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Market Street brings original insights and clarity to the evaluation and revitalization of the places where people live, work and grow. Through honest and informed assessments, *Market Street* can equip you with the tools to create meaningful change. Our solutions successfully merge our experience and expertise with the economic and social realities of our clients. *Market Street's* community clients are successful at creating stronger programs, increasing operational budgets, and creating new quality jobs that improve the quality of life in their communities.

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PROJECT OVERVIEW

This *Draft Economic Development Strategy* contains objectives and tactics that will direct Sioux Falls’ economic development activities in the upcoming years. The Partners for Progress have engaged *Market Street Services*, a community, economic, and workforce development consulting firm based in Atlanta, to facilitate the planning process. The Partners for Progress includes the City of San Marcos, Economic Development San Marcos (EDSM), the San Marcos Area Chamber of Commerce, Hays County, Caldwell County, the City of Lockhart, the City of Luling, Prime Outlets, Texas State University-San Marcos (TXST), Central Texas Medical Center, San Marcos Consolidated Independent School District (CISD), and Gary Job Corps. Its purpose is to promote sustainable and comprehensive economic development in the Greater San Marcos region.

The process of creating an economic development strategy involves months of community input and research which is then crafted into a creative and realistic plan that can affect meaningful, sustainable change. It is a highly interactive process that allows multiple stakeholder groups to voice their opinions and, at the same time, takes into account previous planning and visioning processes. *Market Street Services* served as the facilitator in the process of crafting this *Strategy*. The end result is truly a product of the community, representing the creative thought and vision of local residents, businesses, and civic leaders.

The components of the process are outlined below. Additional details related to this planning process can be found at the project website, GreaterSanMarcosPlan.com.

The components of the **Future Sioux Falls** process are:

- **Competitive Assessment:** This report presented a breadth of research to demonstrate the Sioux Falls Area’s competitive position to accommodate “visionary” growth and development. A combination of factors that determine a community’s strengths as a place to live, work, and do business were assessed, including indicators related to education and workforce development, infrastructure and land use, business costs, and quality of life.
- **Target Business Analysis:** This report builds on the extensive research and data analysis from the *Competitive Assessment*. The *Target Business Analysis* is a blend of quantitative and qualitative research with significant technical information including location quotients, economic base analysis, and industry-by-occupation employment data. This deliverable provides a short list of clearly defined target sectors and the opportunities and challenges involved in effectively growing them.
- **Marketing Review:** The next step in the process focuses on marketing activities through a review and assessment of the Sioux Falls Development Foundation’s and Chamber of Commerce’s marketing efforts to determine if they reflect best

practice methods for increasing awareness and investment in the area. Current internal and external marketing program tools are reviewed, including the Foundation's website, advertising and collateral materials, inbound/outbound marketing events, public relations, trade shows, site selection professional visits, branding and identity efforts, and sites and buildings.

- **Future Sioux Falls Strategy:** This *Strategy* represents the culmination of all research completed and will present action items geared toward addressing challenges and capitalizing on opportunities for visionary growth. The *Strategy* will serve as a tool to unify the Sioux Falls area's public and private leadership behind a consensus blueprint for the community's future. The final *Strategy* will include best practices as well as benchmarks and performance measures.
- **Implementation Plan:** While the *Strategy* represents "what" the Sioux Falls area needs to do to achieve its preferred future, the *Implementation Plan* will determine "how" that will be done. This report will include a capacity assessment, a first-year action plan, a five year action plan, and will determine which organization(s) should lead plan implementation efforts.

By identifying a set of high-value target sectors for greater Sioux Falls to pursue, this *Target Business Analysis* serves a critical role in the **Future Sioux Falls** process. Understanding that the growth of these sectors will require addressing competitive dynamics related to workforce, community and economic development will ensure that the Sioux Falls Area leverages partnerships across the region to best capture target-sector opportunities.

INTRODUCTION

The economic development strategy of targeting certain “clusters” of economic activity has become increasingly widespread over the years as regional economies attempt to capitalize on their strengths and competitive advantages. The emergence and successful developments of business groupings in Silicon Valley, the Research Triangle Park, and Route 128 in Massachusetts have served as case studies for other regions across the nation as they strive to develop similar agglomerations of related companies and institutions. Such target groupings create external economies of scale for these businesses as they share common labor pools, infrastructure, and other resources while reducing costs through proximity to upstream (suppliers) and downstream (buyers) linkages. These advantages, coupled with the network effects that exist within broader sectors, often result in comparatively high potential for employment growth and wealth creation. Due to limited economic development resources, it is sensible for regions to target those sectors with the greatest potential to create new jobs and raise incomes.

This *Target Business Analysis* will take a “bottom-up” approach to target identification, as opposed to the more traditional “top-down” approach. This bottom-up approach begins by examining the attributes of the region’s workforce – the occupations, skill sets, and types of knowledge that support the region’s business activities – as opposed to beginning with an examination of the region’s business activities.

It is the Sioux Falls region’s competitive advantages with respect to its talent base and the quality of place that will support the development and continued growth of various target sectors. Once these advantages are identified and the proper context is available, only then is it appropriate to proceed with the more traditional analysis of employment concentration by business sector.

Recommended targets were selected based on comprehensive quantitative and qualitative research and answers to questions such as:

- Has the sector been growing regionally?
- Does the sector provide wages at or above the regional average and therefore has the potential to increase local wealth?
- Is the sector projected to grow nationally?
- Does the Sioux Falls Area have an existing – or potential – competitive advantage for the sector?
- Is there an important diversification component for the local economy?
- Are there key occupations, compositions, and skill sets that are transferable across multiple sectors?

Based on all these factors, the following target sectors are recommended for the Sioux Falls Area to pursue:

Target: Medical Services and Research Science**Target: Corporate and Data Services**

Niche: Information Assurance

Niche: Customer-Care Services

Niche: Regional Headquarters

Target: Renewable Energy Technology

Niche: Biofuels and Wind Energy

Niche: Smart-Grid Technology

Target: Warehousing and Distribution

In the above recommendations, “niches” reflect high-value opportunities for local growth based on competitive strengths in existing employment, research capacity, and training resources. Effective development of sub-sector niches leads to possibilities for growth of larger target groupings of affiliated companies and employment.

Targets reflect a broader base of economic activity, with specific “niches” at their core. When appropriate, the more broadly-defined targets capture a range of sub-sectors that may indirectly benefit from strategies focused on the “niches” within each target. These are shown in the NAICS “definition” tables associated with each proposed target in this *Analysis* report.

Effectively capitalizing on the region’s target opportunities will require local economic development organizations and departments, governments and training institutions to partner in dynamic ways to ensure that sectors are pursued through multi-faceted and holistic programs. These include equal focus on existing business retention and expansion, small business development, and recruitment/attraction.

Specific strategies and action steps for growing these recommended target sectors will be included in the forthcoming *Future Sioux Falls* plan.

OPPORTUNITY AREAS

The greater Sioux Falls economy has existing strengths in a variety of fields as represented by the four targets outlined in this document. In addition to these targets, *Market Street* has identified three special opportunity areas that can benefit the Sioux Falls Area economy. These opportunity sectors should be closely

monitored with the understanding that they can enhance the vitality of the Sioux Falls region.

Though not pursued as “targets” in the context of this strategic process, these industries should nevertheless be nurtured responsibly and remain a focus of local economic development professionals so that growth opportunities can be captured. For example, if a catalytic occurrence takes place – i.e., a major expansion is proposed or a high-value prospect is interested in Sioux Falls – then developers should ramp up efforts accordingly.

Hospitality and Tourism

While the Sioux Falls Area has strong and growing capacity in this sector, *Market Street* feels that Hospitality and Tourism will develop outside the purview of a targeted-industry program. While not a target sector, Hospitality and Tourism nevertheless has strong benefit for the region. In addition to bringing “outside” money into the Sioux Falls Area, amenities developed for visitors also benefit existing residents. Shops, restaurants, arts and culture attractions, etc., serve the dual purpose of enhancing Sioux Falls competitiveness as a tourism destination and boosting local quality of life.

The Sioux Falls Convention and Visitors Bureau has ten dedicated and/or shared staff persons working every day to grow the region’s tourism sector. This capacity ensures that much work will be done to attract visitors, conventions, meetings, conferences and other events to greater Sioux Falls, as well as hunting and fishing tourists. These efforts devoted to development of Hospitality and Tourism are another reason that the region’s target-development function can be directed to other value-added sectors.

Food Processing

The John Morrell & Co. processing plant in Sioux Falls is a large existing employer that provides a good source of entry-level jobs for local adults, including recent immigrants. This fact – along with the plant’s contribution to the local tax base – qualifies it as a key economic resource for the Sioux Falls Area. Local economic development professionals should therefore continue to work with representatives from Morrell to ensure that the company is able to succeed long-term in the Sioux Falls Area. However, the food processing sector as a whole does not warrant development as a regional target.

One food processing sub-sector that deserves monitoring by local officials is so-called “functional” foods. The American Dietetic Association broke the functional-food category down into four groups: conventional foods, modified foods (fortified or enriched), medical foods (e.g. formulas used to manage disease) and foods for special dietary use, such as gluten- or lactose-free foods. For some employers, proximity to agricultural suppliers or the by-products of ethanol production can be location advantages; these resources are plentiful in South Dakota. There are also potential synergies with greater Sioux Falls’ Medical Services and Research Science target.

Lastly, in 2009 site selection consultants the Boyd Company determined that the Sioux Falls region was the lowest-cost market in the U.S. for functional food production.

Thus, while current capacity does not warrant pursuit of functional foods as a target sector, future opportunities may compel local economic developers to upgrade this business group as a regional priority. For now, officials should keep abreast of trends in the functional food market to determine the potential benefits for the Sioux Falls Area economy.

Geographic Imaging

The whole of greater Sioux Falls' capacity in the Geographic Imaging sector is comprised by the U.S. Geological Survey's (USGS) Earth Resources Observation and Research Science (EROS) Center. EROS is a remotely sensed data management, systems development, and research field center that offers a variety of data applications and research programs leveraged by scientists, managers, and other technical users. The 600 workers at EROS include USGS staff and employees from private industry working under contract to support the EROS mission.

Though EROS is a dynamic facility with a unique mission and on-site public-private collaboration, *Market Street* does not believe the broader Geographic Imaging sector should be pursued as a target by the Sioux Falls region. The increasing ubiquity of publicly available – often free – data-intensive geographic imaging from sources such as Google Earth and other providers limits the short-term commercial potential for this information. Higher-value geographic imaging, including data with national security and intelligence uses are likely already procured by the federal government from research centers like EROS from across the globe.

Regional economic development entities should certainly consider EROS an “arrow in their quivers” for software and engineering firms that may show interest in leveraging EROS data for value-added products. But it would be premature to consider the presence of EROS alone as an indication of a growing Geographic Imaging target.

WORKFORCE CONSIDERATIONS

Market Street Services' proprietary *Workforce Risk Index* measures the sustainability of metropolitan labor forces in the medium- and long-term future. Labor force sustainability refers to the capability and capacity of a region's workforce to support the region's businesses and operations and accommodate additional demand for labor. The Index leverages a number of key indicators like workforce capacity by age group, labor force participation (the percentage of the adult population actively engaged in work or the act of finding work), and migration (are more people coming into the region than going out?) to determine the number of working-age adults available to support local businesses in the coming years. Quite simply, the Index enables existing and potential employers to answer the question, “Will I have access to a large enough pool of potential employees in five years – in ten years, etc.” The

methodology behind the *Workforce Risk Index* is explained further in **Appendix A** of this report.

The highest-ranking region in the overall Index is viewed as having the most sustainable workforce in the medium to long-term, and similarly has the lowest risk associated with changing demographic trends. Greater Sioux Falls ranked 11th among 353 metro areas nationwide, showing **extremely strong workforce sustainability**. Lower scores in the “young professionals” and “long-term net migration” components of this index point to potential areas of concern. As one focus group participant pointed out in the Community Input phase of the **Future Sioux Falls** process, “We are effective marketing to young professionals within a 150 mile radius of here. We need better national recognition to be able to compete for young talent on a broader level.” Another noted, “Growth has been driven by emptying out of South Dakota’s small towns. What’s next? Where are our future workers going to come from when that trend slows?” However, despite these weak spots, the data suggest Greater Sioux Falls is in a strong competitive position.

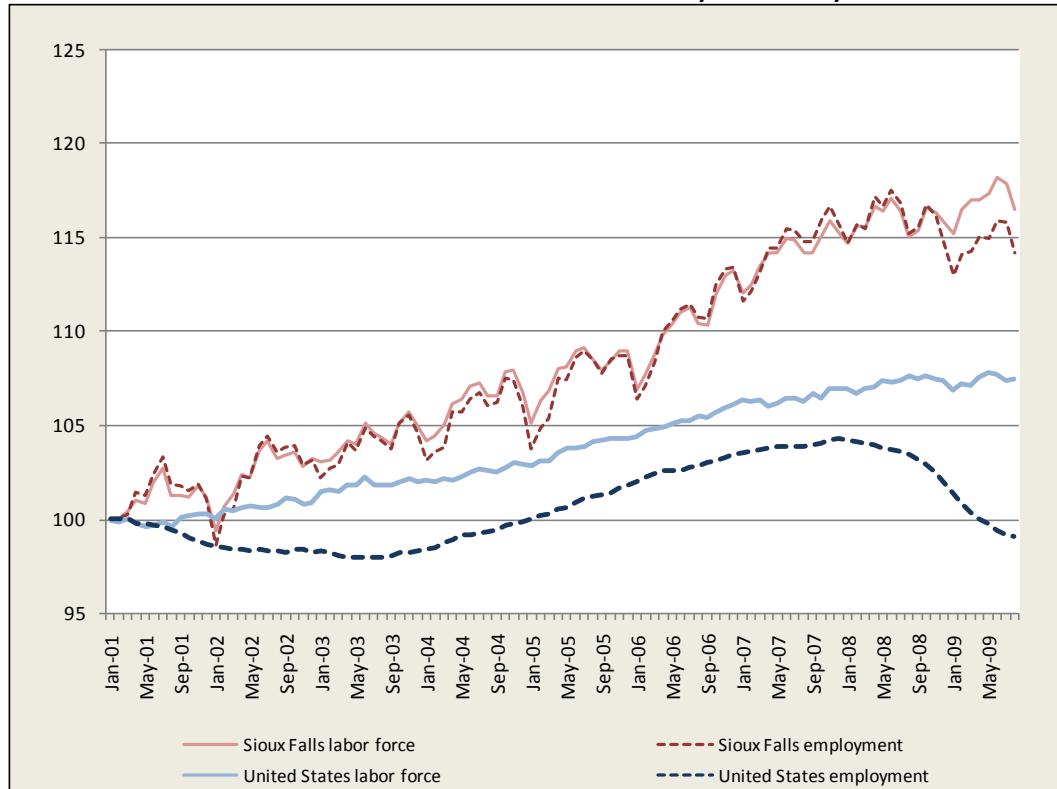
Workforce Risk Index, 2008

Workforce Risk Index - Demographic Sustainability Index			Age Pipeline		Labor Force Participation		Migration Trends	
Overall Rank	Metropolitan Area	Composite Index	Population Approaching Retirement	Young Professionals Population	Ages 62+	Ages 25-34	Long-Term Net Migration	Short-Term Net Migration
11	Sioux Falls, SD	65.47	65.16	47.26	82.73	92.87	55.65	70.18
18	Fargo, ND-MN	63.54	75.02	57.95	51.68	100.00	41.36	61.46
37	Des Moines, IA	60.37	62.39	43.52	73.29	90.14	45.38	66.70
76	Rochester, MN	55.73	65.41	37.79	52.14	89.83	44.07	58.03

Source: Market Street Services

The following chart shows the metro area’s employment and labor force growth since 2001 compared to national trends. Labor force is defined as the number of people employed or actively looking for work. Indexing growth is a way to normalize geographies of different sizes to make growth rates comparable. The Sioux Falls Area has long had a tight labor market, compared to national dynamics. Labor force supply relative to jobs increased throughout this recession; however, longer term trends point to a market that could make it difficult for businesses to find workers.

Index of Labor Force and Job Growth, January 2001–May 2009



Source: U.S. Bureau of Labor Statistics

As discussed in the *Competitive Assessment*, there are many opportunities and threats related to Greater Sioux Falls’ ability to meet the workforce demands of its current and potential future businesses.¹ These include:

¹ Additional workforce data from the *Competitive Assessment* are presented in Appendix B of this report.

Opportunities

- Rapid population growth is occurring in Greater Sioux Falls, with rural areas of North and South Dakota, Minnesota, and Iowa fueling in-migration.
- Compared to the nation, Greater Sioux Falls has a smaller proportion of residents ages 70 or older and a higher proportion of children. These dynamics are typical of many high-growth areas and suggest that Metro Sioux Falls has a robust workforce with strong “pipeline” of future workers.

Threats

- Stakeholders are worried about the region’s ability to draw workers from other markets in the longer-term.
- Reported simultaneous out-migration of the region’s best and brightest is resulting in “brain drain.” Since 2000, Greater Sioux Falls has lost a net number of residents to the metro areas of Minneapolis, Omaha, Lincoln, Des Moines, and Denver.
- Educational attainment lags behind benchmark regions and higher education capacity is limited in Greater Sioux Falls.
- While the regional labor force participation rate remains higher than the national average, it is declining more rapidly.

While metro Sioux Falls has enjoyed rapid growth, many of its competitive advantages are, in different ways, becoming strained. Thus, successful target development will also heavily depend on investments in these dynamics that make Greater Sioux Falls a community of choice for families, workers, and businesses.

Medical Services and Research Science

What's the big picture?

Justification	Multi-region center of health services, specialized treatments and procedures
	Incorporates South Dakota Governor's Office of Economic Development statewide targets of Biotechnology and Medical Devices
	Millions invested in research and pharmaceutical development at regional hospitals and institutes
	Above average concentrations in numerous high-paying health care occupational and industry sectors and sub-sectors
	Health care projected as fastest-growing regional/national economic sector
	Medical school and teaching hospitals in region
	Growing employment in pharmacy-benefits management (PBM)
Challenges	Though mitigated by the purchase and retrofit of an existing facility, the full build-out of Sanford's research center south of the city of Sioux Falls is dependent on high-cost transportation infrastructure development
	Recruitment of top research talent to Sioux Falls challenging due to competition with some of the most dynamic regions in the U.S.
	Long, arduous and costly approval process for many drugs and procedures
	Comparatively limited capacity in two-year and four-year degree training
	Consistent shortages in many skilled health care occupations and salary competition for key positions
	Continuing challenges to translate research into successful enterprises
Opportunities	Potentially transformative research being conducted to address childhood diseases, Type-I diabetes, cancer, women's health and other elements could position the Sioux Falls Area as a nationally recognized region for immunology, innovative treatment protocols, and translational medicine innovations and services
	Burgeoning efforts to address issues of chemical dependency could add to region's capacity and reputation as a location for world-changing research and services
	Institutional and federally-funded research could attract complementary private firms and research entities
	Potential creation of private enterprises spun out from institutional research
	Enhancement of training capacity for in-demand occupations
	Sioux Falls Area occupational and skills capacity in information technology can support continued growth of PBM companies and development of health-data processing employment

TARGET OVERVIEW

With the first wave of the Baby Boom generation nearing retirement, the U.S. Census Bureau estimates that, between 2010 and 2030, the national proportion of residents ages 65 and over will increase from 13 to 20 percent.ⁱ As the nation's overall population ages along with the Baby Boom generation, an increasing number of individuals will require medical services, hospital, nursing, and at-home care, and will purchase trillions of dollars worth of medications, medical devices, and other health related products.

One issue of concern which may threaten the sector's long-term performance and stability is the rising cost of health care. In 2008, the U.S. spent \$2.4 trillion on health care and, with average annual growth of 6.2 percent a year, this is expected to balloon to \$4.4 trillion by 2018, if left unchecked.ⁱⁱ The sector's annual increase in spending reflects a rate nearly three times that of inflation (2.7 percent).ⁱⁱⁱ Furthermore, the U.S. Census Bureau recently reported a decline in the proportion of adults covered by private or employer-provided health insurance for the eighth year in a row.^{iv} High costs are reducing access, hitting small businesses and people with chronic disease the hardest.

While federal reform efforts may change the nature of service delivery, demand for health care services and investments in life science research will continue to rise. Increased demand will coincide with developments in R&D as health care providers are increasingly using state-of-the-art technologies to optimize and personalize medical treatments and procedures. As such, this field is expected to provide solid employment growth opportunities in the coming years.

The following chart shows statewide and national employment growth projections for 2006 through 2016 for sub-sectors which were available from the South Dakota Department of Labor and the U.S. Bureau of Labor Statistics. Most sub-sectors in this target are expected to grow much faster than the national employment average of 10 percent. It is estimated that jobs in the health care and social assistance sub-sector will account for 26 percent of all new jobs created by the year 2016.

Growth Projections for Medical Services and Research Science, 2006-2016

NAICS Code and Sector Name	Projected Growth: South Dakota		Projected Growth: United States	
	Number of New jobs	Percent	Number of New jobs	Percent
Medical Services				
42 Wholesale Trade	1,675	9%	428,500	7%
62 Health Care and Social Assistance	12,845	25%	4,034,300	27%
621 Ambulatory health care services	4,685	36%	1,560,600	30%
622 Hospitals, private	4,110	22%	691,800	16%
623 Nursing and residential care facilities	2,395	19%	686,900	24%
Medical Sciences				
3254 Pharmaceutical and medicine manufacturing	Not available		69,400	24%
3391 Medical equipment and supplies manufacturing			3,600	1%
6214, 6215, 6219 Outpatient, laboratory, and other services			223,000	25%
5417 Scientific research and development services			55,400	9%
Total Employment, All Jobs	73,510	16%	15,600,200	10%

Source: U.S. Bureau of Labor Statistics and the South Dakota Department of Labor

Note: Projections are not available for all NAICS codes included in the target definition. Super-sector figures do not sum to the sub-sectors because only those which are available and relevant to target recommendations have been included.

Because of Greater Sioux Falls' competitive position, this target is focused on specific opportunity areas. **Medical services** includes hospital care, ambulatory health care services (e.g. practitioner offices), and nursing and residential care facilities. Because of the metro area's growth and role within the larger region, this is a natural area of growth for Greater Sioux Falls. Medical service jobs feature higher than average wages. While doctors, physicians, and nurse specialists earn top salaries, the jobs available to individuals without substantial professional training can still provide viable, high-paying career opportunities in a stable profession. Furthermore, numerous technical support occupations in health care services require only one or two years of education beyond high school.

There are also opportunities in key areas which support medical services and health care consumers, specifically in **pharmacy benefits management (PBM)**.

Prescription drugs account for a small segment of the larger health care sector. However, it is one of the fastest growth areas within the field. According to the Kaiser Family Foundation, U.S. spending on prescription drugs increased five-fold between 1990 and 2006 from \$40.3 to \$216.7 billion.^v Pharmacy benefits management is the third-party administration of prescription drugs through order processing and paying of prescription drug claims. The purchase of large quantities of medications through pharmacy networks and online mail order delivery services enables PBMs to negotiate lower prices and discounts for their customers.

Research and development comprises the second focus area within the Medical Services and Research Science target. Greater Sioux Falls' growing capacity and

increasing R&D investments put the community at a competitive advantage compared to regions that have not diversified their health care sectors past specialty services. Leveraging existing research at the region's hospitals and companies could potentially result in spin-off small businesses or technology and product commercialization.

The manufacturing of **drugs, vaccines, and medical devices** represents affiliated opportunities within Research Science. The State of South Dakota's economic development efforts have identified medical devices as a key opportunity area for the eastern region of South Dakota. While medical devices are a slower growth area within health care, state economic developers have been successful in recruiting medical device companies from higher cost markets.

How can Sioux Falls compete?

PEOPLE: OCCUPATIONAL ANALYSIS

Over 30,000 of the region's 135,110 workers are employed in occupations relevant to the Medical Services and Research Science target. Greater Sioux Falls is home to several large medical centers such as Sanford/USD Medical Center, Avera McKennan Hospital and University Health Center, and the Sioux Falls Department of Veterans Affairs (VA) Medical Center. Specialty hospitals include Avera Heart Hospital, Children's Care Hospital and School, Sioux Falls Surgical Hospital, and Select Specialty Hospital.

As shown in the tables on the following pages, over 40 percent of South Dakota's health care practitioners, registered nurses, pharmacists, physical therapists, and medical lab technicians are employed in Greater Sioux Falls. According to the state Department of Labor, approximately one-third of the target's occupations will experience at least 25 percent growth statewide between 2006 and 2016.

**Medical Services and Research Science Occupational Target:
Medical Services (table 1 of 2)**

SOC	Occupation	Sioux Falls MSA, Q2 2009			2006-2016 Statewide Projected % Change
		Workers	% of SD total	Annual Avg Wage	
Medical Services					
29-0000	Healthcare Practitioners and Technical Occupations	9,990	40.6%	\$61,672	NA
29-1111	Registered Nurses	4,320	43.2%	\$55,693	28.2%
39-0000	Personal Care and Service Occupations	3,870	33.6%	\$22,269	NA
31-0000	Healthcare Support Occupations	3,290	31.7%	\$26,290	NA
31-1012	Nursing Aides Orderlies and Attendants	1,870	31.6%	\$24,135	16.8%
19-0000	Life Physical and Social Science Occupations	740	18.5%	\$64,973	NA
29-2061	Licensed Practical and Licensed Vocational Nurses	680	34.9%	\$34,038	13.5%
29-1051	Pharmacists	500	46.7%	\$92,322	24.8%
29-2052	Pharmacy Technicians	430	37.7%	\$28,659	34.3%
29-2071	Medical Records and Health Information Technicians	360	34.3%	\$30,569	20.9%
39-9021	Personal and Home Care Aides	360	24.8%	\$20,659	27.5%
31-9092	Medical Assistants	310	37.3%	\$26,419	39.1%
31-9094	Medical Transcriptionists	290	36.7%	\$30,427	20.3%
31-1011	Home Health Aides	230	26.4%	\$26,506	39.3%
29-1123	Physical Therapists	230	41.1%	\$63,028	31.1%
31-9091	Dental Assistants	210	26.6%	\$32,692	38.8%
29-2021	Dental Hygienists	200	45.5%	\$64,731	40.8%
11-19111	Medical and Health Services Managers	200	33.9%	\$87,123	16.1%
29-2012	Medical and Clinical Laboratory Technicians	190	50.0%	\$31,872	17.1%
21-1011	Substance Abuse and Behavioral Disorder Counselors	190	40.4%	\$39,732	33.6%
29-2055	Surgical Technologists	190	51.4%	\$37,795	30.5%
21-1022	Medical and Public Health Social Workers	170	38.6%	\$45,976	14.3%
29-1071	Physician Assistants	160	38.1%	\$84,692	34.1%
21-1014	Mental Health Counselors	130	52.0%	\$44,117	34.9%
29-1062	Family and General Practitioners	120	37.5%	\$134,880	12.9%
29-2081	Opticians Dispensing	120	31.6%	\$31,540	16.0%
29-1126	Respiratory Therapists	120	46.2%	\$49,405	29.6%
continued on next table					

Source: South Dakota Department of Labor

**Medical Services and Research Science Occupational Target:
Medical Services (table 2 of 2) and Research Science**

SOC	Occupation	Sioux Falls MSA, Q2 2009			2006-2016 Statewide Projected % Change
		Workers	% of SD total	Annual Avg Wage	
Medical Services - continued from previous table					
29-2041	Emergency Medical Technicians and Paramedics	110	14.3%	\$25,696	19.0%
21-1023	Mental Health and Substance Abuse Social Workers	110	39.3%	\$31,721	23.1%
29-1122	Occupational Therapists	110	42.3%	\$58,512	22.2%
31-2021	Physical Therapist Assistants	110	45.8%	\$30,955	41.7%
21-1015	Rehabilitation Counselors	110	32.4%	\$38,234	9.2%
29-1067	Surgeons	110	NA	\$229,878	15.9%
29-1061	Anesthesiologists	100	83.3%	\$149,550	12.9%
29-2031	Cardiovascular Technologists and Technicians	100	58.8%	\$50,896	36.7%
29-1063	Internists General	100	62.5%	\$215,870	12.7%
49-9062	Medical Equipment Repairers	90	56.3%	\$50,894	25.8%
43-6013	Medical Secretaries	90	34.6%	\$31,672	24.6%
31-9093	Medical Equipment Preparers	80	66.7%	\$26,075	20.0%
29-2033	Nuclear Medicine Technologists	70	63.6%	\$56,414	18.2%
19-3031	Clinical Counseling and School Psychologists	60	37.5%	\$75,136	20.0%
29-1021	Dentists General	60	33.3%	\$166,386	18.2%
29-2032	Diagnostic Medical Sonographers	60	46.2%	\$51,745	25.0%
29-1031	Dietitians and Nutritionists	60	40.0%	\$49,492	2.9%
21-1091	Health Educators	50	41.7%	\$42,861	23.5%
29-9011	Occupational Health and Safety Specialists	50	35.7%	\$58,894	6.7%
29-1121	Audiologists	40	80.0%	\$62,042	0.0%
51-9083	Ophthalmic Laboratory Technicians	40	57.1%	\$27,205	14.3%
29-1131	Veterinarians	40	20.0%	\$64,391	31.9%
51-9081	Dental Laboratory Technicians	30	27.3%	\$29,252	16.0%
31-9099	Healthcare Support Workers All Other	30	30.0%	\$38,578	NA
29-1064	Obstetricians and Gynecologists	30	NA	\$214,127	13.2%
29-1041	Optometrists	30	27.3%	\$100,236	24.0%
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	30	16.7%	\$19,933	18.8%
25-1071	Health Specialties Teachers Postsecondary	20	13.3%	\$59,884	13.5%
25-1072	Nursing Instructors and Teachers Postsecondary	20	10.5%	\$53,677	12.8%
Medical Science					
19-4011	Agricultural and Food Science Technicians	*	NA	\$26,177	12.2%
29-2056	Veterinary Technologists and Technicians	*	NA	\$30,409	34.1%
29-2011	Medical and Clinical Laboratory Technologists	370	44.6%	\$49,370	16.5%
19-2031	Chemists	30	27.3%	\$50,897	25.0%
19-2041	Environmental Scientists and Specialists Including Health	110	34.4%	\$65,886	12.5%
45-2011	Agricultural Inspectors	20	NA	\$40,314	0.0%
25-1042	Biological Science Teachers Postsecondary	20	13.3%	\$67,981	12.5%

Source: South Dakota Department of Labor
Table cells with a bullet or NA indicate that data was not available for this occupational code

As is the case with most occupational areas, Greater Sioux Falls has lower-cost labor compared to other metropolitan areas. According to a 2009 study from the Boyd Company, among 22 U.S. cities currently housing major pharmacy mail order companies and 35 U.S. cities with existing or emerging concentrations of bioscience

and pharmaceutical industry operations, labor costs were found to be lowest in the Sioux Falls metro. The following table shows labor costs for a hypothetical 230-worker mail order pharmacy and a 150-worker bioscience facility in Sioux Falls compared to five other cities which were included in both rankings.

Comparative Labor Costs, 2009

	Biosciences	Mail Order Pharmacy
San Diego, CA	\$11,856,753	\$15,603,122
Denver, CO	\$11,711,853	\$14,995,609
St. Louis, MO	\$11,251,692	\$14,335,475
Cincinnati, OH	\$11,076,570	\$13,902,842
Omaha, NE	\$10,663,398	\$13,525,668
Sioux Falls, SD	\$10,169,082	\$12,526,485

Source: The Boyd Company

Note: Labor costs for biosciences are based on a sample mix of 21 job descriptions for a 150-worker bioscience facility. Labor costs for mail order pharmacy operations are based on a representative mix of job descriptions for a 230-worker mail order pharmacy. The mix of job titles assumed 20 licensed pharmacists employed at the center.

As was discussed in the *Competitive Assessment*, a 2008 study commissioned by the University Center predicted the need for knowledge workers in the metro area economy in the coming years. It is estimated that the region would need over 31,000 workers holding a bachelor’s degree or higher to meet employer over the next ten years. Of these, it is predicted that the region will need 13,260 workers to sustain business needs in the health care and education super-sector. Stakeholder input gathered earlier in this project suggest local higher education institutions are responsive to the education and workforce training needs of employers in this target sector.^{vi}

In the 2007-08 academic year, 992 degrees and certificates were conferred in Medical Services and Research Science related disciplines, including 48 medical degrees conferred by the University of South Dakota Sanford School of Medicine. Relocation of the main campus of the USD medical school to Sioux Falls helps to ensure long-term workforce capacity in higher skill areas of this target sector. Furthermore, because the vast majority of physicians practice in the location where they completed their medical residency, Sioux Falls’ capacity at its major teaching hospitals (Sanford Heath and Avera) puts the region in a strong competitive position. However, focus group participants still expressed concerns about Greater Sioux Falls’ lack of higher education programs to support the need for graduate and doctorate-level Medical Services and Research Science workers at the local hospitals.

**Higher Education Degrees Awarded in
Medical Services and Research Science, 2007–08**

	Certificate	Associate's	Bachelor's	Master's	First Professional	Total
Agriculture, agriculture operations, and related sciences	0	31	0	0	0	31
Biological and Biomedical Sciences	0	0	49	0	0	49
Business, management, and marketing	9	168	146	40	0	363
Computer and information sciences	51	34	5	0	0	90
Engineering technologies/technicians	10	57	0	0	0	67
Health professions and related clinical sciences	192	24	60	3	48	327
Mathematics and statistics	0	0	12	0	0	12
Physical sciences	0	0	8	0	0	8
Psychology	0	1	26	0	0	27
Public administration and social service professions	0	7	11	0	0	18
Science technologies/technicians	0	0	0	0	0	0
TOTAL	262	322	317	43	48	992

Source: National Center for Education Statistics

Southeast Technical Institute offers 11 different Associate’s degrees in its Health Technology program, ranging from cardiac ultrasound technology to licensed practical nursing. Kilian Community College offers a specialized Associate of Applied Science (A.A.S.) in Chemical Dependency Counseling, as well as two-year degrees in medical office administration, medical coding and reimbursement, and medical assistance.

Augustana College has many four-year Medical Services and Research Science-related degree programs such as nursing, several pre-professional health profession fields of study, and natural sciences. The University of Sioux Falls has Bachelor of Science programs in radiological technology, paramedic technology, medical technology, and biology with the option of pre-professional specializations in medicine, dental, and veterinary. At the graduate level, the University of Sioux Falls offers a Master of Business Administration with a health care concentration, and Augustana College has a Master’s in Nursing for Clinical Nurse Leader (CLN).

With options for higher education programs at the certificate, associate, bachelor, and professional levels, there is a clear gap of programming at the master’s degree level. This is an important component to this target’s career ladder, as many professionals seek master’s degrees for additional training to increase wages and advance in the workplace.

Focus group participants noted the need for more professional development in Greater Sioux Falls through a wider range of master’s degree program offerings. While Sioux Falls’ overall higher education capacity needs to be expanded, increasing opportunities to earn degrees in Medical Services and Research Science occupations should be a high priority. Additionally, high school programs such as Sioux Falls School District’s Career and Technical Education curriculum should expand its

current health care professions offerings, which consist of two courses in health careers held at Lincoln High School.

PROSPERITY: BUSINESS SECTOR ANALYSIS

For the Sioux Falls Area, growth in Medical Services and Research Science will mean not only more jobs, but also better access to health care services and innovation. Access is important not only to better serve all segments of the region's existing population, but also to build stronger amenities to sell to firms and workers seeking to relocate to or expand in Greater Sioux Falls.

Quarterly data provided by the U.S. Bureau of Labor Statistics (BLS) can illuminate trends within Medical Services and Research Science, including changes in employment and wages. **Due to privacy issues, local data for Greater Sioux Falls' Medical Services and Research Science sector is partially suppressed.** The following chart shows changes in employment and wages in Medical Services and Research Science between Q1 2004 and Q1 2009 in Greater Sioux Falls.

Due to the national boom in health care services and employment in this decade, many communities have seen their relative concentration of employment drop despite employment growth. However, the location quotient (LQ) for the Sioux Falls Area's general medical and surgical hospitals (NAICS 62211) actually rose by 0.10 to 2.22 in Q1 2009, indicating tremendous local presence.

Medical Services and Research Science Industry Target

NAICS	Sector	LQ	Emp Q1 2004	Emp Q1 2009	Net Change	% Change
Medical Services						
4242	Drugs and Druggists' Sundries Merchant Wholesalers	1.88	304	374	70	23.0%
44611	Pharmacies and Drug Stores	0.56	321	409	88	27.4%
621111	Offices of Physicians (except Mental Health Specialists)	1.27	3,008	2,824	-184	-6.1%
621112	Offices of Physicians, Mental Health Specialists	0.71	ND	32		
621210	Offices of Dentists	0.88	603	716	113	18.7%
62131	Offices of Chiropractors	1.97	164	229	65	39.6%
62132	Offices of Optometrists	1.25	162	133	-29	-17.9%
62133	Offices of Mental Health Practitioners (except Physicians)	0.86	30	51	21	70.0%
62134	Offices of Phys., Occupational and Speech Therapists, and Audiologists	0.81	221	211	-10	-4.5%
62139	Offices of All Other Health Practitioners	0.00	13		-13	-100.0%
62141	Family Planning Centers		ND	ND		
62142	Outpatient Mental Health and Substance Abuse Centers	1.40	171	241	70	40.9%
621490	Other Outpatient Care Centers	0.03	22	24	2	9.1%
62151	Medical and Diagnostic Laboratories	0.73	151	158	7	4.6%
62161	Home Health Care Services	0.39	191	388	197	103.1%
62191	Ambulance Services	0.59	82	86	4	4.9%
62199	All Other Ambulatory Health Care Services	0.50	33	51	18	54.5%
62211	General Medical and Surgical Hospitals	4.77	7,504	20,706	13,202	175.9%
62221	Psychiatric and Substance Abuse Hospitals		ND	ND		
62231	Specialty (except Psychiatric and Substance Abuse) Hospitals	3.97	1,443	1,761	318	22.0%
62311	Nursing Care Facilities	23.06	4,709	3,831	-878	-18.6%
62321	Residential Mental Retardation Facilities	0.50	354	185	-169	-47.7%
62322	Residential Mental Health and Substance Abuse Facilities	2.21	831	406	-425	-51.1%
62331	Community Care Facilities for the Elderly	1.03	563	731	168	29.8%
62399	Other Residential Care Facilities	6.67	503	1,109	606	120.5%
Medical Science						
3254	Pharmaceutical and Medicine Manufacturing		ND	ND		
334510	Electromedical and Electrotherapeutic Apparatus Manufacturing		ND	ND		
339112	Surgical and Medical Instrument Manufacturing		ND	ND		
339113	Surgical Appliance and Supplies Manufacturing		ND	ND		
339114	Dental Equipment and Supplies Manufacturing		ND	ND		
339115	Ophthalmic Goods Manufacturing		ND	ND		
62151	Medical and Diagnostic Laboratories	0.73	141	158	17	12.1%
541711	R&D in Biotechnology	0.20	32	66	34	106.3%
541712	R&D in the Physical, Engineering, and Life Sciences	0.12	41	114	73	178.0%

Sources: U.S. Bureau of Labor Statistics; South Dakota Department of Labor

While local data is suppressed for pharmaceutical and medicine manufacturing and medical equipment and supplies manufacturing, these sub-sectors are included in the target because of their roles in supporting the drug, vaccines, and medical device manufacturing niche. Greater Sioux Falls' existing manufacturing base suggests the presence of a labor force and firms with the capacity for medical manufacturing.

All but one of the largest Medical Services and Research Science sub-sectors experienced employment growth between Q4 2007 and Q4 2008. Nursing and residential care facilities, which employs over 3,600 workers, saw a small decline while others saw a wide range of growth. Chemical manufacturing, the umbrella under which pharmaceutical and medicine manufacturing falls, employed an average of 263 workers in 2008 yet grew by 26.3 percent in this time, with a hiring rate second only to Greater Sioux Falls' rapidly expanding hospitals. Additionally, the

above average increase in average earnings in chemical manufacturing (9.5 percent) is a positive trend in this emerging field.

Greater Sioux Falls' Top Sub-Sector Employers in Medical Services and Research Science

Rank	NAICS Subsector	2008	Q4 2007-Q4 2008		
		Average Quarterly Employment	Employment Growth	Hiring Growth	Average Earning Growth
3	622 Hospitals	9,572	8.1%	14.9%	1.9%
4	621 Ambulatory Health Care Services	5,107	1.8%	-3.7%	1.5%
10	623 Nursing and Residential Care Facilities	3,643	-0.8%	-7.3%	5.0%
46	446 Health and Personal Care Stores	661	0.7%	-16.9%	0.7%
60	325 Chemical Manufacturing	263	26.3%	6.5%	9.5%
	All NAICS Sectors	121,848	1.9%	-5.5%	0.3%

Source: U.S. Census Bureau

PLACE: GEOGRAPHIC ADVANTAGES

According to a 2008 Boyd Company report on bioscience industry operating costs in 35 North American cities^{vii}, Sioux Falls offers the lowest total annual geographically-variable operating costs, at \$12,556,884. Utilities (electric power, natural gas, and heating and air conditioning) were more costly than those in other Midwestern cities such as Des Moines and Cedar Rapids, Iowa and Omaha, Nebraska. Additionally, the annual cost of shipping bioscience products outbound from Sioux Falls at a rate of \$1.93 per mile (inclusive of fuel, labor, maintenance, and other operating costs) is higher due to the area's distance from market destinations like Dallas, Texas and Pasadena, California. However, the low costs of land, construction, ad valorem and sales tax, and corporate travel still make Sioux Falls a highly competitive location for bioscience firms looking for a low cost of business.

The disadvantage of higher shipping costs by private truck carriers from Sioux Falls to key market destinations does not play as much of a role in pharmacy benefits management. The U.S. Postal Service's discounted first class rate is the same nationwide; however, higher shipping charges for pharmacy drugs may come into play with expedited orders that require next day air service by private carriers. Nevertheless, a similar site selection analysis on mail order pharmacy centers^{viii} ranked Sioux Falls as the lowest cost regional market for mail order pharmacy center locations out of 22 metros, at \$74,485,088 for total annual operating costs.

Pharmacy benefits management already has a foothold in Sioux Falls through CIGNA Tel-Drug, and AmeriPharm. Opportunities for the Sioux Falls Area to become a Midwestern hub for the development and management of a networked health care database leverages the pool of credit card call center workers in addition to the region's growing health care sector employment.

Regional hospitals are the foundation of the Medical Services and Research Science target. Sanford Health is the largest employer in the Sioux Falls MSA and home of the national medical research institution Sanford Research/USD. Sanford Health's

recent merger with MeritCare out of Fargo, ND significantly increases the geographic reach and growth potential of the combined company. By creating one of the nation's largest integrated health care systems, the merger will allow the new Sanford/MeritCare to expand its services, education, research and access-to-care.

Avera has over 100 facilities in South Dakota, including Avera McKennan Hospital and University Health Center, and is the second largest employer in the region. The U.S. Department of Veterans Affairs Medical and Regional Office, Lewis Drug retail stores and pharmacies, CIGNA Tel-Drug, Children's Care Hospital and School, and the Evangelical Good Samaritan Society each employ hundreds of workers across the Sioux Falls Area in the Medical Services and Research Science target.

As South Dakota's overall population ages, the Sioux Falls Area is increasingly becoming the health care destination for residents in a tri-state region surrounding metro Sioux Falls. The expansion of high quality medical services available in the area means that medical procedures that might have once been referred to the Mayo Clinic or other out-of-state medical centers can now be performed in the Sioux Falls Area. The future Sanford Research Park has the physical capacity to accommodate and further centralize much the growing Medical Services and Research Science target, with space planned for offices, research laboratories, light manufacturing, and retail. Ground has already broken on the complex and the first phase is planned to open in 2011.

Corporate and Data Services

What's the big picture?

Justification	Thousands of existing jobs in financial services, customer care and information assurance companies
	Sioux Falls Area an established region for location of regional financial services headquarters
	Incorporates South Dakota Governor's Office of Economic Development statewide target of Information Technology
	Strong local workforce skills in financial services, transaction-processing and information technology occupations
	Long-term growth prospects in these sub-sectors are promising
	Continuing corporate growth and launch of new operations have proven Sioux Falls Area's significant cost advantages for regional headquarters, information-assurance facilities and back-office operations relative to other regions
Challenges	Pending federal policy changes pose significant threat to regional credit card and student loan processing employment
	Lack of comprehensive two-year and four-year degree capacity for financial and professional services occupations
	Predictions of continued economic instability in the near-term future will restrict the growth potential of financial services firms and preclude corporations from opening new regional headquarters
	Lack of non-stop destinations and comparatively high airfares at Sioux Falls Regional Airport make region anti-competitive for certain headquarters operations
	Relative lack of local and state incentives limits Sioux Falls Area's prospects for highly competitive corporate relocations
Opportunities	High number of skilled financial services professionals provides opportunities to leverage these employees for growth in other sub-sectors if federal policies lead to large-scale regional layoffs
	Potential to continue to leverage the Sioux Falls Area's extremely low-cost business climate for the expansion and attraction of top employers and data centers
	Sioux Falls Area's dynamic quality of life is a compelling asset for retention and attraction of top talent, financial services and customer care firms
	Enhanced business retention and expansion (BRE) services can potentially lead to expansion of existing employers and identification of relocation prospects
	Continuing opportunities related to the launch and growth of professional services firms through small business development programs

TARGET OVERVIEW

The national shift from a production to a more service-oriented economy has dramatically increased opportunities in service-oriented sectors. Some types of services are a natural growth area of a local economy, and thus often grow without encouragement. However, there is benefit derived from targeting certain types of firms to ensure a comprehensive network of high-capacity service providers is established in an economy. Usually, services are non-exporting operations. Therefore, the primary benefits are the support system they provide to local individuals and businesses, thus making it more attractive to prospective exporting employers. Due to its size, location within the region, business climate, and workforce, individuals and businesses outside the immediate community utilize Greater Sioux Falls service-based firms; thus, these firms “export” their services and bring wealth into the region.

The Corporate and Data Services target focuses on generating additional jobs with competitive earning potential for a variety of skill levels. There are three primary components of this target, including expansion and attraction of **regional headquarters**. Typical functions that occur in these types of offices include executive decision-making, strategizing, human resources, marketing, and financial operations. While this area certainly focuses on attending to the needs of existing employers, there are opportunities for recruitment of new firms and local growth of small businesses in the areas of professional and technical services. These types of firms include consulting, advertising and marketing, accounting, law, and financial consulting firms, among others.

The second component is **customer-care centers**. This niche leverages the region’s current workforce skills and incorporates potential displacement that may occur as the result of the Credit Card Accountability Responsibility and Disclosure Act of 2009 (or Credit CARD Act), which will go into effect in February 2010. This legislation will impose interest-rate caps and other new regulations that, as a result, will likely cause many of the region’s financial service outlets to cut back their sales calls. It should be emphasized that local economic developers should pursue customer-care employment that provides value-added services to the “typical” call center position and therefore pays higher average wages.

The niche of **information assurance** provides additional growth opportunities for Greater Sioux Falls. As more consumers use the Internet to conduct personal and financial business, companies are not only investing in increased server capacity but also in measures to protect their consumers’ information and to manage information-related risks. Information assurance includes not only “server farms” or data centers, but also requires skilled technicians and analysts to monitor usage and system performance.

The following chart shows the national employment growth projections from the U.S. Bureau of Labor Statistics (BLS) between 2006 and 2016. With the exception of depository credit intermediation, which is expected to experience a slight decline, all sub-sectors in this target are expected grow faster than the national employment

average of 13 percent. Many sub-sectors like management, scientific, and technical consulting services; marketing research; accounting services; and specialized design services are expected to add thousands of jobs nationwide in the near future. The Great Recession has likely impacted these projections, but economic experts nevertheless predict that financial services will resume employment growth in the coming years.

Growth Projections for Corporate and Data Services, 2006-2016

NAICS Code and Sector Name	Projected Growth: South Dakota		Projected Growth: United States	
	Number of New jobs	Percent	Number of New jobs	Percent
Regional Headquarters				
*521, 522 Monetary authorities, credit intermediation, and related activities	6,075	33%	3,196,100	8%
523 Securities, commodity contracts, and other financial investments	320	43%	1,192,400	46%
5241 Insurance carriers	Not available		1,462,900	2%
5242 Agencies, brokerages, and other insurance related activities			1,024,900	15%
525 Funds, trusts, and other financial vehicles			122,400	31%
54 Professional and technical services	3,105	32%	2,121,900	29%
55 Management of companies and enterprises	380	14%	2,079,600	15%
Information Assurance and Customer-Care Services				
516, 518, 519 Internet and other information services	Not available		67,200	14%
5415 Computer systems design and related services			489,400	38%
5416 Management, scientific, and technical consulting services			717,800	78%
5611 Office administrative services			93,000	26%
5614 Business support services			159,500	20%
Total Employment, All Jobs	73,510	16%	15,600,200	10%

Source: U.S. Bureau of Labor Statistics and the South Dakota Department of Labor

* State projections only include 522

Note: Projections are not available for all NAICS codes included in the target definition. Super-sector figures do not sum to the sub-sectors because only those which are available and relevant to target recommendations have been included.

How can Sioux Falls compete?

PEOPLE: OCCUPATIONAL ANALYSIS

Corporate and Data Services benefits from the largest existing labor force of the targets discussed in this *Target Business Analysis*; about half of the region's workers are employed in administrative and management occupations. However, it is important to keep in mind that they are employed across nearly every business sectors, not just Corporate and Data Services.

According to a 2009 Boyd Company analysis, metro Sioux Falls ranks the lowest in labor costs for corporate headquarters (among 50 U.S. cities) and data assurance (among 60 U.S. cities).² The following table shows total annual labor costs for Sioux Falls compared to ten cities which appeared on both ranking lists. While low wages make Sioux Falls a competitive location for businesses, they can also challenge worker recruitment and retention efforts.

Comparative Labor Costs, 2009

	Corporate Headquarters	Data Assurance
Minneapolis, MN	\$21,527,103	\$8,685,526
Denver, CO	\$21,155,297	\$8,785,947
Kansas City, MO	\$19,669,416	\$8,389,195
Atlanta, GA	\$19,450,548	\$8,324,668
Charlotte, NC	\$19,232,129	\$8,335,765
Des Moines, IA	\$19,123,143	\$8,296,035
Omaha, NE	\$19,013,709	\$8,042,037
Jacksonville, FL	\$18,751,337	\$7,939,972
Birmingham, AL	\$18,467,436	\$8,018,199
Sioux Falls, SD	\$17,702,295	\$7,534,178

Source: The Boyd Company.

Note: Cost estimates for headquarters were based on a head office employing 325 workers, with a mix of 25 administrative and management occupations, and include wages and fringe benefits. Costs estimates for data assurance were based on a 100,000 square foot data center operated by 100 workers.

The following tables show the potential labor force for Corporate and Data Services, based on the number of people employed in occupations which support regional headquarters, information assurance, and customer care centers. A significant proportion of the state’s workforce in this target is located in Greater Sioux Falls. Many of these occupations pay above the region’s overall average annual wage of \$35,980 (Q2 2009).

² City lists and selection criteria can be found in the methodology appendix of this report.

Corporate and Data Services Occupational Target: Regional Headquarters

SOC	Occupation	Sioux Falls MSA, Q2 2009			2006-2016 Statewide Projected % Change
		Workers	% of SD total	Annual Avg Wage	
Regional Headquarters					
13-0000	Business and Financial Operations Occupations	6,370	41.4%	\$54,879	NA
11-0000	Management Occupations	3,680	33.9%	\$90,329	NA
15-0000	Computer and Mathematical Occupations	3,250	52.0%	\$55,343	NA
13-2011	Accountants and Auditors	1,550	40.7%	\$57,226	23.8%
43-6014	Secretaries Except Legal Medical and Executive	1,370	24.8%	\$25,137	7.9%
43-1011	First-Line Supervisors/Managers of Office and Administrative Sup	1,210	46.0%	\$47,129	18.6%
43-9061	Office Clerks General	1,190	34.6%	\$22,390	15.9%
43-6011	Executive Secretaries and Administrative Assistants	1,070	39.6%	\$34,106	19.0%
11-1021	General and Operations Managers	1,040	38.8%	\$113,206	6.0%
13-1111	Management Analysts	770	44.3%	\$65,768	25.5%
13-2051	Financial Analysts	370	64.9%	\$53,853	36.1%
13-1071	Employment Recruitment and Placement Specialists	280	44.4%	\$44,636	18.1%
13-1073	Training and Development Specialists	250	49.0%	\$41,635	26.1%
13-1072	Compensation Benefits and Job Analysis Specialists	200	40.8%	\$46,020	16.5%
11-1011	Chief Executives	190	26.8%	\$180,724	5.8%
43-3051	Payroll and Timekeeping Clerks	190	38.0%	\$30,513	5.7%
13-2053	Insurance Underwriters	170	73.9%	\$59,959	27.1%
43-4161	Human Resources Assistants Except Payroll and Timekeeping	150	37.5%	\$29,430	16.7%
11-3011	Administrative Services Managers	120	44.4%	\$78,825	14.5%
419970	Human Resources Managers All Other	70	38.9%	\$91,404	22.9%
43-3061	Procurement Clerks	60	23.1%	\$30,966	3.4%
13-2081	Tax Examiners Collectors and Revenue Agents	50	25.0%	\$48,473	4.3%
13-2031	Budget Analysts	40	33.3%	\$58,584	8.3%
417048	Compensation and Benefits Managers	20	66.7%	\$82,030	25.0%
11-3042	Training and Development Managers	10	50.0%	\$81,996	25.0%

Source: South Dakota Department of Labor

**Corporate and Data Services Occupational Target:
Information Assurance and Customer-Care Services**

SOC	Occupation	Sioux Falls MSA, Q2 2009			2006-2016 Statewide Projected % Change
		Workers	% of SD total	Annual Avg Wage	
Information Assurance and Customer-Care Services					
43-0000	Office and Administrative Support Occupations	27,430	39.2%	\$28,308	25.0%
43-4051	Customer Service Representatives	5,470	55.4%	\$26,606	40.6%
43-3031	Bookkeeping Accounting and Auditing Clerks	2,700	30.7%	\$28,449	19.4%
43-3011	Bill and Account Collectors	2,310	53.3%	\$29,815	52.4%
43-4171	Receptionists and Information Clerks	1,630	35.4%	\$23,418	23.9%
43-4131	Loan Interviewers and Clerks	1,370	58.1%	\$28,568	9.8%
43-9041	Insurance Claims and Policy Processing Clerks	790	61.2%	\$27,273	12.5%
15-1041	Computer Support Specialists	760	49.7%	\$37,175	18.0%
43-3071	Tellers	750	32.8%	\$22,549	27.4%
41-3021	Insurance Sales Agents	710	43.8%	\$57,524	21.1%
43-3021	Billing and Posting Clerks and Machine Operators	630	39.6%	\$24,990	11.6%
15-1071	Network and Computer Systems Administrators	600	46.2%	\$55,712	29.3%
13-2072	Loan Officers	510	33.6%	\$49,930	26.5%
43-4041	Credit Authorizers Checkers and Clerks	460	67.6%	\$28,974	12.2%
15-1081	Network Systems and Data Communications Analysts	410	50.6%	\$59,582	55.0%
15-1031	Computer Software Engineers Applications	370	54.4%	\$70,002	67.8%
15-1051	Computer Systems Analysts	340	56.7%	\$65,679	29.1%
13-1031	Claims Adjusters Examiners and Investigators	320	56.1%	\$57,901	26.4%
13-1041	Compliance Officers Except Agriculture Construction Health and Sa	310	34.4%	\$49,883	8.2%
15-1021	Computer Programmers	300	60.0%	\$51,230	2.6%
13-2041	Credit Analysts	300	66.7%	\$58,464	15.9%
41-3395	Financial Managers	290	42.0%	\$111,516	19.1%
15-1032	Computer Software Engineers Systems Software	220	52.4%	\$68,724	44.9%
41-9041	Telemarketers	220	26.5%	\$24,330	7.1%
49-2011	Computer Automated Teller and Office Machine Repairers	140	43.8%	\$38,073	NA
11-3021	Computer and Information Systems Managers	130	61.9%	\$98,326	15.0%
19-3021	Market Research Analysts	100	52.6%	\$50,316	32.4%
15-2031	Operations Research Analysts	90	90.0%	\$48,218	30.8%
43-9071	Office Machine Operators Except Computer	90	64.3%	\$24,484	13.6%
15-1061	Database Administrators	80	72.7%	\$66,331	35.3%
13-2052	Personal Financial Advisors	80	57.1%	\$75,223	33.9%
43-4011	Brokerage Clerks	70	53.8%	\$38,154	22.7%
13-2061	Financial Examiners	70	77.8%	\$74,833	10.5%
43-9011	Computer Operators	40	50.0%	\$33,424	-10.0%
43-2011	Switchboard Operators Including Answering Service	40	57.1%	\$28,093	-8.3%
11-2021	Marketing Managers	30	50.0%	\$108,070	17.6%
17-2061	Computer Hardware Engineers	20	40.0%	\$84,561	NA
13-2082	Tax Preparers	20	16.7%	\$31,843	18.8%
13-2099	Financial Specialists All Other	10	NA	\$61,451	NA

Source: South Dakota Department of Labor

Corporate and Data Services is a key target for attracting young professionals and recent college graduates. The earning and advancement potential for jobs in this sector is also very high, making it appealing for prospective job candidates who intend to live in Greater Sioux Falls long term. However, average annual wages in Corporate and Data Services in the Sioux Falls Area are still much lower than the national industry average. To contend with other cities in the Midwestern United States for skilled workers, local firms must also offer competitive wages that are consistent with the cost of living in Greater Sioux Falls.

In the 2007-08 academic year, colleges and universities in the Sioux Falls Area graduated 363 students with degrees related to business, management, and marketing. Just over 11 percent of the degrees conferred were Master's degrees. At many firms, management and executive-level positions require a Master's of Business Administration or similar degree like computer and information sciences. As was discussed in the *Competitive Assessment*, Greater Sioux Falls benefits from its relative proximity to the University of South Dakota, South Dakota State and Dakota State University.

Corporate and Data Services occupations growth in South Dakota can be concentrated in the Sioux Falls metro if past migration and business trends continue. However, current higher education degree programs in the Sioux Falls Area are not adequate to producing home-grown talent for these occupations. In order to maintain a steady flow from local high schools, technical colleges, and universities into Sioux Falls' Corporate and Data Services workforce, increased and expanded higher education options in related fields of study will be necessary. While many regional headquarters and other corporate businesses require in-house training, an existing educated workforce is a critical component to remaining attractive to relocating or expanding businesses.

Higher Education Degrees Awarded in Corporate and Data Services, 2007-08

	Certificate	Associate's	Bachelor's	Master's	Total
Business, management, and marketing	9	168	146	40	363
Communication, journalism, and related programs	0	0	18	0	18
Communications technologies	0	30	0	0	30
Computer and information sciences	51	34	5	0	90
Engineering technologies/technicians	10	57	0	0	67
English language and literature/letters	0	0	22	0	22
Foreign languages, literatures, and linguistics	0	0	5	0	5
Liberal arts and sciences, general studies and humanities	0	17	8	0	25
Mathematics and statistics	0	0	12	0	12
Mechanic and repair technologies/technicians	0	78	0	0	78
TOTAL	70	384	216	40	710

Source: National Center for Education Statistics

Currently, Kilian Community College offers four Associate's degrees related to Corporate and Data Services – accounting, business management, information systems, and administrative office management. Southeastern Technical Institute has a wide range of diplomas and two-year degrees in Business and

Communications, Computer Information Systems, and Electronics Technology. These include financial services, network administration, computer programming, and business administration.

Augustana College and University of Sioux Falls have four-year degree programs in business administration, accounting, and computer science. USF also offers a traditional Master's in Business Administration. However, there are no public M.B.A. options in Greater Sioux Falls. According to focus group participants, many local residents seeking lower-cost or "fast-track" options commute to M.B.A. programs at the University of South Dakota or South Dakota State University.

PROSPERITY: BUSINESS SECTOR ANALYSIS

Greater Sioux Falls has experienced a wide range of job change in the identified priority areas of Corporate and Data Services between the first quarter of 2004 and the first quarter of 2009. Some sub-sectors have seen dramatic job loss and others have experienced momentous increases during this period. Savings institutions, securities and commodities exchange, other financial investment activities, management of companies and enterprises, computer system design services, and collection agencies all grew in employment by over 100 percent in the five years analyzed.

Custom computer programming services (81.3 percent), telephone call centers (67.8 percent), office administration services (64.7 percent), commercial banking (54.6 percent), and insurance agencies and brokerages (41.3 percent) also saw significant employment increases. Meanwhile, the two largest sub-sectors in Corporate and Data Services – credit card issuing and financial transactions processing – experienced drops in employment in the five-year span (-2.8 percent and -9.8 percent, respectively).

Corporate and Data Services Industry Target

NAICS	Sector	LQ	Emp Q1 2004	Emp Q1 2009	Net Change	% Change
Corporate and Regional Headquarters						
521	Monetary Authorities-Central Bank		ND	ND		
52211	Commercial Banking	2.54	2,187	3,382	1,195	54.6%
52212	Savings Institutions	2.86	279	565	286	102.5%
52213	Credit Unions	0.89	194	206	12	6.2%
52219	Other Depository Credit Intermediation		32	ND		
52221	Credit Card Issuing	30.74	3,353	3,260	-93	-2.8%
52222	Sales Financing	0.43	65	42	-23	-35.4%
52229	Other Nondepository Credit Intermediation	0.76	402	295	-107	-26.6%
52231	Mortgage and Nonmortgage Loan Brokers	0.47	45	32	-13	-28.9%
52232	Fin. Transactions Processing, Reserve, and Clearinghouse Activities	29.74	3,634	3,277	-357	-9.8%
52239	Other Activities Related to Credit Intermediation	0.31	23	28	5	21.7%
52311	Investment Banking and Securities Dealing	0.31	98	52	-46	-46.9%
52312	Securities Brokerage	0.57	163	170	7	4.3%
52313	Commodity Contracts Dealing		ND	ND		
52314	Commodity Contracts Brokerage	1.78	11	23	12	109.1%
5232	Securities and Commodity Exchanges		ND	ND		
52391	Miscellaneous Intermediation		ND	ND		
52392	Portfolio Management	0.17	18	23	5	27.8%
52393	Investment Advice	0.26	45	34	-11	-24.4%
52399	All Other Financial Investment Activities	0.49	10	22	12	120.0%
5241	Insurance Carriers	1.30	1,526	1,627	101	6.6%
5242	Agencies, Brokerages, and Other Insurance Related Activities	2.24	1,417	2,002	585	41.3%
5251	Insurance and Employee Benefit Funds		ND	ND		
52591	Open-End Investment Funds		ND	ND		
52592	Trusts, Estates, and Agency Accounts	0.87	ND	7		
52599	Other Financial Vehicles		ND	ND		
551	Management of Companies and Enterprises	0.75	646	1,424	778	120.4%
Information Assurance and Customer Care Services						
541511	Custom Computer Programming Services	0.43	148	269	121	81.8%
541512	Computer Systems Design Services	0.83	174	543	369	212.1%
541513	Computer Facilities Management Services		ND	ND		
541519	Other Computer Related Services	0.12	28	13	-15	-53.6%
51821	Data Processing, Hosting, and Related Services	0.08	18	19	1	5.6%
5191	Other Information Services	0.33	ND	45		
5416	Management, Scientific, and Technical Consulting Services	0.29	275	285	10	3.6%
5611	Office Administrative Services	0.55	133	219	86	64.7%
56142	Telephone Call Centers	1.56	407	683	276	67.8%
56144	Collection Agencies	2.27	154	349	195	126.6%
561499	All Other Business Support Services	1.71	142	124	-18	-12.7%

Sources: U.S. Bureau of Labor Statistics; U.S. Census Bureau

The most rapid employment decline in Corporate and Data Services has occurred in the past year as a result of national economic instability and dramatic changes in the financial services sector. Between Q4 2007 and Q4 2008, most of the Corporate and Data Services sub-sectors with the largest employment in Greater Sioux Falls faced declining employment and all sub-sectors declined in new hiring.

Top Sub-Sector Employers in Corporate and Data Services

Rank	NAICS Subsector	2008	Q4 2007-Q4 2008		
		Average Quarterly Employment	Employment Growth	Hiring Growth	Average Earning Growth
1	522 Credit Intermediation and Related Activities	10,546	-5.2%	-34.9%	2.4%
5	561 Administrative and Support Services	5,055	-2.3%	-14.0%	0.2%
6	541 Professional, Scientific, and Technical Services	4,947	2.6%	-24.6%	-1.3%
9	524 Insurance Carriers and Related Activities	3,738	-0.2%	-55.2%	2.6%
18	517 Telecommunications	2,126	-1.2%	-33.1%	2.9%
21	551 Management of Companies and Enterprises	1,500	9.0%	-16.7%	13.0%
55	523 Securities, Commodity Contracts, and Other Financial Investments ar	360	2.8%	-46.2%	-10.1%
	All NAICS Sectors	121,848	1.9%	-5.5%	0.3%

Source: U.S. Census Bureau

The successful expansion of Corporate and Data Services employment will occur primarily via small business development, expansion of existing firms, and recruitment of divisions or headquarters of firms with an existing presence in the Sioux Falls Area. With the proper support and information from business incubators and economic development organizations, start-ups in Corporate and Data Services can flourish and expand in the Sioux Falls Area.

The Edward Lowe Foundation measures entrepreneurship in four stages based on number of employees. A firm's employees may determine the development of products and services, long-term sustainability, ability to expand and broaden its geographic reach, and ability to compete in its particular industry's market niche. Of Corporate and Data Services-related NAICS sectors in 2007, the Sioux Falls metro experienced growth in firm creation (Stage 1, or 1-9 employees) and growth in employment among these firms that reach Stage 3 (100-499 employees). Fostering the region's high-value entrepreneurs in professional, scientific, and technical services could provide promising opportunities for "home grown" jobs.

Job and Firm Growth by Stage, 2007

NAICS Sector	Total	Noncomm- ercial	Nonresident	Resident	Stage 1	Stage 2	Stage 3	Stage 4
Establishment Growth								
56 Administrative, Support, Services	101	0.0%	0.0%	9.4%	9.8%	-0.1%	-0.1%	0.0%
52 Finance and Insurance	34	0.0%	-0.9%	5.5%	7.3%	-0.3%	0.0%	0.0%
54 Professional, Scientific, and Technical Services	86	0.0%	-0.3%	8.3%	8.0%	0.6%	0.2%	0.0%
51 Information	16	-0.8%	0.8%	6.3%	8.3%	0.0%	-0.5%	0.0%
55 Management of Companies and Enterprises	8	0.0%	3.0%	21.2%	21.9%	0.0%	0.0%	0.0%
Job Growth								
52 Finance and Insurance	264	0.0%	0.5%	1.6%	2.0%	-2.0%	4.9%	0.0%
56 Administrative, Support, Services	68	0.0%	0.0%	1.4%	3.8%	0.5%	-2.6%	0.0%
51 Information	47	0.5%	4.5%	-3.5%	1.4%	-1.0%	-6.7%	0.0%
55 Management of Companies and Enterprises	15	0.0%	0.2%	0.5%	0.5%	0.0%	0.0%	0.0%
54 Professional, Scientific, and Technical Services	-199	0.0%	-9.8%	6.6%	2.9%	0.1%	6.0%	0.0%

Source: YourEconomy.com, Edward Lowe Foundation

While Sioux Falls should continue to attract firms from outside of the region, efforts should also be focused on cultivating new and existing local businesses that operate at the Stage 1 level in order to get them to Stages 3 and 4 where expansion occurs in the firm and they can actively hire from the local labor force. Community input participants expressed satisfaction with current start-up assistance and small business development resources in the Sioux Falls region, but said more could still be done to increase seed funding and specialized services for entrepreneurs.

Wells Fargo and CitiGroup are two of the largest private employers in the metro area and have regional headquarters in Sioux Falls. Other financial firms include First Premier/Premier Bankcard, US Bank, Sammons Financial Group, Great Western Bank, CNA Surety and HSBC. Additionally, the presence of large data centers in the Sioux Falls Area and the potential to leverage and transition certain financial services employment to the high-end customer care center niche provide strong opportunities for regional growth.

PLACE: GEOGRAPHIC ADVANTAGES

Sioux Falls Area's low business costs, skilled workforce, and strong quality of life have previously factored into the successful attraction of regional financial services headquarters to the region. Many recent studies have determined that the Sioux Falls region is one of the most cost-competitive MSAs in the country for corporate and information assurance operations. The region's Midwestern location and the absence of potential major natural disasters also contribute to a competitive advantage for information assurance projects.

According to a Boyd Company report analyzing geographically-variable operating costs of regional and corporate headquarters in 50 U.S. regions^x, Sioux Falls boasts the lowest total annual operating costs of surveyed head office sites, at \$21,020,889. Versus national competitor regions, the Sioux Falls Area's low costs in electric power utilities, property and sales taxes, on-site travel, and labor contributed to this competitive operating cost average. However, air travel costs in Sioux Falls were relatively high (\$246,252) due to the lack of a major airport in the region.

Similarly, in a 2008 analysis of information assurance sites in 60 communities^x, the Sioux Falls site had the lowest total annual operating costs at \$12,449,665. Sioux Falls had significantly lower comparative labor costs (\$7,534,178) in Information Assurance even when compared to other areas in the Midwest region; however, the low cost of labor translates to lower earnings for workers – in this case, the weighted average annual earning of an Information Assurance worker was \$54,994, as opposed to \$60,555 elsewhere. While these low labor costs may be competitive for attracting businesses, they are not ideal for retaining the best and brightest employees the Sioux Falls Area has to offer.

Renewable Energy Technology

What's the big picture?

Justification	Presence in greater Sioux Falls of one of the world's largest ethanol producers
	Proximity to raw materials and resources for corn and cellulosic ethanol production
	Strong potential for growth in wind-based renewable energy based on geographic location and increasing investments in wind-energy production capacity
	Billions of federal dollars and mandates for renewable energy usage create dynamic future market opportunities in the sector
	Incorporates South Dakota Governor's Office of Economic Development statewide target of Energy
	Strong base of research taking place regionally on smart-grid technologies
Challenges	Global food-supply risks and unstable costs of raw materials creates future uncertainties for corn-based ethanol production
	Competition to develop and produce renewable energy becoming increasingly intense, both nationally and globally
	A relative shortage of venture capital financing in the region
	A lack of state funding to support renewable-energy research, entrepreneurship, and early-stage companies in the private sector
	Lack of two- and four-year degree opportunities to support training in renewable energy occupations
	Development of smart-grid infrastructure dependent on a complicated web of local, regional, and inter-state partnerships
Opportunities	Tremendous potential to leverage existing capacity for growth in ethanol, biofuels, and wind-energy sub-sectors
	Need for complete redevelopment of nation's energy grid to best capitalize on renewable energy potential can position leading-edge regions for dynamic success
	Predicted usage increases in renewable energy sources offers strong growth opportunities for Sioux Falls Area raw material suppliers (corn, corncobs, switch grass and other biomass products)in these sub-sectors
	Low-cost business climate and quality of life advantages makes Sioux Falls Area a compelling location for renewable energy firms, talent, and researchers

TARGET OVERVIEW

Events such as wars in the Middle East and Hurricane Katrina, escalating fossil fuel costs, global warming concerns, and other occurrences have heightened national awareness of the implications of America's dependency on foreign oil and non-renewable energy sources. With this awareness comes more prominent calls for leveraging renewable and "clean" energy sources, reducing personal and corporate "carbon footprints" through changed consumption patterns and business policies, increasing recycling efforts, and constructing more energy efficient buildings. Because of heightened demand, entrepreneurs are starting new businesses, and existing companies are re-strategizing to take advantage of these new "green" opportunities.

According to the Pew Charitable Trusts, in 2007 only eight percent of U.S. power production came from renewable sources – solar, hydro, wind, and geothermal - far short of President Obama's goal of 17 percent by 2025.^{xi} Because of its comparative cost benefits and the opportunities for large-scale, speedy installations (typically in one year or less for most farms), the Renewable Energy Technology niche of **wind energy** can fill a considerable amount of this demand in the coming years. The U.S. Department of Energy estimates that solar power costs for consumers range from 24-59 cents per kilowatt hour, while wind energy costs about 9-12 cents. This is in range of existing, traditional non-renewable energy sources like natural gas (5-10 cents). In 2008 alone, the country's total wind energy capacity increased by 50 percent.

The niche of **Smart grid** technologies is also key to the management of renewable energy transmission. According to the U.S. Department of Energy, demand for electricity is expected to grow 30 percent by 2030. To help meet this demand, the current grid needs to be modernized and better controlled to avoid blackouts. By plugging electric appliances into sensing devices that then plug into the wall, the sensing device enables communication between points of use in a consumer's home and the utility provider. This creates a "smart" grid because it allows consumers to see what electricity they use and make smarter conservation or cost-saving decisions, and also enables utilities to better balance supply and demand.^{xii} Millions of dollars from the Federal Stimulus Package were devoted to smart grid grants to help modernize the nation's electricity infrastructure and provide jobs in occupations such as information technology consulting, overhead utility linemen, home energy inspectors, and other positions.

In addition to advances in electricity production and management, the niche of renewable **biofuels** is gaining a foothold in the U.S. market. One of the most prominent of these fuels is ethanol, which can be produced from a number of crop-based products and can be used to power such devices as "flex-fuel" automobiles. Between 2000 and 2008, domestic ethanol production increased from 1.630 to 10.6 billion gallons; the number of production plants increased from 54 to 170. Total production will continue to increase, with the U.S. predicted to continue to be the global leader in ethanol production. The U.S.' 2007 Energy Independence and Security Act mandates 36 billion gallons of ethanol to be used in motor fuel by 2022. To meet this benchmark, the industry is investing heavily in research and

development. It is estimated that over \$1.4 billion was spent on new generation ethanol technologies in 2008.^{xiii} Thus, despite current production slowdowns due to cost imbalances, the future prospects for biofuels are predicted to be strong.

Because state and federal employment projections are not available at the granular levels necessitated by this target definition, they cannot be provided. However, there is clear confidence in the growth of green jobs at the federal level. The \$789 billion economic-recovery bill included \$11 billion for smart grid technologies, \$7.5 billion for renewable energy and transmission line construction, \$500 million for green jobs training, \$400 million for alternative energy R&D, and the list goes on. There are clear and abundant economic opportunities for both existing businesses and entrepreneurs in the area of Renewable Energy Technologies.

How can Sioux Falls compete?

PEOPLE: OCCUPATIONAL ANALYSIS

As an emerging target, Renewable Energy Technology combines skill sets and resources from more traditional business sectors to create a New Economy output. The target also takes advantage of a wide range of skills and education levels, requiring a breadth of mechanical, technical, management, and scientific and engineering skill sets in the labor force. Greater Sioux Falls' Renewable Energy Technology target can leverage the region's diverse existing construction and utilities occupations for the construction and operations of energy-related structures and machinery.

The Sioux Falls Area employs 34.1 percent of South Dakota's workforce and is home to 29 percent of the state population. However, an analysis of occupations related to the biofuel and wind energy niches shows that the Sioux Falls metro has a lower share of higher paying occupations such as chemists, engineers, and scientists. On the other hand, the Sioux Falls Area has a larger share of labor-intensive or technical smart grid-related occupations like fabricators, electricians, and installers and repairers.

Renewable Energy Technology Occupational Target

SOC	Occupation	Sioux Falls MSA, Q2 2009			2006-2016 Statewide Projected % Change
		Workers	% of SD total	Annual Avg Wage	
Biofuel and Wind Energy Technology					
47-0000	Construction and Extraction Occupations	6,960	31.4%	\$34,046	NA
17-0000	Architecture and Engineering Occupations	1,300	30.4%	\$58,142	NA
47-2061	Construction Laborers	770	30.0%	\$24,675	36.9%
47-1011	First-Line Supervisors/Managers of Construction Trades and Extraction Workers	510	34.7%	\$53,967	24.1%
47-2073	Operating Engineers and Other Construction Equipment Operators	410	21.1%	\$37,444	27.8%
53-7051	Industrial Truck and Tractor Operators	400	35.4%	\$27,600	11.2%
49-9041	Industrial Machinery Mechanics	240	29.6%	\$39,144	42.9%
51-2041	Structural Metal Fabricators and Fitters	210	70.0%	\$32,168	25.0%
17-2051	Civil Engineers	210	28.0%	\$68,188	NA
17-3022	Civil Engineering Technicians	170	33.3%	\$38,087	NA
51-4041	Machinists	150	18.5%	\$32,845	31.5%
53-7081	Refuse and Recyclable Material Collectors	130	28.9%	\$25,488	13.9%
17-3011	Architectural and Civil Drafters	110	42.3%	\$37,952	0.0%
19-2041	Environmental Scientists and Specialists Including Health	110	34.4%	\$65,886	12.5%
420700	Industrial Production Managers	90	28.1%	\$80,629	22.7%
17-2141	Mechanical Engineers	90	28.1%	\$63,666	20.6%
11-9021	Construction Managers	80	44.4%	\$74,881	32.6%
17-2112	Industrial Engineers	80	24.2%	\$64,120	49.2%
45-2092	Farmworkers and Laborers Crop Nursery and Greenhouse	70	50.0%	\$20,930	7.5%
17-2081	Environmental Engineers	60	35.3%	\$54,118	11.8%
17-3013	Mechanical Drafters	60	33.3%	\$34,257	17.2%
51-9011	Chemical Equipment Operators and Tenders	50	25.0%	\$26,501	111.5%
47-4011	Construction and Building Inspectors	50	31.3%	\$48,914	9.1%
47-2221	Structural Iron and Steel Workers	50	19.2%	\$45,311	32.7%
17-1011	Architects Except Landscape and Naval	40	44.4%	\$104,411	9.4%
51-4032	Drilling and Boring Machine Tool Setters Operators and Tenders Metal and Plastic	40	16.7%	\$28,153	14.3%
11-9041	Engineering Managers	40	30.8%	\$91,775	14.8%
45-2041	Graders and Sorters Agricultural Products	40	10.0%	\$26,425	2.0%
17-3027	Mechanical Engineering Technicians	40	36.4%	\$34,854	25.0%
19-2031	Chemists	30	27.3%	\$50,897	25.0%
51-9021	Crushing Grinding and Polishing Machine Setters Operators and Tenders	30	21.4%	\$27,312	21.9%
19-1013	Soil and Plant Scientists	30	9.1%	\$55,875	13.8%
19-1031	Conservation Scientists	20	6.1%	\$57,151	10.8%
53-7021	Crane and Tower Operators	20	25.0%	\$42,117	30.8%
17-3026	Industrial Engineering Technicians	20	13.3%	\$37,282	35.3%
51-8099	Plant and System Operators All Other	20	NA	\$34,677	NA
49-9043	Maintenance Workers Machinery	10	14.3%	\$22,305	25.0%
17-1022	Surveyors	10	7.1%	\$61,831	13.9%
Smart Grid					
49-0000	Installation Maintenance and Repair Occupations	5,260	34.2%	\$38,219	NA
47-2111	Electricians	740	40.9%	\$40,779	27.6%
51-2022	Electrical and Electronic Equipment Assemblers	680	36.2%	\$25,282	-3.4%
49-9052	Telecommunications Line Installers and Repairers	230	42.6%	\$33,989	NA
49-2022	Telecommunications Equipment Installers and Repairers Except Line Installers	170	33.3%	\$50,882	NA
49-9051	Electrical Power-Line Installers and Repairers	140	18.4%	\$55,892	12.4%
49-2094	Electrical and Electronics Repairers Commercial and Industrial Equipment	130	48.1%	\$48,515	20.4%
17-3023	Electrical and Electronic Engineering Technicians	80	33.3%	\$43,743	16.3%
17-2071	Electrical Engineers	60	28.6%	\$67,610	15.0%
17-3012	Electrical and Electronics Drafters	10	33.3%	\$40,756	12.5%
17-2072	Electronics Engineers Except Computer	NA	NA	\$72,558	NA

Source: South Dakota Department of Labor

The O*NET Resource Center, a service of the U.S. Department of Labor’s Employment and Training Administration, projects the national ten-year growth of Energy sector occupations. The expected pace of job growth is important when preparing resources to support the expansion of specific occupation in a sector that, overall, is growing rapidly. Some positions may continue to grow at a steady rate as they transition from sub-sectors like commercial construction to wind farm construction. Other occupations may see phenomenal increases as the demands for their services grow with newly created operations of the Renewable Energy Technology target.

U.S. Energy Occupation Projected Growth Rates

SOC Code	Occupation	Projected Growth (2006-2016)
19-2041	Environmental Scientists and Specialists, Including Health	Much faster than average
19-2042	Geoscientists, Except Hydrologists and Geographers	Much faster than average
17-3031	Surveying and Mapping Technicians	Faster than average
47-1011	First-Line Supervisors/Managers of Construction Trades and Extraction Workers	Average
47-2152	Plumbers, Pipefitters, and Steamfitters	Average
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	Average
49-9041	Industrial Machinery Mechanics	Average
53-6031	Service Station Attendants	Average
49-9051	Electrical Power-Line Installers and Repairers	Average
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	Average
47-3015	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	Average
41-9031	Sales Engineers	Average
47-2151	Pipelayers	Average
53-7032	Excavating and Loading Machine and Dragline Operators	Average
17-2041	Chemical Engineers	Average
17-2071	Electrical Engineers	Slower than average
17-3023	Electrical and Electronic Engineering Technicians	Slower than average
51-8013	Power Plant Operators	Slower than average
17-3012	Electrical and Electronics Drafters	Slower than average

Source: O*NET Online, U.S. Department of Labor

Since many occupations analyzed under the umbrella of Renewable Energy Technology do not, as yet, have direct applications for targeted employment, it is important to consider how existing jobs in Greater Sioux Falls can be applied to this emerging field. O*NET Online classifies Green Economy jobs into three categories – Green Increased Demand Occupations, Green Enhanced Skills Occupations, and Green New and Emerging Occupations. The first classification, increased demand occupations, defines existing occupations that will maintain the same basic skill set while they face growing employment demand. Enhanced skills occupations are those that require new or enhanced tasks, skills, knowledge, or credentials. New and emerging occupations arise from the combination of existing occupations to merge

into a new skill set, or an entirely new occupation relevant to new technologies and needs. Thus, workers in the Sioux Falls region employed in these occupations can potentially be leveraged in the future for “green economy” positions.

Examples of “Green Economy” Occupations by Category

Increased Demand	Enhanced Skills	New and Emerging
Agricultural Inspectors	Automotive Specialty Technicians	Automotive Engineers
Architectural Drafters	Civil Engineers	Biofuels Processing Technicians
Chemical Equipment Operators and Tenders	Construction and Building Inspectors	Compliance Managers
Computer-Controlled Machine Tool Operators, Metal and Plastic	Construction Laborers	Electromechanical Engineering Technologists
Construction Managers	Biomass Production Managers	Energy Brokers
Biomass Plant Technicians	Engineering Managers	Financial Quantitative Analysts
Electrical Engineers	Environmental Engineering Technicians	Industrial Engineering Technologists
Electrical Power-Line Installers and Repairers	Farmers and Ranchers	Investment Underwriters
Electronics Engineering Technicians	Geophysical Data Technicians	Manufacturing Engineering Technologists
Environmental Scientists and Specialists, Including Health	Heating and Air Conditioning Mechanics and Installers	Manufacturing Production Technicians
First-Line Supervisors/Managers of Production and Operating Workers	Industrial Engineering Technicians	Mechanical Engineering Technologists
Industrial Production Managers	Maintenance and Repair Workers, General	Precision Agriculture Technicians
Industrial Truck and Tractor Operators	Mechanical Engineers	Regulatory Affairs Specialists
Insulation Workers, Floor, Ceiling, and Wall	Occupational Health and Safety Technicians	Remote Sensing Scientists and Technologists
Materials Scientists	Power Plant Operators	Supply Chain Managers
Occupational Health and Safety Specialists	Refuse and Recyclable Material Collectors	Sustainable Design Specialists
Operating Engineers and Other Construction Equipment Operators	Storage and Distribution Managers	Validation Engineers
Power Distributors and Dispatchers	Transportation Managers	Water Resource Specialists
Purchasing Agents and Buyers, Farm Products	Transportation Vehicle, Equipment and Systems Inspectors, Except Aviation	Weatherization Installers and Technicians
Structural Iron and Steel Workers	Wholesale and Retail Buyers, Except Farm Products	Wind Energy Project Managers
Team Assemblers		Wind Turbine Service Technicians

Source: O*NET Online, U.S. Department of Labor

The projected growth seen in previous charts does not highlight the new skill sets and knowledge required by the expanded Renewable Energy Technology workforce. However, the degrees granted and training offered in Greater Sioux Falls are indications of how the region will be able to take advantage of high-demand, updated, and new Renewable Energy Technology jobs immediately and in the near future.

Higher Education Degrees Awarded in Renewable Energy Technology, 2007–08

	Certificate	Associate's	Bachelor's	Master's	Total
Agriculture, agriculture operations, and related sciences	0	31	0	0	31
Biological and Biomedical Sciences	0	0	49	0	49
Business, management, and marketing	9	168	146	40	363
Computer and information sciences	51	34	5	0	90
Engineering technologies/technicians	10	57	0	0	67
Mathematics and statistics	0	0	12	0	12
Mechanic and repair technologies/technicians	0	78	0	0	78
Physical sciences	0	0	8	0	8
Precision production	9	6	0	0	15
Science technologies/technicians	0	0	0	0	0
TOTAL	79	374	220	40	713

Source: National Center for Education Statistics

Outside of the field of business, management, and marketing, Greater Sioux Falls' workforce pipeline from technical and higher education institutions to the labor market is insufficient to keep up with the coming demand in Renewable Energy Technology occupations. A very near threat to the world economy is a green energy skills shortage, meaning learning institutions must be graduating workers not just in academic and vocational fields related to Renewable Energy Technology but with specific applicable skill sets. Due to the highly technical nature of many of these target occupations, increased educational and training options in engineering, science, mechanic and repair technology, and other similar academic fields must be available to Greater Sioux Falls residents. Construction jobs may be less difficult to adapt from traditional practices to the emerging sector.

A skills entry point to be leveraged is the public school system in Greater Sioux Falls. Currently, the Sioux Falls School District offers CAD, architectural, and engineering drafting as well as technology systems courses through its Career and Technical Education program. These programs could be specialized to include a Renewable Energy Technology component for high school students planning on a career in this target.

The science- and technology-based degrees offered in Greater Sioux Falls' postsecondary institutions (referenced earlier in this *Target Business Analysis*) are good starting points for building a skilled and educated base of workers in Renewable Energy Technology. However, further academic and training specialization must be available to master the specific technology skills and knowledge needed to sustain a competitive local workforce in this emerging target.

PROSPERITY: BUSINESS SECTOR ANALYSIS

The following chart attempts to “define” Renewable Energy Technology employment according to NAICS sectors. The sub-sectors that constitute Renewable Energy Technology are varied and contain many employment specializations that in many cases may not directly relate to wind and biofuel energy production and smart grid development. Nevertheless, *Market Street* feels the following employment sub-sectors represent the principal categories with applications to clean energy and other Renewable Energy Technology sub-sectors.

Of the NAICS employment sub-sectors with relevance to this target, the Sioux Falls MSA is strongest (as measured by location quotients) in electric power transmission and distribution (4.96). All other sub-sectors with disclosed employment data have location quotients under 1.00, meaning Greater Sioux Falls currently has a below-average share of employment in most Renewable Energy Technology sub-sectors. However, almost all the sub-sectors experienced notable growth in employment between Q1 2004 and Q1 2009, signifying the further growth potential of the biofuel, wind energy, and smart grid technology niches.

Renewable Energy Technology Industry Target

NAICS	Sector	LQ	Emp Q1 2004	Emp Q1 2009	Net Change	% Change
Biofuel and Wind Energy Technology						
111	Crop Production	0.13	54	58	4	8.1%
221119	Other Electric Power Generation		ND	ND		
325199	All Other Basic Organic Chemical Manufacturing		ND	ND		
335999	All Other Miscellaneous Electrical Equipment Manufacturing		ND	ND		
54162	Environmental Consulting Services	0.11	9	8	-1	-11.1%
54171	R&D in the Physical, Engineering, and Life Sciences		42	ND		
Smart Grid						
2211	Power Generation and Supply	0.81	157	194	37	23.6%
22112	Electric Power Transmission and Distribution	4.96	116	134	18	15.5%
221122	Electric Power Distribution	0.93	116	131	15	12.9%
237	Heavy and Civil Engineering Construction	0.69	485	560	75	15.5%
2371	Utility System Construction	0.61	148	244	96	64.9%
541512	Computer Systems Design Services	0.83	174	543	369	212.1%

Sources: U.S. Bureau of Labor Statistics, U.S. Census

Greater Sioux Falls has strong resources for growth in the Renewable Energy Technology sector, but low LQs for nearly all sub-sectors. This indicates that the region has not yet seen job growth in these sub-sectors. Active, targeted growth of Renewable Energy Technology in the region would therefore serve to potentially capture some of this employment “leakage.”

As demonstrated in the following table, many Renewable Energy Technology-related sub-sectors experienced greater employment, hiring, and earnings growth between Q4 2007 and Q4 2008 than the metro average among all sectors. Heavy and civil engineering construction saw the most significant job change in the past year at 28.9 percent growth, with average earnings growing by 11 percent.

Top Sub-Sector Employers in Renewable Energy Technology

Rank	NAICS Subsector	2008	Q4 2007-Q4 2008		
		Average Quarterly Employment	Employment Growth	Hiring Growth	Average Earning Growth
7	238 Specialty Trade Contractors	4,605	-2.6%	-31.0%	-9.2%
18	517 Telecommunications	2,126	-1.2%	-33.1%	2.9%
19	236 Construction of Buildings	1,949	2.0%	13.5%	-1.7%
23	334 Computer and Electronic Product Manufacturing	1,428	9.9%	75.9%	5.5%
27	332 Fabricated Metal Product Manufacturing	1,345	7.3%	-27.5%	-0.6%
35	237 Heavy and Civil Engineering Construction	1,038	28.9%	68.0%	11.0%
39	339 Miscellaneous Manufacturing	849	19.5%	14.9%	5.2%
48	326 Plastics and Rubber Products Manufacturing	586	7.3%	22.2%	0.6%
56	221 Utilities	344	3.8%	0.0%	-6.9%
60	325 Chemical Manufacturing	263	26.3%	6.5%	9.5%
	All NAICS Sectors	121,848	1.9%	-5.5%	0.3%

Source: U.S. Census Bureau

Production of renewable energy sources will necessitate the development of a next-generation transmission network to leverage “smart” technologies in the conservation and dissemination of power to homes and businesses. The Sioux Falls Area, through its strong number of information technology workers, can potentially leverage some of these skilled professionals towards the development of software, systems, and networking equipment to create the transmission infrastructure necessary to further the “green revolution.”

Many community input participants named alternative or renewable energy as an area with one of the greatest opportunities for economic growth in the region. Current Renewable Energy Technology firms located in the Sioux Falls Area include Quin Wind Inc., a wind farm construction-management company based at the South Dakota Technology Business Center; DAK Renewable Energy of Brandon which since 1995 specializes in ethanol plant development, financing of renewable energy projects, portfolio management, strategic partnerships, and mergers and acquisitions of energy projects; and POET Ethanol Products in Sioux Falls. POET is the nation’s top producer of ethanol. Currently, POET is working to patent an ethanol co-product that can be used in pill coatings, complementing the Medical Services and Research Science target. POET is also creating products that will replace petroleum-based products in the home. Local officials also cite the strong economic development partnerships with Xcel Energy and Sioux Valley Energy as benefits related to potential growth in renewable energy.

Quin Wind is working to coordinate subcontractors for a 20.7-megawatt, nine-turbine wind farm at Hagerman, Idaho. Quin Wind constructs wind farms with land, turbines, and funding provided by a developer or other client; after construction is completed, the developer takes over ownership of the wind farm. Quin Wind also offers project safety, quality control, operations, and maintenance services at wind farms in the Midwestern United States.

DAK Renewable Energy and commercial real estate provider NAI Sioux Falls have partnered to deal in the strategic acquisition and management of ethanol production plants. The two firms collaborate to bring buyers and sellers together across the nation – introducing small, sometimes struggling ethanol plants to new investors looking to get into the renewable energy business. The services provided by the DAK

Renewable Energy and NAI Sioux Falls partnership include plant acquisition and disposition, business consulting, financial analysis, financing through debt and equity, investment sales and plant management.

A new manufacturing plant that will fabricate components for wind turbines is set to become operational in early 2010. Located in the Corson Development Park near Brandon, the Tower Tech Systems plant is expected to employ 150 people and produce roughly 150 wind-turbine towers per year.

PLACE: GEOGRAPHIC ADVANTAGES

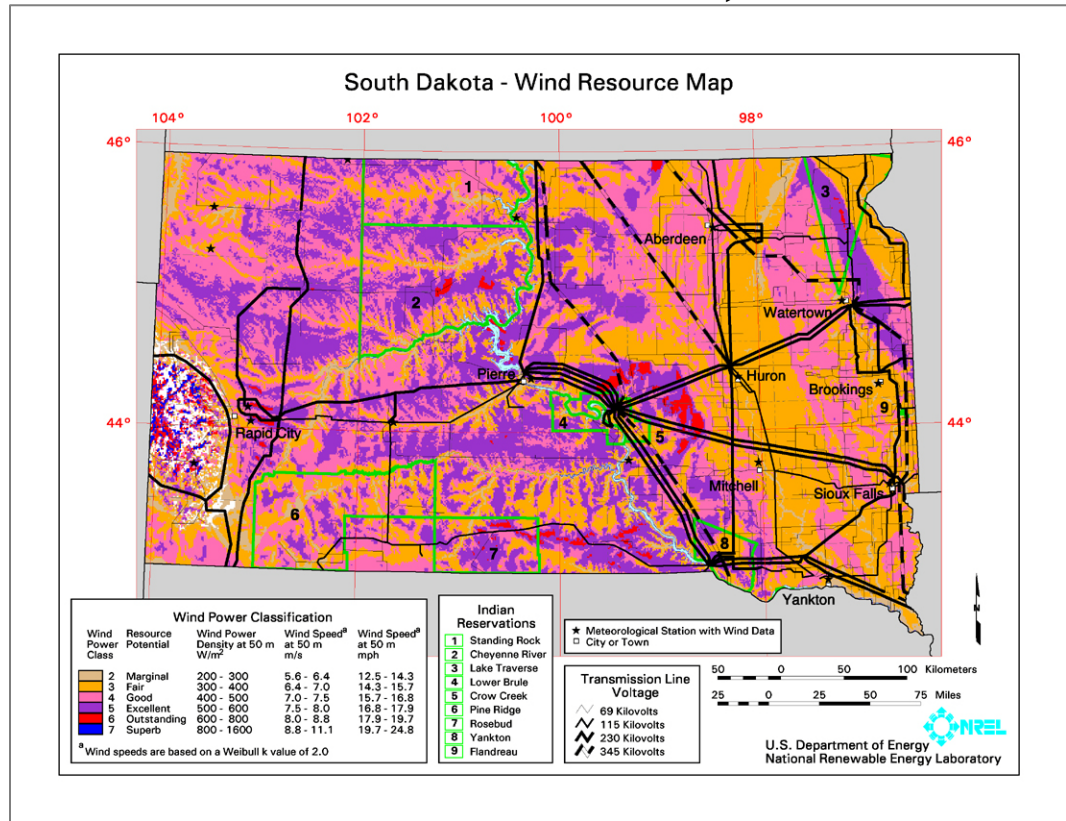
Unlike other target business sectors in Greater Sioux Falls, the recommendation of the Renewable Energy Technology target is based heavily on the region's geographic advantages, as opposed to its workforce advantages. In this sense, the development of the region's Renewable Energy Technology target is more heavily focused on the competitive advantages derived from the infrastructural and geographic qualities of the Sioux Falls Area and South Dakota, as opposed to the competitive advantages derived from employment composition. However, formalizing a workforce pipeline for jobs in this sector will ultimately be a key component of the target's development strategies.

The Sioux Falls Area is well positioned to become a dominant player in corporate research and development of biofuels and other sustainable energy sources. The regional presence of numerous agricultural producers that provide the sector with raw materials and product source inputs is another dynamic complement to the development of the Sioux Falls Area's Renewable Energy Technology target. Ethanol production capacity in South Dakota is above 1 billion gallons a year, and as of October 2009, there were 15 operational ethanol plans in South Dakota, two planned, two on hold, one not producing.

South Dakota also has the capacity to generate the fourth highest volume of wind energy in the nation, but currently ranks 18th for actual wind production, with few policies or incentives to attract construction of wind farms. According to the American Wind Energy Association (AWEA), South Dakota has the potential to provide 117,200 megawatts of wind-generated energy – enough power for 93.8 million homes a year. However, the AWEA also reported in August 2009 that South Dakota ranks third in the nation in wind-generating capacity growth, at a rate of 21 percent.

In the following map, the U.S. Department of Energy's National Renewable Energy Laboratory estimates wind speeds in South Dakota at 50 meters above ground level and illustrates resources that could be utilized for utility-scale wind development. South Dakota has wind resources consistent with utility-scale production. Good-to-excellent wind resource areas are located throughout the state, including the Sioux Falls Area.

South Dakota Wind Resource Map



Source: U.S. Department of Energy

As a renewable resource, wind is classified according to wind power classes, which are based on typical wind speeds. These classes range from Class 1 (the lowest) to Class 7 (the highest). In general, at 50 meters, wind power Class 4 or higher can be useful for generating wind power with large turbines. Class 4 and above are considered good resources. Particular locations in the Class 3 areas could have higher wind power class values at 80 meters than shown on the 50 meter map because of possible high wind shear. Given the advances in technology, a number of locations in the Class 3 areas may be suitable for utility-scale wind development.^{xiv}

South Dakota’s first wind farm is being built over 100 miles north of Sioux Falls and is expected to be completed in 2010. In September 2009, Citi Foundation gave \$250,000 to the Growing Green Rural Partners Program to help create a training program in Howard, South Dakota for renewable energy occupations.

The federal government injected \$9 million into the South Dakota economy to develop smart grid technology and build infrastructure for renewable energy, but the smart meters and other technology will be in other regions of the state. Rapid growth in this energy sector is anticipated in the near future; however, state-level efforts will be required to make this niche truly take hold in the Sioux Falls Area, where the

quality and quantity of the metro labor force can meet the growing demands of the Renewable Energy Technology sector.

The growth in wind and biofuel energy in South Dakota has enormous implications for the Sioux Falls Area, as the major metro in the state with the largest skilled workforce. Sioux Falls has the capacity to manage and coordinate the renewable resources generated in South Dakota and the Midwestern U.S. region through smart-grid networks. While construction and production may expand faster in more rural areas of the state, Greater Sioux Falls may continue to innovate, initiate, and operate these products, plants, and farms statewide as the centralized Renewal Energy Technology management hub.

Warehousing and Distribution

What's the big picture?

Justification	Strong regional concentrations in a number of Warehousing and Distribution sub-sectors, especially in trucking and wholesale trade
	Region located at the confluence of a north/south and east/west federal Interstate
	Regional airport with the potential for increased cargo capacity
	Warehousing and Distribution sub-sectors projected to continue strong local and national growth trends
	Sioux Falls metro counties have an abundance of affordable, flat land for location of distribution centers and trans-modal yards
	South Dakota Port's International Cargo and Air Passenger Processing Facility is extremely cost-competitive and provides more personalized service than larger import/export hubs
	Employment in this sector is not vulnerable to outsourcing and foreign cost competition
Challenges	Lack of Class I rail presence in South Dakota with limited connectivity to major markets
	No current direct air cargo flights into or out of Sioux Falls Regional Airport
	Inbound and outbound freight traffic insufficient to attract development of multi-modal transload facilities
	Presence of BNSF multi-modal hubs in Minneapolis-St. Paul and Omaha potentially limits need for major presence in Sioux Falls region
Opportunities	Successful attraction of distribution centers (DCs) in metro Sioux Falls could lead to more viable opportunities for development of intermodal distribution facilities
	Building the capacity necessary to market Sioux Falls Area properties – especially in more rural counties – to Warehousing and Distribution prospects
	Staff capacity at Great Plains International Trade Association provides opportunities to facilitate increased global trade for Great Plains companies
	Potential for development of a container depot in the Sioux Falls region to provide capacity for loading and transport of containers to multi-modal transload facilities
	Sioux Falls Regional Airport runway capacity capable of accommodating large cargo planes
	Opportunities to better leverage freight-forwarders with a presence in greater Sioux Falls for growth in regional inbound and outbound freight traffic
	Enhanced business retention and expansion efforts could source prospective import/export opportunities at local companies
	Presence of South Dakota's only federally-appointed Foreign Trade Zone

TARGET OVERVIEW

Advances in technology have spawned new ways of doing business and reduced the virtual distance between people, even if the physical distance remains vast. Such technologies have not only created a demand for rapid movement of goods, but have also redefined the distribution sector itself. Current technology allows businesses to track the location of individual vehicles via satellite, and use refrigerated units to provide computerized feedback on specific operational times and temperatures. Advanced in-house technology and hand-held wireless devices in the field also greatly streamline inventory maintenance operations. Support activities for Warehousing and Distribution can include scheduling, supply-chain management, fleet management, network optimization, and other processes.

An effective Warehousing and Distribution services network is critical to profitability for businesses across all sectors because **just-in time inventory strategies** are now commonplace among most national retailers, manufacturers, and service providers. To maintain lean operations, businesses have decreased the volume of in-process inventory they carry and instead rely on express just-in-time shipments from suppliers to improve flexibility, efficiency, and return on investments. This is a model many households have adopted as well through the use of online retailers, grocers, and pharmacies. Because of this, Warehousing and Distribution services are expected to remain strong.

According to the U.S. Census Bureau, purchases of transportation-related goods and services comprised 8.7 percent of the Gross Domestic Product (GDP) in 2007, or \$1.2 trillion.^{xv} Warehousing and Distribution services will continue to play a dominant role in the national economy, and in Sioux Falls' regional economy due to its growth dynamics. As shown in the following chart, across all target sub-sectors South Dakota's employment is projected to grow at a more rapid rate than national sub-sectors.

Growth Projections for Warehousing and Distribution Employment, 2006-2016

NAICS Code	Sector Name	Projected Growth: South Dakota		Projected Growth: United States	
		Number of New jobs	Percent	Number of New jobs	Percent
42	Wholesale Trade	1,675	9%	428,500	7%
48, 492	Transportation and Warehousing	1,875	18%	496,200	11%
481	Air Transportation	50	19%	35,300	7.3%
482	Rail Transportation	95	10%	-12,000	-5.3%
484	Truck Transportation	765	14%	157,700	11.0%
488	Support Activities for Transportation	355	49%	97,000	17.0%
493	Warehousing and Storage	240	39%	149,500	23.5%
	Total Employment, All Jobs	73,510	16%	15,600,200	10%

Source: U.S. Bureau of Labor Statistics and the South Dakota Department of Labor
 Note: Projections are not available for all NAICS codes included in the target definition. Super-sector figures do not sum to the sub-sectors because only those which are available and relevant to target recommendations have been included.

One issue that affects the profitability of firms within the Warehousing and Distribution target is the price of oil. In 2005, crude oil was priced at \$60 per barrel; in March 2008, oil prices reached \$107 per barrel but by May 2008 had dropped to \$62 per barrel. They are once again on the rise, reaching \$78 per barrel in November 2009. Drastic price fluctuations and increases at the fuel pump affect families' retail spending and the bottom-line of Warehousing and Distribution employers. According to the American Trucking Association, when oil prices reached record levels 2008, for the first time, carriers in some cases reported that fuel costs exceeded labor costs.^{xvi} These costs are tied into product pricing, and passed back to consumers. Despite the challenges increased fuel prices bring to the section, growth in the Warehousing and Distribution sector is expected to remain strong.

Another issue that has come to the forefront is safety. After the 9/11 attacks, U.S. Homeland Security has placed increase scrutiny on the safety of cargo moving into the country via roadways, airplanes, and sea ports. More rigorous inspection standards and the use of technology, including radio frequency identification tags, are being employed to insure greater safety. However, due to the sheer volume of goods that are moved in, out, and throughout the nation and its communities on a daily basis, there remain serious concerns about cargo security within Warehousing and Distribution sector.

How can Sioux Falls compete?

PEOPLE: OCCUPATIONAL ANALYSIS

While most Warehousing and Distribution occupations are projected to increase by 2016 across South Dakota, those with higher average annual wages boast more expected growth. These include supervisors/managers and mechanics related to the target. Sales representatives in Wholesale Trade are also anticipated to increase.

Warehousing and Distribution Occupational Target

SOC	Occupation	Sioux Falls MSA, Q2 2009			2006-2016 Statewide Projected % Change
		Workers	% of SD total	Annual Avg Wage	
Truck Transportation					
53-0000	Transportation and Material Moving Occupations	10,280	34.3%	\$28,524	NA
53-3032	Truck Drivers Heavy and Tractor-Trailer	2,880	38.9%	\$35,282	14.6%
53-3033	Truck Drivers Light or Delivery Services	850	38.3%	\$29,771	14.4%
49-3023	Automotive Service Technicians and Mechanics	670	30.3%	\$36,457	8.8%
53-7061	Cleaners of Vehicles and Equipment	530	47.7%	\$17,780	9.0%
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	420	40.0%	\$37,438	15.6%
53-7051	Industrial Truck and Tractor Operators	400	35.4%	\$27,600	11.2%
43-5071	Shipping Receiving and Traffic Clerks	380	41.3%	\$29,332	15.3%
49-1011	First-Line Supervisors/Managers of Mechanics Installers and Repairers	360	35.0%	\$60,148	12.5%
49-3042	Mobile Heavy Equipment Mechanics Except Engines	230	45.1%	\$40,230	25.7%
53-1031	First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle	170	33.3%	\$53,774	14.4%
49-3021	Automotive Body and Related Repairers	140	22.6%	\$31,902	5.8%
53-1021	First-Line Supervisors/Managers of Helpers Laborers and Material Movers Hand	120	44.4%	\$43,942	NA
47-4051	Highway Maintenance Workers	120	9.4%	\$30,983	2.4%
49-3022	Automotive Glass Installers and Repairers	NA	NA	\$37,140	12.5%
Warehousing and Storage					
53-7062	Laborers and Freight Stock and Material Movers Hand	2,430	33.2%	\$23,069	6.6%
33-9032	Security Guards	500	41.0%	\$25,478	10.9%
43-5011	Cargo and Freight Agents	260	76.5%	\$46,666	37.1%
11-3071	Transportation Storage and Distribution Managers	50	50.0%	\$78,432	11.1%
Wholesale Trade					
41-4012	Sales Representatives Wholesale and Manufacturing Except Technical and Scientific Produc	2,030	46.7%	\$51,216	18.1%
43-5081	Stock Clerks and Order Fillers	1,830	35.7%	\$21,554	-1.6%
53-7064	Packers and Packers Hand	1,070	38.9%	\$20,884	-7.6%
41-4011	Sales Representatives Wholesale and Manufacturing Technical and Scientific Products	590	33.3%	\$80,650	12.8%
13-1023	Purchasing Agents Except Wholesale Retail and Farm Products	220	33.3%	\$47,035	15.3%
51-9111	Packaging and Filling Machine Operators and Tenders	210	23.9%	\$27,045	12.7%
43-4151	Order Clerks	140	31.1%	\$27,582	-20.9%
11-2022	Sales Managers	140	51.9%	\$106,722	12.9%
13-1022	Wholesale and Retail Buyers Except Farm Products	100	58.8%	\$43,771	4.3%
13-1021	Purchasing Agents and Buyers Farm Products	90	24.3%	\$53,222	1.6%
11-3061	Purchasing Managers	20	33.3%	\$82,203	16.7%
45-2011	Agricultural Inspectors	20	NA	\$40,314	0.0%

Source: South Dakota Department of Labor

Training needs in Warehousing and Distribution are not as demanding as those in other identified target industries. Although some workers need a college degree, many Warehousing and Distribution jobs do not require an education beyond high school. New workers usually receive training after they begin work, in such training areas as the operation of inventory management databases, online purchasing

systems, and/or electronic data interchange systems. Many occupations in this sector do not require more than a high school degree and would therefore be well suited for the low-skilled portion of the Sioux Falls Area’s workforce. However, two-year colleges are increasingly offering degrees in logistics and supply-chain management.

The number of business, management, and marketing degrees conferred in the Sioux Falls Area in 2007-08 is promising when considering the projected growth in management positions related to Warehousing and Distribution; however, Associate-level degrees in mechanic and repair technologies, precision production, and engineering technologies may be inadequate to keep up with the demand in qualified workers to fill the skilled repair and technician positions necessary in sustaining a competitive Warehousing and Distribution target.

Higher Education Degrees Awarded in Warehousing and Distribution, 2007-08

	Certificate	Associate's	Bachelor's	Master's	Total
Business, management, and marketing	9	168	146	40	363
Communications technologies	0	30	0	0	30
Computer and information sciences	51	34	5	0	90
Engineering technologies/technicians	10	57	0	0	67
Mechanic and repair technologies/technicians	0	78	0	0	78
Precision production	9	6	0	0	15
Security and Protective Services	0	27	17	0	44
TOTAL	79	400	168	40	687

Source: National Center for Education Statistics

Technological advances and market forces are rapidly altering this industry. Even workers in small firms need to be informed about distribution processes, management methodologies, and information systems. In addition, these technological advances affect the skill requirements for occupations across the entire industry, from warehouse workers to truck drivers to management positions. As a result, numerous firms devote significant resources to worker training.

Sioux Falls School District’s Career and Technical Education program includes several automotive technology courses at three high schools. Southeastern Technical Institute offers degrees in transportation technology, with specific programs in automotive technology, collision repair and refinish technology, and diesel technology, all areas critical to maintaining flourishing truck carrier distribution. However, there is not currently a strong local focus on programs that specifically cater to the Warehousing and Distribution sector.

PROSPERITY: BUSINESS SECTOR ANALYSIS

Due to U.S. manufacturers’ and retailers’ reliance on the nation’s distribution network, the Warehousing and Distribution sector is expected to remain strong.

According to the U.S. Bureau of Transportation Statistics' 2008 annual report, demand for transportation-related goods and services represented over 10 percent of the U.S. economy in the year 2007. Purchases of transportation-related goods and services comprised 10.6 percent of the Gross Domestic Product (GDP) in 2007, or \$1.5 trillion.^{xvii}

Most wholesale trade sub-sectors experienced significant job growth in Greater Sioux Falls from the first quarter of 2004 to the first quarter of 2009, include merchant wholesalers of motor vehicles and motor vehicle parts and supplies (+110 jobs, 15.1 percent); machinery, equipment, and supplies (+90 jobs, 10.6 percent); electrical and electronic goods (+83 jobs, 27.1 percent); and hardware, plumbing, and heating equipment (+82 jobs, 28.4 percent). However, considerable job loss was experienced in specialized freight trucking (-71 jobs, -13.8 percent); petroleum and petroleum products merchant wholesalers (-65 jobs, -30 percent); and general warehousing and storage (-36 jobs, -54.5 percent).

The Sioux Falls Area has a higher than average share of employment in many sub-sectors of Warehousing and Distribution. Due to its key location (discussed later in this section), farm product raw material merchant wholesalers have a location quotient of 4.71. Other warehousing and storage (3.89); motor vehicle and motor vehicle parts and supplies merchant wholesalers (2.63); miscellaneous nondurable goods merchant wholesalers (2.23); and general freight trucking (2.29) also have very high location quotients.

Warehousing and Distribution Industry Target

NAICS	Sector	LQ	Emp Q1 2004	Emp Q1 2009	Net Change	% Change
Truck Transportation						
4841	General Freight Trucking	2.29	1,743	2,077	334	19.2%
4842	Specialized Freight Trucking	1.18	513	442	-71	-13.8%
4884	Support Activities for Road Transportation	1.09	92	89	-3	-3.3%
4889	Other Support Activities for Transportation		ND	ND		
Warehousing and Storage						
4931	Warehousing and Storage	0.46	158	298	140	88.6%
49311	General Warehousing and Storage	0.05	66	30	-36	-54.5%
49312	Refrigerated Warehousing and Storage		ND	ND		
49313	Farm Product Warehousing and Storage		ND	ND		
49319	Other Warehousing and Storage	3.89	ND	177		
Wholesale Trade						
4231	Motor Veh. and Motor Veh. Parts and Supplies Merchant Wholesalers	2.63	729	839	110	15.1%
4232	Furniture and Home Furnishing Merchant Wholesalers	0.60	33	61	28	84.8%
4233	Lumber and Other Construction Materials Merchant Wholesalers	1.97	371	412	41	11.1%
4234	Prof. and Comm. Equipment and Supplies Merchant Wholesalers	0.52	276	328	52	18.8%
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0.34	37	41	4	10.8%
4236	Electrical and Electronic Goods Merchant Wholesalers	1.16	306	389	83	27.1%
4237	Hardware, and Plumbing and Heating Equipment Merchant Wholesalers	1.56	289	371	82	28.4%
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	1.43	853	943	90	10.6%
4239	Miscellaneous Durable Goods Merchant Wholesalers	0.92	183	255	72	39.3%
4241	Paper and Paper Product Merchant Wholesalers	0.90	131	120	-11	-8.4%
4242	Drugs and Druggists' Sundries Merchant Wholesalers	1.88	304	374	70	23.0%
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers		ND	ND		
4244	Grocery and Related Product Merchant Wholesalers	0.62	410	443	33	8.0%
4245	Farm Product Raw Material Merchant Wholesalers	4.71	287	338	51	17.8%
4246	Chemical and Allied Products Merchant Wholesalers	0.58	71	74	3	4.2%
4247	Petroleum and Petroleum Products Merchant Wholesalers	1.54	217	152	-65	-30.0%
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	1.66	196	269	73	37.2%
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	2.23	660	740	80	12.1%
4251	Wholesale Electronic Markets and Agents and Brokers	0.66	598	545	-53	-8.9%

Source: U.S. Bureau of Labor Statistics

The Warehousing and Distribution sub-sectors with the largest employment in the Sioux Falls Area between Q4 2007 and Q4 2008 had mixed results in terms of employment, hiring, and earnings growth. While average earnings did grow faster than average growth in the region (with two major exceptions – motor vehicle and parts dealers and warehousing and storage, with actual declines in earnings), employment growth in the largest Warehousing and Distribution sub-sectors was, on average, slower than the regional employment average growth rate. However, wholesale electronics markets, agents, and brokers did experience higher than average growth in employment, hiring, and earnings in this year.

Top Sub-Sector Employers in Warehousing and Distribution

Rank	NAICS Subsector	2008	Q4 2007-Q4 2008		
		Average Quarterly Employment	Employment Growth	Hiring Growth	Average Earning Growth
8	423 Merchant Wholesalers, Durable Goods	3,811	1.4%	5.7%	1.3%
14	424 Merchant Wholesalers, Nondurable Goods	2,764	1.2%	-4.9%	1.1%
15	484 Truck Transportation	2,642	6.0%	-14.4%	4.5%
17	441 Motor Vehicle and Parts Dealers	2,152	6.2%	-20.0%	-11.8%
31	811 Repair and Maintenance	1,176	-3.0%	3.1%	0.9%
32	447 Gasoline Stations	1,152	-4.3%	-25.3%	0.7%
43	425 Wholesale Electronic Markets and Agents and Brokers	695	7.6%	24.2%	0.5%
49	488 Support Activities for Transportation	571	7.2%	-16.5%	8.2%
50	336 Transportation Equipment Manufacturing	514	-8.6%	73.3%	6.6%
57	493 Warehousing and Storage	324	-24.0%	-37.3%	-15.2%
	All NAICS Sectors	121,848	1.9%	-5.5%	0.3%

Source: U.S. Census Bureau

In 2007, the Sioux Falls Area saw its most significant job growth in the Transportation and Warehousing sector occur among non-residents, according to the Edward Lowe Foundation. The larger share of resident firm growth at the Stage 1 (1-9 employees) level demonstrates that Sioux Falls' homegrown Warehousing and Distribution firms need support to survive and maintain a local workforce in order for the region to reap the full benefits of this critical target sector.

Job and Firm Growth by Stage, 2007

NAICS Sector	Total	Noncommercial	Nonresident	Resident	Stage 1	Stage 2	Stage 3	Stage 4
Establishment Growth								
56 Administrative, Support, Services	101	0.0%	0.0%	9.4%	9.8%	-0.1%	-0.1%	0.0%
42 Wholesale Trade	29	0.0%	-1.1%	5.1%	6.7%	0.0%	0.0%	0.0%
48 Transportation and Warehousing	27	0.0%	0.2%	6.0%	8.2%	-0.3%	-0.3%	-0.3%
55 Management of Companies and Enterprises	8	0.0%	3.0%	21.2%	21.9%	0.0%	0.0%	0.0%
Job Growth								
56 Administrative, Support, Services	68	0.0%	0.0%	1.4%	3.8%	0.5%	-2.6%	0.0%
55 Management of Companies and Enterprises	15	0.0%	0.2%	0.5%	0.5%	0.0%	0.0%	0.0%
42 Wholesale Trade	-68	0.0%	-2.4%	1.5%	0.9%	1.6%	0.0%	0.0%
48 Transportation and Warehousing	-216	-3.1%	13.3%	-14.8%	1.9%	0.3%	-8.8%	-17.6%

Source: YourEconomy.com, Edward Lowe Foundation

PLACE: GEOGRAPHIC ADVANTAGES

As was discussed in the *Competitive Assessment*, Greater Sioux Falls' population grew by 24 percent (from 187,093 to 232,930 residents) between 2000 and 2008. It is one of the fastest-growing MSAs in the country, and one of only two in the Midwest to make the top 50 in the nation. While this momentum facilitates direct employment growth in Warehouse and Transportation to serve an increasing number of local consumers, it further strengthens Greater Sioux Falls potential as an exporter of goods and services.

The region is well positioned to target Warehouse and Transportation services because of its growth and its aggressive investments in infrastructure development.

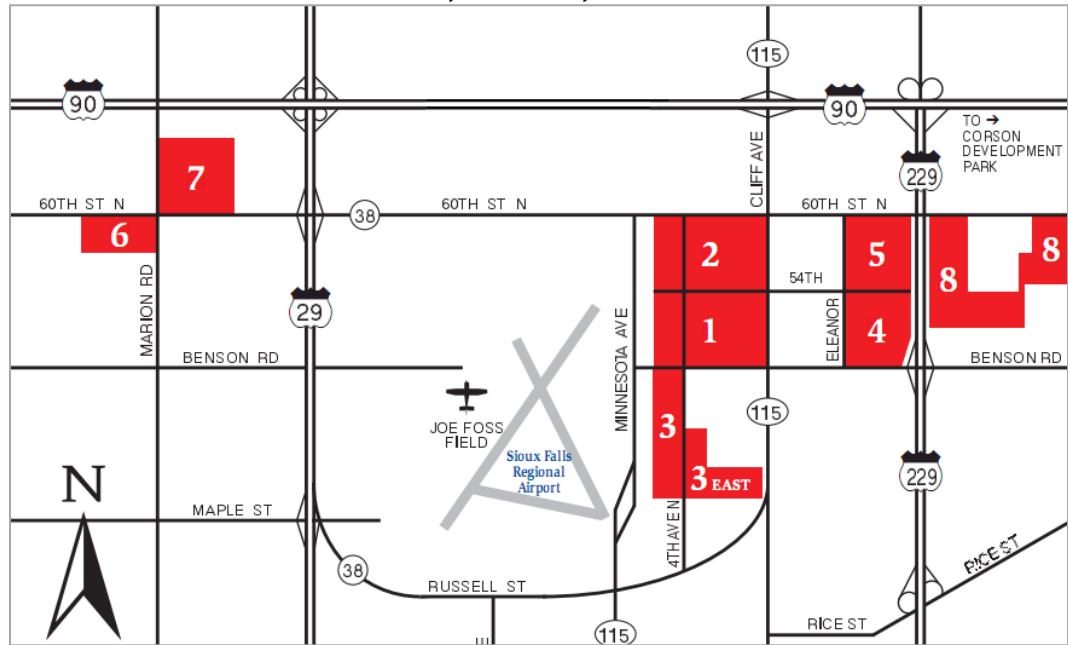
Alongside the area's overall low cost of doing business, Greater Sioux Falls has many geographic advantages to developing this target.

Sioux Falls is connected to other major metro areas via east/west Interstate 90, which runs from Boston to Seattle, and north/south Interstate 29, which connects Kansas City and Winnipeg. The presence of two federal interstates is a key regional advantage and positions greater Sioux Falls as a critical junction point for NAFTA-related trade. As a result of its key location, Sioux Falls has remained a hub for the distribution of food, fuel, oil, gasoline, machinery, automobiles, trucks, plastics, and paper products. Over 50 truck lines cross through Sioux Falls to provide road transportation to national markets.

The Sioux Falls Regional Airport (also known as Joe Foss Field) is the largest in South Dakota and can be a focus point for enhanced cargo operations. Currently, regional air cargo services at Sioux Falls Regional Airport are provided by FedEx, United Parcel Service (UPS), Airborne Express, and DHL Worldwide.

Importantly, the pursuit of the Warehousing and Distribution target provides development opportunities across the Sioux Falls region. The **Sioux Empire Development Parks** are owned and managed by the Sioux Falls Development Foundation and are located in the City of Sioux Falls. With key access to both major Interstates as well as the Sioux Falls Regional Airport, these properties are zoned as light industrial or planned commercial. Most plots are fully-developed with complete utilities – water, sewer, electrical, natural gas, paved roads, and telecommunications. With 925 acres occupied, the Sioux Empire Development Parks have roughly 310 available acres for light industrial prospects and 70 remaining acres for commercial clients.

Sioux Empire Development Parks



Source: Sioux Falls Development Foundation

Current Warehousing and Distribution occupants of the Sioux Empire Development Parks include Eaton Corporation’s distribution center for electrical components and systems, digital automotive instrument manufacturer Dakota Digital, and Kresiers, Inc., a medical equipment and supplies distributor that recently expanded to a 44,000 square foot warehouse.

The **Brandon–Corson Development Park** in the City of Brandon is managed by the Minnehaha Economic Development Association and zoned for heavy industrial use. The park is located adjacent to the BNSF rail spur and is accessible by I-90 and State Highway 11. The park is served with paved streets, water and sewer, electric service, telecommunications infrastructure, and natural gas utilities. Approximately 140 acres of rail and non-rail sites are available.

Brandon-Corson Development Park



Source: Minnehaha County Economic Development Association

Incentives available include property tax abatement and the Brandon Revolving Loan Fund; tax increment financing is available to qualified projects. Current Warehousing and Distribution businesses located at Brandon-Corson Development Park are Luverne Truck Equipment and Wasau Supply.

Plentiful, cheap land in the non-urban regional counties positions these areas to capture dynamic opportunities related to the warehousing and distribution of goods. As distribution centers (DCs) are successfully located in metro Sioux Falls, increased cargo tonnage may one day prove competitive for the attraction of multi-modal distribution prospects. Importantly, building infrastructure for Warehousing and Distribution-related firms can serve as a catalyst to attract companies – especially on the manufacturing and production side – that would benefit from proximity to a cost-competitive and robust multi-modal distribution center.

The Sioux Falls Region also boasts South Dakota’s only federally-approved Foreign Trade Zone (FTZ). The FTZ offers key benefits to Warehousing and Distribution firms engaged in international trade-related activities. Items that are processed in FTZs and then re-exported receive duty-free treatment; duty payment is deferred on items until they are brought out of the FTZ for sale in the U.S. market. The federally-approved Foreign Trade Zone includes part of the Sioux Falls Regional Airport, Sioux Empire Development Parks III and IV, and two warehouse facilities.

CONCLUSION

This *Target Business Analysis* utilized quantitative and qualitative information to evaluate the Sioux Falls Area's competitive position for high-value, wealth-creating target sectors. By prioritizing investment of economic development resources and efforts, this report enables local officials to best capture opportunities for short- and medium-term employment growth.

Based on the full complement of research conducted for this report, the following four target sectors and niches were identified as priorities for regional development:

Target: Medical Services and Research Science

Target: Corporate and Data Services

Niche: Information Assurance

Niche: Customer-Care Services

Niche: Regional Headquarters

Target: Renewable Energy Technology

Niche: Biofuels and Wind Energy

Niche: Smart-Grid Technology

Target: Warehousing and Distribution

Ultimately, growth of target industries will be realized through strategies encompassing recruitment, retention and expansion of existing companies, entrepreneurship and small business development, workforce and training development, and optimization of local competitiveness. Importantly, determination of regional industries to target does not preclude the Sioux Falls Development Foundation and other economic development entities from acting on other prospect opportunities that may arise. These reactive activities are important, though the proactive targeting of priority regional growth sectors will more effectively sustain and diversify Greater Sioux Falls' economy.

As the Greater Sioux Falls market matures beyond its standing as a low-cost, business-friendly alternative to Minneapolis-St. Paul, the pursuit of high-value, high-skill sectors will be key. In order to retain and attract top talent, the creation of higher-paying employment in a diversity of top sectors will enable the Sioux Falls region to provide attractive job opportunities to local graduates and other talent interested in Sioux Falls as a residential destination. In addition, greater economic diversity will buffer the Sioux Falls Area against potential declines in top sectors such

as financial services. The collapse of the national housing market and pending federal legislation threatens to cause significant job loss in the region. A more diverse economy will enable Metro Sioux Falls to achieve greater economic sustainability. This, in turn, will ensure that the region's population growth and strengthening reputation continue unabated.

This *Target Business Analysis* is a research report. Specific strategies to develop the region's priority target sectors will be included in the **Future Sioux Falls** plan.

APPENDIX A: METHODOLOGY

This review of Greater Sioux Falls' target business sectors employs both quantitative and qualitative research. Perspectives on certain industry's challenges and strengths have been gained through focus groups, interviews, and on-site meetings with regional stakeholders. This input complements the quantitative research and provides much needed perspective on each target's potential for future growth.

The quantitative portion of this review primarily utilizes data from the Quarterly Census of Employment and Wages (QCEW) from the U.S. Bureau of Labor Statistics (BLS) and the South Dakota Department of Labor (DOL). The QCEW provides information on local employment and wage levels for all industries as defined as the North American Industrial Classification Systems (NAICS). The recommended targets for metro Sioux Falls are clusters of related and supporting industries grouped by NAICS codes. Industries are defined broadly as 2-digit super-sectors, followed by increasingly specific detail down to the 6-digit level.

Within this review, targets are defined using 2-digit, 3-digit, and 4-digit NAICS industries. Although greater detail can be obtained at the 5 and 6-digit levels, the BLS non-disclosure policy often prevents a comprehensive review of target employment at these levels of granularity. In order to protect the identity of individual firms, the BLS suppresses employment and wage values for any industry sector where the number of establishments is less than or equal to three, or when a single employer represents more than 80 percent of total sector employment. This form of data suppression is increasingly prevalent as the sectors become more specific. Suppressed data have been noted in this report's tables as "ND" (not disclosed).

Recognizing these limitations of publicly-available data, every effort has been made to provide the most comprehensive snapshot of employment and wages in the recommended targets. Above all, *Market Street's* recommendations are derived from a holistic view of the sectors and networks within each target. Relevant support services, educational opportunities, research activity, recent developments, and public input are just a few of the considerations that complement the quantitative analysis and are taken into account when developing recommendations.

Drawing from the QCEW, the quantitative analysis supporting this review includes the following elements for each industry sub-sector within the identified target sectors:

- Regional employment levels and growth rates
- Historical and projected employment growth
- Regional and national average annual wages
- Location quotients

Location quotients (LQ) are used to measure the relative concentration of local employment in a given industry or target. Specifically, they are the ratio of an industry's share of total local employment to that industry's share of total national employment.

$$LQ = \frac{(\text{Local Employment in Sector} / \text{Total Local Employment})}{(\text{National Employment in Sector} / \text{Total National Employment})}$$

A local industry with an LQ equal to 1.0 possesses exactly the same share of total local employment as the industry's share of national employment. When a local industry possesses a location quotient greater than 1.0, this signals that the industry is more concentrated in the region than it is nationwide. Conversely, a location quotient less than 1.0 indicates that the industry is less concentrated in the region than it is nationwide. The higher the location quotient, the more concentrated the level of local employment as compared to its national equivalent. For example, a location quotient of 1.25 would indicate that an industry's share of total regional employment is 25 percent higher than the industry's share of national employment. An LQ of 2.0 would indicate that an industry's share of regional employment is twice as large as the national share, while an LQ of 0.5 would indicate that the industry's share of local employment is half the national equivalent.

Location quotients are often used to provide an introductory examination of the competitive position of a local industry. Those industries with relatively large LQs are often assumed to possess competitive advantages. However, competitive advantage is not derived from employment concentration alone. The region's talent base, infrastructure, the availability of support services, the transfer of academic research and technology to the marketplace, and the capacity of educational institutions all heavily impact the competitive advantage of an industry target and should be considered when identifying target sectors. This review blends the quantitative and qualitative research that is necessary to identify such opportunities in Greater Sioux Falls.

Market Street Services' Workforce Risk Index

Market Street Services' proprietary Workforce Risk Index measures the sustainability of metropolitan labor forces in the medium- and long-term. Labor force sustainability refers to the capability and capacity of a region's workforce to support the region's businesses and operations and to accommodate additional demand for labor. A sustainable labor force is capable of absorbing the risks imposed upon regional economies from impending demographics trends and structural changes in the national economy.

The Workforce Risk Index includes six demographic components and compares metro performance to 352 other metropolitan areas. The six components included are:

- **Population Approaching Retirement:** The percentage of the non-college working age population (25-64) that is approaching retirement age in the coming decade (current ages 55-64, approaching 65-74 in coming decade).
- **Young Professional Population:** The percentage of the non-college working age population (25-64) that are young professionals' age (25-39).
- **LFPR (Ages 62+):** The labor force participation rate of those above the average retirement age in the United States.
- **LFPR (Ages 25-39):** The labor force participation rate of the young professional age population (ages 25-39).
- **Long-term Net Migration:** The net migration of individuals to/from the metropolitan area between 1997 and 2007.
- **Short-term Net Migration:** The net migration of individuals to/from the metropolitan area between 2005 and 2007.

An index value is calculated for each of the six individual components according to the following formula, which fits all values between zero and one hundred:

$$\text{Index value} = \frac{[(\text{actual value} - \text{minimum value}) / (\text{maximum value} - \text{minimum value})] * 100}{1}$$

This formula fits the distribution of values between zero and one hundred, ensuring that the top performer in a given category is assigned an index value of 100 and the worst performer is assigned an index value of zero. All other regions' index values are expressed relative to the deviation between the top performer and the worst performer. A ranking of one is assigned to the best performer in each component; a ranking of 353 indicates the worst performer.

A weighting scheme is applied to the six individual components to calculate the final composite index of demographic sustainability. The indicators measuring the age pipeline (population approaching retirement, and young professional population) each receive a weighting value equal to two. The indicators measuring labor force participation receive a weighting value equal to one. The indicators measuring trends in net migration receive weighting values of 1.5.

The highest ranking region in the overall index is viewed as having the most sustainable workforce in the medium to long-term, and similarly has the lowest risk associated with changing demographic trends.

Boyd Company Reports

Bioscience industry

This analysis included 35 U.S. metro with major concentrations of bioscience and pharmaceutical industry operations. Included cities are listed below.

- Northeast Region: Boston, Massachusetts; New Haven, Connecticut; New York/Nassau County, New York; Princeton, NJ; Middlesex/Somerset/Hunterdon, New Jersey; Princeton, New Jersey; Camden/Cherry Hill, New Jersey; and Philadelphia/Montgomery/Bucks, Pennsylvania.
- South Atlantic Region: Wilmington, Delaware; Baltimore, Maryland; Montgomery County, Maryland; Fairfax County, Virginia; Atlanta, Georgia; Miami, Florida; and Palm Beach County, Florida.
- Central Region: Cincinnati, Ohio; Chicago, Illinois; Minneapolis, Minnesota; St. Louis, Missouri; Omaha, Nebraska; Des Moines, Iowa; Cedar Rapids, Iowa; and Sioux Falls, South Dakota.

Western Region: Denver, Colorado; Salt Lake City/Provo, Utah; San Francisco, California; Princeton, NJ; San Jose, California; Stockton, California; Los Angeles, California; and San Diego, California.

Corporate headquarters

Fifty U.S. cities were included in this report. Locations were included based on the location of at least one *Fortune 100* national headquarters and major concentrations of other head office operations. Included cities are listed below.

Birmingham, AL; Phoenix, AZ; Little Rock, AR; Los Angeles, CA; Orange County, CA; San Diego, CA; San Francisco, CA; San Jose, CA; Denver, CO; Stamford, CT; Washington, DC; Wilmington, DE; Jacksonville, FL; Atlanta, GA; Honolulu, HI; Des Moines, IA; Boise, ID; Chicago, IL; Indianapolis, IN; Louisville, KY; New Orleans, LA; Boston, MA; Baltimore, MD; Detroit, MI; Minneapolis, MN; Kansas City, MO; St. Louis, MO; Omaha, NE; Las Vegas, NV; Charlotte, NC; Newark, NJ; New York, NY; Cincinnati, OH; Columbus, OH; Oklahoma City, OK; Portland, OR; Philadelphia, PA; Pittsburgh, PA; Providence, RI; Columbia, SC; Sioux Falls, SD; Memphis, TN; Dallas, TX; Houston, TX; San Antonio, TX; Salt Lake City, UT; Richmond, VA; Virginia Beach, VA; Seattle, WA; and Milwaukee, WI.

Information assurance

Sixty U.S. cities were included in this report. Surveyed cities represent all regions of the country and house major concentrations of corporate headquarters, administrative back office and I.T. support operations. Included cities are listed below.

- New England Region: Boston, Massachusetts; Providence, Rhode Island; Springfield, Massachusetts; Hartford, Connecticut; and Stamford, Connecticut.
- Middle Atlantic Region: New York, New York; Rochester, New York; Philadelphia, Pennsylvania; Pittsburgh, Pennsylvania; and Wilmington, Delaware.
- Southeast Region: Atlanta, Georgia; Charlotte, North Carolina; Winston-Salem, North Carolina; Memphis, Tennessee; and Birmingham, Alabama.
- Florida East Coast Region: Orlando, Florida; Jacksonville, Florida; Palm Beach County, Florida; Broward County, Florida; and Miami, Florida.
- Florida Gulf Coast Region: Lee County, Florida; Sarasota/Bradenton, Florida; Tampa/ St. Petersburg, Florida; Ft. Walton/Destin, Florida; and Pensacola, Florida.
- East North Central Region: Cleveland, Ohio; Cincinnati, Ohio; Chicago, Illinois; Detroit, Michigan; and Milwaukee, Wisconsin.
- West North Central Region: Kansas City, Missouri; Minneapolis/St. Paul, Minnesota; Des Moines, Iowa; Omaha, Nebraska; and Sioux Falls, South Dakota.
- South Central Region: Tulsa, Oklahoma; Dallas, Texas; San Antonio, Texas; Houston, Texas; and New Orleans, Louisiana.
- Mountain Region: Denver, Colorado; Phoenix, Arizona; Salt Lake City, Utah
- Albuquerque, New Mexico; and Colorado Springs, Colorado.
- Pacific Northwest Region: Seattle, Washington; Spokane, Washington; Portland, Oregon; Salem, Oregon; and Eugene/Springfield, Oregon.
- Northern California Region: San Francisco, California; San Jose, California; Santa Rosa, California; Oakland, California; and Vallejo/Fairfield/Napa, California.
- Southern California Region: Los Angeles/Long Beach, California; Orange County, California; San Diego, California; Ventura, California; and Santa Barbara/ Santa Maria, California.

Mail order pharmacy

Twenty-two U.S. cities which currently house major mail order pharmacy companies were included in this analysis. Included cities are Troy, NY; Willingboro, NJ; Horsham, PA; Wilkes-Barre, PA; Pittsburgh, PA; Cincinnati, OH; Columbus, OH; Whitestown, IN; Birmingham, AL; Tampa, FL; Miramar, FL; St. Louis, MO; Kansas

City, MO; Omaha, NE; Sioux Falls, SD; Ft. Worth, TX; Denver, CO; Albuquerque, NM; Phoenix, AZ; Henderson, NV; San Diego, CA; and Portland, OR.

APPENDIX B: WORKFORCE DATA

This Appendix presents workforce data that were included in the *Competitive Assessment*, which was presented to the Steering Committee in October 2009. It expands upon workforce data that were discussed in the introduction of this report.

Population Change, 2000–2008

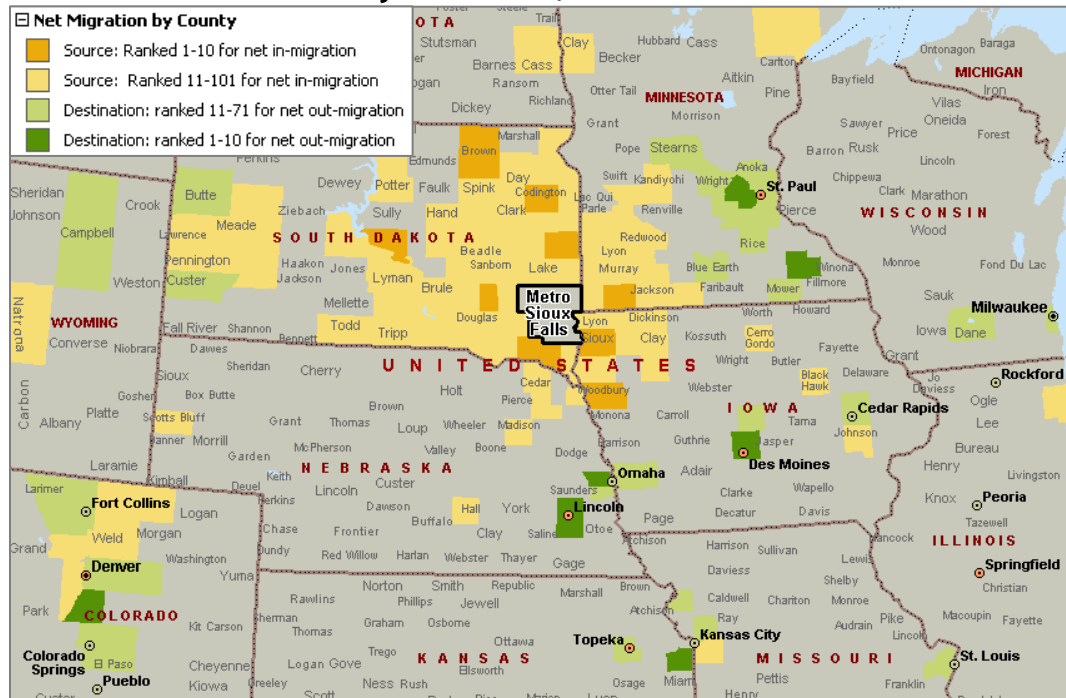
	Population		2000-08 Change		
	2000	2008	Total Number	00-08 Percent	Average Annual Growth Rate
Sioux Falls, SD	187,093	232,930	45,837	24.5%	2.8%
Lincoln County	24,131	39,713	15,582	64.6%	6.4%
McCook County	5,832	5,671	-161	-2.8%	-0.3%
Minnehaha County	148,281	179,180	30,899	20.8%	2.4%
Turner County	8,849	8,366	-483	-5.5%	-0.7%
South Dakota	754,844	804,194	49,350	6.5%	0.8%
United States	281,421,906	304,059,724	22,637,818	8.0%	1.0%

Source: U.S. Census Bureau

Note: Sioux Falls, SD reflects the metro area or "Greater Sioux Falls"

- ✓ *Rapid population growth:* Since 2000, the State of South Dakota grew by 49,350 residents, with metro Sioux Falls capturing the majority of this growth (45,373 residents or 92 percent). The Sioux Falls metro area is one of the fastest-growing MSAs in the country, and one of only two in the Midwest to make the top 50 in the nation.

Migration Trends, 2000–2007



Source: Internal Revenue Service

- ✓ *In-migration dynamics suggest Sioux Falls is a community-of-choice for many families:* Domestic in-migration feeds population growth in Sioux Falls. The region pulls most new residents from rural areas of South Dakota, Northwest Iowa, and Southwest Minnesota. The region is also able to attract new residents from other metro areas including Fargo, Bismarck, Duluth, Salt Lake, Los Angeles, Las Vegas, and Austin. It is interesting to note that international in-migration accounts for a smaller percentage of population change in Sioux Falls than in all of the benchmark communities, the state, and the nation.

- ✓ *Reported “brain drain” issues:* Since 2000, Greater Sioux Falls has lost a net number 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.” However, as noted above, Sioux Falls has had positive net in-migration from Austin and Los Angeles, communities with relatively creative economies that attract young talent.

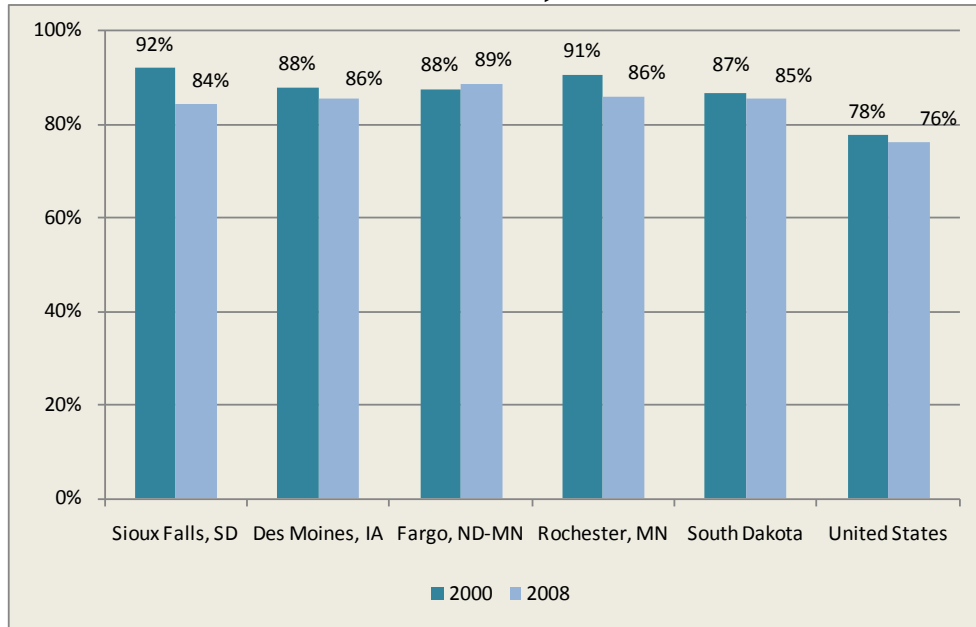
Greater Sioux Falls Age Distribution, 2008

	0-17	18-24	25-34	35-44	45-69	70+	Total
2008 population	60,020	20,696	35,186	31,761	65,929	19,338	232,930
Percent of total population, 2008	25.8%	8.9%	15.1%	13.6%	28.3%	8.3%	100.0%
Numerical growth since 2000	10,127	1,877	7,568	535	22,700	3,030	45,837
Percent growth since 2000	20.3%	10.0%	27.4%	1.7%	52.5%	18.6%	24.5%

Source: U.S. Census Bureau
 Note: Greater Sioux Falls reflects the metro area

- ✓ *Rapid growth in school-aged children suggest strong potential future workforce pipeline:* Compared to the nation, Greater Sioux Falls has a smaller proportion of residents ages 70 or older and a higher proportion of children. These dynamics are typical of many high-growth areas and suggest that Metro Sioux Falls has a robust workforce with strong “pipeline” of future workers. Between 2000 and 2008, the Sioux Falls metro area has grown by 45,837 residents, over 10,000 of which were children. Children have accounted for nearly 1-in-4 new residents compared to less than 1-in-10 nationwide.

Labor Force Participation Rate

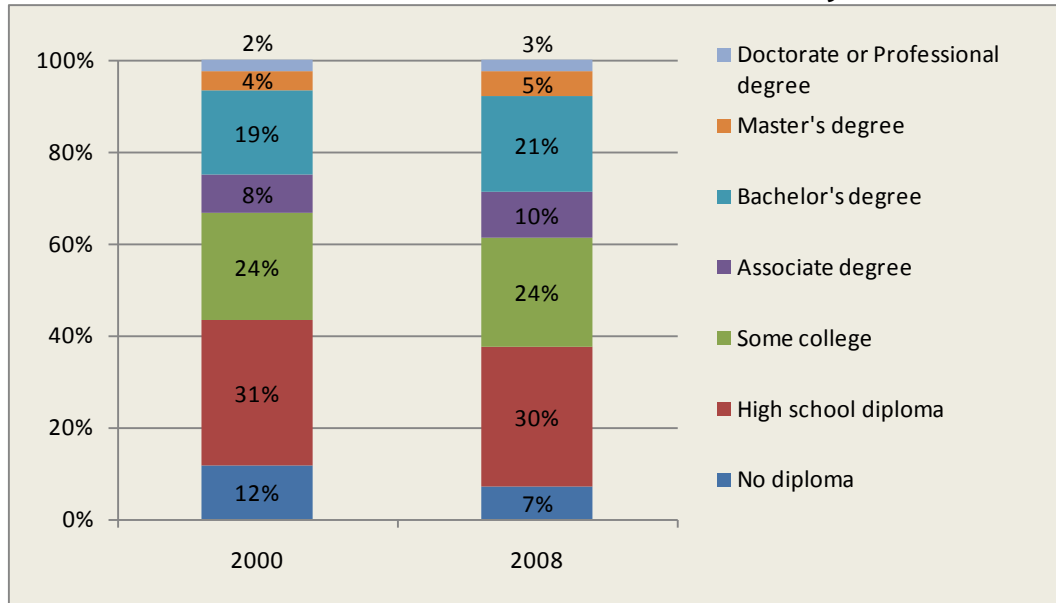


Sources: U.S. Census Bureau; U.S. Bureau of Labor Statistics

Note: The *Competitive Assessment* compared metro Sioux Falls to three peer regions, which are reflected in this chart. Community names reflect the metro areas.

- ✓ *Labor force participation is declining:* 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. This indicates that thousands of adults have dropped out of the local workforce. While this has loosened Sioux Falls' relatively tight labor market, this is an issue of concern.

Greater Sioux Falls: Educational Attainment of Adults (Ages 25+)



Source: U.S. Census Bureau

- ✓ *Educational attainment levels lag behind peer communities:* Metro Sioux Falls has made great strides in improving educational attainment of adults. Since 2000, the number of adults ages 25 and older without a high school diploma dropped from 12 to seven percent, and the number holding only a high school diploma dropped slightly from 31 to 30 percent. Educational attainment of local adults is competitive with state and national standards; however, Sioux Falls lags behind its peer communities in terms of the proportion of residents who hold an associate's, bachelor's, and/or master's degree.

- ✓ *Comparatively smaller higher education capacity and limited workforce development resources:* Educational options at the two-year and four-year levels in the metro area are fairly limited. Even when considering state universities within an hour's drive time, Greater Sioux Falls still has a smaller higher education capacity than its peer regions. Additionally, 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.

Greater Sioux Falls Job Creation Estimates, Degreed Workers (Ten-Year Estimate)

Sector	Total Jobs, 2006	Estimated Jobs Held by 4-yr Degree or Higher Workers, 2006	Annual Job Growth of 4-Yr or Higher Degreed Workers	New 4-yr Degree (or Higher) Jobs Created in Next Ten Years
Agriculture, forestry, fishing, hunting, and mining	5,875	759	6.4%	500
Finance, insurance, and real estate	23,463	8,824	5.1%	5,180
Arts, entertainment, accommodation, and food services	15,423	2,556	5.0%	1,168
Construction	12,416	948	0.8%	71
Education, health care, and social assistance	27,785	12,936	5.9%	13,260
Information	3,573	1,511	9.8%	2,682
Manufacturing	14,157	1,297	-6.7%	-823
Other Services	10,489	4,696	3.0%	839
Professional, technical, and scientific services; management; administrative and waste services	14,600	5,291	7.7%	5,090
Public administration	13,007	5,970	4.6%	1,383
Retail trade	21,748	3,970	3.4%	1,379
Transportation and warehousing; Utilities	6,431	1,147	6.4%	1,174
Wholesale trade	7,908	1,016	-10.2%	-470
Active Duty Military	1,456	209	0.0%	0
Grand Total	178,331	51,130	5.0%	31,433

Source: Corona Research, Inc. (prepared for the University Center, 2008).
Sioux Falls Knowledge Worker Trends and Analysis.

- ✓ *Continuing need for knowledge workers:* A 2008 study commissioned by the University Center predicted the need for knowledge workers in the metro area economy in the coming years. It was estimated that over 30,000 jobs would be created between 2006 and 2016 which would require a bachelor's degree or higher. Many of these jobs will be created in health care, professional services, finance and insurance, and logistics and trade.
- ✓ *Lack of major research university is detrimental to high tech growth:* After *Forbes* magazine ranked Sioux Falls as a "Best Place for High-Technology," the Forward Sioux Falls Technology Committee commissioned a report to study high-tech opportunities in the region. The lack of a major research university with electronics, computer science, and engineering programs and opportunities for advanced study was identified as a key hurdle to developing high-tech businesses in the long-term.

APPENDIX C: ENDNOTES

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