

## SIOUX FALLS AREA ACTION AGENDA WORKFORCE SUSTAINABILITY ANALYSIS

Submitted by *Market Street Services, Inc.*  
[www.marketstreetservices.com](http://www.marketstreetservices.com)

April 2015

**MARKET ST**

# TABLE OF CONTENTS

Process Overview.....	1
Introduction .....	3
Methodology .....	4
Workforce Sustainability Analysis .....	6
Existing Research Review .....	6
How has our Population Grown and Changed?.....	14
Key Findings .....	20
How has our Economy and Workforce changed? .....	22
Key Findings .....	29
What issues are our employers facing today in terms of workforce availability? .....	30
Key findings .....	37
What can we expect in the next decade? .....	38
Key Findings .....	43
Are we developing sufficient talent to meet demand? .....	45
K-12 Schools .....	45
Higher education .....	49
City, State, and regional Programs .....	55
Key Findings .....	58
Conclusion .....	59
Key Questions.....	60
Appendix A: Occupational Breakout.....	63
Information Technology.....	64
HealthCare .....	66
Finance and Customer-care.....	68
Advanced Manufacturing .....	70
Biotechnology .....	72

## PROCESS OVERVIEW

Implementation of the 2009 Future Sioux Falls community and economic development strategic plan has led to a number of accomplishments, many of which have contributed to the Sioux Falls area appearing at the top of national rankings and earning accolades and recognition throughout the Great Recession and its aftermath. A robust economy and the completion of several key efforts – including the Sioux Falls Tomorrow III report, the 2025 Downtown Plan, and the Cultural Plan Update – provide significant momentum for taking the region to the next level.

Recent efforts at the state-level that have begun to look more closely at workforce opportunities and challenges provide a strong foundation of knowledge that can inform the strategic efforts of regional leaders in the Sioux Falls area. Ultimately, the question that repeatedly rises to the top of discussions is, “How can we best develop our workforce to ensure that we are fully prepared for the opportunities to come?”

To answer this question and take stock of the region’s overall progress, Forward Sioux Falls leadership has engaged *Market Street Services* to facilitate a six-month talent-focused process that leverages recent and existing studies and initiatives and is led by a Task Force that includes business, government, and education leaders, as well as investors and leaders from the Sioux Falls Development Foundation and the Sioux Falls Area Chamber of Commerce.

This process will assess where the region is now in terms of its competitive position; provide an in-depth understanding of both education and training needs and the sustainability of the workforce; and will result in the development of strategic actions that focus specifically on workforce and training needs.

### PHASE 1: PROJECT INITIATION AND STAKEHOLDER INPUT

The six-month process began with a familiarization tour of the region for the *Market Street* team and a series of focus group and interview sessions. An online survey was developed to ensure that all key voices are heard. Input session participants provided feedback about a broad array of competitive issues and also drilled down on issues related to short and long-term workforce needs and opportunities.

### PHASE 2: COMPETITIVE ASSESSMENT

The report provided an analysis of the Sioux Falls area’s competitive dynamics to assess how the region is performing compared to peer and aspirational communities and also evaluated the Sioux Falls area compared to its performance in years past. Five “scorecards” were used to rank the region’s performance using a wide variety of data indicators.

## PHASE 3: WORKFORCE SUSTAINABILITY ANALYSIS

This phase of the process takes the Workforce Competitiveness scorecard from Phase 2 a step further by adding a detailed analysis of how well the region is positioned to take advantage of future economic opportunities while also filling immediate workforce needs. The Analysis is conducted through the lens of the region's existing target sectors and incorporates ten-year projection-based data. Feedback received from employers and training providers was reviewed and incorporated alongside quantitative data.

## PHASE 4: STRATEGIC WORKFORCE ACTION AGENDA AND IMPLEMENTATION GUIDELINES

The Strategic Workforce Action Agenda will build on the findings from the first three phases. While it is impossible to predict the specifics of what could be included in the Action Agenda, it is expected that there will be strategies that focus on immediate, mid-term, and long-term needs and opportunities. Once the Action Agenda has outlined the strategic items that will need to be implemented, **Implementation Guidelines** will be developed that address how the Action Agenda can be operationalized.

## INTRODUCTION

The Sioux Falls region has made significant efforts over the past several years to support its local economy and improve the quality of life for its residents through developments in its aesthetics, community offerings, and other strategies. Input participants spoke highly about the area's family friendly environment, quality amenities, and positive improvements that have been made recently. The Sanford PREMIER Center, the Big Sioux River Greenway, and downtown developments were among the top cited assets throughout input. However, the sustained growth and development the Sioux Falls area has experienced in recent years is under threat from pervasive issues related to its workforce capacity and skills dynamics. This Action Agenda process seeks to address these issues through assessment of current conditions and future needs with a goal of developing an action plan to address them.

The Workforce Sustainability Analysis is framed to provide a fresh look at the workforce capacity of the region beginning with how the population has grown. Migration patterns and characteristics of new residents are provided to give an understanding of how the area has developed, while the age composition and educational attainment provides context for workforce sustainability issues.

Following analysis of the region's population growth and composition, the metro's economic landscape is examined at the macro-level in order to have an understanding of the subsequent sections that discuss detailed occupational growth. The area's largest occupations, fastest growing employment trends, and most concentrated jobs will be provided.

Next we will examine the workforce issues faced by Sioux Falls area employers. In doing so, we will identify the top in-demand occupations where employers are facing the most hiring difficulties. In this section we will combine the qualitative input received through focus groups, interviews, and the online survey, with quantitative data in order to zero in on which occupations have the greatest number of job openings and begin exploring possible disconnects between the skill sets residents have and those that are required to fill employment gaps.

Armed with an understanding of current workforce issues, we will then look to what the region can expect in the decade to come. Here we will provide information regarding which occupations are most susceptible to shrinkage caused by potential technological advancements and the jobs that are projected to decline the fastest over the next ten years. Also provided are the top occupations that are most at-risk for impending retirements and the type of impact they may have on the region. We will then provide a list of occupations that are projected to grow nationally and how well the region is positioned to capture the growth of those jobs.

Following this we will examine Sioux Falls' ability to produce talent within the region and meet the needs of its employers. The area's public K-12 schools, higher education institutions, and city, state, and regional programs will be detailed in order to identify current offerings and seek to determine if the region is prepared for what's to come.

Finally, we will answer key questions about the region's workforce in the Conclusion. The Appendix provides the occupational composition of some of the region's most influential and targeted sectors with detailed tables that provide historical content, projected growth, earnings ratios, and educational requirements.

## Methodology

**Location Quotients:** Location quotients (LQs) are used to measure the relative concentration of local employment in a given business sector or occupation. When applied to business sector employment, they measure the ratio of a business sector's share of total local employment to that business sector's share of total national employment. A business sector with LQ of 1.0 is exactly the same share of total local employment as that business sector's share of national employment. When a local business sector has a location quotient greater than 1.0, it signals that the business sector is more heavily concentrated in the metro than it is nationwide. Those business sectors with relatively high LQs are often assumed to benefit from one or more sources of competitive advantage derived from locating in the area being examined. Location quotients are also applied to occupational employment in the same manner that they are applied to business sector employment, helping to determine which occupations and corresponding skill sets—irrespective of the business sectors that employ them—are highly concentrated in the local workforce.

**Wages and Earnings:** The average annual wage (AAW) is calculated by dividing total earnings by total employment for the business sector. When used in the context of occupations, the average annual earnings was calculated by multiplying the average hourly earnings by 2,080 hours, the number of hours worked in a year by a full-time employee.

**U.S. Earnings Ratio:** Earnings ratio refers to the ratio of local average earnings (wages plus supplements) to the national average for that same sector. This helps provide an important perspective on the relative cost of labor in a community.

**Job Openings:** The job openings indicator refers to the new jobs and replacement jobs. New jobs are those that are created out of growth. Replacement jobs stems from employees changing occupations, retiring, or leaving the labor force. This indicator is used to estimate the labor market demand for an occupation.

**Completions:** All completions for programs associated with an occupation and offered by institutions falling within the region of study. This indicator is used to estimate the labor market supply for an occupation.

**Suppressions:** Occupations with less than 10 jobs were not included in the analysis of education requirements of jobs. This represented one percent of all jobs in the MSA. In the detailed analysis of the percentage of workers over the age of 55, some employment was suppressed due to data limitations.

**Geography:** The Sioux Falls metropolitan statistical area (MSA) was used throughout the analysis of the report. Any sections in the report that refer to "Sioux Falls" is in reference to the four-county region.

However, the education and training was analyzed through both the local, MSA-designated geography lens, as well as the greater region's institutional offerings that are available within approximately 60 miles of Sioux Falls. Input revealed that while the Sioux Falls MSA does not have its own full public four-year university, the greater region's educational offerings that include Dakota State University (DSU) in Madison, SD; South Dakota State University (SDSU) in Brookings, SD; and University of South Dakota (USD) in Vermillion, SD should be taken into account in certain areas.

**Data Sources:** The Workforce Sustainability Analysis presents a variety of data points covering concepts such as business sector employment composition, wages, occupational composition, demographics, unemployment, and job openings. All of the aforementioned quantitative data is sourced from Economic Modeling Specialists, Inc. (EMSI), an industry-leading provider of proprietary data, aggregated from public sources such as the Census Bureau, the Bureau of Labor Statistics (BLS), the Bureau of Economic Analysis, the National Center for Education Statistics (NCES), CareerBuilder, and many others. EMSI was acquired by CareerBuilder in 2012. Additionally, data directly from the Census Bureau, the Bureau of Labor Statistics, and the National Center for Education Statistics were included in the analysis.



# WORKFORCE SUSTAINABILITY ANALYSIS

## Existing Research Review

Before taking a fresh look at workforce sustainability in the Sioux Falls region in 2015 and beyond, it is important to establish some common understanding of the pre-existing research on the issue, including key findings from:

- ✓ The *Future Sioux Falls* strategic planning process (2010)
- ✓ *Governor's Workforce Summits: Final Report*, South Dakota Workforce Initiatives (SD WINS) Workforce Summits (2014)
- ✓ *Growth and Change in South Dakota Labor Markets*, Drexel University Center for Labor Markets and Policy (2014)
- ✓ The *Competitive Assessment* that comprised phase two of this process (2015)

### FUTURE SIOUX FALLS (2010)

From 2009-2010, *Market Street Services* worked with Forward Sioux Falls, the City of Sioux Falls, Minnehaha and Lincoln Counties, the Sioux Falls Area Community Foundation, the Sioux Empire United Way, and a dedicated Steering Committee to facilitate the creation of a new strategy to enhance economic and community development activities in the Sioux Falls area. This process, *Future Sioux Falls*, began with a *Competitive Assessment* that identified a number of trends and issues facing the region related to workforce sustainability as the first decade of the new millennium came to a close, a time when the United States was mired in the Great Recession.

- ✓ **In-migration dynamics suggested that Sioux Falls was a community-of-choice for many families:** Domestic in-migration fed population growth in Sioux Falls in the 2000s. The region pulled most new residents from rural areas of South Dakota, Northwest Iowa, and Southwest Minnesota. The region was also able to attract new residents from other metro areas including Fargo, Bismarck, Duluth, Salt Lake, Los Angeles, Las Vegas, and Austin.
- ✓ **Reported "brain drain" issues:** Between 2000 and 2007, Greater Sioux Falls experienced net out-migration of residents to Minneapolis, Omaha, Lincoln, Des Moines, and Denver. "There need to be more jobs for these young professionals and more advancement," said one survey respondent. "All the great talent that the city might have had the chance to keep is just leaving." Many other survey participants mentioned Sioux Falls' lack of entertainment and retail amenities as a problem in attracting and retaining the "best and brightest." Continuing to improve the Downtown area, increasing lifestyle options, and developing places with "character" and "atmosphere" were cited by input participants as ways to improve the region's ability to attract and retain young talent.



- ✓ **Educational attainment levels lagged behind peer communities:** The educational attainment levels of adults age 25 and over was competitive with state and national standards; however, Sioux Falls lagged behind its peer communities in terms of the proportion of adults who held an associate's, bachelor's, and/or master's degree.
- ✓ **Competitive public school systems, but concerns about keeping up with demand:** Eighty-four percent of survey participants enrolled or with children enrolled in area schools rated the quality of the education as "very good" or "good". However, with record elementary school enrollments in multiple metro districts, many stakeholders were concerned about these districts' abilities to keep up with burgeoning demand.
- ✓ **Comparatively smaller higher education capacity and limited workforce development resources:** Educational options at the two-year and four-year levels in the metro area were found to be fairly limited. Even when considering state universities within an hour's drive time, Greater Sioux Falls still had a smaller higher education capacity (in terms of enrollments) than its peer regions. It was observed that the state's unique community and technical college structure limits workforce development opportunities available in Sioux Falls compared to many places that receive state funds for two-year colleges.
- ✓ **Multiple hurdles to higher education access:** Funding issues for students at the University Center, no state community college system, and limited degree program availability and flexibility within the metro area were identified as top concerns. Creating and maintaining a pipeline of "knowledge workers" was viewed as critical to the long-term competitiveness of Sioux Falls' regional economy.
- ✓ **Low but rising unemployment, high but declining labor force participation:** The region was historically characterized by exceptionally low unemployment and high labor force participation, signs of a particularly tight labor market. In July 2009, the metro area's unemployment rate was 4.8 percent compared to 9.7 percent nationwide, rising over the most recent year at a pace that was comparable to the statewide and peer community averages. Between 2000 and 2008, labor force participation declined slightly, from 78 percent to 76 percent nationwide. During that same period, labor force participation declined from 92 to 84 percent in Sioux Falls.
- ✓ **Average wages lagged behind peer communities and were growing at a slower rate:** In the fourth quarter of 2008, the average annual wage in the region was \$38,221 compared to wages ranging from \$38,403 to \$49,197 in the peer regions examined (the Des Moines, Fargo, and Rochester metropolitan areas). Furthermore, while the Sioux Falls Area posted very strong five-year employment growth figures, its five-year rate of wage growth fell behind all benchmark communities, the state, and the nation.

## GROWTH AND CHANGE IN SOUTH DAKOTA LABOR MARKETS (2014)

The report *"Growth and Change in South Dakota Labor Markets: An Assessment of the State's Labor Market Imbalances in a Weak National Recovery,"* produced by the Drexel University Center for Labor Markets and

Policy, was released in February 2014. This report examined a number of macroeconomic conditions and trends that reflected the historical and current labor market conditions in South Dakota, and the manner in which these conditions impacted the state's workforce competitiveness. **The report validated many previously held assumptions and long-standing trends, such as the tight labor market and full employment conditions that have, by and large, characterized the state for decades.** The following excerpts from the report highlight some of its key findings:

*"With its high rate of labor force attachment South Dakota has about 40,000 more persons supplying labor than would be expected if the rate of labor force attachment in the state was equal to the nation as a whole. This represents a very important advantage to South Dakota."*

*"The evidence is clear that the primary labor market problem that has characterized the U.S. job market over the last five years has been a very large excess supply of labor at prevailing market wages...Yet despite the poor national context, South Dakota's job market appears to have minimal excess labor supply. Instead, a growing problem in the state is increasing labor scarcity...**Given the statistical relationships between unemployment rates and job vacancy rates in the U.S., we speculate that there is essentially 1 unemployed worker for every job opening in the state; a full-employment condition.**"*

*"College labor market occupations including managers, business and financial operations, computer and mathematical science occupations, engineering and health care professions all had unemployment rates below two percent—signaling labor scarcity in these professional areas. In contrast, we found a number of occupations that had very high unemployment rates including food preparation and service workers and protective service worker occupational groups, both of which had unemployment rates of around 9 percent among those who had worked in these occupations in the past. **Our findings suggest that occupations that require little skill or education were more often characterized by substantial excess labor supply conditions while occupations requiring considerable schooling and/or experience were characterized by labor scarcity in South Dakota.**"*

*"We found evidence of labor supply shortfalls in all three of the durable goods manufacturing industries that compete for many of the same worker skills, especially in welding and machine trades and operatives-related occupations, and engineering fields."*

*"Several (manufacturing) firms reported increased use of capital as a substitute for increasingly scarce blue-collar labor. Robotics and CAD/CAM and 3D printing may be technologies that may render some of the blue-collar skills currently in demand obsolete in the future."*

*"Many firms found engineering and computer science-related occupational job openings difficult to fill. These firms compete in national labor markets against often large firms in major metropolitan areas."*

Source: *Growth and Change in South Dakota Labor Markets: An Assessment of the State's Labor Market Imbalances in a Weak National Recovery*, Neeta P. Fogg and Paul E. Harrington, Drexel University Center for Labor Markets and Policy (February 2014).

## GOVERNOR'S WORKFORCE SUMMITS (2014)

In 2014, Governor Dennis Daugaard convened a series of Workforce Summits in six regions around the state of South Dakota to promote discussion among state, community, business, and education leaders regarding the workforce challenges and opportunities facing each region.

A total of 251 individuals attended the Sioux Falls Summit on June 17<sup>th</sup>, 2014. The discussions that took place at this Summit have helped set the stage for this Workforce Sustainability Analysis and the forthcoming Strategic Workforce Action Agenda.

According to the *Governor's Workforce Summits: Final Report* (August 2014), there were a few common themes that arose from the summits held across the state:

1. ***Having enough people with the right skills and competencies is the key to success:*** South Dakota's economic success is tied to having enough people with the right skills and capabilities for South Dakota jobs. This is an urgent issue requiring continued concentrated attention and effort.
2. ***Employers need more ways to access and support a workforce with needed skills and competencies:*** Businesses cannot find enough of the right skills at the right time, and need support from educational institutions, communities and government to attract and retain workers.
3. ***Students and job seekers need more accurate views of career opportunities and employer expectations:*** Job seekers do not know the real potential of technical and other careers, or what is expected to succeed.
4. ***Educators are key to developing workforce skills and competencies:*** Education is critical to providing the workforce South Dakota needs, and must be focused on the skills and competencies needed to grow and sustain South Dakota's economy.
5. ***All sectors must collaborate to address these issues:*** Every sector has a role to play individually, and as part of a unified workforce agenda.

Source: *Governor's Workforce Summits: Final Report* (August 2014) produced by Accenture

The Final Report also identified the following challenges as those that were most frequently cited across the state, with most of these challenges tied to the aforementioned common themes:

- ✓ Young people, parents and educators have misperceptions of technical and other careers, and do not understand the opportunities these careers provide
- ✓ Many job seekers have unrealistic job/career expectations and do not know how or where to begin searching for jobs
- ✓ The education and training system needs to continually adjust to meet the current needs of the business community
- ✓ Access to education and training in Career Technical Education (CTE) and Science, Technology, Engineering and Math (STEM) fields is limited, especially in rural areas
- ✓ Some job seekers lack exposure to early real world work experience
- ✓ Employers struggle to find and attract workers who fit their business needs
- ✓ Communities struggle to recruit or attract new workers due to perceptions of limited work opportunities and community amenities in South Dakota
- ✓ Employers struggle to retain workers due to competition for available skills
- ✓ Workers want opportunities for professional growth and development at their jobs
- ✓ Job seekers' soft skills do not always match employer expectations
- ✓ Communities lack available and affordable housing options to attract and retain workers
- ✓ Specialized services are required to support the integration of different cultures, disabled and multilingual populations into the workforce

Source: *Governor's Workforce Summits: Final Report* (August 2014) produced by Accenture

The Appendix to the Final Report provided a recap of the specific challenges discussed at each of the six Regional Summits, including the following concerns that were identified by participants at the Sioux Falls Summit:

1. Finding skilled/qualified workers
2. Disconnect between industry needs and education system
3. Insufficient wages/benefits to attract and retain talent
4. Lack of student awareness of career development opportunities
5. Lack of school/business partnerships that allow students early exposure to the workforce
6. Lack of education/technical training opportunities
7. Limited career development opportunities for entry level/new populations
8. Limited education/training on soft-skills

Source: *Governor's Workforce Summits: Final Report* (August 2014) produced by Accenture

## COMPETITIVE ASSESSMENT (2015)

The Competitive Assessment that preceded this Workforce Sustainability Analysis presented a series of scorecards that evaluated the region's competitiveness across multiple indicators that helped measure how the Sioux Falls region has performed in recent years in a few key areas relative to a set of nine metropolitan areas with which the region competes for jobs and talent. The Workforce Capacity scorecard identified a few key trends relative to workforce sustainability that provide important context for the more detailed analysis that follows in the remainder of this report:

- ✓ **Population increases and labor force growth in metro Sioux Falls have slowed in recent years compared to historic trends, with the region now finding its growth rate in both indicators trailing many of the comparison communities.** Net migration accounted for a higher percentage of the population change in the Sioux Falls area than the other metros, but lower than previously. Additionally, there has been a shift in migration patterns. Between 2003 and 2008, domestic migration accounted for roughly 55 percent of the population change, while between 2008 and 2013 it accounted for 43 percent of the change. **However, those that are relocating to Sioux Falls are more educated than they have been historically;** nearly 40 percent of all in-migrants to the Sioux Falls area and 37.6 percent of in-migrants from abroad had a bachelor's degree or higher in 2013. Historically, only 18.7 percent of in-migrants from abroad had a bachelor's degree or higher.
- ✓ **The dependency ratio suggests that Sioux Falls will have enough workers to replace those retiring over the next ten to 20 years.** For every ten workers nearing the age of retirement (ages 45 to 64), there are 12 residents between the ages of 25 to 44 to replace them. Nevertheless, the advantageous dependency ratio is reliant upon the region's ability to retain workers in the younger cohort. The Workforce Sustainability Analysis will further explore the occupational composition of greater Sioux Falls' labor force and identify the business sectors most at risk for impending retirees and shortages in skilled workers.
- ✓ **In 2013, nearly half of the Sioux Falls MSA population between the ages of 18 and 24 had some college experience or an associate's degree, ranking it 7<sup>th</sup> out of the comparison communities.** "University towns" such as Fargo, Fort Collins, and Lincoln boasted populations with 60 percent or higher attaining some college or an associate's degree within this age group – typical of communities with a large public university.

**The most notable increases in greater Sioux Falls workforce competitiveness can be seen in the region's rise in its adult population with a bachelor's degree or higher since the 2009 study.** Though its current attainment rates still trail many of the comparison areas, the percentage of adult residents in the Sioux Falls region with a bachelor's degree or higher rose from 28.9 percent to 32.3 percent. This represented a 3.4 percentage point increase, which outpaced the rate of growth in every comparison community; nationally, the rate of increase over the five-year time period was 1.9 percentage points. The Sioux Falls area also saw more residents attend college in 2013 than in 2008, with 8.3 percent of the population over age 15 enrolled in higher education. Of those, roughly half the Sioux Falls area population enrolled in college was over the age of 25.

### Workforce Capacity Scorecard: Rankings

	Boise	Cedar Rapids	Des Moines	Fargo	Fort Collins	Lincoln	Madison	Omaha	Rochester	Sioux Falls
<b>Population Change</b>										
5-yr population growth rate	2	10	3	1	4	6	7	5	9	8
5-yr labor force growth rate	1	10	6	9	5	2	4	8	7	3
Net migration as % of total population	5	9	4	1	2	7	6	8	10	3
% of in-migrants w/bachelor's degree +	10	9	7	3	2	6	1	8	5	4
% of in-migrants from abroad w/bachelor's degree +	10	2	9	4	5	7	3	8	1	6
<b>Age Composition</b>										
Dependency ratio (Age 25-44 / Age 45-64)	6	9	2	1	8	4	7	5	10	3
Workers age 55+	2	5	10	1	6	9	4	7	8	3
<b>Educational Attainment</b>										
% of population over 15 enrolled in college	7	6	9	1	3	2	4	5	10	8
Pop 18-24 w/some college or assoc. deg.	8	4	9	3	2	1	5	6	10	7
Pop 25+ w/assoc. degree	10	2	6	1	8	4	7	9	5	3
Pop 25+ w/bachelor's degree +	9	10	4	5	1	3	2	7	5	8
5-yr pct. pt. chg. 18-24 w/some college or assoc. deg.	2	6	4	9	8	7	3	5	10	1
5-yr pct. pt. chg. w/assoc. degree	6	3	9	1	8	4	5	6	10	2
5-yr pct. pt. chg. w/bachelor's degree +	6	7	10	2	5	4	8	1	9	3
Average ranking score, all indicators	6.00	6.57	6.57	3.00	4.79	4.71	4.71	6.29	7.79	4.43
<b>Average Ranking, All Indicators</b>	<b>6</b>	<b>8</b>	<b>8</b>	<b>1</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>7</b>	<b>10</b>	<b>2</b>



### Workforce Capacity Scorecard: Data Values

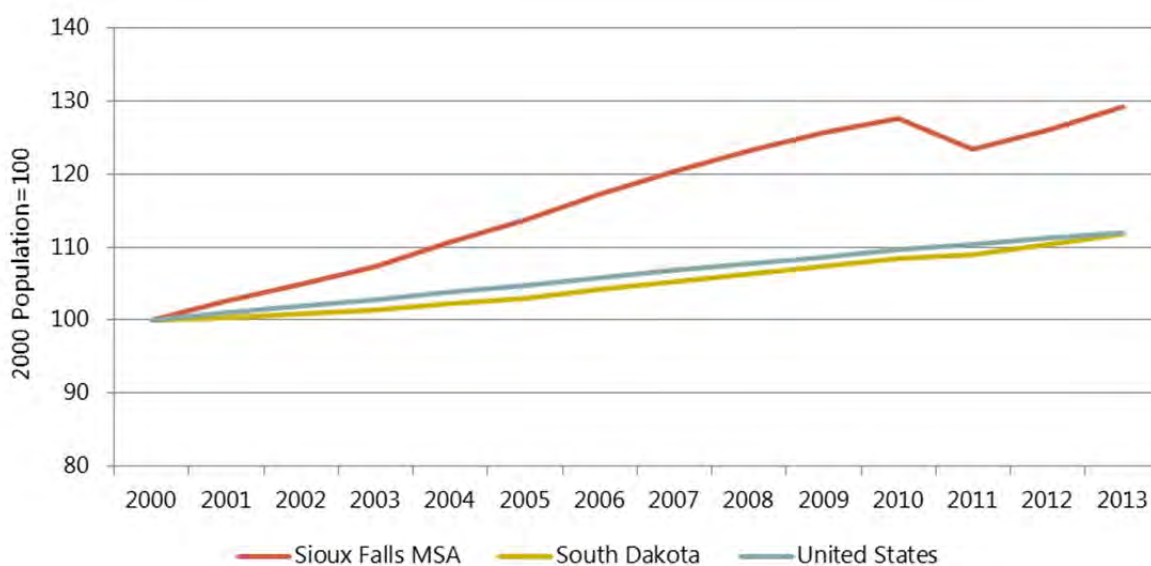
	Year	Boise	Cedar Rapids	Des Moines	Fargo	Fort Collins	Lincoln	Madison	Omaha	Rochester	Sioux Falls	Sioux Falls	Year
Population Change												Historical	
5-yr population growth rate	2008-2013	8.7%	3.1%	8.3%	14.0%	8.2%	5.8%	4.9%	6.8%	3.6%	4.8%	14.7%	2003-2008
5-yr labor force growth rate	2008-2013	4.1%	0.1%	2.9%	0.1%	3.3%	4.1%	3.5%	1.5%	2.5%	4.0%	10.7%	2003-2008
Net migration as % of total population	2008-2013	4.3%	0.5%	4.7%	6.4%	6.3%	2.3%	3.1%	1.8%	0.3%	6.2%	8.3%	2003-2008
% of in-migrants w/bachelor's degree +	2013	23.6%	26.1%	34.5%	39.9%	46.7%	36.9%	51.1%	32.2%	39.0%	39.6%	30.6%	2008
% of in-migrants from abroad w/bachelor's degree +	2013	17.0%	60.4%	20.6%	57.3%	48.0%	35.7%	59.9%	21.3%	88.2%	37.6%	18.7%	2008
Age Composition													
Dependency ratio (Age 25-44 / Age 45-64)	2013	1.08	1.00	1.17	1.22	1.01	1.12	1.07	1.10	0.96	1.14	1.12	2008
Workers age 55+	2013	19.0%	20.1%	20.5%	18.6%	20.2%	20.4%	20.1%	20.3%	20.3%	19.6%	N/A	-
Educational Attainment													
% of population over 15 enrolled in college	2013	8.7%	9.0%	8.0%	15.9%	15.5%	15.7%	14.2%	10.8%	7.0%	8.3%	7.8%	2008
Pop 18-24 w/some college or assoc. deg.	2013	42.6%	52.2%	42.1%	59.8%	62.8%	67.7%	51.4%	50.4%	40.6%	48.8%	45.4%	2008
Pop 25+ w/assoc. degree	2013	8.2%	13.2%	9.8%	14.7%	8.4%	11.7%	9.7%	8.3%	11.3%	12.4%	9.8%	2008
Pop 25+ w/bachelor's degree +	2013	30.7%	27.6%	35.4%	35.3%	43.3%	36.3%	42.4%	33.4%	35.3%	32.3%	28.9%	2008
5-yr pct. pt. chg. 18-24 w/some college or assoc. deg.	2008-2013	2.1	0.9	-5.4	5.4	2.5	2.6	-0.5	6.2	-0.9	3.4	N/A	-
5-yr pct. pt. chg. w/assoc. degree	2008-2013	0.4	1.9	0.0	3.4	0.2	1.5	0.7	0.4	-0.5	2.6	N/A	-
5-yr pct. pt. chg. w/bachelor's degree +	2008-2013	2.8	1.4	2.5	0.5	0.6	1.1	2.6	1.7	-0.5	3.4	N/A	-



## How has our Population Grown and Changed?

It is important to understand the Sioux Falls area's population base before assessing the workforce, current challenges, future opportunities, and what these trends say about the sustainability of the workforce. **Over the past decade, the population in the Sioux Falls MSA has grown rapidly, roughly two times faster than the growth rate in South Dakota and the nation.** Between 2003 and 2013, population in the Sioux Falls area had a net increase of more than 40,000 people. However, of the four counties in the MSA, only Lincoln and Minnehaha County enjoyed the increased population base; population in McCook and Turner County has remained relatively unchanged over the past decade. The population growth was spread evenly between Lincoln and Minnehaha County, with each county having a net gain of roughly 20,000 residents.

FIGURE 1: POPULATION GROWTH

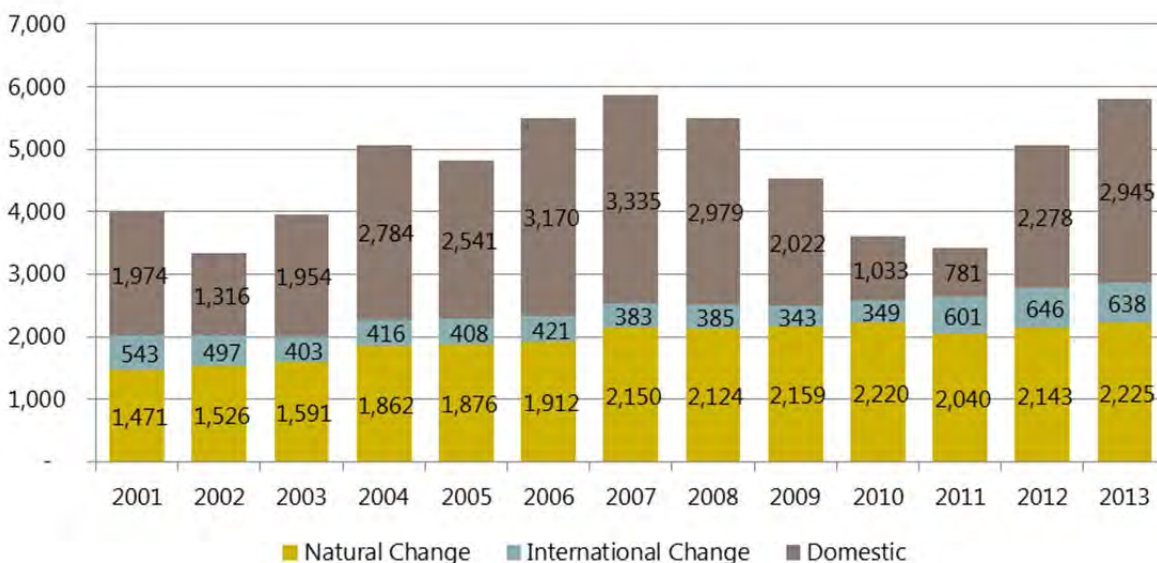


Source: U.S. Census Bureau

The components of population change reveal the foundation of the population growth. As was discussed by *Market Street* in the 2009 Future Sioux Falls Competitive Assessment, **greater Sioux Falls has historically grown its population base by attracting residents from the surrounding counties in the state and region;** domestic net migration has typically accounted for roughly half of the population growth in the metro area. Population growth stalled slightly between 2009 and 2011, mirroring national trends when mobility for many people was limited due to negative recessionary effects. Domestic migration declined between 2007 and 2011 but has since rebounded. Natural change (births minus deaths) has been consistent over the years. **The notable change in population growth has been in the increase**

**in international migration.** The positive net migration of international residents helped to soften the effects of the stalled domestic migration and provided employers with a new pool of workers.

**FIGURE 2: COMPONENTS OF POPULATION CHANGE**



Source: U.S. Census Bureau

Understanding which counties incoming residents are moving from offers insight to the areas of the country that are attracted to the Sioux Falls region. The Internal Revenue Service's (IRS) Statistics of Income program helps to identify specific migration patterns based on the counties that tax payers file in each year. If an individual moves from one county to another between tax years, the program categorizes this individual as a migrant between counties.

**The metro's population growth has continued to pull largely from other counties in South Dakota and the surrounding states in the Midwest.** Out of the top ten sources for new migrants to the area, seven are counties in South Dakota. The remaining three counties are located just over the South Dakota border in Iowa and Minnesota. These sources include top metros in South Dakota and neighboring states as well as South Dakota's two principal public university locations. With a recovering economy, the Sioux Falls area will face stronger competition for workers and will need to compete with other metros across the nation to retain and attract talent.

**The top destinations for Sioux Falls area out-migrants highlight some of the cities that the metro is competing with for talent.** As suspected by input participants, Minneapolis is a magnet for some of the talent leaving Sioux Falls; Hennepin County accounted for a net loss of roughly 100 residents. There is a strong link between the two metros with approximately 1,050 people moving to Minneapolis MSA and 950 moving from it to Sioux Falls between 2006 and 2011. Denver, Rapid City, Phoenix, Des Moines, and Dallas are other large metro areas that stand as top destinations for residents leaving the Sioux Falls area.

FIGURE 3: TOP SOURCES AND DESTINATIONS, 2006-11

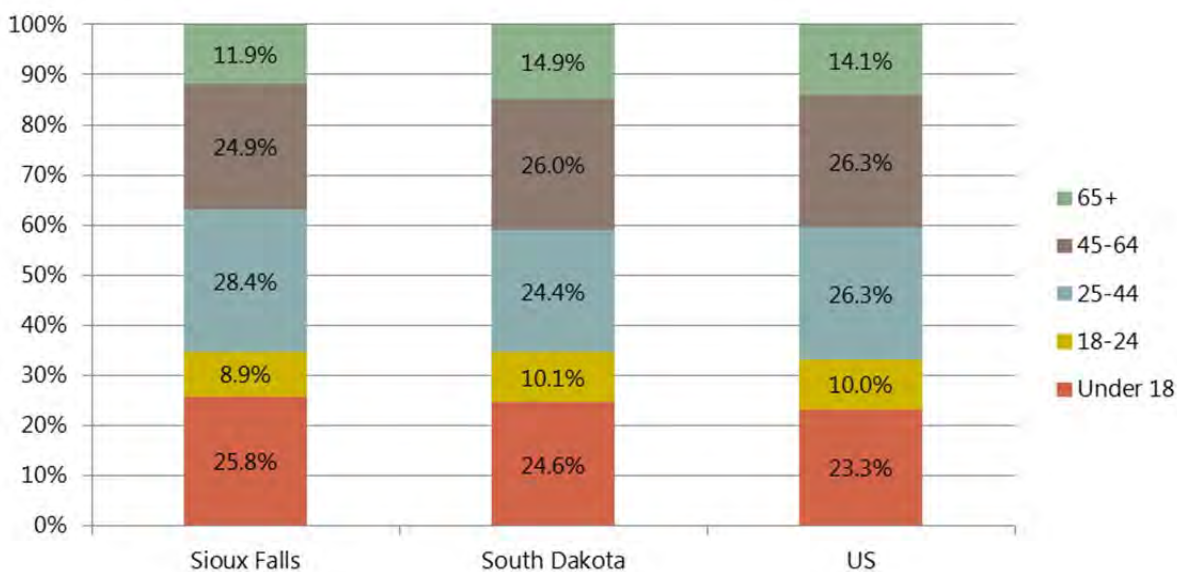
Top Sources		Top Desinations	
Brookings County, SD	972	Pinal County, AZ	-138
Davidson County, SD	560	Polk County, IA	-107
Codington County, SD	429	Hennepin County, MN	-94
Yankton County, SD	411	Maricopa County, AZ	-86
Clay County, SD	402	Tarrant County, TX	-79
Brown County, SD	374	Custer County, SD	-72
Woodbury County, IA	320	Hidalgo County, TX	-69
Lake County, SD	288	Pinellas County, FL	-65
Sioux County, IA	273	Arapahoe County, CO	-63
Rock County, MN	219	Campbell County, WY	-46

Source: Internal Revenue Service

**As reported in the Competitive Assessment, in-migrants to the Sioux Falls region are well-educated, having attained higher levels of degree attainment than all but three of the benchmark communities.** Roughly 40 percent of individuals that moved to the Sioux Falls metro from another state had attained a bachelor's degree or higher between 2011 and 2013. This indicates that the area is attracting an educated workforce, which increases the community's overall educational attainment. However, there was disparity within the educational attainment of in-migrants from abroad; approximately 37 percent had less than a high school degree, while only 20 percent had a bachelor's degree or above.

In-migrants to the Sioux Falls metro were also younger than the population already residing in the area. The median age in the Sioux Falls MSA was 35.2, while in-migrant ages ranged from 27.5 to 28.3; ages out-of-state migrants was 28 between 2011 and 2013. **The younger age of in-migrants to the area has contributed to the advantageous age distribution in the Sioux Falls region.** As discussed in the Competitive Assessment, the percentage of the population between the ages of 25 and 44 is larger than the population between the ages of 45 and 64. The younger cohort represents the future workers that will replace individuals that are likely to be retiring in the next ten to 20 years. The Sioux Falls metro also has a smaller share of its population over the age of 65 and a larger share under that age of 18 compared to South Dakota and the United States. Individuals under the age of 18 represent a potential supply of future workers if the community can retain and train them for in-demand occupations.

FIGURE 4: AGE DISTRIBUTION, 2013



Source: U.S. Census Bureau

**Fueled by domestic and international migration, greater Sioux Falls has continued to become more diverse.** The region's immigrant population is extremely diverse and represents a wide range of countries, languages, and cultures. In 2003, 92.3 percent of the population was white and not Hispanic; in 2013, that demographic represented 87.2 percent of residents. There's been an increase in the share of the population among other races and ethnicity. The Hispanic population has doubled since 2003, while the population that reported as black, non-Hispanic has nearly tripled over the past decade. Input participants from all backgrounds spoke highly of how the community has embraced its growing diversity and felt that the Sioux Falls region was a very welcoming community. The Lutheran Social Serves Center for New Americas provides services to newly arriving refugees. Nevertheless, although the Sioux Falls area has made great strides in creating a welcoming community for its growing diversity and immigrant population – the Multicultural Center and Sioux Falls Diversity Council are cited as examples – representatives from community and social service organizations in the area reported continuing challenges with training additional translators as well as immigrants adjusting to English-only signage and forms.

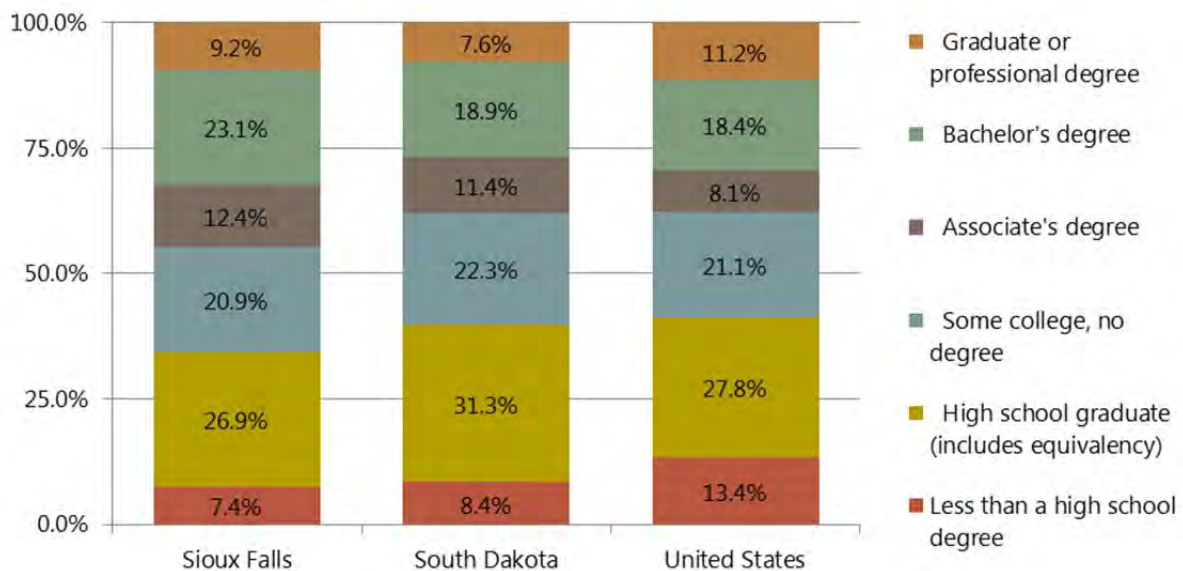
**Input participants also cited a lack of affordable housing as a challenge that has affected their ability to attract more residents to the area and provide for residents at various income levels.** Zillow, the online real estate database, reported that the median price of homes currently listed in the Sioux Falls Metro was \$185,000; comparatively, in the Omaha metro area, median home prices were \$155,000 and \$178,000 in Des Moines. This has reportedly caused talent retention and attraction issues, especially for younger professionals and immigrants. According to a recent article, as Sioux Falls home values and rental rates rise faster than incomes, keys statistics suggest the city is not making enough progress on affordable

housing supply. In a city where people wait years for subsidized housing, officials say Sioux Falls must figure out how to create enough affordable housing to reduce the need for more subsidies.<sup>1</sup>

When survey participants were asked to rank the seriousness of issues that the area was facing in attracting and/or retaining residents, responses were split between “not a problem” to “serious problem.” Even so, conversations with residents suggest that affordable housing remains an issue. One said, “I relocated here 2 years ago - our biggest problem with the move was finding affordable, single family houses. There were not many homes that were for sale when we moved that weren't run down or in our price range.”

**Educational attainment in the Sioux Falls area still trails many competitor regions, but trends are improving.** Roughly one-quarter of the population in the Sioux Falls area has received a bachelor's degree. Its share of the population with a bachelor's degree is 4.7 percentage points higher than the nation and 4.2 percentage points higher than South Dakota. In fact, the Sioux Falls metro area accounts for 28.9 percent of the state's population that is 25 years or older, but accounts for 35.2 percent of population that has attained a bachelor's degree.

FIGURE 5: EDUCATIONAL ATTAINMENT OF POPULATION AGED 25+, 2013



Source: U.S. Census Bureau

The educational attainment of the population in the Sioux Falls area has increased over the past five years along with a drop in the share of the population with less than a high school degree. Consequently, Sioux Falls stands out compared to some of the previous communities it was benchmarked against. Between 2008 and 2013, the share of the population that had an associate's degree increased by 2.6 percentage points, while the share that had attained a bachelor's degree or graduate/professional degree increased 2.1 and 1.3 percentage points, respectively.

<sup>1</sup> Young, Steve. Rise in S.F. home values squeezes residents. *Argus Leader*, 2/11/15



FIGURE 6: PERCENTAGE POINT CHANGE IN EDUCATIONAL ATTAINMENT, 2008-13

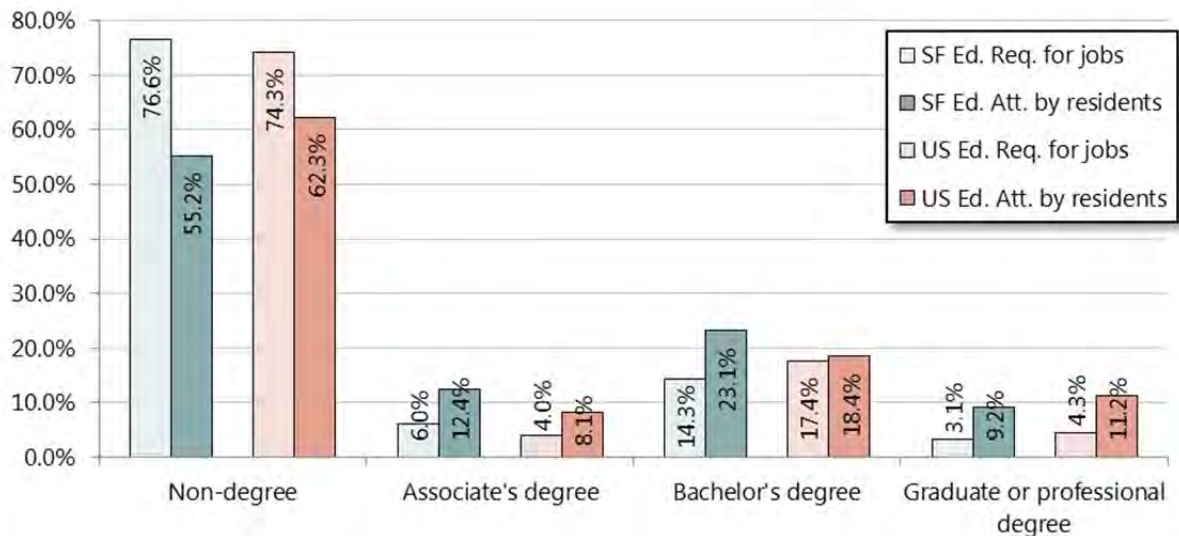
	Sioux Falls	Des Moines	Fargo	Rochester
Less than a high school degree	0.2%	-1.3%	0.1%	-1.0%
High school degree	-3.5%	-0.2%	-2.1%	2.1%
Some college, no degree	-2.8%	-1.0%	-1.8%	-0.1%
Associate's degree	2.6%	0.0%	3.4%	-0.5%
Bachelor's degree	2.1%	1.6%	-0.2%	-0.1%
Graduate or professional degree	1.3%	0.9%	0.6%	-0.4%

Source: U.S. Census Bureau

While Sioux Falls has made strides in increasing the education level and training of its residents, **to maintain or improve the sustainability of the workforce it will be important to ensure that the educational attainment of the population and the educational requirements of the local in-demand jobs are aligned.** The Bureau of Labor Statistics provides detailed information about an occupation's typical education and training requirements. The BLS collects data from the Census Bureau's American Community Survey to analyze the education attained and the reported occupation of each survey respondent to determine what educational attainment is typical for a person working in that occupation. The BLS also takes into account changes in recent programs where new educational requirements are placed on individuals entering the occupation that were not previously required, such as certifications and higher levels of education. These requirements represent the minimum education needed for the occupation at the entry-level, and do not include the additional training or education required for more advanced jobs that fall within the occupational category<sup>2</sup>. The underlying assumptions used to determine educational requirements place limits on the data, but nevertheless offer insight to the economic landscape of a community and the alignment of local jobs and workers.

<sup>2</sup> For more information on the methodology, visit [http://www.bls.gov/emp/ep\\_education\\_tech.htm](http://www.bls.gov/emp/ep_education_tech.htm)

**FIGURE 7: SHARE OF JOBS BASED ON EDUCATION REQUIREMENTS AND EDUCATION ATTAINED BY RESIDENTS, SIOUX FALLS MSA AND US**



Source: U.S. Census Bureau; EMSI

Figure 7 illustrates the difference in the share of jobs by education required and the distribution of the education attained by the population over the age of 25 for the Sioux Falls MSA and the United States. **The most striking finding in this analysis was the difference between greater Sioux Falls' education required and education attained at the bachelor's degree level, indicating a level of "underemployment" that is consistent with findings at the state level and reported by input participants.** As previously stated, the percentage of the population in the Sioux Falls area with a bachelor's degree is 4.7 percentage points higher than what is seen at the national level. However, despite having attained higher levels of education, the share of jobs that require a bachelor's degree is smaller (-3.1 pct. pt.) in the Sioux Falls area compared to the United States. Only 14.3 percent of jobs in the Sioux Falls MSA require a bachelor's degree, while 17.4 percent of jobs across the United States require one. At the other end of the spectrum, a higher share of jobs in the Sioux Falls region do not require a degree compared to the nation, while a smaller percentage of the population has less than an associate's degree; approximately three-quarters of jobs in the Sioux Falls area require less than an associated degree, while 55.2 percent of the population has attained that level of education.

## KEY FINDINGS

- ✓ The Sioux Falls area's population continues to rise steadily, but growth is uneven with only two of the region's four counties, Lincoln and Minnehaha, experiencing increases. Most of the region's growth is comprised by new residents migrating from other metro counties in South Dakota, although international migration has risen in recent years.



- ✓ In-migrants to greater Sioux Falls are younger and better educated than existing residents, helping to contribute to the region's advantageous age dynamics. The region is also continuing to become more diverse.
- ✓ A lack of affordable housing has been cited as a challenge for talent retention and attraction, especially for young professionals and recent immigrants and refugees.
- ✓ Educational attainment in the Sioux Falls area still trails many competitor metros, but percentages are rising.
- ✓ Underemployment is both a reported and statistically demonstrated reality, with many Sioux Falls area workers possessing higher levels of education than their jobs require.

## How has our Economy and Workforce changed?

South Dakota has continued to operate with a high labor force participation rate and a low unemployment rate since *Market Street's* last assessment in 2009. In 2013, it ranked fifth out of the states for the highest labor force participation rate and it had the second lowest unemployment rate. Those between the ages of 25 and 34 had the highest labor force participation rate in South Dakota at 86.5 percent. Of the population between the ages of 55 and 64, 75.2 percent were participants in the labor force.

**FIGURE 8: EMPLOYMENT STATUS OF THE CIVILIAN NONINSTITUTIONAL POPULATION, 2013  
ANNUAL AVERAGES**

	LFPR	Employment		Unemployment	
		Number (ths.)	Percent of population	Number (ths.)	Rate
South Dakota	69.6	430	67.1	16	3.6
Colorado	68.1	2,583	63.6	183	6.6
Idaho	64.0	724	59.8	51	6.5
Iowa	69.8	1,600	66.6	78	4.7
Minnesota	70.1	2,815	66.6	145	4.9
Nebraska	72.3	988	69.4	42	4.1
North Dakota	72.9	397	70.8	12	2.9
Wisconsin	68.6	2,884	63.9	208	6.7
United States	63.2	146,305	93.8	9,617	6.2

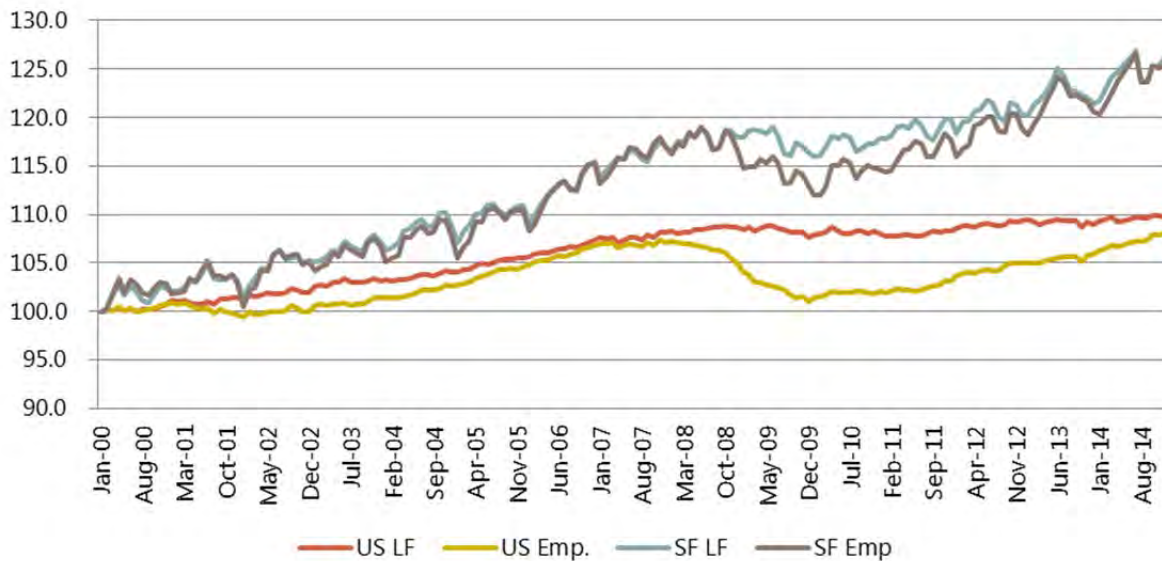
Source: Bureau of Labor Statistics

The unemployment rate in the Sioux Falls MSA was 3.1 percent in December 2014, the most recent data available, representing roughly 4,000 unemployed individuals; nationally the unemployment rate was 5.6 percent. **A tight labor market with a limited pool of available, qualified workers presents challenges for employers looking to grow their companies. A low number of applicants was the top competitive challenge cited by employers throughout input.** When asked to rate their reasons for hiring difficulties, 38.1 percent reported that a low number of applicants was *always* the reason they had difficulty filling positions, while another 31.9 percent reported that it was *often* the case. One employer succinctly said, "Just not enough people."

**Due to the tight labor market, employers reported that they have been forced to compromise their hiring standards, noting that a lack of workforce *quantity* has affected employee *quality*.** Employers stated that they have had to hire people that were "unemployable" out of desperation, despite the fact that the applicant may have a poor work ethic, unstable work history, or is not fully qualified. When asked what actions the respondent's company had taken in response to hiring difficulties, 59.5 percent reported that

they hired a less qualified person, while 65.3 percent said that they did not fill the job opening. Employers also reported that qualified workers were being “poached” by other companies in the Sioux Falls region.

**FIGURE 9: EMPLOYMENT AND LABOR FORCE, US AND SIOUX FALLS MSA**
  
**(INDEXED JAN 2000=100)**



Source: Bureau of Labor Statistics

**Data supports employers’ concerns regarding the quantity of available workers.** As seen in Figure 9, the labor force and employment level indexed to January 2000<sup>3</sup> in the Sioux Falls metro illustrates just how tight the labor market is. The growth in Sioux Falls MSA employment is limited to the growth of its labor force. With the unemployment rate so low, there is only so much room to grow. Even with a healthy economy, there will always be some level of unemployment as individuals switch jobs, enter the labor market, or leave the labor force. Adding more pressure to the tight labor market, 78 percent of survey respondents reported that it was likely or highly likely that their business will add employees in the Sioux Falls area over the next five years.

**In a positive sign, the greater Sioux Falls labor force has continued to increase, while the U.S. labor force has changed very little in the past five years.** The large gap between the employment level and the labor force at the national level represents the recessionary years, the loss of jobs, and the increase in the amount of unemployed workers; the US unemployment rate peaked in October 2009 at 10 percent. Between 2008 and 2013, the labor force in the United States increased by 0.7 percent; in the Sioux Falls MSA it increased by 4.0 percent. Meanwhile, employment in the MSA increased by 3.4 percent and fell nationally by 1.0 percent.

<sup>3</sup> January 2000 was chosen to illustrate how the labor force and employment level has changed over the past 15 years. For historical context, the unemployment rate in Sioux Falls at that time was 2.6 percent and 4.0 percent nationally.

As seen in the following table, **Greater Sioux Falls added approximately 10,000 jobs between 2009 and 2014, with health care and social assistance accounting for roughly 25 percent of the job growth.** Health care continues to be a strong sector in the Sioux Falls MSA economy, with 16.8 percent of jobs in this sector in 2014. Health care is also the only sector that has an advantageous wage ratio from the employee perspective with earnings roughly 12 percent higher than the national average.

**FIGURE 10: BUSINESS SECTOR OVERVIEW, SIOUX FALLS MSA<sup>4</sup>**

	2009 Jobs	2014 Jobs	Share of Total Jobs	Net Chg. (09-14)	Pct. Chg. (09-14)	US Pct. Chg. (09-14)	2014 LQ	LQ Chg. (09-14)	AAW	U.S. Earnings Ratio
Agriculture, Forestry, Fishing & Hunting	1,680	1,765	1.1%	85	5.1%	1.6%	0.93	0.01	\$30,508	0.97
Mining, Quarrying, & Oil & Gas Extraction	88	59	0.0%	(29)	-33.0%	33.1%	0.07	(0.06)	\$38,416	0.40
Utilities	318	320	0.2%	2	0.6%	-1.7%	0.57	0.00	\$87,772	0.94
Construction	8,755	8,874	5.7%	119	1.4%	-3.8%	1.11	0.04	\$43,710	0.92
Manufacturing	12,370	13,465	8.7%	1,095	8.9%	2.6%	1.07	0.04	\$44,280	0.72
Wholesale Trade	6,800	7,653	4.9%	853	12.5%	4.7%	1.26	0.07	\$58,059	0.86
Retail Trade	16,886	18,658	12.0%	1,772	10.5%	4.6%	1.15	0.04	\$27,050	0.96
Transportation & Warehousing	5,190	4,949	3.2%	(241)	-4.6%	8.8%	0.97	(0.16)	\$42,178	0.88
Information	3,109	2,799	1.8%	(310)	-10.0%	-3.0%	0.96	(0.10)	\$50,335	0.62
Finance & Insurance	15,580	15,463	10.0%	(117)	-0.8%	2.4%	2.46	(0.12)	\$53,671	0.60
Real Estate & Rental & Leasing	1,822	1,796	1.2%	(26)	-1.4%	-1.3%	0.70	(0.02)	\$37,667	0.82
Professional, Scientific, & Technical Services	5,241	5,746	3.7%	505	9.6%	9.7%	0.59	(0.01)	\$55,882	0.72
Management of Companies & Enterprises	1,437	1,963	1.3%	526	36.6%	14.6%	0.91	0.13	\$88,189	0.79
Admin. & Support & Waste Mgmt. & Remed. Svcs.	5,253	6,680	4.3%	1,427	27.2%	18.4%	0.69	0.04	\$29,110	0.87
Educational Services (Private)	3,357	3,468	2.2%	111	3.3%	10.4%	0.88	(0.08)	\$24,275	0.64
Health Care & Social Assistance	23,650	26,129	16.8%	2,479	10.5%	11.5%	1.36	(0.03)	\$50,336	1.12
Arts, Entertainment, & Recreation	2,620	2,728	1.8%	108	4.1%	7.7%	1.07	(0.05)	\$16,882	0.57
Accommodation & Food Services	10,588	11,528	7.4%	940	8.9%	12.2%	0.90	(0.04)	\$14,854	0.81
Other Services (except Public Administration)	6,162	6,432	4.1%	270	4.4%	-1.9%	0.87	0.04	\$24,422	0.93
Government	14,121	14,912	9.6%	791	5.6%	-1.8%	0.61	0.03	\$41,674	0.86
<i>Total, all sectors</i>	<i>145,027</i>	<i>155,387</i>		<i>10,360</i>	<i>7.1%</i>	<i>5.2%</i>			<i>\$40,856</i>	<i>0.84</i>

Source: EMSI

**Jobs in finance and insurance decreased between 2009 and 2014, although employment within this sector is nearly back to its 2009 level.** Companies in finance and insurance remain a strong presence in the local economy. In fact, out of the 374 MSAs across the country, metro Sioux Falls has the fourth highest concentration of jobs in finance and insurance. Earnings are comparatively lower than the national average due to differences in the local occupational mix. Sioux Falls area jobs within this sector employ a large number of comparatively lower-paying categories like customer service representatives, bookkeeping clerks, and insurance agents.

<sup>4</sup> Note: "Earnings ratio" refers to the ratio of local earnings to the national average for that same sector. This helps provide an important perspective on the relative cost of labor in a community. "AAW" is the average annual wage. "LQ" refers to location quotient where an LQ equal to 1.0 possess exactly the same share of total local employment as it does of national employment within that sector. The color coding next to the LQ value illustrates the concentration of each sector relation to the nation's where an LQ less than 0.95 is represented by red as having a smaller share of employment within that sector, yellow (0.95<LQ>1.05) has roughly the same share, and green (LQ>1.05) illustrates that there is a stronger local presence of the business sector than there is nationally. Likewise, the earnings ratio icons represent similar where red represents wages are less than the national average, yellow indicates that they are roughly the same (0.95<U.S. Earnings Ratio>1.05, and green indicates that wages are higher locally than the national average.

Seen in Figure 11, the top 20 largest occupations highlight the types of jobs that are most prevalent in the greater Sioux Falls economy. **Topping the list are registered nurses, a highly concentrated occupation with a location quotient of nearly twice that of the nation.** Jobs for registered nurses have grown quickly over the past five years (22.5 percent, ahead of the national figure). However, earnings are approximately 80 percent of the national average hourly wage.

There is also a high concentration of customer service representatives in the local economy due in part to a large presence of finance and insurance companies and back-office operations. Wells Fargo, Citibank, Capital One, Esurance, and First PREMIER Bank are top employers in the Sioux Falls metro and together supply over 8,000 jobs to local workers. Customer service representative jobs are typically filled by a younger workforce and have lower education requirement compared to other occupations. The average wage is roughly \$13 an hour, 18 percent less than the nation.

The remaining top occupations represent a variety of business sectors, with several occupations such as bill and account clerks, bookkeeping clerks, and secretaries supporting companies in multiple areas, including manufacturing and education. As will be seen in this report's Appendix, occupational strengths are strongly linked to employment sector concentrations, including industries pursued as targets by the region's economic developers.

Earnings are nearly all equal to or lower than national average. Elementary school teachers had the least attractive earnings ratio with average earnings 25 percent less than the nation's. In fact, teacher salaries in South Dakota rank 51<sup>st</sup> nationally, including the District of Columbia. Low salaries were reported to heighten the difficulty of attracting and retaining quality K-12 faculty. Administrators report that candidates living in greater Sioux Falls often cross into neighboring states to obtain teacher positions, which pay thousands of dollars more per year than in South Dakota.

According to recent news report, tax increases to support higher teacher pay are not likely at the state level. A local funding mechanism known as an "opt-out" allows districts to raise local taxes higher than South Dakota's per-student funding cap, which is set by lawmakers. The Sioux Falls School District has a \$7.5 million annual opt-out, which has helped provide more funding for things such as teacher salaries. Opt-outs require two-thirds approval from a school board before being put before voters. Even if passed, opt-outs are temporary and require a sunset. In an ominous sign for South Dakota K-12 districts, even with almost half of every district in South Dakota spending millions of dollars more than the state-approved K-12 funding levels, there still are pervasive reports of unfilled openings and dwindling candidate pools.<sup>5</sup>

---

<sup>5</sup> Anderson, Patrick. Teacher shortage: Boosting pay depends on taxes. *Argus Leader*, 1/25/15

FIGURE 11: TOP 20 LARGEST OCCUPATIONS

Description	2014 Jobs	09-14 # Chg.	09-14 % Chg.	2014 LQ	Average Hourly Earnings	U.S. Earnings Ratio	Education Level
Registered Nurses	5,511	1,011	22.5%	1.98	\$25.90	0.78	Associate's degree
Customer Service Representatives	4,442	218	5.2%	1.75	\$13.11	0.82	High school diploma or equivalent
Bookkeeping, Accounting, & Auditing Clerks	2,966	219	8.0%	1.61	\$14.87	0.83	High school diploma or equivalent
Heavy & Tractor-Trailer Truck Drivers	2,850	(110)	-3.7%	1.52	\$18.73	0.97	Postsecondary non-degree award
Sales Representatives, Wholesale & Manufacturing*	2,197	242	12.4%	1.43	\$27.54	0.90	High school diploma or equivalent
Bill & Account Collectors	2,131	(96)	-4.3%	5.51	\$14.45	0.87	High school diploma or equivalent
Nursing Assistants	2,077	127	6.5%	1.37	\$12.13	0.97	Postsecondary non-degree award
Secretaries & Administrative Assistants**	1,940	99	5.4%	0.72	\$13.26	0.81	High school diploma or equivalent
Receptionists & Information Clerks	1,809	100	5.9%	1.69	\$12.21	0.92	High school diploma or equivalent
Childcare Workers	1,802	(225)	-11.1%	1.37	\$8.61	0.98	High school diploma or equivalent
Office Clerks, General	1,795	16	0.9%	0.54	\$11.46	0.79	High school diploma or equivalent
Accountants & Auditors	1,625	116	7.7%	1.18	\$29.98	0.88	Bachelor's degree
Insurance Sales Agents	1,616	357	28.4%	2.14	\$27.49	0.94	High school diploma or equivalent
General & Operations Managers	1,420	61	4.5%	0.67	\$59.45	1.07	Bachelor's degree
Team Assemblers	1,312	233	21.6%	1.16	\$12.09	0.82	High school diploma or equivalent
Carpenters	1,264	22	1.8%	1.22	\$16.57	0.89	High school diploma or equivalent
First-Line Supervisors of Retail Sales Workers	1,203	78	6.9%	0.81	\$18.80	1.01	High school diploma or equivalent
Farmers, Ranchers, & Other Agricultural Managers	1,146	(53)	-4.4%	2.28	\$13.54	0.98	High school diploma or equivalent
Elementary School Teachers, Except Special Education	987	52	5.6%	0.72	\$20.27	0.75	Bachelor's degree
Residential Advisors	953	119	14.3%	8.22	\$11.69	0.91	High school diploma or equivalent

\* Except Technical & Scientific Products

\*\* Except Legal, Medical, & Executive

\*\*\* Except Special & Career/Technical Education

Source: EMSI

Note: Occupations that required less than a high school degree were not included.

The following table (Figure 12) shows that several fast-growing Sioux Falls area occupations over the past five years account for a larger share of jobs than the national level. **The fastest growing occupations are mainly concentrated in the sectors of manufacturing and health care and social assistance** and most often do not require formal post-secondary education. This is likely a contributor to the impacted labor pool for these lower-paying occupations that will be described later in this report.



FIGURE 12: TOP 20 FASTEST GROWING OCCUPATIONS

Description	2014 Jobs	09-14 # Chg.	09-14 % Chg.	2014 LQ	Average Hourly Earnings	U.S. Earnings Ratio	Education Level
Welding, Soldering, & Brazing Machine Setters*	78	27	52.9%	1.39	\$16.42	0.96	High school diploma or equivalent
Tool & Die Makers	93	32	52.5%	1.12	\$21.55	0.91	High school diploma or equivalent
Computer, Automated Teller, & Office Machine Repairers	123	36	41.4%	0.84	\$16.87	0.97	Some college, no degree
Welders, Cutters, Solderers, & Brazers	758	214	39.3%	1.90	\$16.55	0.89	High school diploma or equivalent
Security & Fire Alarm Systems Installers	78	22	39.3%	1.25	\$18.40	0.88	High school diploma or equivalent
Machinists	236	65	38.0%	0.57	\$17.52	0.89	High school diploma or equivalent
Computer-Controlled Machine Tool Operators^	67	18	36.7%	0.45	\$18.07	1.01	High school diploma or equivalent
Coating, Painting, & Spraying Machine Setters*	294	77	35.5%	3.20	\$13.08	0.85	High school diploma or equivalent
Electrical & Electronic Equipment Assemblers	348	89	34.4%	1.68	\$12.92	0.86	High school diploma or equivalent
Diagnostic Medical Sonographers	159	40	33.6%	2.57	\$26.15	0.81	Associate's degree
Medical Equipment Repairers	69	17	32.7%	1.60	\$24.56	1.10	Associate's degree
Molding, Coremaking, & Casting Machine Setters *^	249	59	31.1%	1.94	\$14.61	1.00	High school diploma or equivalent
Extruding & Drawing Machine Setters *^	167	39	30.5%	2.21	\$12.51	0.78	High school diploma or equivalent
Electrical Power-Line Installers & Repairers	112	26	30.2%	0.96	\$33.40	1.10	High school diploma or equivalent
Cutting, Punching, & Press Machine Setters *^	247	56	29.3%	1.27	\$14.73	0.97	High school diploma or equivalent
Surgical Technologists	235	53	29.1%	2.28	\$18.28	0.85	Postsecondary non-degree award
Producers & Directors	98	22	28.9%	0.84	\$23.95	0.61	Bachelor's degree
Insurance Sales Agents	1,616	357	28.4%	2.14	\$27.49	0.94	High school diploma or equivalent
Substance Abuse & Behavioral Disorder Counselors	196	42	27.3%	2.04	\$16.92	0.86	High school diploma or equivalent
Reservation & Transportation Ticket Agents & Travel Clerks	141	30	27.0%	0.96	\$12.68	0.76	High school diploma or equivalent

\* Operators, & Tenders

^ Metal and Plastic

Source: EMSI

Note: Occupations with fewer than 50 jobs and/or required less than a high school degree were not included.

Medical equipment repairers, which are connected to the health care sector, have grown rapidly over the past five years, with 33 percent more jobs than in 2009. Also indicative of the strong demand for these workers is the earnings ratio, which suggests upward pressures have been placed on wages within this line of work in an effort to recruit or retain qualified employees.

**During the five-year period analyzed, jobs for welders increased by 39.3 percent in the metro area compared to 9.7 percent nationally.** Welders predominantly work in the manufacturing sector, which has performed well since 2009 with growth accounting for over 1,000 jobs. Welding occupations have been the center of national focus in recent years due to the occupation's aging workforce and impending retirements. It is an issue that has been on the radar of most local workforce agencies in South Dakota and in communities around the United States. A new state-level program, Build Dakota, will seek to address shortages in welding talent as well as other impacted occupations. The program will be described more fully later in this report. In fact, all four technical institutes in South Dakota have welding programs. "The issue," according to Southeast Technical Institute's president Jeff Holcomb, "is we couldn't turn out enough of them to fill the need even if we quadrupled the space in our programs." In addition to welders, Holcomb says companies desperately need mechatronics technicians and mechanical engineering technicians.<sup>6</sup>

Figure 13 highlights the Sioux Falls region's top 20 fastest declining occupations. Reasons for the decline in each occupation vary and must be taken into context. For example, some occupations were negatively affected by the recession to a larger degree than others. Jobs such as architects, architectural and civil drafters, brickmasons and blockmasons, and securities, commodities, and financial services sales agents

<sup>6</sup> Young, Steve. Is welding really a career worth pursuing? *Argus Leader*, 1/30/15



were all casualties likely brought on by the downturn. On the other hand, the decline observed in photographers, tellers, gaming change persons and booth cashiers, couriers and messengers, and door-to-door sales workers likely tells a different story. Some of the jobs in these areas are less likely to rebound over the next ten years due to technological advancements and changes in consumer preferences. **It is interesting to note that the majority of greater Sioux Falls' fastest declining occupations require a bachelor's degree or above for employment, while its fastest growing require just a high school diploma or, on occasion, a certificate or associate's degree.** This again supports trends the region is observing in lower-paying, lower-skill jobs wanting for hireable candidates while some in the workforce with higher-level degrees are underemployed.

**FIGURE 13: FASTEST DECLINING OCCUPATIONS**

Description	2014 Jobs	09-14 # Chg.	09-14 % Chg.	2014 LQ	Average Hourly Earnings	U.S. Earnings Ratio	Education Level
Photographers	93	(42)	-31.1%	0.70	\$12.83	0.85	High school diploma or equivalent
Door-to-Door Sales Workers, News & Street Vendors^	70	(30)	-30.0%	0.82	\$12.42	1.27	High school diploma or equivalent
Architects, Except Landscape & Naval	52	(21)	-28.8%	0.45	\$34.70	0.99	Bachelor's degree
Personal Financial Advisors	125	(40)	-24.2%	0.53	\$32.27	0.72	Bachelor's degree
Massage Therapists	68	(16)	-19.0%	0.44	\$15.16	0.94	Postsecondary non-degree award
Brickmasons & Blockmasons	141	(32)	-18.5%	1.87	\$21.34	0.94	High school diploma or equivalent
Reporters & Correspondents	51	(11)	-17.7%	1.01	\$15.88	0.77	Bachelor's degree
Couriers & Messengers	66	(14)	-17.5%	0.62	\$12.37	0.92	High school diploma or equivalent
Installation, Maintenance, & Repair Workers, All Other	62	(13)	-17.3%	0.38	\$19.22	1.04	High school diploma or equivalent
Construction Managers	220	(44)	-16.7%	0.58	\$29.54	0.88	Bachelor's degree
Software Developers, Systems Software	148	(29)	-16.4%	0.37	\$39.89	0.80	Bachelor's degree
Architectural & Civil Drafters	116	(20)	-14.7%	1.17	\$18.90	0.77	Associate's degree
Medical Secretaries	97	(16)	-14.2%	0.18	\$17.86	1.12	High school diploma or equivalent
Dentists, General	112	(18)	-13.8%	0.83	\$86.65	1.10	Doctoral or professional degree
Securities, Commodities, & Financial Services Sales Agents	254	(40)	-13.6%	0.70	\$62.85	1.32	Bachelor's degree
Electronics Engineers, Except Computer	64	(10)	-13.5%	0.45	\$37.51	0.80	Bachelor's degree
Electrical & Electronics Engineering Technicians	53	(8)	-13.1%	0.36	\$23.69	0.84	Associate's degree
Tellers	740	(109)	-12.8%	1.40	\$11.22	0.89	High school diploma or equivalent
Gaming Change Persons & Booth Cashiers	59	(8)	-11.9%	2.84	\$13.49	1.12	High school diploma or equivalent
Telecommunications Equipment Installers & Repairers*	229	(31)	-11.9%	1.01	\$24.44	0.95	Postsecondary non-degree award

\* Except Line Installers

^ And related workers

Source: EMSI

Note: Occupations with fewer than 50 jobs and/or required less than a high school degree were not included.

As previously mentioned, the location quotient is a measure of how concentrated an occupation or business sector is in the local economy compared to the national level. **Figure 14 lists the top 20 most concentrated occupations in the Sioux Falls MSA.** Topping the list are correspondence clerks, jobs whose primary duties include composing letters or electronic correspondence in reply to requests for damage claims, credit, delinquent accounts, and incorrect billings, among others. These jobs mainly fall within the business activities covered by the finance and insurance sector. There is also a high concentration of residential advisors., which can be attributed to the presence of mental health facilities, community housing, and group homes.

**FIGURE 14: TOP 20 MOST CONCENTRATED OCCUPATIONS**

Description	2014 Jobs	09-14 # Chg.	09-14 % Chg.	2014 LQ	Average Hourly Earnings	U.S. Earnings Ratio	Education Level
Correspondence Clerks	163	14	9.4%	19.55	\$13.72	0.79	High school diploma or equivalent
Residential Advisors	953	119	14.3%	8.22	\$11.69	0.91	High school diploma or equivalent
Bill and Account Collectors	2,131	(96)	-4.3%	5.51	\$14.45	0.87	High school diploma or equivalent
Floor Layers, Except Carpet, Wood, and Hard Tiles	111	17	18.1%	5.01	\$16.42	1.01	High school diploma or equivalent
Nuclear Medicine Technologists	97	19	24.4%	4.69	\$25.61	0.74	Associate's degree
Loan Interviewers and Clerks	861	(31)	-3.5%	3.93	\$15.39	0.86	High school diploma or equivalent
Broadcast Technicians	115	18	18.6%	3.85	\$13.79	0.69	Associate's degree
Cabinetmakers and Bench Carpenters	387	29	8.1%	3.84	\$14.46	0.93	High school diploma or equivalent
Credit Authorizers, Checkers, and Clerks	192	(23)	-10.7%	3.78	\$13.81	0.81	High school diploma or equivalent
Nurse Anesthetists	138	15	12.2%	3.64	\$80.77	1.06	Master's degree
Credit Analysts	241	(16)	-6.2%	3.55	\$30.46	0.87	Bachelor's degree
Extruding, Forming, Pressing, and Compacting Machine Setters*	254	33	14.9%	3.51	\$15.36	0.96	High school diploma or equivalent
Merchandise Displayers and Window Trimmers	264	34	14.8%	3.29	\$10.35	0.73	High school diploma or equivalent
Electrical and Electronics Repairers*	229	23	12.2%	3.24	\$18.61	0.71	Postsecondary non-degree award
Coating, Painting, and Spraying Machine Setters^	294	77	35.5%	3.20	\$13.08	0.85	High school diploma or equivalent
Insurance Claims and Policy Processing Clerks	781	111	16.6%	3.13	\$14.37	0.79	High school diploma or equivalent
Medical Transcriptionists	256	25	10.8%	3.13	\$15.21	0.93	Postsecondary non-degree award
Gaming Change Persons and Booth Cashiers	59	(8)	-11.9%	2.84	\$13.49	1.12	High school diploma or equivalent
Crushing, Grinding, and Polishing Machine Setters^	88	8	10.0%	2.78	\$11.20	0.68	High school diploma or equivalent
Surgeons	132	7	5.6%	2.73	\$107.88	1.00	Doctoral or professional degree

\* Commercial and Insutrail Equipment

^ Operators, and Tenders

Source: EMSI

Note: Occupations with fewer than 50 jobs in 2014 and/or required less than a high school degree were not included.

## KEY FINDINGS

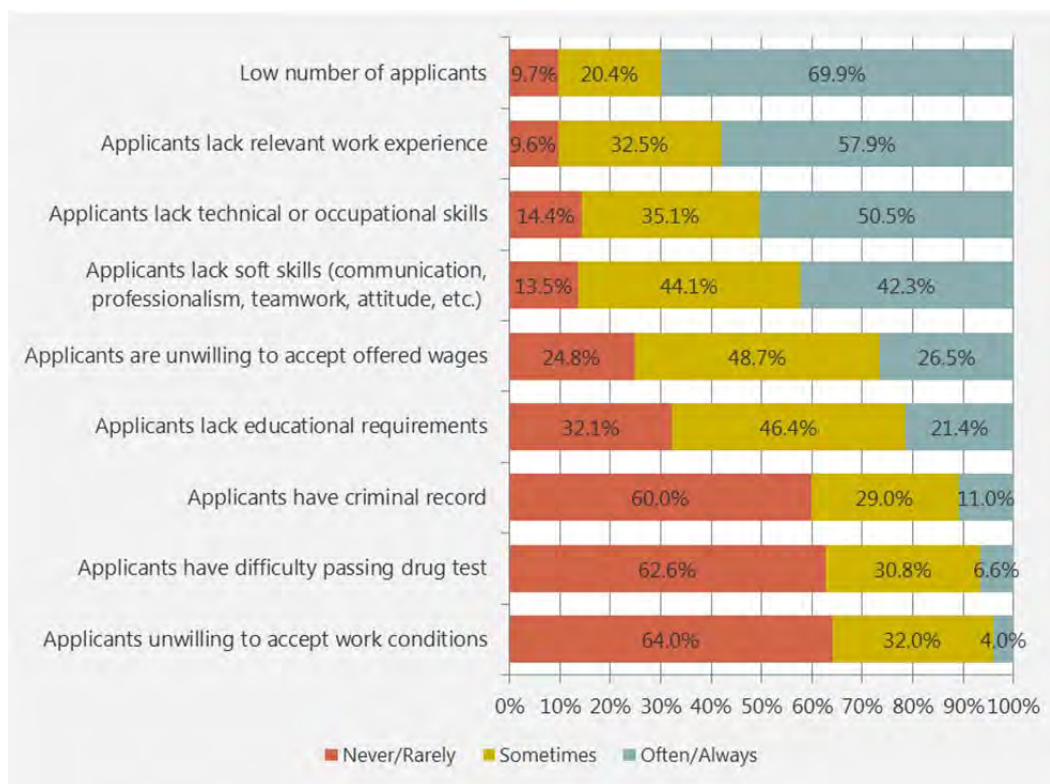
- ✓ South Dakota and metro Sioux Falls continue to experience high labor force participation and low unemployment, a situation that has led to a tight labor market and dearth of available candidates for many job openings. In greater Sioux Falls, this has led to employers reportedly hiring under-qualified applicants and "poaching" from other local businesses.
- ✓ Healthcare and social assistance jobs accounted for the highest rate (25 percent) of employment growth from 2009 to 2014. Finance and insurance jobs declined during this period, but are almost back to 2009 levels.
- ✓ The most prevalent occupations in the Sioux Falls area are registered nurses, customer service representatives, and bookkeeping, accounting, and auditing clerks. Most of the region's largest occupational categories do not require four-year degrees for eligibility.
- ✓ Fastest growing occupations include health care and social assistance and manufacturing, especially welders. Interestingly, many of the region's fastest-declining occupations require a bachelor's degree or above.
- ✓ The majority of the Sioux Falls area's most concentrated (by LQ) occupations, including correspondence clerks, residential advisors, and bill and account collectors, only require a high school diploma or equivalent for employment. Overall, data clearly show that the Sioux Falls MSA economy is strongly focused on lower-skill, lower-paying jobs.

## What issues are our employers facing today in terms of workforce availability?

Employers discussed several issues and frustrations throughout input, from the quantity of candidates to the quality of workers. Many of the challenges cited were similar to those identified during the Accenture-facilitated Workforce Summits in 2014 and the 2009 Future Sioux Falls process. These include difficulty in finding qualified workers, training capacity issues, and the lack of early exposure in schools to career fields.

Survey participants for the Action Agenda process were asked to rank a list of possible reasons that have affected their ability to hire quality candidates. As seen in Figure 15, **top answers included a low number of applicants, lack of relevant work experience, and lack of technical or occupational skills.**

**FIGURE 15: PLEASE RATE THE FOLLOWING POSSIBLE REASONS THAT HAVE CAUSED HIRING DIFFICULTIES BASED ON THE FREQUENCY THAT EACH REASON HAS PLAYED A PART IN FINDING INDIVIDUALS TO FILL POSITIONS WITH YOUR COMPANY**



Source: 2015 Sioux Falls Strategic Workforce Action Agenda Survey; *Market Street Services*.  
Question was presented to 116 individuals that self-identified as owners, executives, managers, or human resources staff.

These survey findings are consistent with interview and focus group impact and are borne out by trends seen in employment, occupational, and workforce data. **Sioux Falls area companies are faced with**

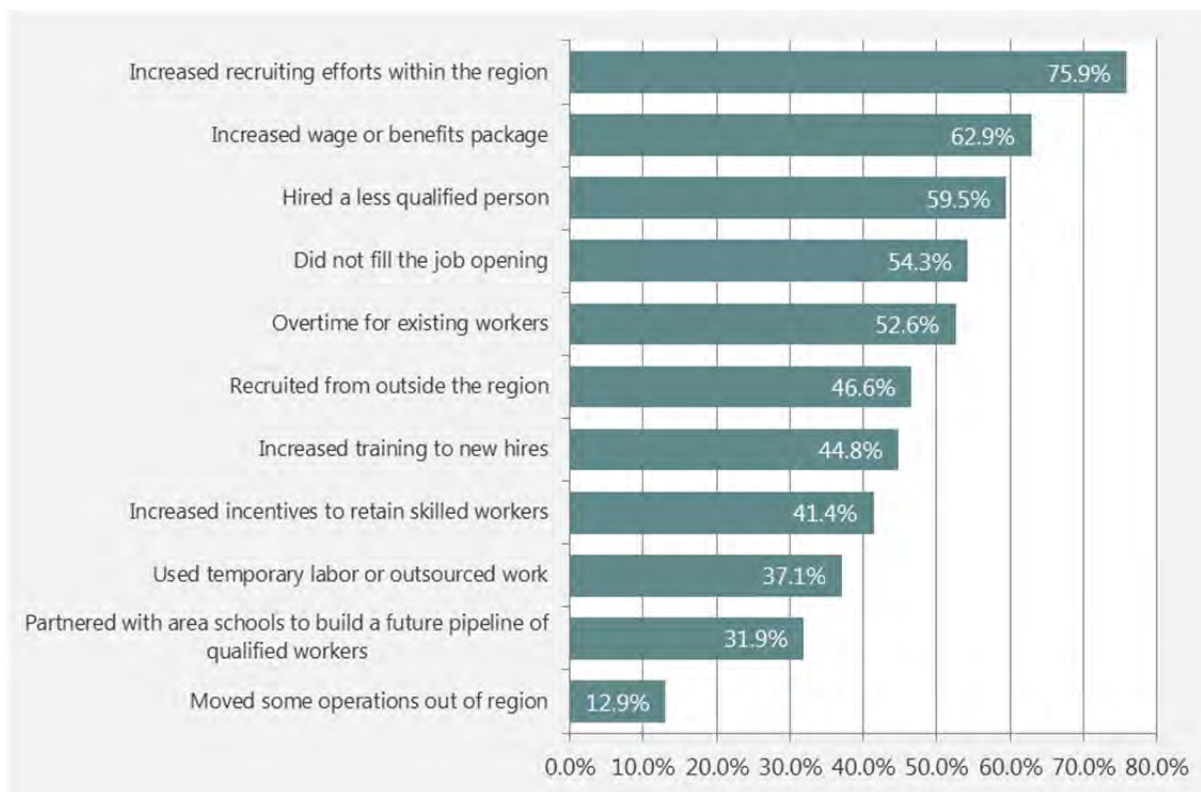
**growing demand for workers but a shrinking pool of candidates, especially for lower-wage, lower-skill positions.** As will be discussed later in this report, the region's capacity to produce local graduates to meet this demand is constrained by the lack of a stand-alone four-year university campus and structural factors related to the technical college system. Also, pervasive attitudes diminishing the value of career and technical education and pursuit of employment in the skilled trades are key factors limiting the number of potential workers that pursue these fields.

Indeed, the theme of constrained labor supply emerged often through input. **Participants said that external perception of South Dakota as frozen prairie adversely impacted talent attraction**, though candidates were "won over" by greater Sioux Falls when experiencing the region in person. One employer reported that the company "would have had to leave South Dakota if it hadn't been for the refugee population." They felt that the area's concentration "should be on recruiting people, not companies." **Several focus group participants and interviewees felt that the area needs to change its "brand" and increase talent-marketing efforts.**

**Others noted that low average wages are a challenge for retaining graduates or recruiting external talent.** Many tried to convey that the lack of state income tax and generous benefits packages compensate for lower wages, but acknowledged that this was often a hard sell for prospective talent. Even so, young professional workers did note that concerted efforts to communicate the value of benefits versus higher salary were effective when pursued proactively and honestly.

Survey respondents were asked about actions their company or organization had taken in response to hiring difficulties. **As displayed in Figure 16, one of the top responses was increased wage or benefits packages.** Increases in the Sioux Falls area's average annual wages would seem to support the fact that employers are raising compensation packages to better attract and retain talent. Other top responses included more aggressive internal and external recruiting efforts, hiring of less qualified workers, paying more overtime, leaving positions unfilled, and training candidates in-house. **It is interesting that greater Sioux Falls is simultaneously experiencing underemployment among over-educated workers as well as employers reportedly hiring underqualified candidates.** Talent absorption to fill a preponderance of need in lower-skill positions has evidently led to educated workers setting for lower-paying positions because jobs in their preferred fields are not available in addition to employers hiring sub-optimal candidates due to the basic need to fill the position.

**FIGURE 16: PLEASE CHECK ALL THE ACTIONS THAT YOUR COMPANY OR ORGANIZATION HAS TAKEN IN RESPONSE TO HIRING DIFFICULTIES.**



Source: 2015 Sioux Falls Workforce Action Agenda survey; Market Street Services

**Generational differences within the workplace were also often cited as a challenge throughout input.** The growing presence of Millennials (those born between 1981 and 1995) in the workplace is creating challenges as managers try to adjust to new worker attitudes and preferences. In fact, this is the first time in history where five generations of employees are working together. Between 2008 and 2013, the number of residents in the Sioux Falls area from the Millennial generation increased by 11.8 percent, outpacing growth of the Baby Boomer generation, which increased by 0.7 percent. Employers in input were frustrated by what they perceived as an entitlement attitude among Millennials and a lack of work ethic. Many felt they were “shooting in the dark” trying to figure out how to attract and manage them. For their part, young professionals spoke of the need for work-life balance and a desire to work “smarter” instead of “longer.” They appreciated efforts made by employers to make the workplace a more fun and engaging environment.

Survey respondents were asked to rank the effectiveness of certain programs and services used to find or provide qualified employees. **Approximately half of survey respondents reported that the most effective option to source qualified workers was employee referral or word of mouth.** One company official noted, “Employee referrals are by far the most successful recruiting and retention opportunities.” Staffing firms and third-party recruiters were ranked as the least effective services for sourcing qualified



workers. Internships, including Dakota Seeds, and local higher education institutions were also cited as beneficial.

Finally, employers participating in the online survey were asked to report the top three most difficult jobs to fill at their companies. Figure 17 displays participants' answers; word size is based on the frequency of use of that term in the survey responses. **Their replies echoed the input heard from interviewees, focus groups, and other stakeholders that lower-paying positions often requiring little formal education were some of the hardest jobs to fill.** Higher-skill categories such as engineer, IT, and software were referenced, but not to the degree as lower-skilled positions.

FIGURE 17: SPECIFICALLY, WHAT ARE THE TOP THREE MOST DIFFICULT JOBS TO FILL AT YOUR COMPANY?



Source: 2015 Sioux Falls Strategic Workforce Action Agenda Survey; *Market Street Services*

Supplementing qualitative data with the quantitative data provides context for determining which occupations are most in demand by regional employers. **Figure 18 provides an overview of the major occupational groups and their composition in the Sioux Falls area.** Historical trends illustrate changes in the occupational composition of the local labor market. **Office and administrative support positions account for the largest percentage of jobs in the Sioux Falls area, followed by sales and related occupations.** As indicated by the location quotient (LQ), 14 occupational groups have increased in concentration in the local economy, albeit small increases, with the exception of healthcare practitioners.

Due to the large number of employers involved in health care, fast growth rates and high concentrations were found in healthcare practitioners and technical occupations. Although the health care and social assistance business sector as a whole averaged higher than average wages, healthcare practitioners and technical occupations average lower wages compared to the nation. In fact, wages for all occupations except two (Farming, fishing, and forestry and Military) were lower than the U.S. average, oftentimes much

lower. **Clearly, low wage rates are not just the perception of employees but the reality of the Sioux Falls area economy.**

FIGURE 18: OCCUPATIONAL OVERVIEW

Description	2009 Jobs	2014 Jobs	# Chg. (09-14)	% Chg. (09-14)	US % Chg. (09-14)	Jobs: Share of Total	Openings: Share of Total	2014 LQ	LQ Chg. (09-14)	Avg. Annual Earnings	US Earnings Ratio**
Management	6,209	6,244	35	0.6%	3.4%	4.0%	3.2%	0.76	(0.04)	\$85,872	0.87
Business and Financial Operations	7,397	7,789	392	5.3%	6.2%	5.0%	4.7%	1.03	(0.03)	\$58,745	0.84
Computer and Mathematical	3,268	3,588	320	9.8%	11.5%	2.3%	2.1%	0.88	(0.03)	\$59,004	0.73
Architecture and Engineering	1,405	1,362	(43)	-3.1%	4.6%	0.9%	0.8%	0.53	(0.05)	\$60,839	0.77
Life, Physical, and Social Science	762	873	111	14.5%	5.3%	0.6%	0.7%	0.68	0.04	\$62,098	0.90
Community and Social Service	2,202	2,424	222	10.1%	6.7%	1.6%	1.7%	0.97	0.01	\$38,825	0.87
Legal	860	900	39	4.6%	1.8%	0.6%	0.5%	0.69	0.01	\$74,403	0.78
Education, Training, and Library	5,617	5,907	290	5.2%	1.3%	3.8%	3.4%	0.66	0.01	\$38,867	0.77
Arts, Design, Entertainment, Sports, and Media	2,512	2,752	240	9.5%	3.9%	1.8%	2.1%	1.02	0.03	\$35,309	0.71
Healthcare Practitioners and Technical	10,561	12,348	1,787	16.9%	7.0%	7.9%	8.8%	1.48	0.10	\$65,151	0.86
Healthcare Support	3,620	3,791	170	4.7%	10.6%	2.4%	2.1%	0.87	(0.07)	\$27,372	0.98
Protective Service	1,880	2,047	168	8.9%	2.0%	1.3%	1.3%	0.59	0.03	\$40,645	0.94
Food Preparation and Serving Related	11,849	12,848	999	8.4%	11.6%	8.3%	9.7%	1.01	(0.05)	\$19,854	0.92
Building and Grounds Cleaning and Maintenance	5,255	5,919	664	12.6%	4.4%	3.8%	3.8%	0.99	0.06	\$23,326	0.94
Personal Care and Service	5,904	5,899	(5)	-0.1%	7.6%	3.8%	4.5%	0.98	(0.09)	\$22,803	0.99
Sales and Related	17,006	18,475	1,469	8.6%	3.6%	11.9%	13.2%	1.14	0.03	\$37,883	0.98
Office and Administrative Support	25,688	26,487	799	3.1%	3.7%	17.0%	13.9%	1.11	(0.03)	\$29,269	0.84
Farming, Fishing, and Forestry	454	567	113	24.8%	6.0%	0.4%	0.6%	0.49	0.07	\$28,552	1.20
Construction and Extraction	7,266	7,507	241	3.3%	-1.7%	4.8%	4.5%	1.10	0.03	\$36,171	0.85
Installation, Maintenance, and Repair	5,210	5,701	491	9.4%	5.7%	3.7%	3.9%	0.97	0.02	\$42,291	0.98
Production	8,646	9,811	1,165	13.5%	6.1%	6.3%	7.3%	1.05	0.05	\$30,280	0.87
Transportation and Material Moving	10,002	10,612	610	6.1%	8.3%	6.8%	6.2%	1.06	(0.04)	\$31,016	0.92
Military	1,456	1,537	81	5.6%	-1.4%	1.0%	0.8%	0.73	0.04	\$39,233	1.13
	145,029	155,387	10,358	7.1%	5.2%					\$38,881	0.86

\*Average annual earnings calculated by multiplying the average hourly wage by 2080, the standard hours worked in a year.

\*\*Sioux Falls average hourly earnings divided by the US average hourly earnings. A ratio greater than 1 indicates that workers in Sioux Falls earn more hourly.

Source: EMSI

The “openings” column represents jobs that were available over the five-year period and can be used to identify occupations in demand by employers. The number of openings stems from job growth, replacements, and retirees; the share of total openings by occupational group helps to identify where the largest needs have been for qualified workers.

**Office and administrative and sales and related occupations – both fast-growing and large categories – account for a significant percentage of total job openings.** Food preparation and serving related occupations accounted for 9.7 percent of openings. **Replacement needs occurring when a job is vacated permanently are typically seen at lower skilled jobs.** Often those workers will switch occupations to a more skilled position after acquiring additional training or education.

**Figure 19 lists the occupations with the largest number of openings over the past five years.** Declining occupations (such as team assemblers) with high rates of openings are likely characterized by demand driven by retirements and resulting replacement needs. By comparison, growing occupational categories (such as registered nurses and customer service representatives) with high number of openings are more likely the result of pure employer demand and scarcity of available talent with those skills. **Reflecting a consistent theme of this report, the occupations with the highest number of job openings are in fields that typically require less education and less intensive acquisition of hard-to-find skills.**



FIGURE 19: TOP 20 OCCUPATIONS BY OPENINGS 2009-2014

Description	2014 Jobs	# Chg. (09-14)	Openings	% Chg. (09-14)	US % Chg. (09-14)	Difference in Growth
Registered Nurses	5,511	1,011	1,554	22%	6%	16%
Customer Service Representatives	4,442	218	978	5%	7%	-2%
Insurance Sales Agents	1,616	357	687	28%	24%	5%
Bill and Account Collectors	2,131	(96)	498	-4%	4%	-8%
Sales Representatives, Wholesale and Manufacturing*	2,197	242	490	12%	4%	8%
Accountants and Auditors	1,625	116	454	8%	6%	2%
Childcare Workers	1,802	(225)	453	-11%	-8%	-3%
Bookkeeping, Accounting, and Auditing Clerks	2,966	219	443	8%	6%	2%
Residential Advisors	953	119	418	14%	10%	4%
Nursing Assistants	2,077	127	412	7%	5%	2%
Receptionists and Information Clerks	1,809	100	384	6%	6%	0%
Heavy and Tractor-Trailer Truck Drivers	2,850	(110)	361	-4%	7%	-11%
Team Assemblers	1,312	233	352	22%	14%	8%
Welders, Cutters, Solderers, and Brazers	758	214	341	39%	10%	30%
Office Clerks, General	1,795	16	289	1%	4%	-3%
First-Line Supervisors of Retail Sales Workers	1,203	78	275	7%	2%	5%
Secretaries and Administrative Assistants^	1,940	99	275	5%	6%	0%
Automotive Service Technicians and Mechanics	789	158	257	25%	8%	17%
Hairdressers, Hairstylists, and Cosmetologists	681	92	239	16%	4%	11%
Carpenters	1,264	22	234	2%	-5%	7%

\* Except Technical and Scientific Products

^ Except Legal, Medical, and Executive

Source: EMSI

To provide additional perspective to the issue of labor supply versus demand, *Market Street* calculated ratios of unemployed workers versus job openings for the Sioux Falls area's occupational categories as seen in Figure 20. In total, it was estimated that there were 6,000 to 7,000 job openings over the past year, in greater Sioux Falls and roughly 4,000 unemployed workers. The unemployed worker to job openings ratio was approximately 0.6, suggesting that there were roughly three unemployed individuals for every five job openings. For comparison, nationally in January 2015 there were 1.8 unemployed workers per opening. (At the end of the recession in June 2009, that figure in the U.S. was 6.2.) Thus, this data demonstrates the relative "tightness" of the labor market for each occupation.

FIGURE 20: SHARE OF TOTAL UNEMPLOYED VERSUS JOB OPENINGS BY OCCUPATION

Occupational Group	Share of Total Unemployed	Share of Total Job Openings	Sioux Falls ratio	United States ratio
Architecture & Engineering	0.1%	0.8%	0.1	0.9
Farming, Fishing, & Forestry	0.1%	0.6%	0.1	2.1
Healthcare Practitioners & Technical	2.2%	8.9%	0.1	0.7
Life, Physical, & Social Science	0.2%	0.7%	0.1	0.8
Computer & Mathematical	0.7%	2.1%	0.2	0.7
Production	3.3%	7.4%	0.2	1.6
Installation, Maintenance, & Repair	1.8%	3.9%	0.2	1.0
Business & Financial Operations	2.8%	4.8%	0.3	1.1
Sales & Related	9.4%	13.3%	0.3	1.4
Food Preparation & Serving Related	6.9%	9.8%	0.3	0.9
Community & Social Service	1.3%	1.7%	0.4	1.0
Education, Training, & Library	2.6%	3.4%	0.4	1.2
Transportation & Material Moving	5.1%	6.2%	0.4	1.6
Personal Care & Service	4.0%	4.6%	0.4	1.4
Healthcare Support	1.9%	2.1%	0.4	1.4
Protective Service	1.3%	1.4%	0.5	1.0
Arts, Design, Entertainment, Sports, & Media	2.5%	2.2%	0.6	1.6
Office & Administrative Support	19.7%	14.1%	0.7	1.8
Management	4.6%	3.2%	0.7	1.9
Legal	0.9%	0.5%	0.8	1.8
Building & Grounds Cleaning & Maintenance	6.6%	3.8%	0.8	2.5
Construction & Extraction	9.2%	4.6%	1.0	2.3

Source: EMSI

**Based on these data, healthcare and computer/mathematical occupations are currently the higher wage jobs experiencing the tightest labor markets in the Sioux Falls region and are thus priorities for education and training practitioners.** It is natural to assume that the positions with the greatest educational requirements would have the fewest available unemployed workers, but the reported (and quantifiable) lack of talent for lower-skill positions in sales, administration, and other lower-paying jobs shows that, 1) there are still not enough qualified workers being developed or attracted in these fields, and 2) there are stronger opportunities to bring adults back to work with existing experience in these occupations. **Overall, there is not a single occupational group with a surplus of workers, which again**

**illustrates the tightness of the Sioux Falls area labor force and the pressing need to grow the region's supply of available workers.**

## KEY FINDINGS

- ✓ There is a growing need for workers in the Sioux Falls area, but a shrinking pool of applicants, especially for lower-skill positions. Talent attraction is a challenge in the region due to perceptions of South Dakota's lifestyles and lower wages across-the-board for metro Sioux Falls positions.
- ✓ Employers in greater Sioux Falls are utilizing multiple tactics to cope with talent shortages, including increasing regional recruiting, rising salaries, hiring less qualified candidates, and even leaving hundreds of jobs unfilled. Generational workplace issues between management and Millennials are compounding employers' perceptions that current staff lack the work ethic of past generations.
- ✓ The principal occupational categories in the Sioux Falls MSA, led by office and administration and sales and related, nearly all pay less than their national equivalents.
- ✓ Occupations with the highest number of job openings from 2009 to 2014, including registered nurse, customer service representatives, insurance agents, and bill collectors, all require less education than higher-paying positions.
- ✓ Data show that the tightest labor markets in the Sioux Falls area are for health care and computer and mathematical jobs. There is not one major occupational category in the region that is experiencing a surplus of available workers.

## What can we expect in the next decade?

A key expectation of this Workforce Sustainability Analysis report is the projection of future jobs and occupations in demand to not only inform the Action Agenda but give perspective to the education and training community on programs that might be critical to meeting employer needs. As the Great Recession showed, prediction of future economic conditions is not an exact science; the constantly changing dynamics of the global, national, and regional economies means that correctly assessing the sectors and jobs growing fastest should be taken with a grain of salt. This is especially true as technologies such as the Internet of Things and sub-atomic-scale production will alter the employment landscape in ways today's thinkers cannot hope to fathom.

**Therefore, while this report will present ten-year employment projections, the ultimate goal of the Action Agenda should be to formalize systems and partnerships that will enable the Sioux Falls area to flexibly and nimbly adjust to new job and skills requirements** and demands before talent needs become impacted as they currently are in the region. Communicating with existing workers and rising graduates on the realities of the current and emerging marketplace will also be important to ensure they are aware of burgeoning opportunities and their associated training needs. *(Note: This section does not break down occupations by Sioux Falls area target sectors; this will be done in the Appendix of this report.)*

A 2013 Oxford University study<sup>7</sup> presented a detailed analysis of occupations that are most susceptible to shrinkage caused by computerization and advancement in technology over the next 20 years and predicted that 47 percent of U.S. jobs are at risk, including many low-skill occupations. The authors found that a significant number of jobs in service occupations are the most susceptible to computerization. Less so are occupations that require advanced skills like social intelligence and creativity-based jobs. Management, business, and financial; computer, engineering, and science; education, legal, community service, arts, and media; and healthcare practitioners and technical occupations all have a smaller probability of being computerized. Occupations least likely to be replaced by technology include occupational therapists, elementary school teachers, recreational therapists, and mental health and substance abuse social workers. The authors concluded that, "For workers to win the race... they will have to acquire creative and social skills."

Figure 21 provides a list of the top 20 occupations with the highest probability of automation, as well as the number and concentration of jobs in the Sioux Falls area that would potentially be affected. Note that this refers to the probability that this occupation *can* be computerized over the next two decades, and does not estimate the chance that all of the jobs will be eliminated. Eleven out of 20 occupations in the Sioux Falls MSA are at risk of obsolescence, amounting to just over 3,000 jobs. This is significant for the region in that, as has been noted, **some of the area's fastest-growing job categories are also most at risk of elimination due to technological advancement**. If greater Sioux Falls had the same job concentrations as the national average, then roughly 2,400 jobs would be at risk, or approximately 40 percent fewer than the locally-based figure.

---

<sup>7</sup> [http://www.oxfordmartin.ox.ac.uk/downloads/academic/The\\_Future\\_of\\_Employment.pdf](http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf)

**FIGURE 21: TOP 20 OCCUPATIONS MOST AT RISK OF AUTOMATION**

Occupation	Probability	Sioux Falls	
		2014 Jobs	2014 LQ
1 Telemarketers	0.99	446	1.76
2 Title Examiners, Abstractors, and Searchers	0.99	95	1.49
3 Sewers, hand	0.99	<10	-
4 Mathematical Technicians	0.99	<10	-
5 Insurance Underwriters	0.99	241	2.51
6 Watch Repairers	0.99	<10	-
7 Cargo and Freight Agents	0.99	167	2.14
8 Tax Preparers	0.99	66	0.65
9 Photographic Process Workers & Processing Machine Operators	0.99	39	1.06
10 New Accounts Clerks	0.99	18	0.31
11 Library Technicians	0.99	161	1.29
12 Data Entry Keyers	0.99	147	0.67
13 Timing Device Assemblers and Adjusters	0.98	<10	-
14 Insurance Claims and Policy Clerks	0.98	781	3.13
15 Brokerage Clerks	0.98	104	1.68
16 Order Clerks	0.98	100	0.48
17 Loan Officers	0.98	675	2.18
18 Insurance Appraisers, Auto Damage	0.98	19	1.30
19 Umpires, Referees, and Other Sports Officials	0.98	17	0.72
20 Tellers	0.98	740	1.40

Source: The Future of Employment: How Susceptible Are Jobs to Computerization?

Note: The probability factor indicates the likelihood that the occupation can be computerized.

**Figure 22 lists the top 20 occupations that are projected to decline the fastest nationally.** Projections are done based on current and expected future conditions and under the assumption that the labor market is in equilibrium. Postal service is one of the largest sectors most negatively impacted by the advancements in technology. Door-to-door sales workers, news and street vendors, and related workers are casualties of both technological changes and consumer preferences as more people turn to online options for their news and purchasing choices.

**Overall, the Sioux Falls area has a relatively small share of jobs in occupations that are projected to rapidly decline nationally.** Although many of the jobs are in manufacturing, they are primarily concentrated in fabric mill operations which are not pervasive in the local economy. Several of the occupations have little to no employment in the Sioux Falls area; postal service mail sorters, postmasters, and farmers are the only occupations on the list that have a LQ greater than one in greater Sioux Falls.

**FIGURE 22: TOP 20 OCCUPATIONS WITH THE FASTEST PROJECTED NATIONAL DECLINE**

Description	United States			Sioux Falls	
	2014 Jobs	# Chg.	% Chg.	2014 Jobs	2014 LQ
Textile Knitting & Weaving Machine Setters, Operators, & Tenders	22,162	(6,581)	(30%)	<10	0.02
Fallers	9,554	(2,764)	(29%)	<10	0.15
Locomotive Firers	1,986	(566)	(28%)	<10	0.47
Textile Bleaching & Dyeing Machine Operators & Tenders	11,920	(3,259)	(27%)	0	0.00
Door-to-Door Sales Workers, News & Street Vendors, & Related Workers	84,699	(19,623)	(23%)	70	0.82
Postal Service Clerks	69,134	(15,379)	(22%)	42	0.59
Log Graders & Scalers	3,344	(740)	(22%)	<10	0.25
Shoe Machine Operators & Tenders	4,105	(904)	(22%)	0	0.00
Postal Service Mail Sorters, Processors, & Processing Machine Operators	117,802	(25,516)	(22%)	196	1.64
Shoe & Leather Workers & Repairers	8,084	(1,579)	(20%)	<10	0.24
Postal Service Mail Carriers	297,554	(53,591)	(18%)	275	0.91
Paperhangers	4,609	(815)	(18%)	<10	0.64
Textile Cutting Machine Setters, Operators, & Tenders	14,969	(2,619)	(17%)	<10	0.29
Farmers, Ranchers, & Other Agricultural Managers	496,262	(86,076)	(17%)	1,146	2.28
Sewing Machine Operators	153,565	(26,581)	(17%)	61	0.39
Word Processors & Typists	105,524	(17,206)	(16%)	91	0.85
Fabric Menders, Except Garment	754	(120)	(16%)	0	0.03
Postmasters & Mail Superintendents	17,864	(2,693)	(15%)	31	1.74
Data Entry Keyers	224,747	(33,531)	(15%)	147	0.64
Textile Winding, Twisting, & Drawing Out Machine Setters, Operators, & Tenders	26,379	(3,749)	(14%)	<10	0.04

Source: EMSI

**Conversely, Figure 23 shows national projections of the top growing occupations in the next ten years, many of which are concentrated in metro Sioux Falls' target-driven occupations.** Principal among these are health care jobs. Growth trends at the national level can have varying degrees of effect on local economies. The Sioux Falls area has a large share of diagnostic sonographers, a nationally and locally fast growing occupation. Employment is projected to grow by 34 percent in the United States, with the Sioux Falls area standing to experience similarly fast growth rates. Other occupations of strength in the Sioux Falls area projected to grow nationally are physician assistants and interpreters and translators. As a reminder, input noted that there is a great need for additional capacity to train licensed translators.



FIGURE 23: TOP 20 OCCUPATIONS WITH THE FASTEST PROJECTED NATIONAL GROWTH

Description	United States			Sioux Falls	
	2014 Jobs	# Chg.	% Chg.	2014 Jobs	2014 LQ
Interpreters and Translators	72,068	26,056	36%	124	1.70
Diagnostic Medical Sonographers	60,887	20,851	34%	159	2.57
Insulation Workers, Mechanical	31,235	10,641	34%	19	0.61
Home Health Aides	965,740	324,728	34%	137	0.14
Occupational Therapy Assistants	31,726	10,662	34%	21	0.65
Information Security Analysts	82,047	26,836	33%	49	0.59
Personal Care Aides	1,603,138	512,921	32%	570	0.35
Physical Therapist Assistants	74,962	23,835	32%	92	1.20
Genetic Counselors	2,488	791	32%	<10	0.37
Physical Therapist Aides	50,331	15,671	31%	32	0.62
Audiologists	11,975	3,707	31%	18	1.45
Orthotists and Prosthetists	8,818	2,681	30%	<10	0.72
Meeting, Convention, and Event Planners	90,821	27,257	30%	80	0.87
Medical Equipment Repairers	42,624	12,295	29%	69	1.60
Physician Assistants	94,088	26,987	29%	155	1.63
Market Research Analysts and Marketing Specialists	477,996	136,554	29%	287	0.59
Petroleum Engineers	39,085	11,134	28%	<10	0.10
Skincare Specialists	53,533	15,131	28%	23	0.42
Occupational Therapy Aides	9,423	2,629	28%	10	1.08
Physical Therapists	211,812	57,954	27%	249	1.16

Source: EMSI

*Market Street* also looked at occupations with high percentages of workers over the age of 55 and, therefore, most susceptible to impending retirements in the Sioux Falls area. **Figure 24 shows that nine out of 20 professions on this list require more than a high school degree; several are management-level positions where experience is necessary to fulfill job duties. Overall, the Sioux Falls region is not significantly impacted by the specter of future retirements.** As has been mentioned, the region has a comparatively young workforce and features job concentrations in many service sector positions that are not as susceptible to age-related contraction. An exception is teachers, which have already been discussed as a critical occupational need in the Sioux Falls area.

**FIGURE 24: TOP 20 SIOUX FALLS AREA OCCUPATIONS MOST SUSCEPTIBLE TO RETIREMENTS**

Description	% 55+ 2014 Jobs	2014 LQ	Typical Entry Level Education
Bus Drivers, School or Special Client	53.6% 267	0.54	High school diploma or equivalent
Postal Service Mail Sorters <sup>^</sup>	49.5% 196	1.64	High school diploma or equivalent
Clergy	49.3% 282	1.17	Bachelor's degree
Farmers, Ranchers, & Other Agricultural Managers	48.0% 1,146	2.28	High school diploma or equivalent
Real Estate Sales Agents	47.5% 314	0.69	High school diploma or equivalent
Postal Service Mail Carriers	45.5% 275	0.91	High school diploma or equivalent
Directors, Religious Activities & Education	41.7% 132	0.98	Bachelor's degree
Chief Executives	38.0% 329	1.05	Bachelor's degree
Property, Real Estate, & Community Association Managers	36.5% 446	1.75	High school diploma or equivalent
Education Administrators, Elementary & Secondary School	36.4% 143	0.62	Master's degree
Managers, All Other	33.6% 295	0.44	High school diploma or equivalent
Musicians & Singers	33.0% 176	0.94	High school diploma or equivalent
Court, Municipal, & License Clerks	32.7% 165	1.21	High school diploma or equivalent
Sales & Related Workers, All Other	32.3% 226	1.61	High school diploma or equivalent
Middle School Teachers*	31.4% 529	0.84	Bachelor's degree
Elementary School Teachers, Except Special Education	31.3% 987	0.72	Bachelor's degree
Security Guards	30.8% 519	0.44	High school diploma or equivalent
Secondary School Teachers*	30.6% 731	0.77	Bachelor's degree
Heavy & Tractor-Trailer Truck Drivers	30.3% 2,850	1.52	Postsecondary non-degree award
Cost Estimators	30.0% 213	0.94	Bachelor's degree

<sup>^</sup> Also includes Processors, & Processing Machine Operators

\*Except Special & Career/Technical Education

Source: EMSI

Note: At least 100 jobs in 2014 and a high school diploma

To this point in this section, we have examined national trends related to projected occupational growth, decline, and jobs susceptible to retirement in the context of the Sioux Falls MSA labor force. **The following table (Figure 25) aggregates all ten-year projection data to present the Sioux Falls area's ten-year job-replacement needs.** It should be noted that these data project the *minimum* level of necessary hires. The actual number of openings could potentially be higher, a situation caused by individuals switching occupations or moving out of the Sioux Falls region.

**As could be assumed, the list of metro Sioux Falls' occupations with the greatest growth and replacement needs mirrors other analyses in this report related to top current concentrations and hiring needs. Registered nurses are by far the largest category for replacement,** over double the number two position, Bookkeeping, accounting, and auditing clerks. Also high on the list are Customer service representatives, Secretaries and administrative assistants, Heavy and tractor-trailer drivers and Sales representatives for wholesaling and manufacturing. Teachers also show up as a key category for replacement.

**FIGURE 25: TOP 40 OCCUPATIONS WITH THE LARGEST PROJECTED HIRING NEEDS (2014-24)**

Description	2014 Jobs	Growth and Replacement Needs	2014 LQ	Typical Entry Level Education
Registered Nurses	5,511	2,461	1.98	Associate's degree
Bookkeeping, Accounting, & Auditing Clerks	2,966	1,054	1.61	High school diploma or equivalent
Customer Service Representatives	4,442	922	1.75	High school diploma or equivalent
Secretaries & Administrative Assistants*	1,940	792	0.72	High school diploma or equivalent
Heavy & Tractor-Trailer Truck Drivers	2,850	777	1.52	Postsecondary non-degree award
Sales Representatives, Wholesale & Manufacturing**	2,197	706	1.43	High school diploma or equivalent
Nursing Assistants	2,077	660	1.37	Postsecondary non-degree award
Office Clerks, General	1,795	625	0.54	High school diploma or equivalent
Insurance Sales Agents	1,616	549	2.14	High school diploma or equivalent
General & Operations Managers	1,420	503	0.67	Bachelor's degree
Receptionists & Information Clerks	1,809	490	1.69	High school diploma or equivalent
Accountants & Auditors	1,625	452	1.18	Bachelor's degree
Elementary School Teachers, Except Special Education	987	394	0.72	Bachelor's degree
Team Assemblers	1,312	373	1.16	High school diploma or equivalent
Maintenance & Repair Workers, General	881	350	0.62	High school diploma or equivalent
First-Line Supervisors of Office & Administrative Support Workers	902	333	0.62	High school diploma or equivalent
Teacher Assistants	869	319	0.67	Some college, no degree
First-Line Supervisors of Retail Sales Workers	1,203	318	0.81	High school diploma or equivalent
Childcare Workers	1,802	297	1.37	High school diploma or equivalent
Automotive Service Technicians & Mechanics	789	274	1.03	High school diploma or equivalent

\*Except Legal, Medical, & Executive

\*\*Except Technical & Scientific Products

Source: EMSI

Note: Occupations with at least a high school diploma

The process for training and attracting workers to fill these positions of future need will be multi-faceted and rely on a network of partners working with employers to ensure that programs are in place with sufficient capacity to meet demand. The following section and Appendix of this report will begin to look at the Sioux Falls area's education and training systems and outputs, both overall and by target sector, to gain an understanding of the region's capacity to meet current and future employer hiring needs.

## KEY FINDINGS

- ✓ Many customer service and support occupations (including those related to financial transactions processing and insurance claims processing) are highly susceptible to automation. This is a troubling trend for a region such as the Sioux Falls area with a high concentration of such jobs.
- ✓ Trends impacting customer service and agriculture will disproportionately impact those on the lower end of the wage and educational attainment spectrum. However, retraining needs are not overly restrictive for these workers and the impact of automation on customer service representatives will be counteracted by growing demand.

- ✓ Occupations with high replacement needs due to growth or the impact of retiring workers include registered nurses and nursing assistants, clerical positions, sales representatives, truck drivers, carpenters, and numerous production-oriented positions, particularly team assemblers.
- ✓ The Sioux Falls area's future workforce needs will largely mirror current trends in which lower-skill, lower-wage positions experience greater talent shortages than occupations requiring a more advanced level of education.

## Are we developing sufficient talent to meet demand?

To date, this report has focused principally on labor demand and not supply. Both sides of the equation are critical to ensuring that the Sioux Falls area's workforce is sustainable. This section will examine current dynamics, capacities, and outputs of the region's K-12 systems, technical colleges, four-year colleges and universities, and programs at all levels focused on developing, retaining, and attracting workers for in-demand occupations and industries.

**With migration trends illustrating that the Sioux Falls MSA has an especially strong dependence on workers in the immediate area, growing the region's incumbent workforce is even more important to the area's success than in other regions.** As such, we will examine historical degree completions by level and area of study in order to identify any potential shortages in the workforce development pipeline and ensure that local training programs can prepare workers with the skills needed to fill the occupations in demand. Additionally, regional analysis will look at program completions in subjects lacking in current job openings.

### K-12 SCHOOLS

K-12 districts represent the first and most important component of the training "pipeline" preparing students for college and careers. **The Sioux Falls area's top five public school districts based on enrollment numbers include Brandon Valley, Harrisburg, Sioux Falls, Tea Area, and West Central.** Combined, the five districts have more than 30,000 students, accounting for roughly 80 percent of the region's public school students. Sioux Falls School District, with a 2013-14 enrollment of over 23,000 students, is by far the largest district; Brandon Valley is the next largest at 3,485 students.

**Due to its size, the Sioux Falls district is able to provide the most comprehensive early childhood programming in the region.** The district features an Early Childhood Screening and Evaluation Center, infant and toddler services, and early childhood preschool experiences for eligible children before they are kindergarten age. A research-based curriculum, High/Scope, engages children in activities to encourage language, social, cognitive, adaptive, and motor-skills development. The Tea Area School District also offers pre-K services in its Tea Area Elementary School.

**Figure 26 shows that the Sioux Falls School District is not only the largest, but has the highest number of students eligible for free and reduced-price lunch,** a commonly held proxy to estimate low-income student percentages. The district's total is over twice the next highest districts, Tea Area and West Central. Sioux Falls schools also have the highest dropout rates and the second-lowest teacher salaries, ahead of only the West Central district.

FIGURE 26: ASSORTED METRICS, SIOUX FALLS AREA FIVE LARGEST K-12 DISTRICTS, 2012-2013 SCHOOL YEAR

District	Total Enrollment	% Eligible for Free/ Red. Lunch	Pupil to Teacher ratio	Dropout Rate	Base Teacher Salary
Sioux Falls	23,227	45.4	16.0	2.2	\$33,469
Brandon Valley	3,485	17.6	16.9	0.2	\$35,140
Harrisburg	3,041	15.2	13.6	0.7	\$35,400
Tea Area	1,488	21.8	16.8	0.5	\$33,500
West Central	1,304	21.8	15.8	0.7	\$32,500

Source: South Dakota Department of Education

**A high-level analysis of the Sioux Falls area's five largest K-12 districts shows that regional students have generally performed well with higher graduation rates than state and national averages.** Nearly 90 percent of students in the MSA graduated compared to 82.1 percent in South Dakota and 80.0 percent nationally. Additionally, students at the region's top five public school districts had higher average ACT scores than both the state and national averages.

FIGURE 27: HIGH SCHOOL PERFORMANCE MEASURES, 2013-14 SCHOOL YEAR

	Graduation Rate	Average ACT Score
Sioux Falls MSA	87.4%	N/A
Brandon Valley	93.5%	23.8
Harrisburg	89.1%	22.4
Sioux Falls	83.2%	22.7
Tea Area	96.7%	22.8
West Central	96.7%	22.0
Aggregate of other districts in the metro	87.0%	N/A
South Dakota	82.1%	21.9
United States	80.0%	21.0

Source: South Dakota Department of Education

According to public input respondents, **K-12 public education in the Sioux Falls area continues to be a strength, although changing demographics in the region – most particularly in the city of Sioux Falls core – are putting additional pressures on local educators.** More than 90 percent of online survey respondents "agreed" or "strongly agreed" with the statement that children in their district received a high-quality education. However, challenges are increasing. In the 2012-13 school year, nearly half of students in the Sioux Falls school district were eligible for free and reduced lunches. Combined with the other four



districts with the highest enrollment, roughly 40 percent of regional students were eligible for the program. Another expressed concern was the impact that the area's growing diversity was having on school systems. Again, the situation is most acute in the Sioux Falls district where nearly 10 percent of students were limited English proficient or English language learners.

**Also straining districts' ability to effectively educate children is the continuing turnover in their teacher ranks.** Replacement rates for local faculty are higher than in neighboring states as teachers are forced to leave the profession in search of a living wage or are driven to adjacent, out-of-state districts because of higher average salaries. As was noted earlier, local districts in South Dakota have "opt-out" opportunities to increase teacher pay, but these funds sunset and are still not sufficient to raise salaries to competitive levels. Relationships between K-12 districts and employers are often strong, but take place on a company-by-company basis because there is reportedly no overarching "umbrella" entity coordinating these relationships. The Sioux Falls district features a number of active internship and job-shadowing partnerships with local employers, who also contribute resources and expertise in the district's Career and Technical Academy and New Technology School.

Indeed, the Sioux Falls area and its largest district (Sioux Falls School District) have launched and expanded several programs designed to better prepare students for college and careers. Specifically, the Sioux Falls district features several specialized schools at all levels of education. At the elementary level, the following specialized options are available to families:

- *All City Elementary* is a tuition free public school and the only specialized school that incorporates parents into their classrooms.
- *Eugene Field A+* became South Dakota's first A+ (arts plus academics) school in the fall of 2001. Daily arts instruction includes drama, visual art, music and dance.
- The *Challenge Center at Garfield* is designed to offer an accelerated/advanced curriculum for gifted students grades two through five. The curriculum is built around unifying concepts that encourage depth and breadth of content and provide application connections to the real world.
- At *Lowell Math, Science, and Technology School* all students receive curriculum taught with an emphasis on math, science, and technology and hands-on learning. Through partnerships with local businesses and organizations, students participate in research, field trips and special projects.
- The *Rosa Parks Global Studies/World Language School* integrates global learning and understanding into all subject areas at all grade-levels. Students develop knowledge of other countries and continents through classroom lessons and service learning projects.
- The *Spanish Immersion Program* is a specialized language immersion program housed at two schools, Rosa Parks and Robert Frost, that allows English-proficient students to become bilingual and bi-literate in Spanish. Students attending the immersion program receive all classroom instruction in Spanish beginning in kindergarten.

At the middle school level, students have access to gifted education courses at Edison Middle School, where they receive accelerated, integrated, and enriched instruction in core subjects. The Middle School Spanish Immersion program is also located at Edison Middle School.

**Many input participants felt that there was not enough emphasis on career paths and “planting the seed” for students to begin thinking about their career options in middle and secondary school.**

Roughly 40 percent of survey respondents “strongly disagreed” or “disagreed” with the statement that career education received adequate attention in K-12, while the statement that schools provided high quality career guidance and college counseling services was divided in agreement. Focus groups and interview participants expressed preferences that career education begin earlier in students’ careers. The Sioux Falls school district created the following two campuses to support career education and technology immersion.

- The **New Technology High School** opened in 2010 to provide students a 1:1 computer environment for researching, communicating and solving problems in the community. New Tech uses its curriculum to engage students as they develop presentations to demonstrate their knowledge and skills. Grades are determined on factors such as work ethic, collaboration, communication, critical thinking and content knowledge. Students participate in internships and post-secondary coursework during their junior and senior years. Public input regarding New Tech High School reported that it has been a good addition with a strong relationship with the business community.
- Approximately 875 high school sophomores, juniors, and seniors at traditional high schools in Sioux Falls attend the **Career and Technical Education Academy (CTE Academy)** for a two-hour block during their regular daily schedule, where they participate in programs that include Media Production, Health Science, Biomedical Sciences, Carpentry, Hospitality & Tourism, Culinary Arts, Engineering, Auto Tech., Auto Body, Manufacturing, Welding, and Human Services. All programs are state-approved courses that fulfill certain graduation requirements.
  - Also at CTE Academy is the Academy of Finance, a multi-year program affiliated with the National Academy Foundation. This national program is designed to prepare students with practical skills to enter the world of business and finance. Students have the opportunity to earn up to 17 college credits while in high school.
  - CTE was highly regarded among community stakeholders. Employers reported that the business community has a strong relationship with CTE and that it is training students to help meet their demand. The welding program was specifically mentioned as impactful to supply employers with trained future workers.

Despite this growing array of programs, **there is a widely reported and corroborated attitude in greater Sioux Falls –and, indeed, statewide – that discourages students from pursuing career and technical education and employment in the skilled trades** at the expense of aspiring to a traditional four-year college degree. In fact, some higher education officials consider the “bias” against trades employment as the top constraint preventing the acceleration of student participation in courses preparing them for the

region's (and state's) occupations in greatest demand. Stated and implied biases against career and technical programs and employment are reportedly found not only in students' homes, but also in college and career placement offices in high schools and colleges as well as the state's Board of Regents. Statewide programs discussed later in this section are trying to counter these biases through investment in internal and external marketing focused on the benefits of skilled-trades positions.

## HIGHER EDUCATION

The next stage of the "cradle to career" training pipeline for local workers is the higher educational system. Public input and migration patterns indicated that employers in the Sioux Falls area predominantly recruit employees from regional technical programs and the state's two large public universities. However, structural issues such as the lack of a main or branch four-year public university campus, no statewide community college system, a disconnect between technical institutes and four-year colleges, and structural funding and student-attraction issues at the University Center hamstringing local efforts.

**The lack of transferability between technical colleges and four-year institutions in Sioux Falls and South Dakota was cited by input participants as a key constraint.** There is no guarantee that students who take associate's level courses will be able to apply these credits to local or state universities, a situation that reportedly drives many students out of state to obtain their degrees. This lack of transferability stems from a situation unique in the nation to South Dakota – the lack of a community college system. Not only does this reality obviate a "feeder system" from two-year to four-year schools, it also adversely affects technical institutes' abilities to remediate new students who may lack basic math, science, and English skills. In an attempt to fill a vacuum of transferable two-year degrees, the state's principal four-year universities have increasingly started offering associate's degrees, a situation that reportedly puts them in further competition with technical institutes for student dollars.

### *Two-Year Institutions*

**Southeast Technical Institute (STI)** is one of South Dakota's four technical institutes. Governed jointly by the South Dakota Department of Education, the South Dakota Board of Education and the local school board<sup>8</sup>, Southeast Tech's mission is "to educate individuals for employment opportunities, professional growth and lifelong learning." The campus is located in Sioux Falls and consists of six buildings: the Mickelson Education Center; the Terrence Sullivan Health/Science Center; the Ed Wood Trade and Industry Center; the Technology Center; the Scarbrough Child Care Center; and Nicolay-Hummel and Andera Residence Halls. The institution offers over 50 programs in eight subject areas: advanced technologies, business and communications, engineering technology, health technology, horticulture technology, human services technology, industrial technology, and transportation technology. STI turns out the third largest higher education graduating class in the state.

According to public input, key STI challenges include the previously reported lack of transferability of course credits, competition from four-year schools offering two-year degrees, and local and statewide biases against trades employment that creates situations in which demand does not satisfy availability of

---

<sup>8</sup> A recent development. STI previously reported directly to the Sioux Falls school district superintendent.

training slots for certain key programs. STI also reportedly has difficulty paying instructors enough to attract them away from private-sector employment.

**Kilian Community College** is South Dakota's only private, non-tribal community college. Established in 1977, Kilian is located in the heart of downtown Sioux Falls and is known for its small class sizes. The community college offers seven Associate of Arts programs (liberal arts, education, Native American studies, business management, psychology, sociology, and history); four Associate of Science programs (business management, information systems, criminal justice, and social work); six Associate of Applied Science programs (accounting, business management, chemical dependency counseling, early childhood education, healthcare coding and reimbursement, and medical administrative services); and two certificate programs (chemical dependency counseling and healthcare coding and reimbursement).

#### *Four-Year Institutions*

**Augustana College** was founded in 1860 and is a selective, private, residential, comprehensive (liberal arts and professional) college of the Evangelical Lutheran Church in America. Augustana offers 52 majors, 40 minors, and 14 pre-professional specializations to its approximately 1,800 full- and part-time students. These programs are offered within three departments: Humanities, Natural Sciences, and Social Sciences. In addition to its undergraduate programs, the school offers two Master of Arts degree programs: education and sports administration and leadership. Another option available to Augustana students is its Dual Degree Engineering program, in which the student studies toward a B.A. from Augustana in a major of his choice and a B.S. in a chosen engineering specialty from a partner school. Affiliated schools currently consist of Columbia University, University of Minnesota, and Washington University St. Louis. Augustana also has a number of programs in partnership with K-12 districts in greater Sioux Falls.

The **South Dakota Public Universities and Research Center**, also referred to as "University Center," (UC), offers certificate, associate, bachelor, and graduate degree programs from six South Dakota universities: Black Hills State University, Dakota State University, Northern State University, South Dakota School of Mines and Technology, South Dakota State University, and The University of South Dakota. Academic programs include:

- Three certificate programs: Executive banking and financial services, intermediate banking and financial services, and health care coding
- Eleven associate degree programs: Applied gerontology, banking and financial services, business management, general studies (by three institutions), health information technology, industrial technology, network and system administration, respiratory care, and tourism and hospitality management
- Thirty-five bachelor degree programs: general studies (by five institutions), banking and financial services, business administration with five concentrations (accounting, economics, finance, management, and marketing), business technology, computer science, consumer affairs with two emphases (consumer services management and family financial management), criminal justice, cyber operations, economics, entrepreneurial studies, graphic design, health information administration, health sciences, human development and family studies, information systems,

interdisciplinary studies, international business, journalism, network and security administration, nursing (by two institutions), accelerated nursing, professional and technical communication, psychology, respiratory care, and sociology

- Fourteen graduate programs: Doctor of Science in Information Systems, Ph.D. in Nursing, Master of Business Administration (by two institutions), Master of Professional Accountancy, Master of Science in Administration with six specializations (drug abuse studies, health services administration, human resources, interdisciplinary studies, long-term care administration, and organizational leadership), Master of Science in Information Assurance, Master of Science in Information Systems, and Master of Science in Nursing

According to public input, the UC has challenges inherent to its mission and funding model. Competition from online degree programs from public and private colleges has also undercut the Center's principal student clientele, mid-career and adult learners. Because the UC is not a traditional campus with student-fee-funded programs, clubs, and amenities, it is difficult for the Center to attract traditional students. However, local officials feel it will be important for the Center to become more competitive for these students if it is to survive. Opportunities to improve the student experience could involve supporting adjacent development such as student apartments and student-focused retail as well as capitalizing on the rapid development of the *University of South Dakota Discovery District* quickly enveloping the UC buildings.

Founded in 1883, the **University of Sioux Falls (USF)** is a Christian, Liberal Arts University affiliated with the American Baptist Churches, U.S.A. USF, which has an enrollment of 1,419 students, has over 80 undergraduate academic programs in nine categories (Fine Arts, Humanities, Interdisciplinary, Nursing, Natural Sciences, Social Sciences, Fredrikson School of Education, Pre-Professional Programs, and Vucurevich School of Business). Graduate programs include a Master of Business Administration with four available concentrations (business innovation and marketing, general management, healthcare management, and project management); an Ed.S. in Educational Administration with two tracks (superintendent and principal), M.Ed. in Educational Administration: Adult and Higher Education, M.Ed. in Teaching (an initial certification for non-educators), and four M.Ed. programs for currently licensed teachers (Reading Specialist Authorization, Reading Specialist Authorization aimed at Rapid City Area Schools, Educational Leadership – Principal Licensure, and Educational Leadership – Technology Endorsement). The university also offers online and on-campus adult and graduate programs to help adult learners finish their degrees or earn advanced degrees.

### Completions

The following section details degree awards from higher educational institutions within a *one-hour's drive of central Sioux Falls* – in other words, local employers' labor shed. Figure 28 shows these schools and their enrollment and degree awards in 2013. There are over 33,000 students within a one-hour's drive of central Sioux Falls and a total of 6,921 degrees presented in 2013 alone. **This is a significant number of graduates the Sioux Falls area can capitalize on if connections are made and opportunities communicated that would lead to the retention of these new workers in the region.**

Degree awards will be linked with occupational and employment data focused on the Sioux Falls area's target sectors in the Appendix of this report.

FIGURE 28: HIGHER EDUCATIONAL INSTITUTIONS, SIOUX FALLS LABOR SHED, 2013

	Total Enrollment	Cert.	Assoc.	Bach.	Master	PhD or Prof'l	Total
Augustana College	1,765	-	-	371	15	-	386
Avera McKennan Hospital School of Radiologic Tech.	20	10	-	-	-	-	10
Avera Sacred Heart Hospital	18	6	-	-	-	-	6
Dakota State University	3,129	8	54	249	67	4	382
Kilian Community College	253	4	34	-	-	-	38
Mount Marty College	1,225	11	21	133	32	-	197
Sanford Medical Center	24	14	-	-	-	-	14
Sioux Falls Seminary	143	-	-	-	28	-	28
South Dakota State University	12,525	25	21	1,988	324	118	2,476
Southeast Technical Institute	2,467	326	609	-	-	-	935
University of Sioux Falls	1,408	-	12	308	117	-	437
University of South Dakota	10,235	5	341	952	509	205	2,012
Sioux Falls Labor Shed	33,212	409	1,092	4,001	1,092	327	6,921

Source: NCES

Of the institutions in the one-hour radius, the largest output was in four-year bachelor's degrees followed by associate's degrees. However, **over the past five years the number of associate's degrees completions has been increasing at a faster rate than bachelor's degrees.** Between 2008 and 2013, the number of associate's degrees awarded increased by 28.0 percent (240 degrees) compared to a 15.3 percent increase (520 degrees) at the bachelor's level.

**Approximately 25 percent of program completions are within the field of health professions and related support services, which aligns with the target sectors and local employers demand for skilled workers.** Output of these degrees has increased significantly over the past five years in an effort to meet the demand of local employers. **There is also a higher concentration of business, management, marketing, and related support services locally than what is seen at the national level.**



**FIGURE 29: CONCENTRATION OF PROGRAM OUTPUT, SIOUX FALLS LABOR SHED AND US**

Program	Share of Total Completions		
	SF Labor Shed	United States	Difference
Business, management, marketing, & related support services	22.0%	15.7%	6.3%
Health professions & related clinical sciences	24.8%	19.2%	5.6%
Computer & information sciences & support services	6.3%	3.0%	3.3%
Personal & culinary services	4.8%	3.4%	1.4%
Education	8.1%	6.8%	1.3%
Parks, recreation, leisure, & fitness studies	2.4%	1.2%	1.2%
Family & consumer sciences/human sciences	2.3%	1.1%	1.2%
Engineering technologies/technicians	2.7%	1.7%	1.0%
Mechanic & repair technologies/technicians	3.1%	2.2%	1.0%
Agriculture, agriculture operations, & related sciences	1.3%	0.6%	0.7%

Source: EMSI

**As shown in Figure 30, the number of certificates issued in the labor shed in the past five years has increased by 27.8 percent, likely fueled by employer demand to get job candidates trained quickly.** Specifically, STI added a family and consumer sciences program to help satisfy the growth in demand for child care workers. Representatives from the community and social service organizations also reported the need for an accredited certification program for interpreters. Other stakeholders expressed the need for more computer training courses catering to individuals less familiar with computers such as older individuals and refugees.

Because of the high demand for workers, employers participating in public input identified additional training and certification programs of need. Skilled trade representatives would prefer a one or two year program for carpentry or building trades. Lake Area Tech, Mitchell Tech, and Western Iowa tech all have offer such programs, but similar courses are not available at STI. Individuals in social work also expressed frustration in the need for a career path into their line of work. CDL training is another area that lacks local training options. It is projected that there will be roughly 800 openings for drivers with CDLs over the next ten years.

**FIGURE 30: REGIONAL CERTIFICATES AWARDED, BY PROGRAM (2013)**

Program	Award <1 academic year	Award of >1 but <2 academic years	Award 2 but <4 academic years	Above the baccalaureate level	Total Certificates
Grand Total	197	161	51	69	478
Health Professions & Related Programs	55	159	35	10	259
Computer & Information Sciences & Support Services	57	-	-	4	61
Education	-	-	0	33	33
Family & Consumer Sciences/Human Sciences	30	-	-	0	30
Visual & Performing Arts	21	-	-	-	21
Psychology	-	-	-	19	19
Mechanic & Repair Technologies/Technicians	-	-	16	-	16
Business, Mgmt, Marketing, & Related Support Services	10	2	-	2	14
Precision Production	12	-	-	-	12
Engineering Technologies & Engineering-related Fields	11	-	-	0	11
Social Sciences	1	-	-	-	1
Theology & Religious Vocations	-	-	-	1	1
Agriculture, Agriculture Operations & Related Sciences	0	0	-	0	0
Communication, Journalism, & Related Programs	-	-	-	0	0
Engineering	-	-	-	0	0
English Language & Literature/Letters	0	-	-	-	0
Public Administration & Social Service Professions	-	-	-	0	0

Source: NCES

Figure 31 shows the top ten degree award program categories for the Sioux Falls labor shed. **Because the Sioux Falls MSA offers very limited doctoral or professional degree programs, the region depends on graduates from South Dakota State University (SDSU), the University of South Dakota (USD), and Dakota State University (DSU) to supply the training for these positions.** Exceptions are two programs offered through the University Center: a PhD in Nursing and D.Sc. in Information Systems.

Increased output for degrees in health professions and related programs has no doubt stemmed from the strong growth in the health care sector. Associate's degrees increased by 33.6 percent, while bachelor's degrees increased by 48.7 percent. Degrees in psychology and liberal arts are also among the top ten degree completions by programs. Occupational outlook in the area is not as strong as other areas of studies for individuals graduating with bachelor's degrees, but internships or teacher certification programs are two options that would offer them experience and qualifications to find employment in the area.

**FIGURE 31: TOP 10 REGIONAL DEGREES AWARDED, BY PROGRAM,  
SIOUX FALLS LABOR SHED (2013)**

Program	Associate's degree	Bachelor's degree	Master's degree	Doctor or professional degree	Total Degrees
Grand Total	1,092	4,001	1,092	327	6,512
Health Professions & Related Programs	441	879	174	169	1,663
Business, Mgmt, Marketing, & Related Support Services	224	401	153	0	778
Education	5	336	229	37	607
Social Sciences	0	278	24	1	303
Agriculture, Agriculture Operations & Related Sciences	52	222	16	2	292
Biological & Biomedical Sciences	-	223	31	22	276
Psychology	2	169	94	7	272
Computer & Information Sciences & Support Services	76	125	55	4	260
Parks, Recreation, Leisure & Fitness Studies	-	178	23	0	201
Liberal Arts & Sciences, General Studies & Humanities	84	93	19	0	196

Source: NCES

What these data show are that degree awards in the Sioux Falls area's labor shed at least partially reflect identified employer demand, especially for health professions, business and related categories, and education. **However, as this report has shown, the majority of reported job openings in the Sioux Falls MSA only require high school completion or else a certificate or two-year degree.** Therefore, efforts must be significantly increased to direct non-college-bound high school seniors, underemployed workers, adults that have left the labor force, and talent attraction efforts on those occupational categories with high levels of opening not satisfied by training institutions in the labor shed. **This will require a major cultural shift in the Sioux Falls area (and statewide) towards the benefit of career and technical education, school-to-work programs, and training for skilled trades occupations.**

## CITY, STATE, AND REGIONAL PROGRAMS

There are a variety of programs highlighted below that are offered by multiple partners and institutions and are aimed at enhancing local and regional talent development in a number of key ways.

**TechEd Works for Me**, the workforce initiative launched by Forward Sioux Falls and Southeast Tech, seeks to elevate the image of technical education and position it as a fast-track solution to a career. The program encourages area businesses to connect technical institute graduates with employment and advancement opportunities. Community stakeholders reported that they would like to see the initiative continued.

**ShadowED** is a clearinghouse created out of Forward Sioux Falls to arrange shadowing experiences for Sioux Falls high school students. Each year, over 300 students take part by choosing one of 200 occupations of interest. Between 2006 and 2011, during the Forward Sioux Falls V cycle, Shadow ED coordinated more than 1,650 job shadowing experiences. Nearly 100 businesses open their doors each

year to ShadowED students. Input participants reported that there's been a drop in participation and that there is a need to increase opportunities and involvement by the schools and businesses.

The first **Learners to Leaders** program in the region was launched in conjunction with John Morrell & Co. (now John Morrell Food Group), Sioux Falls School District, and Southeast Technical Institute. High school students begin the program as juniors by enrolling in STI classes, earning credit in a variety of disciplines toward their high school diplomas as well as STI degrees. Upon high school graduation, students can continue toward their Associate of Applied Science degrees at the STI campus.

**Build Dakota** is a scholarship program created in 2014 through a \$50 million dollar investment funded by a \$25 million donation from T. Denny Sanford, the Chairman of the Board of United National Corporation, and a \$25 million contribution from the South Dakota Future Fund. Build Dakota Scholarships will be awarded to skilled students entering high-need workforce programs at South Dakota technical institutes to support tuition, fees, books, and other required program expenses. Recipients of the scholarships must commit to working full-time in their field of study in South Dakota for at least three years following graduation. In the first five years, a projected 300 scholarships will be awarded annually. Beyond the first five years, the endowment will support approximately 50 full-ride scholarships. There are 54 eligible program options within eight industry areas, which include automotive fields, building trades and construction, energy technicians, engineering technicians, licensed practical nursing, medical lab technicians, precision manufacturing, and welding.

The **Dakota Corps Scholarship** was designed by Governor Mike Rounds in 2011 to keep South Dakota high school students in the state by providing full tuition and generally-applicable fees to selected qualified applicants. The program is funded by private businesses, nonprofit corporations, the Governor's Office and the South Dakota Department of Labor. Sixteen colleges and universities, including many in the Sioux Falls labor shed, participate in the scholarship program and have the discretion to limit the number of recipients they accept, set the eligibility requirements higher than the minimum, or not offer any or all critical need majors.

The **Sanford Program for the Midwest Initiative in Science Exploration (PROMISE)** is a partnership between research scientists, school districts, educational institutions, and community partners to establish programs that connect people to research being conducted in the region and to build strong relationships between scientists and their communities. The goal of Sanford PROMISE is to increase community understanding of science, raise awareness of the benefits of research, and emphasize the role of both in our society.

The state's **Career Learning Centers** work closely with the South Dakota Department of Labor and Regulation to provide education and employment training services that meet the needs of local job seekers and businesses. Job seekers work with career specialists to develop an employability plan will be prepared to address personal education and job training needs. They also receive assistance in searching for jobs, job retention skills training, and counseling on topics such as budgeting, substance abuse and self-esteem. The cost of various programs may be subsidized through federal, state and local grants for eligible applicants. Many of the programs and services are also available on a tuition basis. There are six centers in

the state, though none are located in the four-county Sioux Falls MSA. The closest centers are the Yankton location, southwest of Turner County, and the Mitchell location, west of McCook County.

South Dakota has more than 100 **U.S. Department of Labor Registered Apprenticeships**. Registered Apprenticeship programs aid in recruiting new personnel, support the activities of human resources departments of participating businesses, and help employees become nationally certified. There are currently close to 1,000 apprentices registered in apprenticeship programs in South Dakota in sectors such as construction, dental, municipalities, health services, fire protection, fire medic, electric, plumbing, and building maintenance.

**South Dakota WINS** is a workforce development program that brings together government, education and business leaders. The components of this program are intended to help South Dakota develop and attract a stronger, better educated workforce. Initiatives include one-day career cluster camps, expanded advanced placement and dual credit courses, remediation courses for in-need students before they leave high school, the University Student Success program, and programs like SD MyLife, SDWORKS, and Dakota Roots.

- **SD MyLife**, a program by the South Dakota Department of Education and a component of SD WINS, provides online career development tools for South Dakota students. The program's goal is to help students better understand how their interest, skills, and knowledge relate to real-world academic and career opportunities. Through this platform, high school students are able to research career interests by career cluster, keyword, or school subject area; take interest and ability assessments to find career matches; and map their high school and postsecondary education and training; and build a Personal Learning.
- The Department of Labor and Regulation's **SDWORKS** is a one-stop shop database that lists all jobs and internships offered by state government, the Board of Regents, and state technical institutes. Private companies and organizations are also able to post available internships. All students attending a post-secondary institution in South Dakota are encouraged to take advantage of the database to find internships. Currently, there are over 13,000 job openings posted on the site.
- An initiative to grow the South Dakota workforce, **Dakota Roots** is a website that connects citizens, business leaders, and government. The goal of Dakota Roots is to expand the South Dakota workforce by encouraging those with ties to the state to return to available job opportunities. The website launched in October 2006 and has gained many business partners and active users. The number of new job seekers that have utilized the Dakota Roots program has grown from 250 in 2006 to 5,027 in 2013. Businesses are able to receive assistance finding employees and filling skill gaps when they become partners.

The City of Sioux Falls launched its **Workforce Development Pilot Program** in January 2015 to support and explore activities to drive workforce growth and development within the community. The goal of the pilot program is to provide funding to local entities that are well-positioned to address workforce development and recruitment in Sioux Falls. As part of the 2015 budget approval process, the City Council

included \$500,000 to support workforce development efforts within the community. The program will be available to any business, organization, or entity with operations in Sioux Falls. The award amount range spans from \$2,000 to \$100,000. While matching funds are not required, availability of matching financial or in-kind resources may be a factor in the City's determination of awards.

## KEY FINDINGS

- ✓ With the Sioux Falls MSA's especially strong dependence on workers in the immediate area, growing the existing workforce is more important than in regions that more effectively attract external talent.
- ✓ The Sioux Falls area's K-12 districts are considered to be strengths by the vast majority of input participants. Even so, demographic changes threaten to compromise performance gains while challenges to attract and retain teachers may soon become critical.
- ✓ The region's K-12 districts are increasingly offering more options for students interested in specific careers or exposure to career and technical occupations.
- ✓ A reported bias against career and technical education and skilled-trades occupations threatens to perpetuate under-enrollment trends in associated training programs and limit the Sioux Falls area's ability to fill talent-impacted lower-skill and lower-wage occupations.
- ✓ The Sioux Falls region's technical institute is a key lynchpin in the local training pipeline, but suffers from endemic challenges related to a lack of transferability of credits, a bias against its programs among parents, school administrators, and state education officials, challenges to attract and retain faculty, and a funding system that is more reactive than proactive.
- ✓ The Sioux Falls University Center provides important capacity to train for local careers, but is experiencing declining enrollment due to competitive pressures from online colleges as well as disadvantages to attract and retain "traditional" college students who prefer the region's private colleges and the state's public institutions where student housing is common and fees provide a more complete collegiate experience.
- ✓ Degree awards from institutions in the Sioux Falls labor shed offer a competitive array of programs in many of the region's top occupations, but current demand is for employable high school graduates with a good work ethic, the potential to be trained on the job, or a certificate or associate's degree for in-demand fields.
- ✓ A bevy of local and state programs support students' educational ambitions and offer exposure to college and careers. Build Dakota, a new state program, aims to significantly increase participation in two-year programs at South Dakota's technical institutes.



## CONCLUSION

The quantitative and qualitative research conducted for this Workforce Sustainability Analysis highlighted key trends and challenges the Sioux Falls area faces in order to provide a sustainable talent pool for its employers. Data presented a picture of an extremely tight labor market that is causing thousands of positions to remain unfilled, many of them in lower-skill, lower-paying occupations. Employers are being forced to search harder for workers, pay them more, hire under-qualified applicants, or leave the jobs unfilled. Conversely, a dearth of employment opportunities at the higher end of the skills spectrum has left many workers in situations where they are “underemployed” for their current positions.

A number of factors have contributed to the region’s gaps in available talent for in-demand positions. Among these are a pure lack of bodies; unemployment is low and most of the available talent for growing job categories has been hired, many of them before they even finish their degree programs. For the most impacted positions, employers are reportedly poaching employees from other Sioux Falls area companies. What is striking about the region’s current talent and employment dynamics is the predominance of job openings for positions on the lower end of the skills spectrum and pay scale. Even for trades positions, the majority of these jobs require less than a bachelor’s degree for eligibility. Because of this, the state and region’s long-held biases against career and technical education and skilled trades positions has created surpluses of training slots for many certificate and two-year degree programs and frustration among companies, career and technical education providers, and technical institute officials that students who could benefit from this type of training are instead being pushed into four-year degree programs.

Despite dire talent shortages and continuing challenges to direct students to the skilled trades, progress is being made in South Dakota and the Sioux Falls area to create additional training programs, expose children to career opportunities earlier in their educational careers, and promote the advantages of career and technical fields to parents, school administrators, and state education officials. A program like Build Dakota is evidence that awareness of the need for technical education and trades workers has reached a critical mass. Even with this dawning realization, however, the Sioux Falls region is hamstrung in its ability to respond to employer demand and enhance its talent pipeline for fast-growing occupations. At the K-12 level, an increasingly low-income population with a growing percentage of limited-English-proficiency students challenges educators to effectively present career opportunities to these youth and train them for college and the workplace. At the two-year level, the state’s lack of a community college system has resulted in a structural disconnect between technical institutes and four-year colleges that limits credit transferability and often drives students outside South Dakota to finish their degrees. Funding formulas also reward past performance but do not account for future demand.

At the four-year level, a lack of a stand-alone four-year public university campus reduces the Sioux Falls region’s capacity to produce graduates in fields requiring a bachelor’s degree or higher. Challenges the University Center faces from competition with private online colleges and, indeed, the state’s main four-year public campuses themselves have put the Center’s programs in peril of decline or discontinuance. Attempts to attract more “traditional” students will be difficult but necessary if the UC is to optimize its impact on the local training pipeline.

Above all, the fact that the Sioux Falls area has deemed talent development worthy of its own singular strategic process is evidence that regional leaders understand the challenges presented by an impacted labor force capacity and are motivated to find solutions. Proposed recommendations to enhance greater Sioux Falls' talent development systems will be included in this process' Action Agenda. Effectively implementing them will be an even more critical challenge as certain of the region's issues are structural, solvable only at the state level, or the result of generations' worth of attitudes about the value of a four-year degree versus the pursuit of a career in the skilled trades. It will be important that the identified lack of an "umbrella" coordinating entity overseeing talent development in the Sioux Falls area also be addressed so that efforts can be optimally aligned, collaborative, and sustainable.

## Key Questions

This Workforce Sustainability Analysis has sought to answer a number of key questions that relate to the Sioux Falls area's future workforce capacity and output. The following questions and summarized answers will directly inform the development of the region's workforce Action Agenda.

### *Do we have a sustainable workforce capable of supporting job growth in the decades ahead?*

- ✓ The road ahead will be challenging for the Sioux Falls area. Job growth will be dependent on increased labor force capacity, while the labor force is constrained by the maximization of existing supply and challenges in attracting out-of-state talent.
- ✓ Retaining local graduates, increasing the supply of applicants for programs serving impacted occupations, and changing attitudes on the value of career and technical jobs will be important strategies. On-the-job training, new certificate programs, and enhanced use of job-shadowing, internships, and other tools will also help boost the training pipeline for in-demand careers.

### *Where are our most immediate workforce training needs?*

- ✓ Principally, these include technical trades such as mechanics, truck drivers, welders, carpenters, and machinists. In fact, many of the region's most pressing training needs are for occupations that require less than a four-year college degree and, in some cases, only a high school diploma or equivalent.
- ✓ Registered nurses and nursing assistants are key needs and are served by programs at Augustana, USF, and STI. Output of graduates will need to be increased to meet current and future demands.
- ✓ There is a critical need for teachers in the Sioux Falls area, but successfully addressing this occupation's talent supply will require either state or local salary increases.
- ✓ Other occupations in need include engineers, sales representatives, network and systems administrators, interpreters, and business support staff.

### *What parts of the country are workers coming from?*

- ✓ The region's in-migrants are typically arriving from other South Dakota regions, and, in fewer numbers, from major Midwest metropolitan areas and international countries.

- ✓ Efforts to better promote greater Sioux Falls outside the state – a component of the Build Dakota initiative – will be important to increasing the flow of external workers to the region.

#### *Are educational systems aligned with current and future employment needs*

- ✓ The short answer is that many systems are aligned with projected needs, but the output of graduates must be significantly enhanced to meet future demand.
- ✓ The Sioux Falls area is better situated to meet demand for occupations requiring certificate and associate's degrees. The region's four-year-degree-granting capacity is limited by the lack of a main or branch four-year public university campus. Enhancing the attraction and retention of graduates from institutions in the Sioux Falls area's one-mile labor shed will be an important strategy.

#### *What state-level changes might be needed to achieve optimal levels of alignment*

- ✓ Principally, state-level changes that would most beneficially impact greater Sioux Falls' talent development involve increasing pay for teachers and raising institutional budgets for the state's technical institutes. Per-student, South Dakota spent about \$3,300 on two-year colleges last year, with students paying an average of \$4,155 more than any other state in the Midwest, according to the National Center for Education Statistics.
- ✓ Changing the governance structure for technical colleges would also have a positive effect for the region's training pipeline and allow STI the flexibility to better align classes with the workforce needs of companies.
- ✓ Though aspirational, a potentially transformational state-level decision for the Sioux Falls area would be the chartering of a branch four-year public university campus in the region.

#### *Which occupations and business sectors are most susceptible to impending retirement?*

- ✓ Primarily, the answer is teachers and truck drivers. The Sioux Falls area's age dynamics are generally favorable, with fewer occupations at risk of shortages from retirements than the U.S.

#### *What occupations are most susceptible to technological advancements?*

- ✓ As with anywhere in the country, the jobs most susceptible to being eliminated due to advances in technology are those that feature processes that could be automated. Principally, these would include order clerks, insurance claims and policy processors, tellers, telemarketers, postal carriers, and other lower-skill occupations.

#### *How should our talent attraction, retention, and development strategies be differentiated by skill set and/or occupation based on the analysis of occupational characteristics?*

- ✓ This report has provided a rich vein of data to be utilized by greater Sioux Falls education and training providers to inform future programmatic needs and demands.
- ✓ Strategies will largely be determined by potential capacity enhancements at the region's training institutions. If resources limit the development of new programs or the addition of training slots, talent attraction strategies will be paramount.

- ✓ Above all, better aligning training providers with employer demand will enable programmatic development to be more proactive and allow education officials to better anticipate strategies to either create new capacity or focus efforts on identifying and recruiting external talent.

## APPENDIX A: OCCUPATIONAL BREAKOUT

The following pages provide a detailed outlook of the most common occupations found in the Sioux Falls region by business sector and include some of the area's predominant and targeted sectors: **healthcare, finance and customer care, biotechnology, information technology, and advanced manufacturing**. Data represent total employment for each occupation in the Sioux Falls MSA, rather than the number of jobs in the sector's share. Therefore, *occupations that are found in multiple sectors have been placed in the table that has the largest employment of workers in the occupation*. The data includes all pertinent information that was provided throughout this report for the profiled sectors and serves as a reference guide for the job outlooks for top occupations. Data regarding completions is provided for two principal geographic levels. Two-year completion data is for the four-county Sioux Falls MSA. But, because programs at the University Center are considered part of their main campuses, degree-award data is not broken out for this satellite location. Therefore, degree-award data at the four-year level is for the one-mile Sioux Falls labor shed geography for the UC's affiliated institutions. Values with an asterisk (\*) indicate that employment over age 65 was suppressed.

## INFORMATION TECHNOLOGY

Description	Current Trends			Projected Growth (2014-24)			Projected Demand and Supply				Attributes		
	2014 LQ	2014 Jobs	2004-14 SF % Chg.	SF % Chg.	US % Chg.	Pct. Pt. Difference	SF # Chg.	SF # 55+	2014-24 Openings (Growth plus replacements)	2013 Regional Completions	2013 Avg. Hourly Earnings	Earnings Ratio	Typical Entry Level Education
Network and Computer Systems Administrators	1.96	754	44.3%	8.0%	12.9%	-4.9%	60	68*	128	37	\$28.99	0.78	Bachelor's degree
Computer User Support Specialists	1.17	739	40.2%	15.3%	19.8%	-4.5%	113	75*	187	88	\$17.34	0.72	Some college, no degree
Software Developers, Applications	0.54	376	12.3%	28.4%	23.4%	4.9%	107	30*	136	39	\$35.97	0.78	Bachelor's degree
Computer Systems Analysts	0.60	333	27.3%	30.5%	23.3%	7.2%	102	41*	142	39	\$31.28	0.77	Bachelor's degree
Computer Programmers	0.87	302	45.4%	9.5%	10.9%	-1.4%	29	32*	61	26	\$26.68	0.70	Bachelor's degree
Software Developers, Systems Software	0.37	148	-34.8%	39.6%	21.6%	18.0%	59	11*	70	39	\$39.89	0.80	Bachelor's degree
Computer Network Architects	0.98	147	27.6%	12.0%	14.8%	-2.8%	18	12*	29	101	\$43.45	0.93	Bachelor's degree
Web Developers	0.73	113	33.5%	14.4%	23.1%	-8.7%	16	<10	<26	101	\$27.87	0.95	Associate's degree
Database Administrators	0.80	98	26.7%	15.1%	15.9%	-0.9%	15	12*	27	13	\$35.82	0.92	Bachelor's degree
Information Security Analysts	0.59	49	32.1%	39.0%	32.7%	6.3%	19	<10	<29	101	\$38.70	0.88	Bachelor's degree
Computer Hardware Engineers	0.22	19	-77.7%	52.8%	11.4%	41.3%	10	<10	<20	0	\$39.52	0.77	Bachelor's degree

### Profile:

While the information technology sector in the Sioux Falls region represents a relatively smaller share of jobs, it is an area that has been growing quickly over the past ten years and employment in IT-related occupations accounts for roughly 3,000 jobs. Several occupations support multiple sectors within the area, including the financial and corporate sectors, and are important to business operations in various other sectors. Additionally, there is a growing concentration of jobs in custom computer programming services and other sectors within the information technology business sector, and employment within that sector has doubled over the past five years.

### Local Employers:

Click Rain, Raven Industries, and Docutap are all local employers that depend on IT professionals to perform primary business activities, while companies, such as Citibank, Qwest, Avera, and Sanford, require IT professions to ensure that business operations run smoothly.

### National Trends:

Employment has grown quickly over the past ten years. Information security is essential to companies and there has been an increased demand for qualified professionals to perform the duties necessary to prevent data leaks or hacks. Additionally, globalization and technological advancements have spurred job growth within this field and have increased the need for computer programmers, software developers, computer engineers, and administrations, among other IT-related occupations.



### ***Occupational Outlook:***

Job opportunities are projected to continue to grow rapidly both in the local economy and at the national level. IT professionals are made up of a younger workforce than most occupational groups, and thus have a more sustainable employment outlook in terms of age composition; there is less of a concern regarding impending retirees within these occupations. Some of the openings within certain occupations, however, will be due to retirees. This includes employment in network and computer system administrators, computer user support specialists, and computer programmers. On the other hand, software developers and computer system analysts are projected to create roughly 215 new jobs over the next ten years. The majority will be due to newly created jobs.

### ***Area Educational Offerings:***

The majority of IT jobs require formalized training and attainment of a bachelor's degree. There are 14 programs within the Sioux Falls labor shed that provide training for information technology and computer science. Certain programs may provide training for individuals to fill multiple positions, as is seen in the completions values. There are also many options for online training for IT and computer programming professionals that enable individuals to advance their skills easier than most occupational groups.

## HEALTHCARE

Description	Current Trends			Projected Growth (2014-24)			Projected Demand and Supply				Attributes		
	2014 LQ	2014 Jobs	2004-14 SF % Chg.	SF % Chg.	US % Chg.	Pct. Pt. Difference	SF # Chg.	SF # 55+	2014-24 Openings (Growth plus replacements)	2013 Regional Completions	2013 Avg. Hourly Earnings	Earnings Ratio	Typical Entry Level Education
Registered Nurses	1.98	5,511	50.9%	21.6%	16.2%	5.4%	1,190	1,271	2,461	181	\$25.90	0.78	Associate's degree
Nursing Assistants	1.37	2,077	8.6%	12.7%	16.7%	-3.9%	265	395	660	21	\$12.13	0.97	Postsecondary non-degree award
Licensed Practical and Licensed Vocational Nurses	0.92	693	8.7%	13.5%	19.9%	-6.4%	93	179	273	113	\$17.23	0.83	Postsecondary non-degree award
Pharmacy Technicians	1.62	608	44.9%	12.8%	17.5%	-4.6%	78	79	157	55	\$14.14	0.93	High school diploma or equivalent
Medical Assistants	0.83	507	5.5%	15.3%	21.4%	-6.0%	78	50*	128	73	\$13.96	0.94	Postsecondary non-degree award
Pharmacists	1.70	505	36.0%	17.0%	13.5%	3.5%	86	122	208	21	\$52.15	1.00	Doctoral or professional degree
Radiologic Technologists	1.81	366	44.0%	19.8%	16.6%	3.2%	73	50*	123	59	\$22.27	0.91	Associate's degree
Medical Records and Health Information Technicians	1.90	363	41.0%	15.9%	17.9%	-2.0%	58	82	139	41	\$18.06	0.95	Postsecondary non-degree award
Medical and Clinical Laboratory Technologists	2.16	361	19.5%	12.9%	12.1%	0.8%	47	78	124	21	\$25.89	1.00	Bachelor's degree
Dental Assistants	0.85	280	27.7%	25.3%	16.2%	9.1%	71	22*	93	21	\$16.34	0.95	Postsecondary non-degree award
Medical Transcriptionists	3.13	256	50.6%	5.1%	9.6%	-4.6%	13	48*	61	21	\$15.21	0.83	Postsecondary non-degree award
Physical Therapists	1.16	249	40.1%	25.4%	27.4%	-2.0%	63	23*	86	21	\$32.57	0.81	Doctoral or professional degree
Medical and Health Services Managers	0.75	243	38.3%	30.2%	18.1%	12.1%	73	70	143	14	\$48.20	0.90	Bachelor's degree
Surgical Technologists	2.28	235	41.8%	29.4%	23.5%	5.9%	69	22*	91	42	\$18.28	0.83	Postsecondary non-degree award
Nurse Practitioners	1.94	234	-24.7%	19.1%	26.3%	-7.2%	45	47*	92	0	\$41.76	1.12	Master's degree
Medical and Clinical Laboratory Technicians	1.27	208	-2.7%	24.3%	23.3%	1.0%	50	38*	88	21	\$16.01	1.32	Associate's degree
Dental Hygienists	0.95	193	65.3%	31.4%	21.8%	9.5%	61	25*	86	21	\$31.43	0.85	Associate's degree
Physicians and Surgeons, All Other	0.53	189	31.1%	23.1%	14.0%	9.1%	44	50	94	21	\$115.90	0.91	Doctoral or professional degree
Opticians, Dispensing	2.53	181	37.1%	11.7%	19.9%	-8.2%	21	31*	52	21	\$15.51	0.90	High school diploma or equivalent
Occupational Therapists	1.46	172	34.3%	22.0%	23.1%	-1.2%	38	16*	54	21	\$31.88	0.79	Master's degree
Respiratory Therapists	1.35	164	71.0%	34.7%	16.0%	18.7%	57	27*	84	21	\$22.11	0.81	Associate's degree
Diagnostic Medical Sonographers	2.57	159	19.9%	33.2%	34.2%	-1.0%	53	22*	75	37	\$26.15	0.94	Associate's degree
Physician Assistants	1.63	155	32.9%	19.8%	28.7%	-8.8%	31	19*	50	21	\$45.45	0.93	Master's degree
Emergency Medical Technicians and Paramedics	0.56	139	47.1%	22.8%	20.2%	2.6%	32	<20	<52	21	\$15.78	0.85	Postsecondary non-degree award
Nurse Anesthetists	3.64	138	25.5%	10.1%	20.5%	-10.4%	14	32*	46	0	\$80.77	0.99	Master's degree
Surgeons	2.73	132	37.4%	7.5%	16.5%	-9.0%	10	26*	36	0	\$107.88	1.10	Doctoral or professional degree
Dentists, General	0.83	112	57.7%	13.6%	6.7%	6.9%	15	28*	43	21	\$86.65	0.93	Doctoral or professional degree
Cardiovascular Technologists and Technicians	1.89	100	6.7%	33.2%	24.0%	9.2%	33	14*	47	55	\$24.17	1.00	Associate's degree
Nuclear Medicine Technologists	4.69	97	21.4%	14.2%	16.2%	-2.0%	14	13*	27	27	\$25.61	1.06	Associate's degree
Medical Secretaries	0.18	97	56.7%	88.5%	27.2%	61.3%	86	20*	106	6	\$17.86	0.77	High school diploma or equivalent
Internists, General	1.80	97	1.5%	1.9%	9.8%	-7.9%	2	18*	20	0	\$118.56	1.35	Doctoral or professional degree
Dental Laboratory Technicians	0.73	30	57.9%	65.0%	6.1%	58.9%	19	<20	<39	0	\$14.88	0.74	High school diploma or equivalent
Magnetic Resonance Imaging Technologists	0.87	29	21.0%	30.4%	17.8%	12.6%	9	<20	<29	38	\$24.40	0.77	Associate's degree
Radiation Therapists	0.86	15	19.7%	36.8%	17.8%	19.0%	6	<20	<29	45	\$37.77	0.96	Associate's degree

### **Profile:**

The Health care and social assistance sector accounts for 16.8 percent of total jobs in the local economy, a stronger concentration than what is seen nationally, which is mostly attributed to the presence of two large medical facilities – Avera McKeanan Hospital and Sanford Health – that employ a vast number of residents in the area. Overall, employment within the occupations listed is projected to grow by 19.4 percent, while nationally employment within these fields is estimated to increase by 18.2 percent. Several occupations listed have experienced above average growth over the past ten years, some with more than 50 percent growth rates, including registered nurses, physical therapists, and radiologic technologists.

### **Local Employers:**

Sanford Health and Avera McKeanan Hospital employ thousands of residents at their multiple facilities. Employment at hospitals in the Sioux Falls area accounts for over 13,000 workers alone.

### **National Trends:**

Employment is projected to continue to increase at above average rates. Demand for health care services is also expected to grow, in part, due to the large numbers of Americans from the baby boomer generation that will likely require additional services from age-related ailments. Advancements in technology have also supported improvements in treatments that have contributed to longer life expectancies.

### **Occupational Outlook:**

Several occupations within the health care sector were discussed throughout the report and the employment outlook for occupations in this field is strong. Every occupation listed on the table is expected to experience some level of employment growth, over half of which are projected to grow at faster rates than the national average.

### **Area Educational Offerings:**

The majority of occupations listed require higher levels of education and training. The Sanford School of Medicine at the University of South Dakota offers a pool of talented doctors to supply the area with qualified workers. Sanford's USD Medical Center in Sioux Falls is the teaching hospital for the program and provides students with the proper training needed to fill a number of positions. Avera McKeanan School of Radiologic Technology, USF, and Sanford Medical Center all offer medical radiologic technology programs that work to create a pipeline of skilled workers. Although the number of completions in 2013 indicates that there may be a shortage of qualified workers, the fact that most of the training is done in-house enables the employer to directly connect with students and to increase output of certificates when required, thereby making it less vulnerable than other occupations where gaps in communication may exist between schools and businesses. Augustana College and Southeast Technical Institute also offer a variety of quality health professions and related programs that contribute to the supply of talented

workers within the field. Input reported that there is a strong partnership between the health care sector and the higher education system in the area to help align programs with the needs of the local establishments.

## FINANCE AND CUSTOMER-CARE

Description	Current Trends			Projected Growth (2014-24)			Projected Demand and Supply				Attributes		
	2014 LQ	2014 Jobs	2004-14 SF % Chg.	SF % Chg.	US % Chg.	Pct. Pt. Difference	SF # Chg.	SF # 55+	2014-24 Openings (Growth plus replacements)	2013 Regional Completions	2013 Avg. Hourly Earnings	Earnings Ratio	Typical Entry Level Education
Customer Service Representatives	1.75	4,442	19.6%	5.8%	14.1%	-8.3%	259	662	921	0	\$13.11	0.82	High school diploma or equivalent
Bookkeeping, Accounting, and Auditing Clerks	1.61	2,966	21.6%	6.1%	12.0%	-5.9%	180	874	1,054	11	\$14.87	0.83	High school diploma or equivalent
Bill and Account Collectors	5.51	2,131	3.0%	-2.6%	14.8%	-17.4%	-56	314	258	11	\$14.45	0.87	High school diploma or equivalent
Secretaries and Administrative Assistants**	0.72	1,940	15.6%	11.5%	12.9%	-1.3%	223	568	792	1	\$13.26	0.81	High school diploma or equivalent
Receptionists and Information Clerks	1.69	1,809	16.1%	6.0%	11.9%	-5.9%	109	381	490	42	\$12.21	0.92	High school diploma or equivalent
Accountants and Auditors	1.18	1,625	28.7%	5.6%	12.5%	-6.8%	91	360	452	76	\$29.98	0.88	Bachelor's degree
Insurance Sales Agents	2.14	1,616	53.9%	8.4%	9.7%	-1.3%	135	414	549	3	\$27.49	0.94	High school diploma or equivalent
Loan Interviewers and Clerks	3.93	861	0.8%	4.0%	9.0%	-5.0%	34	84*	118	11	\$15.39	0.86	High school diploma or equivalent
Insurance Claims and Policy Processing Clerks	3.13	781	41.4%	6.3%	10.3%	-4.0%	49	149	198	6	\$14.37	0.79	High school diploma or equivalent
Loan Officers	2.18	675	-2.0%	7.8%	7.8%	0.0%	53	91	144	6	\$25.63	0.74	Bachelor's degree
Financial Analysts	2.43	655	21.7%	5.9%	16.1%	-10.2%	38	59	97	12	\$30.52	0.70	Bachelor's degree
Telemarketers	1.76	446	23.4%	-10.5%	11.4%	-21.9%	-47	65	18	22	\$13.31	1.06	Less than high school
Claims Adjusters, Examiners, and Investigators	1.37	407	23.8%	2.3%	6.7%	-4.4%	9	84	93	3	\$27.73	0.93	High school diploma or equivalent
Compliance Officers	1.56	393	27.7%	5.6%	8.0%	-2.4%	22	105	126	0	\$28.08	0.87	Bachelor's degree
Financial Managers	0.56	305	-3.8%	19.0%	10.2%	8.8%	58	49*	107	12	\$60.83	1.01	Bachelor's degree
Market Research Analysts and Marketing Specialists	0.59	287	22.8%	27.0%	28.6%	-1.6%	77	30*	107	1	\$24.21	0.75	Bachelor's degree
Securities, Commodities, and Financial Services Sales Agents	0.70	254	-9.3%	13.3%	8.2%	5.1%	34	30*	64	0	\$62.85	1.32	Bachelor's degree
Credit Analysts	3.55	241	-1.3%	2.5%	12.3%	-9.8%	6	26*	32	76	\$30.46	0.87	Bachelor's degree
Insurance Underwriters	2.51	241	13.7%	-11.0%	-1.5%	-9.5%	-26	45*	19	3	\$33.53	0.99	Bachelor's degree
Compensation, Benefits, and Job Analysis Specialists	2.27	196	43.4%	5.2%	9.1%	-3.9%	10	31*	41	2	\$24.06	0.79	Bachelor's degree
Credit Authorizers, Checkers, and Clerks	3.78	192	-11.6%	-8.7%	2.2%	-10.9%	-17	28*	11	11	\$13.81	0.81	High school diploma or equivalent
Correspondence Clerks	19.55	163	23.2%	1.9%	10.0%	-8.1%	3	32*	35	6	\$13.72	0.79	High school diploma or equivalent

\*\* Except Legal, Medical, and Executive

### Profile:

The Sioux Falls region has historically had a strong concentration of jobs and companies operating in finance and customer care. Employment within these occupations has grown over the past ten years, despite recent losses within several areas which were largely attributed to the Great Recession. The strong concentration of jobs within these occupations is seen in their high location quotients. Bill and account collectors have five times the share of jobs than they do on average nationally. Many of the occupations listed provide support in other business sectors, such as secretaries, accountants, and bookkeeping clerks. Employment within these occupations is projected to grow at a slower rate than the national average.

### ***Local Employers:***

Sioux Falls is home to many large national employers such as, Citi, Wells Fargo, Capital One, and Esurance. Premier Bankcard is headquartered in Sioux Falls and is a large presence in the community.

### ***National Trends:***

Employment within these occupations as a whole is projected to grow by roughly 12.5 percent, with employment growth varied over the occupations. Insurance underwriters is the only occupation expected to decline. The drop in demand for individuals to perform the job duties associated with insurance underwriting is attributed to technological advancements with automated underwriting software enabling increased productivity among employees, thereby decreasing the number of workers needed for the same amount of output.

### ***Occupational Outlook:***

As was discussed in the section on expectations for the next ten years, technological advancements leave many occupations within this sector vulnerable to shrinkage due to computerization. A large number of residents are employed within these occupations and may be susceptible to job loss if computerization and increased efficiencies lead to fewer levels of employment within their occupation. About 20 percent of total workers in these occupations are over the age of 55, with varying degrees of aging workers. Occupations with large numbers of employees susceptible to retirement should be examined to ensure that there are no shortages that would prevent business activities from operating as normal.

### ***Area Educational Offerings:***

Roughly half of the occupations listed require a high school degree as the highest level of education needed to satisfy requirements. The data suggest that the pipeline for accountants should be able to meet both the growing demand and the larger than average number of employees nearing the age of retirement. However, this operates under the assumption that the area is able to retain the residents that are graduating from local colleges. Compliance officers are projected to grow at slower than average growth rates, yet the region has an aging workforce within this field of work. Although the data suggest that there are no completions that align with this occupation, other degrees may be able to prepare individuals to fill openings.

## ADVANCED MANUFACTURING

Description	Current Trends			Projected Growth (2014-24)			Projected Demand and Supply				Attributes		
	2014 LQ	2014 Jobs	2004-14 SF % Chg.	SF % Chg.	US % Chg.	Pct. Pt. Difference	SF # Chg.	SF # 55+	2014-24 Openings (Growth plus replacements)	2013 Regional Completions	2013 Avg. Hourly Earnings	Earnings Ratio	Typical Entry Level Education
Heavy & Tractor-Trailer Truck Drivers	1.52	2,850	0.4%	-3.1%	10.9%	-14.0%	(87)	864	777	0	\$18.73	0.97	Postsecondary non-degree award
Laborers & Freight, Stock, & Material Movers, Hand	1.03	2,550	16.0%	9.6%	12.4%	-2.8%	244	368	612	0	\$12.37	0.96	Less than high school
Sales Representatives, Wholesale & Manufacturing**	1.43	2,197	22.4%	7.6%	10.9%	-3.3%	167	539	706	22	\$27.54	0.90	High school diploma or equivalent
Team Assemblers	1.16	1,312	34.0%	13.4%	6.6%	6.8%	176	197	373	0	\$12.09	0.82	High school diploma or equivalent
Packers & Packagers, Hand	1.09	786	17.5%	9.0%	9.0%	0.0%	70	132	203	0	\$10.73	0.98	Less than high school
Welders, Cutters, Solderers, & Brazers	1.90	758	33.7%	17.8%	7.9%	9.9%	135	82*	217	11	\$16.55	0.89	High school diploma or equivalent
First-Line Supervisors of Production & Operating Workers	0.62	381	6.0%	17.2%	2.2%	15.0%	66	62*	128	0	\$26.41	0.95	Postsecondary non-degree award
Electrical & Electronic Equipment Assemblers	1.68	348	39.7%	15.7%	1.7%	14.1%	55	100	155	0	\$12.92	0.86	High school diploma or equivalent
Inspectors, Testers, Sorters, Samplers, & Weighers	0.65	327	17.4%	19.7%	9.0%	10.7%	65	71	135	0	\$14.45	0.79	High school diploma or equivalent
Coating, Painting, & Spraying Machine Setters, ***	3.20	294	51.7%	12.3%	3.8%	8.5%	36	28*	64	0	\$13.08	0.85	High school diploma or equivalent
Industrial Machinery Mechanics	0.83	279	31.3%	25.7%	19.4%	6.3%	72	54*	126	0	\$19.16	0.81	High school diploma or equivalent
Extruding, Forming, Pressing, & Compacting Machine Setters, ***	3.51	254	33.8%	8.1%	-0.2%	8.3%	21	34*	55	0	\$15.36	0.96	High school diploma or equivalent
Molding, Coremaking, & Casting Machine Setters, ****^	1.94	249	49.6%	1.3%	-5.7%	7.0%	3	31*	34	0	\$14.61	1.00	High school diploma or equivalent
Cutting, Punching, & Press Machine Setters, ****^	1.27	247	32.3%	6.4%	-2.8%	9.3%	16	34*	50	0	\$14.73	0.97	High school diploma or equivalent
Machinists	0.57	236	30.6%	20.0%	11.8%	8.2%	47	42*	89	1	\$17.52	0.89	High school diploma or equivalent
Extruding & Drawing Machine Setters, ****^	2.21	167	43.7%	2.6%	-6.1%	8.7%	4	21*	25	0	\$12.51	0.78	High school diploma or equivalent
Mechanical Engineers	0.50	137	26.9%	24.8%	8.8%	16.0%	34	21*	55	0	\$34.05	0.83	Bachelor's degree
Industrial Engineers	0.50	121	22.9%	26.0%	8.2%	17.7%	31	21*	52	9	\$32.62	0.81	Bachelor's degree
Industrial Production Managers	0.56	98	10.1%	20.6%	2.1%	18.4%	20	18*	38	360	\$41.54	0.88	Bachelor's degree
Tool & Die Makers	1.12	93	84.9%	6.1%	2.2%	3.9%	6	22*	28	0	\$21.55	0.91	High school diploma or equivalent
Structural Metal Fabricators & Fitters	0.96	79	9.4%	31.6%	10.2%	21.4%	25	10*	35	1	\$14.95	0.82	High school diploma or equivalent
Welding, Soldering, & Brazing Machine Setters, ***	1.39	78	44.0%	31.6%	19.0%	12.6%	25	<20	<45	11	\$16.42	0.96	High school diploma or equivalent
Computer-Controlled Machine Tool Operators ^	0.45	67	43.5%	35.4%	16.5%	18.9%	24	<20	<44	1	\$18.07	1.01	High school diploma or equivalent
Electrical Engineers	0.34	61	-2.8%	34.8%	10.1%	24.8%	21	11*	32	0	\$37.71	0.84	Bachelor's degree
Electrical & Electronics Engineering Technicians	0.36	53	-22.6%	27.4%	6.1%	21.3%	15	10*	25	0	\$23.69	0.84	Associate's degree
Electrical & Electronics Drafters	0.38	12	9.6%	34.8%	12.6%	22.3%	4	<20	<24	0	\$22.56	0.78	Associate's degree

\*\* Except Technical and Scientific Products

\*\*\* Operators, & Tenders

^ Metal and Plastic

### Profile:

Occupations within this field have experienced fast growth rates over the past ten years and are projected to continue to grow at fast rates, outpacing the national projected growth rate in nearly every occupation listed. The region's strength in skilled trades has enabled the area the take advantage of additional opportunities. The strong health care sector also has influenced the advance manufacturing field, with the region positioned well to expand in biomedical device manufacturing.



### ***Local Employers:***

Midwest Precision SD, Dignity Medical Devices, Raven Industries, and Orthotic & Prosthetic Specialties are among some of the local companies operating in biomedical device or advanced manufacturing.

### ***National Trends:***

Employment is projected to grow in nearly every occupation nationally, with the Sioux Falls region expected to grow at similar rates. Advanced manufacturing operations have continued to grow in many metropolitan areas across the United States and stand to continue expanding. The Sioux Falls area has a higher concentration of jobs in many occupations than the nation.

### ***Occupational Outlook:***

There will be a large number of openings for jobs projected over the next ten years. Although a smaller share of these jobs will stem from growth, this sector has some of the most disadvantage age ratios and the region stands to suffer from large numbers of workers retiring over the next decade if qualified workers are not found or trained. Roughly 70 percent of the estimated future openings stem from replacements due to retirements. Earnings are lower than the national average, which acts as a disadvantage for attracting workers to the area. Increased pressures are likely to be put on wages if employment openings are not filled. In total, there will be an estimated 4,000 openings for workers to fill over the coming decade.

### ***Area Educational Offerings:***

Many of the occupations listed require lower levels of education requirements, but higher levels of skills that can be obtained either on the job or at post-secondary institutions. Input related to talent needs was most acute for occupations within this field, as was discussed throughout the report. Welders, machinists, truck drivers, engineers, mechanics, and laborers were just a few of the occupations cited by employers that were difficult to fill with qualified workers. The area's educational offerings indicate that degreed output of these workers is not meeting the current need and is not positioned to meet the future demand. Heavy and tractor-trailer truck drivers have an aging workforce and local residents need to be able to get certified to fill those occupations that will be left open in the near future. Certifications and short-term training at the area's post-secondary institutions would help to alleviate the stress that is being put on employers.

## BIOTECHNOLOGY

Description	Current Trends			Projected Growth (2014-24)			Projected Demand and Supply				Attributes		
	2014 LQ	2014 Jobs	2004-14 SF % Chg.	SF % Chg.	US % Chg.	Pct. Pt. Difference	SF # Chg.	SF # 55+	2014-24 Openings (Growth plus replacements)	2013 Regional Completions	2013 Avg. Hourly Earnings	Earnings Ratio	Typical Entry Level Education
Environmental Scientists and Specialists**	1.06	99	58.6%	12.5%	15.6%	-3.1%	12	<28	<40	0	\$40.17	1.18	Bachelor's degree
Biological Technicians	0.71	53	59.9%	18.2%	13.2%	5.0%	10	<20	<30	0	\$16.37	0.78	Bachelor's degree
Medical Scientists, Except Epidemiologists	0.43	47	48.4%	25.2%	15.0%	10.2%	12	<20	<22	5	\$32.02	0.74	Doctoral or professional degree
Chemists	0.44	40	76.3%	18.1%	8.9%	9.2%	7	<20	<27	7	\$29.63	0.79	Bachelor's degree
Soil and Plant Scientists	2.33	40	63.5%	5.7%	13.0%	-7.3%	2	<20	<22	0	\$32.81	1.14	Bachelor's degree
Chemical Technicians	0.58	39	138.9%	25.8%	11.9%	13.8%	10	<20	<30	0	\$19.25	0.86	Associate's degree
Agricultural and Food Science Technicians	1.71	38	23.0%	-3.1%	10.5%	-13.6%	(1)	<20	<19	0	\$16.01	0.90	Associate's degree
Chemical Equipment Operators and Tenders	0.59	37	156.5%	26.6%	-1.0%	27.6%	10	<20	<30	0	\$16.09	0.69	High school diploma or equivalent
Microbiologists	1.56	33	63.0%	7.0%	11.0%	-4.0%	2	<20	<22	0	\$28.00	0.77	Bachelor's degree
Environmental Science and Protection Technicians**	0.61	22	64.4%	27.9%	19.4%	8.5%	6	<20	<26	0	\$17.13	0.78	Associate's degree
Chemical Plant and System Operators	0.42	17	N/A	37.2%	-0.5%	37.7%	6	<10	<16	0	\$19.14	0.73	High school diploma or equivalent
Biomedical Engineers	0.24	<10	N/A	N/A	26.9%	N/A	N/A	<10	<10	0	N/A	N/A	Bachelor's degree
Chemical Engineers	0.19	<10	N/A	N/A	10.5%	N/A	N/A	<10	<10	0	N/A	N/A	Bachelor's degree
Animal Scientists	0.51	<10	N/A	N/A	8.6%	N/A	N/A	<10	<10	0	N/A	N/A	Doctoral or professional degree
Food Scientists and Technologists	0.55	<10	N/A	N/A	13.6%	N/A	N/A	<20	<10	0	N/A	N/A	Bachelor's degree
Biochemists and Biophysicists	0.17	<10	N/A	N/A	18.8%	N/A	N/A	<10	<10	5	N/A	N/A	Doctoral or professional degree
Epidemiologists	1.32	<10	N/A	N/A	7.8%	N/A	N/A	<20	<10	0	N/A	N/A	Master's degree

\*\* Including Health

### Profile:

The Sioux Falls area has a growing number of companies involved in biomedical, biopharmaceuticals, and biomass research. The area is conducting significant research on breast cancer, Type I diabetes, genetics, human antibodies, and agricultural biotechnology, which has positioned it as a magnet for talent in this field of research. Employment has more than doubled for jobs such as chemical technicians and chemical equipment operators and tenders. Growth rates were high across the board for the occupations listed in biotechnology; the location quotient in five of the jobs listed illustrates the stronger than average presence of employment within this field.

### Local Employers:

Sanford Research, Avera McKennan Hospital and University Health Center, SAB Biotherapeutics, and POET-DSM Advanced BioFuels are just some of the major local employers that are making significant impacts in the biotech world. While biomedical research arguably dominates the biotech influence in the area, the region's strong agriculture sector has offered opportunities for advancements in technology through the use of cattle and corn.

### ***National Trends:***

Employment nationally is expected to have strong growth rates over the next ten years. Occupations in the areas of science, technology, engineering, and math offer high wages to workers. Growing advancements in technology are likely to continue demanding more workers with this area's business activities.

### ***Occupational Outlook:***

Although employment growth within this field accounts for a smaller number of jobs, the education requirements are high for these occupations. It takes years of education and training to become qualified to fill the majority of positions. A long-term vision is needed to ensure that there will be a workforce available for future employment opportunities. Due to the small number of employees that work within these occupations, there were a number of data suppressions, but the national projected growth indicate that there will be a growing number of newly created jobs within this field. Additionally, the growth projected for total jobs that were not suppressed suggests that the employment in the Sioux Falls region will grow at a faster rate than the national average.

### ***Area Educational Offerings:***

The aforementioned educational offerings regarding healthcare also strengthen the region's ability to support increasing biomedical research. Additionally, the University Center's recent expansion that is set to house goods manufacturing practices will be a valuable resource to continue growth within this field. The additional space will enable companies and researchers to produce pharmaceuticals, biological, and medical devices for trial areas, which will offer opportunities to improve the area's presence of companies and workers operating in biotech. The GEAR Center also offers an extremely important educational offering with USD's Biomedical Engineering program. An increased output of engineers will likely be needed in order to continue growing and supporting this sector. The new USD Discovery Center and its focus on biotech will also help greater Sioux Falls to develop and foster growth within the region.