

North
Dakota
Economic
Development
Foundation
Strategic Plan



September 2002



North Dakota Economic Development Foundation: Strategic Plan

Table of Contents

Executive Summary	1
Summary and Prioritization of Goals and Strategies	8
Plan Overview	11
Economic Assessment	20
Demographic & Economic Indices	25
Sectoral Analysis	43
Target Industry Evaluations & Recommendations	60
Strategic Plan Goals and Strategies	74
Goal 1	74
Goal 2	78
Goal 3	83
Goal 4	88
Goal 5	91
Goal 6	93
Implementation and Performance Measures	95
Benchmarks	105



Executive Summary

In a proactive effort to accelerate North Dakota's economic growth rate, Governor John Hoeven proposed, and the General Assembly legislatively enabled, the creation of a new Department of Commerce (DOC) uniting formerly disconnected efforts tasked with economic growth initiatives. The DOC is charged with designing, coordinating and implementing a productive economic growth effort. The enabling legislation also mandated the establishment of the North Dakota Economic Development Foundation, a council of accomplished professional and corporate executives from a broad expanse of geography and constituency. The purpose of the Foundation is clearly defined in the Mission Statement. North Dakota is known for several strengths, most notably education, talented workforce, and quality of life. These factors build the launch pad for North Dakota's re-invigorated economic development program and provide the basis for continuing the reversal of the challenges identified in the Economic Assessment.

Without doubt, North Dakota has a great many assets. Educational attainment is high. Workforce productivity is strong. Both of these enviable characteristics are displayed by the efforts non-resident companies make to recruit workers from North Dakota. In addition, the bold leadership currently in both the executive and legislative branches of state government demonstrates a commitment to address shortfalls in the state's traditional economic growth patterns. State leaders from both the public and private sectors repeatedly tout the state's quality of life including family values, four season recreational opportunities, environmental purity, the pioneer spirit and this almost universal commitment to address issues and promote the state's strengths is a unique display of unity that is often not seen in other states.

North Dakota Economic Development Foundation: Strategic Plan

By the same token the Foundation and North Dakota must continue the slow, but positive growth trends outlined in the Economic Assessment section if the state is to fully realize its potential. For example, in the 1990s the state was able to reverse its population and employment growth declines that occurred in the 1980s and post modest growth. It is clear that North Dakota faces challenges in continuing its recent population and employment growth, however, the forward thinking gubernatorial administration and legislature have placed the state on a path to economic expansion with the adoption of this plan.

Clearly, the Foundation Board members hold no fantasies about the difficulty and duration of the challenges ahead. They know full well that economic problems of fifty years cannot be cured overnight. They also recognize that progress will be incremental with the wisdom that every success breeds opportunities for further success.

Toward that end, the Foundation sought the assistance of an internationally known economic development consulting team. Working together, the Foundation and the consultants developed the following Vision and Mission Statements to guide deliberations and decision-making.

Vision:

With respect for North Dakota values and quality of life, the North Dakota Economic Development Foundation will be a catalyst in creating quality employment opportunities making North Dakota a competitive partner in the global economy.

North Dakota Economic Development Foundation: Strategic Plan

Mission:

The Foundation will advise and support the current and future Governors of North Dakota and the Department of Commerce by:

- Establishing aggressive, yet realistic performance goals for the state's economic development;
- Creating a system to monitor and evaluate the state's performance in meeting its economic development goals; and
- Facilitating productive collaboration among the state's legislators and economic development partners both public and private.

These statements clearly reflect the comprehensive and aggressive approach the state's political and business leadership is taking with regard to expanding economic opportunities for all current and future North Dakota residents. Consequently, the Foundation adopted a plan of goals and strategies that would redefine North Dakota's approach in a distinct and courageous way. The plan's uniqueness is depicted in four important points:

1. For this first time in North Dakota's history, all of the pertinent organizations have united in common purpose. The Executive and legislative branches of government, the Foundation, the newly organized North Dakota Department of Commerce, the Greater North Dakota Association, higher education and local economic development professionals and their organizations have agreed on the direction of the strategic plan and committed to carry out their respective assignments in the plan.
2. The plan sets measurable, practical, yet ambitious benchmarks to reverse demographic and economic trends in existence since the 1950s. Equally important, this plan suggests that 10 years of aggressive and continuous effort

North Dakota Economic Development Foundation: Strategic Plan

can reverse this 50-year trend. The pioneering spirit and work ethic that contributed to North Dakota's early settlement remains strong and vibrant even today. It is those strengths that make the progress possible.

3. This plan requires a broad approach to economic growth. North Dakota will be driven by opportunity and strategy, not react to outdated opportunities. Business recruitment, business formation, and business expansion are all new formidable parts of this comprehensive strategy.
4. To develop more career path opportunities for emerging talent, North Dakota will build on the existing "centers of excellence" in the state university system to create a more fertile climate for entrepreneurial development.

Goals:

(1) Develop a unified front for economic development based on collaboration, accountability, and trust.

(2) Strengthen linkages between the state's higher education system, economic development organizations, and private businesses.

(3) Create quality jobs to retain North Dakota's current workforce, and attract new high-skilled labor.

(4) Create a strong marketing image to build on the state's numerous strengths, including workforce, education, and quality of place.

(5) Accelerate job growth in diversified industry targets to provide opportunities for the state's long-term economic future.

(6) Strengthen North Dakota's business climate to increase global competitiveness.

North Dakota Economic Development Foundation: Strategic Plan

A primary issue for the state is its traditional lack of collaboration among economic development stakeholders. North Dakota is blessed with many organizations and agencies dedicated to economic development, yet most of them work independently of one another without a common vision or message. The lack of a unified front for economic development has diluted North Dakota's limited resources, and the state cannot afford to allow this to continue if it is to become more economically competitive.

One of the potential sources for collaboration is with the New Economy Initiative under the Greater North Dakota Association (GNDA). It began approximately two years ago with an effort to create statewide momentum for a more focused and comprehensive effort toward economic growth. The creation of the North Dakota Department of Commerce is a tangible response to many of the ideas described in the GNDA's New Economy Initiative working papers and reports, and can be viewed as a victory for GNDA leaders. By the same token, the DOC has a reasonable level of financial capacity and is in clear need of a strategy to follow, which this plan provides. DOC should be the hands-on implementation agent for economic development in the state of North Dakota. Nonetheless, certain tasks are assigned to partners best positioned to carry them out. With so much of its suggested economic agenda now incorporated into legislative and DOC program action, the GNDA can move into a more strategic role in the state's ambition to foster better economic growth. The natural progression for GNDA's New Economy Initiative would be to mature into a private sector-focused "think tank" to develop new ideas by identifying problems and potential solutions for consideration by North Dakota's public sector. Moreover, GNDA's membership represents a very important constituency that can be accessed for advice and help on implementation.

North Dakota Economic Development Foundation: Strategic Plan

Next, North Dakota must continue to develop the partnerships between the North Dakota University system, the private sector, and the economic development community to unlock the dynamic potential of this collaboration. The nation is shifting towards a research and knowledge-based economy, and North Dakota must accelerate its efforts to expand knowledge-based industries if the state is to compete successfully in the global economy.

In addition, local economic development agencies are critical to statewide success. By helping to lead each community to its fullest economic potential, the local professionals and their organizations can provide valuable feedback into needed progress; they can be a source for opportunity and essentially, the local partner to collective accomplishment. The Economic Development Association of North Dakota (EDND) can be a vital partner in the implementation of the strategic plan, and increased collaboration between the DOC and EDND is a strong step in improving the state's economic success.

The Department of Commerce has done a commendable job of forging partnerships with the local economic development agencies to present a common message to prospective clients; this trend must continue. The vigorous effort by DOC to communicate with stakeholders was commended in every workshop and telephone conference held with local and regional economic development professionals.

While each of these groups have done laudable and important work in moving North Dakota to the edge of new sophistication, each has its limitations. Strategies and goals outlined below recognize these strengths by suggesting that each group has a significant role to play: yet none, standing alone, can accomplish all the work needed to be done in the foreseeable future. The collective strengths of all the stakeholders will maximize productivity and improve results.

North Dakota Economic Development Foundation: Strategic Plan

Therefore, it is hoped that each suggested prime assignee will accept the lead and/or participatory responsibility in the spirit of the aggregate accomplishment.

The Foundation, with its stature and connections, can be the catalyst in developing a unified front for North Dakota's economic development. By bringing several parties together including the Department of Commerce, GNDA, the North Dakota University System, the private sector, and the local economic developers (EDND), the Foundation can put North Dakota in a competitive position to attain its economic potential. Not only should the Foundation focus the state's strategic efforts through its role as the catalyst for collaboration, **the Foundation must also be aware of its responsibility for establishing continuity to the long term state's economic development efforts. To ensure the consistent implementation of a viable and enduring Strategic Plan, the Foundation must be the anchor that sustains stability in times of economic turbulence and prosperity.**

North Dakota Economic Development Foundation: Strategic Plan

Summary and Prioritization of Goals and Strategies

Responsibility Responsibility Timeline

Goal 1 Develop a unified front for North Dakota based on collaboration, accountability, and trust.

Priority	Strategies:	Strategy Leader	Participate	Timeline
1	Expand Foundation membership to include greater representation from the North Dakota university system, agriculture industry, and rural communities while maintaining private sector influence.	Governor, ND Assembly	The Foundation	Winter 2003
2	Coordinate with GNDA's New Economy Initiative to enhance the state's economic development outcomes.	GNDA, DOC	The Foundation	Ongoing
3	Expand communication and coordination between the Department of Commerce and local economic development organizations to create more economic opportunities.	DOC	EDND	Summer 2002
4	Expand the Department of Commerce role as a lead generator for North Dakota communities and provide a menu of services to support locally generated leads.	DOC	Governor, ND Assembly	Summer 2002

Goal 2 Increase linkages between the university system, private sector, and economic development.

Priority	Strategies:	Strategy Leader	Participate	Timeline
1	Locally promote the workforce development programs of Williston State College, Lake Region State College, Bismarck State College, and the North Dakota State College of Science to local employers.	University system, EDND, GNDA	DOC	Summer 2002
2	Connect state and local economic developers with business incubator programs to encourage greater knowledge and support of emerging companies.	ND University system, EDND	DOC	Fall 2002
3	Develop a website that offers information about how North Dakota Universities meet the workforce needs of the state's target industries.	North Dakota university system	DOC, Commerce Cabinet	Fall 2002
4	Recommend the continuation of the North Dakota university system roundtable.	Governor, ND Assembly	The Foundation, Commerce Cabinet	Fall 2002
5	Recommend university system advisory boards to take a greater role in economic development.	ND University System	The Foundation, Commerce Cabinet	Fall 2002

North Dakota Economic Development Foundation: Strategic Plan

Goal 3 Create quality jobs to retain North Dakota's current workforce and attract new higher skilled labor.

Priority	Strategies:	Strategy Leader	Participate	
1	Develop business expansion initiatives.	EDND	SBDC, DOC	Winter 2003
2	Create and enhance workforce training programs that provide the skills needed by target industries.	University System	Workforce Division, DOC	Fall 2003
3	Expand state government job training incentives for technical skills.	Governor, ND Assembly	DOC	Winter 2005
4	Create an information clearinghouse for new business that provides financing, market intelligence, and incentives information.	Bank of North Dakota	EDND, DOC	Spring 2003
5	Build a publicly and/or privately funded seed stage or early venture capital fund.	GNDA	The Foundation, DOC, ND Assembly, Bank of ND	Winter 2003
6	Actively market entrepreneurial development successes.	DOC	University System, EDND	Spring 2003

Goal 4 Create a strong marketing image to build on the state's numerous strengths, including workforce, education, and quality of place.

Priority	Strategies:	Strategy Leader	Participate	
1	Measure North Dakota's image in various in-state and out of state constituencies,	DOC	GNDA	Fall 2002
2	Develop a statewide internal marketing effort to improve North Dakota's self image.	DOC, Commerce Cabinet	EDND	Summer 2003
3	Continue and expand volunteer participation in external marketing trips.	The Foundation	DOC	Ongoing
4	Improve the common portal that presents the state's marketing message and include demographic, economic, and cultural information about the communities in the state.	DOC	EDND	Summer 2003

North Dakota Economic Development Foundation: Strategic Plan

Goal 5	Accelerate job growth in diversified industry targets to provide opportunities for the state's long-term economic future.
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Priority	Strategies:	Strategy Leader	Participate
1	Encourage industry cross selling through an import substitution campaign.	GNDA	EDND Fall 2002
2	Recruit industries that complement supply chains for target industries and encourage entrepreneurial growth.	DOC	EDND,GNDA. Ongoing
3	Focus state tax incentives to support target industry development.	Governor, ND Assembly	Commerce Cabinet, DOC Winter 2003

Goal 6	Strengthen North Dakota's business climate to increase global competitiveness.
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Priority	Strategies:	Strategy Leader	Participate
1	Conduct annual business climate surveys of private sector leaders to identify strengths and weaknesses.	GNDA	DOC Summer 2003
2	Benchmark cost of doing business and quality of life indicators against regional and national competitors every two years.	DOC	GNDA Fall 2003

Key:

- The Foundation = North Dakota Economic Development Foundation
- DOC = Department of Commerce
- EDND = Economic Development Association of North Dakota
- GNDA = Greater North Dakota Association
- SBDC = Small Business Development Center

Plan Overview

The consulting team of AngelouEconomics, MGT of America, and Paragon Decision Resources is pleased to present the Strategic Plan for the North Dakota Economic Development Foundation (the Foundation). This plan contains the Foundation's vision and mission statements, goals, and strategies to fulfill them. In addition, the strategic plan outlines a series of next steps for the Foundation and defines its role in relation to the Department of Commerce. Finally, the plan proposes an economic development performance measurement system for North Dakota, including specific indicators and targets that can be used to monitor and evaluate the state's economic progress.

The Strategic Plan for the North Dakota Economic Development Foundation is composed of three main sections: Economic Assessment of North Dakota, the plan itself, and the implementation and performance measurement section. The economic assessment provides an analysis of the prevailing economic trends affecting North Dakota, providing the basis for the development of the goals and strategies described in the plan. The second section details the vision and mission, and goals and strategies to reach them. Each of the goals is followed by a rationale that explains the relevance of each goal to the North Dakota economy along with timelines to complete the strategies. In addition, each strategy is assigned to a particular agency or institution for implementation. Lastly, the final section of the plan is the implementation and performance measurement system. This section includes the proposed structure and the core functions for the Foundation, a monitoring system for evaluating the state's economic performance, and specific performance indicators and targets through 2012.

North Dakota Economic Development Foundation: Strategic Plan

The Strategic Plan proposes strategies that require participation from stakeholders other than the Foundation. The role of the Foundation is primarily to monitor the progress of those strategies to ensure that implementation occurs and measurable improvements result. The Department of Commerce is assigned the responsibility for the bulk of the strategies, since it is the implementing agency for this Strategic Plan. However, the Strategic Plan has several strategies where the direct participation of the Foundation in partnership with other organizations will be required. An explanation for the direct involvement of the Foundation and other organizations will be included under the respective strategies where they occur.

Developing an ambitious and comprehensive strategic plan for economic development is a major accomplishment for the Foundation. However, the Foundation's job is not over simply because the strategic plan has been completed. In some ways, the Foundation's work has just begun.

To help guide the Foundation into the future, this final section of the strategic plan:

- Proposes an operational structure for the Foundation based on input received during and after the April strategic planning workshops and the consulting team's best practice research.
- Proposes a method for monitoring and evaluating the state's economic performance and the implementation of this strategic plan; and
- Proposes specific performance indicators and targets through 2012.

Background

North Dakota Economic Development Foundation: Strategic Plan

During the 2001 session, the North Dakota Legislative Assembly created the North Dakota Economic Development Foundation. The Foundation's enabling legislation (SB 2032) detailed a number of items, including membership, funding and key functions. Highlights of key statutory mandates related to the Foundation are presented in the table below.

Table X: Key SB 2032 Statutory Mandates for the North Dakota Economic Development Foundation

Number of Members	15 - 30 members.
Appointment Process	Governor appoints all Foundation members.
Terms	Members serve two-year terms, half of initial members were granted one-year terms to initiate a cycle of staggered terms.
Required Representation	Cross-section of business, tourism, economic development; at least one member representing rural concerns.
Committees	Foundation required to elect Executive Committee composed of 5-7 members.
Funding	Foundation required to seek private sector funding for administrative expenses and to raise and distribute private funds for commerce-related activities.
Mandated Responsibilities	Advising Governor on selection of a Commissioner for the North Dakota Department of Commerce (DOC); Advising the DOC Commissioner; Developing a strategic plan for economic development in the state; Developing accountability standards, measurements, and benchmarks to evaluate the effectiveness of the DOC in implementing the strategic plan; Monitoring DOC tourism and economic development activities.

Methodology

To produce the Foundation's strategic plan, the project team collected input from a variety of sources, including North Dakota's university system, state and local economic development, the private sector, and government interests. The list of participants in the plan will be detailed in the succeeding pages. Interviews via telephone and in person along with three workshops were the primary sources of input that the project team gathered. The workshops allowed Foundation members, local economic developers, and Department of Commerce employees to describe the issues that impact North Dakota's economic development efforts and offer ideas on how the state may focus its efforts to meet its challenges and opportunities. Local economic developers and North Dakota university system leaders comprised the first workshop and they provided candid observations about the state's economic status and how it might be addressed. The second workshop featured Paragon Decision Resources, a site selection consultant with extensive experience in North Dakota, offering local economic developers and Foundation members its perspective on the state's strengths and weaknesses. The final workshop allowed the Foundation members to consider feedback generated in the previous two sessions, develop preliminary vision and mission statements, and set goals to guide the state's economic development efforts. Following the workshop, the project team interviewed several other stakeholders including leaders from North Dakota's university system and the recently organized New Economy Initiative to gather additional input on North Dakota's economic development efforts.

Prior to conducting the workshops, the project team reviewed several reports, plans, and studies that illustrated North Dakota's previous economic development efforts. The review of the state's prior efforts provided a basis for the project team to structure the workshops and develop preliminary ideas for the Foundation's strategic plan.

Acknowledgement of Input

The project team wishes to thank the following individuals for their time and valuable input collected during the course of the planning process.



Board Members

Senator Duaine Espegard
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Fargo

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Ottertail Power Company
Jamestown

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Dickinson

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MDU Resources
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North Dakota Economic Development Foundation: Strategic Plan

Other valuable contributors to the strategic planning process:

John	Hoeven	Governor of North Dakota
Dale	Anderson	Greater North Dakota Association
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Dana	Bohn	Greater North Dakota Association
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North Dakota Economic Development Foundation: Strategic Plan

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Jane	Priebe	Wahpeton EDC
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Irv	Rustad	Lake Agassiz Regional Planning Council
Judy	Sauter	Bismarck-Mandan Dev. Assoc.
Karen	Selensky	Greater North Dakota Association
Mark	Sovig	Tri-County Regional Dev. Council
Allan	Stenehjem	North Dakota Department of Commerce
Terri	Thiel	Dickinson CVB
Gene	Veeder	McKenzie County JDA
Lee	Vickers	Dickinson State University
Julius	Wangler	Red River Regional Council
Laura	Willard	ND Department of Commerce

This strategic plan was prepared with the assistance of the consulting team comprised of the following firms: AngelouEconomics, MGT of America, and Paragon Decision Resources. A profile of each firm is provided below.

AngelouEconomics (AE) is comprised of economic development and technology consultants with extensive experience in applying state-of-the-art approaches to strategic planning, marketing, site selection, and plan implementation in the most dynamic regions, both in the United States and abroad.

AE's is nationally known for providing a unique blend of consulting solutions to public and private sector clients. The firm emphasizes a practitioner's approach to economic development that involves not only development of strategies, but also

North Dakota Economic Development Foundation: Strategic Plan

implementation. Prior and ongoing experience in economic development and technology consulting qualify AE as preeminent in the field of technology recruitment and strategic planning.

In short, AE is an economic development consulting firm focusing on the needs of high technology companies and the communities seeking to recruit them.

MGT of America, Inc. (MGT) is a national public sector management consulting firm founded in Tallahassee, Florida in 1974. MGT has grown to employ more than 140 professionals in Texas, Washington, South Carolina, Florida, and California. The firm has conducted over 1,900 client engagements in 49 states, Puerto Rico, and several foreign countries.

The Austin regional office was founded in 1995 and specializes in organizational development, state and local government performance reviews, public policy research, and strategic planning. MGT has conducted organizational reviews, business process analysis, and planning and reengineering for state and local clients in Texas, Florida, California, Virginia, and Puerto Rico. Current Austin-office clients include the Texas Comptroller of Public Accounts, The University of Texas Athletics Department, the Houston Community College System, the U.S./Mexico Border Counties Coalition, the Commonwealth of Puerto Rico, and most recently, the Fort Worth Independent School District.

Paragon Decision Resources (Paragon) has a history which dates back to 1987 when Premier Decision Management, (their predecessor), a division of Premier Relocation Services, Inc. (a Weyerhaeuser Company) was founded to provide corporate mobility consulting services. In 1991, the senior management of Premier Decision Management acquired the corporate consulting division of Premier Relocation Services, Inc. from Weyerhaeuser Mortgage Company and renamed the entire organization to Paragon Decision Resources, Inc.

Paragon's primary service areas include: Facility & Economic Development; International and Domestic Relocation; and Group Move Planning and Implementation.

North Dakota Economic Development Foundation: Strategic Plan

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

ECONOMIC ASSESSMENT OVERVIEW

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

ECONOMIC ASSESSMENT OVERVIEW

AngelouEconomics (AE) is pleased to present the North Dakota Economic Development Foundation (NDEDF) with this Economic Assessment – the first of three components written for this report. In the following pages, you will find a variety of indicators highlighting the challenges facing North Dakota, and many of the findings will defy long-held notions regarding competitive geography especially concerning wages. Regardless, the Economic Assessment establishes a baseline from which foundation members, stakeholders, and the other North Dakota leaders can build on to create greater economic opportunities for the state’s citizenry. The Economic Assessment component is composed of the following sections: **Demographic & Economic Indices, Sectoral Analysis, and Target Industry Evaluations & Recommendations.**

The purpose of the Economic Assessment is to review the economic and demographic conditions, both current and historical, in North Dakota. This assessment, in combination with the Vision, Mission, Goals, and the Implementation Strategies, will provide the NDEDF the tools for determining further actions for improving North Dakota’s global competitiveness.

The Demographic & Economic Indices section includes the following:

- **Population Trends**
- **Educational Attainment**
- **Income & Wages**
- **Age Distribution**
- **Labor Force Trends**
- **Employment Trends**
- **Employment by Industry**

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Each indicator compares North Dakota's performance relative to the surrounding region and the nation. For regional comparison purposes, following seven states represent the Northern Great Plains region: Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, and Wyoming. Minnesota is a unique selection. First it captures about 42% of all regional growth; yet North Dakota and Minnesota share an interlocking economy, geography and demography.

The second section of North Dakota's Economic Assessment is entitled Sectoral Analysis, defining the strengths and opportunities available to the state's economy by applying AE's proprietary industry sector and shift-share analysis methodologies. This approach is designed to reveal the strength of North Dakota's economy in distinct industrial sectors, both at present and over time. North Dakota provides an interesting and unusual case study in that the Natural Resources sector is quite strong, yet closely related industries, such as Chemicals & Plastics, Industrial Machinery, and portions of Business & Professional Services remain quite weak. The key to success in fueling further employment and wealth creation from its Natural Resources sector will be to tap into this strength and maximize its opportunities to expand other industries.

The final section of the Economic Assessment report, Target Industry Evaluations, provides an informed analysis of North Dakota's existing target industries through a filter of the state's economic constraints and opportunities that were identified in the benchmark and sectoral analysis portions. AE was commissioned by NDEDF to evaluate opportunities within the following industries: **Value-added Agriculture, Energy, Advanced Manufacturing, Information Technology, and Tourism**. As a result of this analysis, AE had identified specific niche opportunities within these industries leveraging the state's economic strengths to create high quality jobs that will retain North Dakota's current workforce and attract new highly skilled labor in the near and long term future.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Summary of Findings

The following will provide a brief synopsis of the observations found in the Economic Assessment:

- The majority of industry sectors that North Dakota specializes in are growing at a slow pace, indicating the need for new approaches to economic growth based on the state's current economic strengths. North Dakota's turn to a more technology-oriented economy must not come at the expense of its traditional economic drivers. Coupling transition with tradition will in fact bring the kind of economic diversity necessary for reducing the boom-bust cycles seen in North Dakota's economic and demographic history.
- North Dakota's technology-related employment is growing, especially in Communication Services and Software & IT Services. Currently, the state employs about 60 percent the number of technology workers as would be expected given the national rate. Ample room for further growth in this sector is therefore available with the added advantage of avoiding the dramatic rise and fall in the so-called "dot.com" economy witnessed in the late 1990s.
- North Dakota is located within a slowly growing region, yet its neighbors are experiencing more rapid population growth.
- Wage and income statistics point to a gap between North Dakota, the Northern Great Plains region, and the nation as a whole. Higher salaries within the state will encourage North Dakotans to forego minor economic advantages in other areas of the country. The history shows that, in those periods when North Dakota has abundant good paying jobs, out-migration is substantially reduced. Hence, a high tech recruitment strategy for the state may provide a significant increase in incomes in future years.
- In the first half of the 1990s employment growth outpaced the nation showing that North Dakota residents prefer to remain in the state when economic opportunities are present. North Dakota's shift to service sector employment is slower than the national conversion rate.

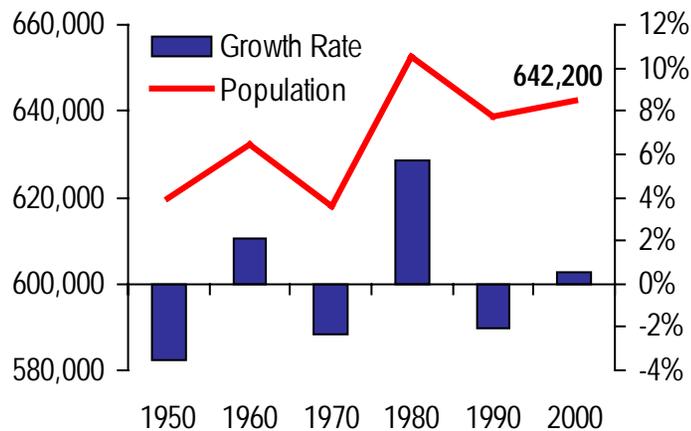
DEMOGRAPHIC & ECONOMIC INDICES

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Population Trends

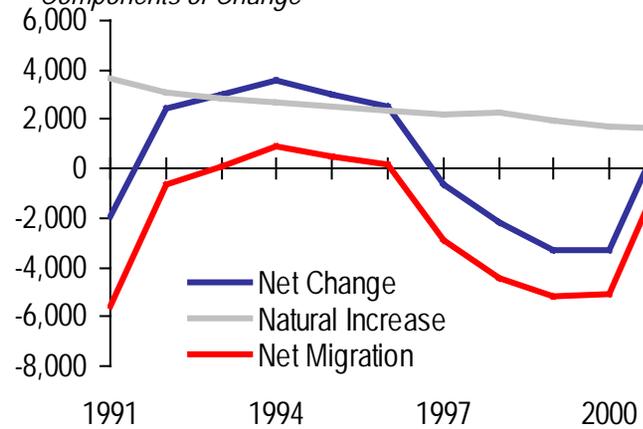
North Dakota Population, 1950 to 2000



Source: US Census Bureau

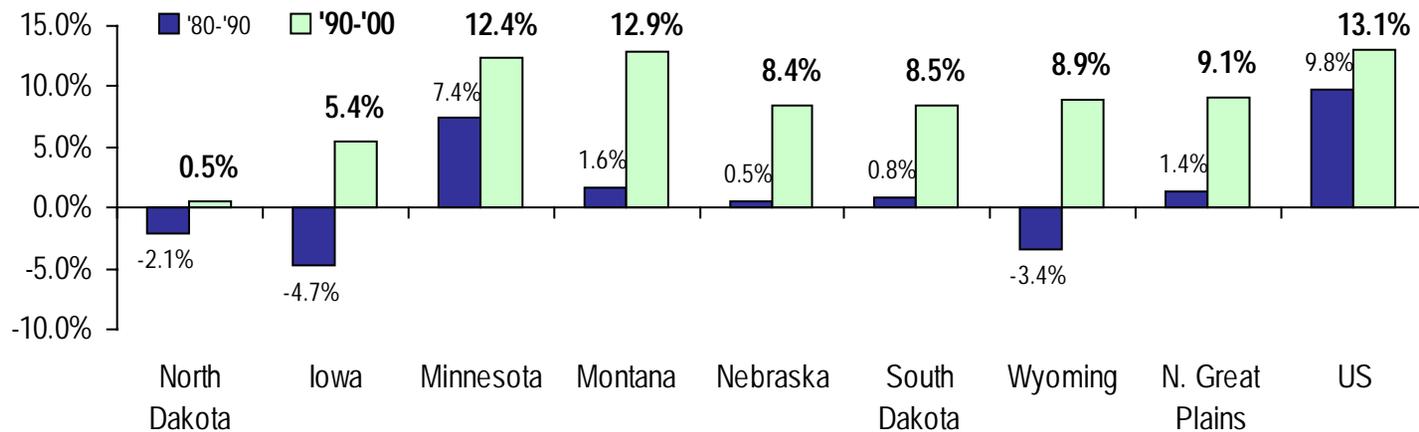
North Dakota Population Growth, 1991 to 2001

Components of Change



Source: AngelouEconomics; US Census Bureau; US Bureau of Labor Statistics

Population Growth Comparison, 1980 to 2000



Source: AngelouEconomics; US Census Bureau

North Dakota Economic Development Foundation: Strategic Plan

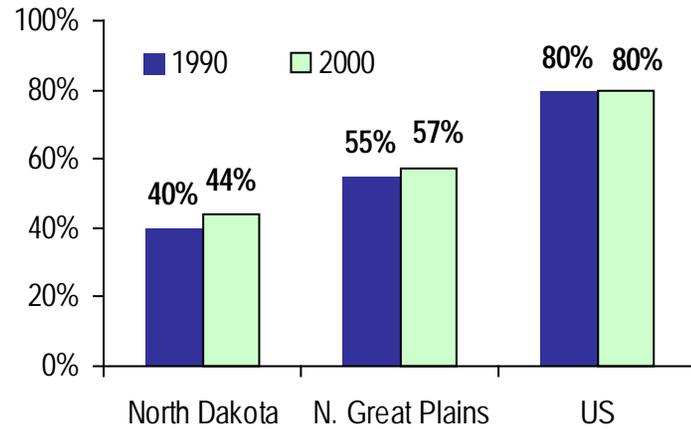
Economic Assessment

- **During the 1990s the state was able to reverse the negative growth trends that occurred in the 1980s.**
- North Dakota's population has increased by 3.6 percent over the past 50 years.
- During the last half-century, North Dakota's population grew by just 22,600 residents.
- Since the beginning of the 1990s, North Dakota, like the nation, has seen its rate of natural population increase (births minus deaths) decline.
- The 1990's population growth shows that North Dakota is overcoming the population exodus of the 1980s. The state has potential to continue its population growth trend as it continues its path towards economic expansion.

North Dakota Economic Development Foundation: Strategic Plan

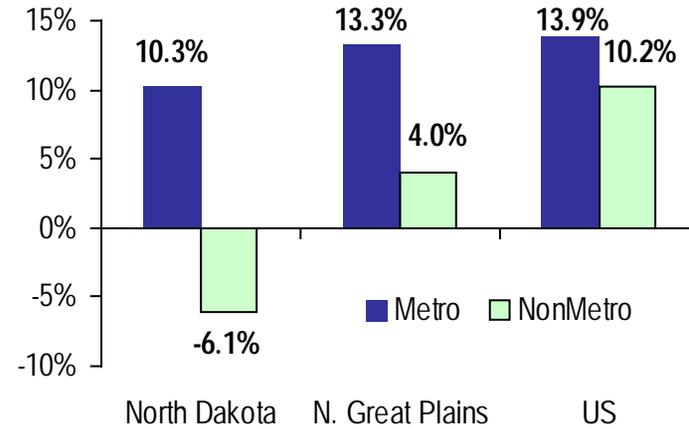
Economic Assessment

Metro Share of Population, 1990 & 2000



Source: US Census Bureau

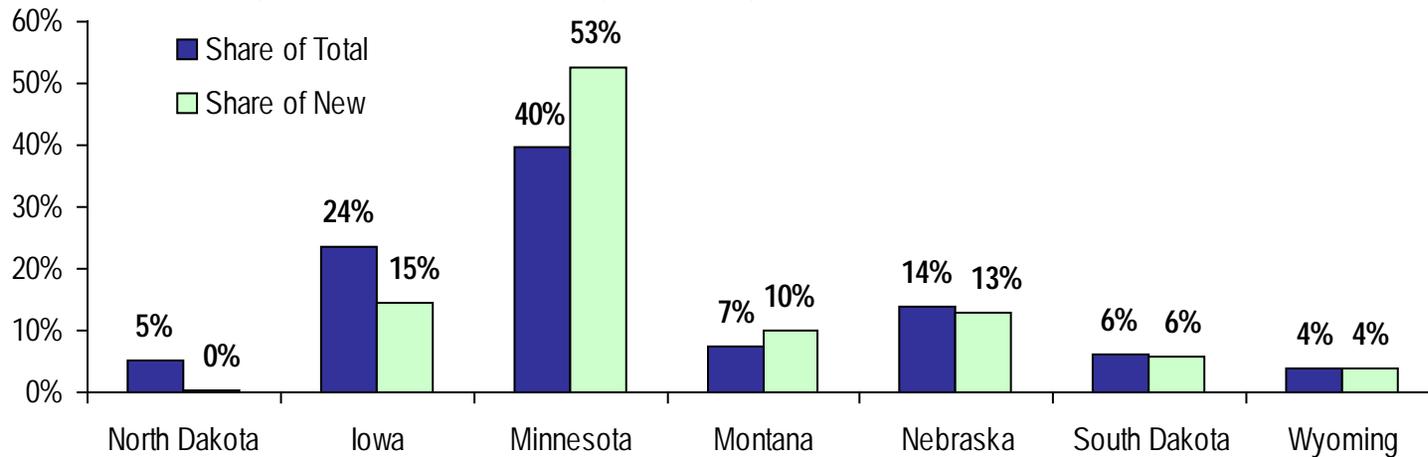
Population Growth Comparison, 1990 to 2000



Source: US Census Bureau

Share of Population in Northern Great Plains

Share of Total (2000) versus Share of New Growth (1990 to 2000)



Source: US Census Bureau

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

While North Dakota's share of its population residing in metropolitan areas has increased at a more rapid pace than the Northern Great Plains region or the US, the state remains largely rural.

- In 2000, 44 percent of North Dakota residents lived in cities classified as metropolitan (Bismarck, Fargo, and Grand Forks) by the US Census Bureau. Nationally four out of every five residents live in such areas. This reflects the substantial commitment to rural living, which North Dakota has traditionally experienced.
- The population of North Dakota's metropolitan regions increased by 10 percent during the last decade, almost as high as the region and nation's metropolitan areas.
- The rural remainder of North Dakota shed six percent of its population during the 1990s, while the rest of rural America grew 10 percent.

Strategic Implications

North Dakota is located within a slowly growing region overall, which is growing primarily due to the significant influence of the Minneapolis-St. Paul metropolitan area. An impediment to the state's retention of residents appears to be linked, at least in part, to North Dakota's lack of a dominant metropolitan region. National trends point to an increasing concentration of employment and, consequently, population growth in the nation's metropolitan regions. Of the seven states within the Northern Great Plains, only Minnesota is growing at a pace on par with the nation. During the last decade, the Minneapolis-St. Paul region, the driver of Minnesota's growth, accounted for 42 percent of all population growth throughout the Northern Great Plains region.

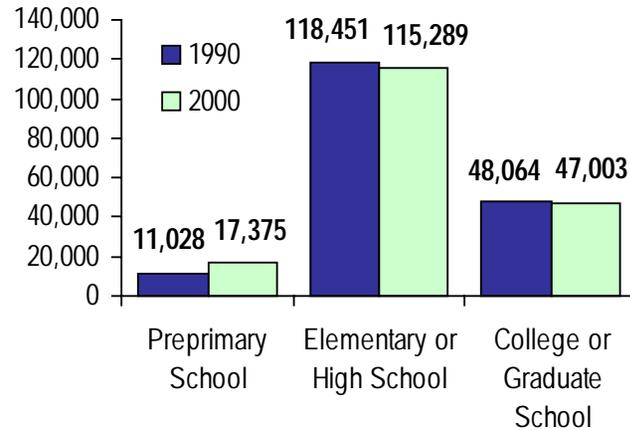
North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Educational Attainment

North Dakota School Enrollment, 1990 & 2000

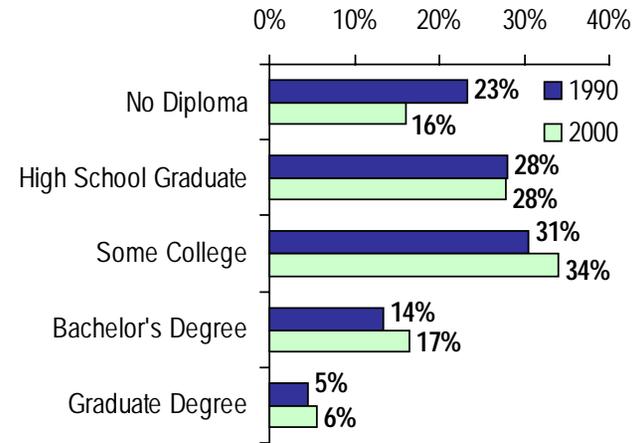
Persons 3+ years of age



Source: US Census Bureau

Educational Attainment, 1990 & 2000

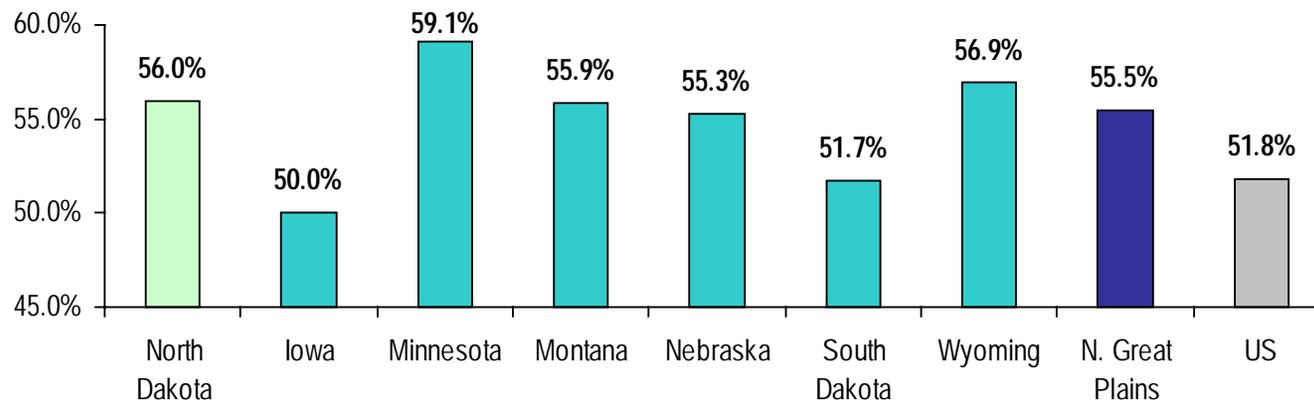
Persons 25+ years of age in North Dakota



Source: US Census Bureau

Share of Adults with Some College or Greater Comparison, 2000

25+ years of age



Source: US Census Bureau

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

North Dakota has enjoyed a measurable improvement in its education attainment levels during the last decade.

- The share of North Dakotans, who have earned a bachelor's degree or higher, increased from 18 to 22 percent, similar to the national increase.
- North Dakota's high school graduation rates increased more quickly than the rest of the region and nation over the last ten years. The state's share of its adult population that has graduated from high school increased from 77 to 84 percent.
- North Dakota's population share with formal education beyond high school is growing.
- North Dakota has significantly reduced its high school graduation factor as a percent of the general population.

Despite a slight decline between 1990 and 2000, the state leads the region in the share of its student population enrolled in college or graduate school.

- North Dakota has performed better than most states in the region in terms of the share of students enrolled in higher education. .

Strategic Implications

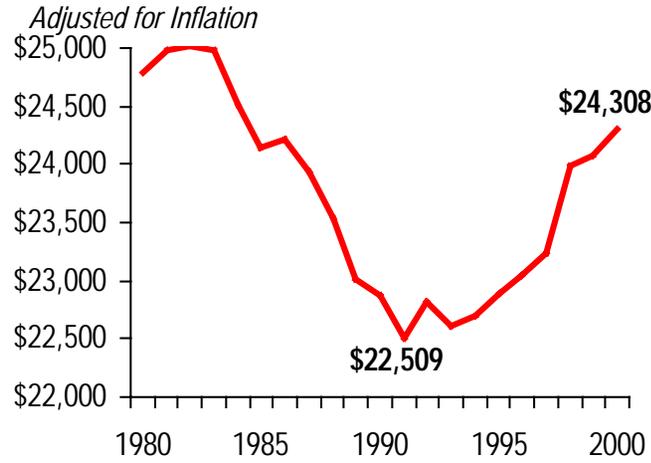
The North Dakota K-12 school system and universities are clearly performing exceptionally well, producing an educated workforce. Retaining those educated workers is an important step in building a generation length economic growth process. Recapturing the public sector investment in education through high skill/high wage jobs will accelerate the prosperity that North Dakota has periodically enjoyed in the past century. In other words, the development of an aggressive economic development strategic plan that targets technology-related industries will allow the state to retain its greatest asset, educated young people.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

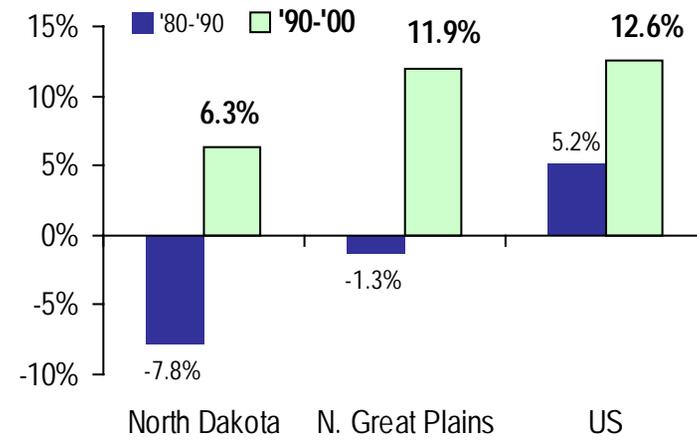
Income & Wages

North Dakota Average Wage per Job, 1980 to 2000



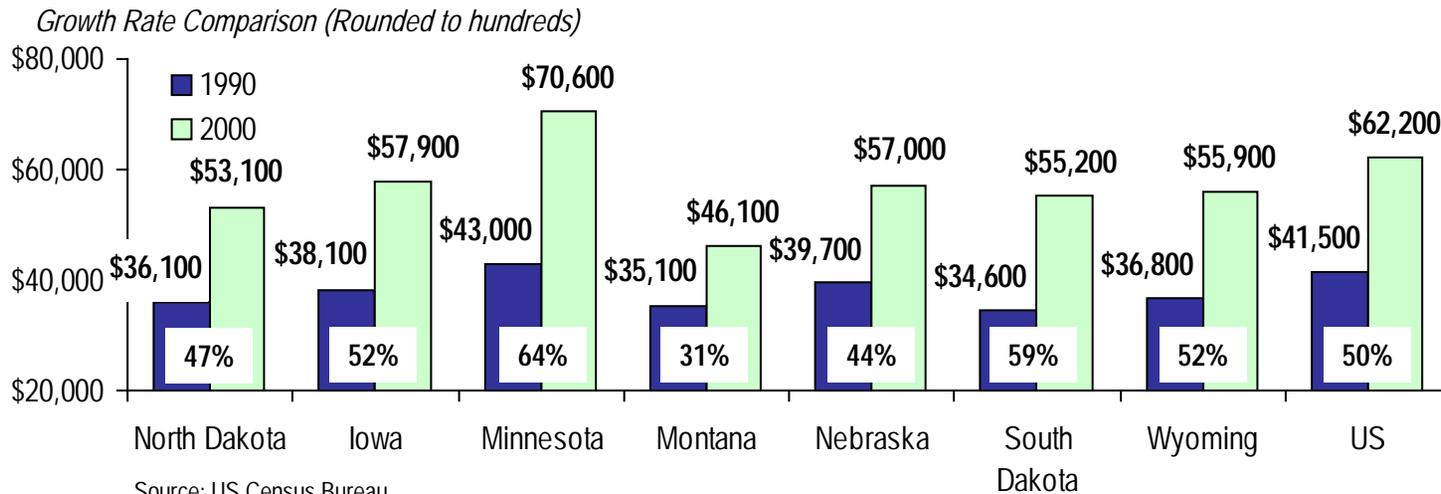
Source: US Bureau of Economic Analysis

Wage Growth Comparison, 1980 to 2000



Source: US Bureau of Economic Analysis

Median Income for 4-Person Families, 1990 & 2000



Source: US Census Bureau

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

In the 1990s North Dakota has reversed the decline in wage rates seen in the 1980s suggesting potential for the future.

- North Dakota's wage growth in the 1990s mirrors the state's advances in population and employment growth displaying that the state is moving towards greater economic success.
- Between 1990 and 2000, North Dakota's average wage increased 46 percent.
- From 1990 to 2000, the median income for a four-person family increased 47 percent in North Dakota, just slightly slower than the US.
- During the past two decades, the average wage in North Dakota increased 105 percent, ahead of Montana and Wyoming.

Strategic Implications

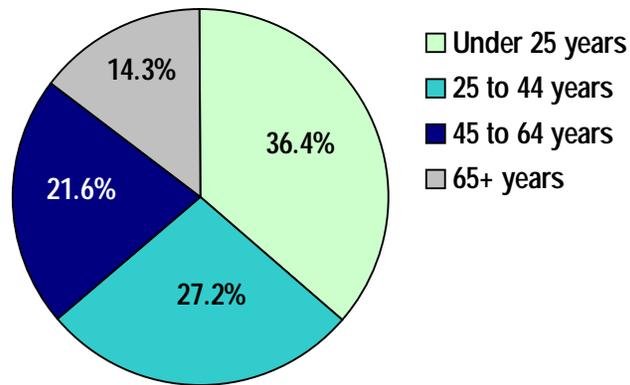
North Dakota's wage rates are difficult to measure in relative strength due to the impact of population growth in Minnesota's Twin Cities metropolitan area. That area has captured 42% of the multi-state population growth skewing wage rates. Yet Minnesota's proximity to North Dakota and their clearly interlinked economies provides substantive opportunities to North Dakota's economy. Wage and income statistics point to a traditionally fluctuating but recently stabilizing gap between North Dakota, the Northern Great Plains region, and the nation as a whole. Recent trends suggest optimism for improving wage rates. By continuing to target higher impact, technology-oriented industries, North Dakota can expect to see further increases in the state's average wage rates. In doing so, high salaried employees will reinvigorate the rest of the economy as their increased buying power will increase demand for retail sales and other services.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Age Distribution

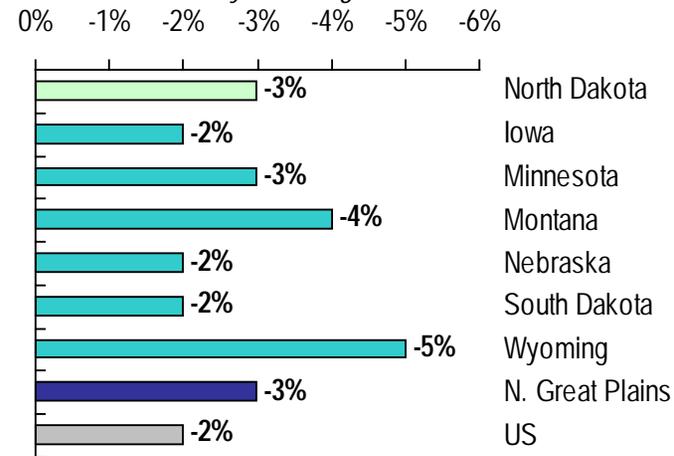
North Dakota Age Distribution, 2000



Source: US Census Bureau

Change in Share of Population, 1990 to 2000

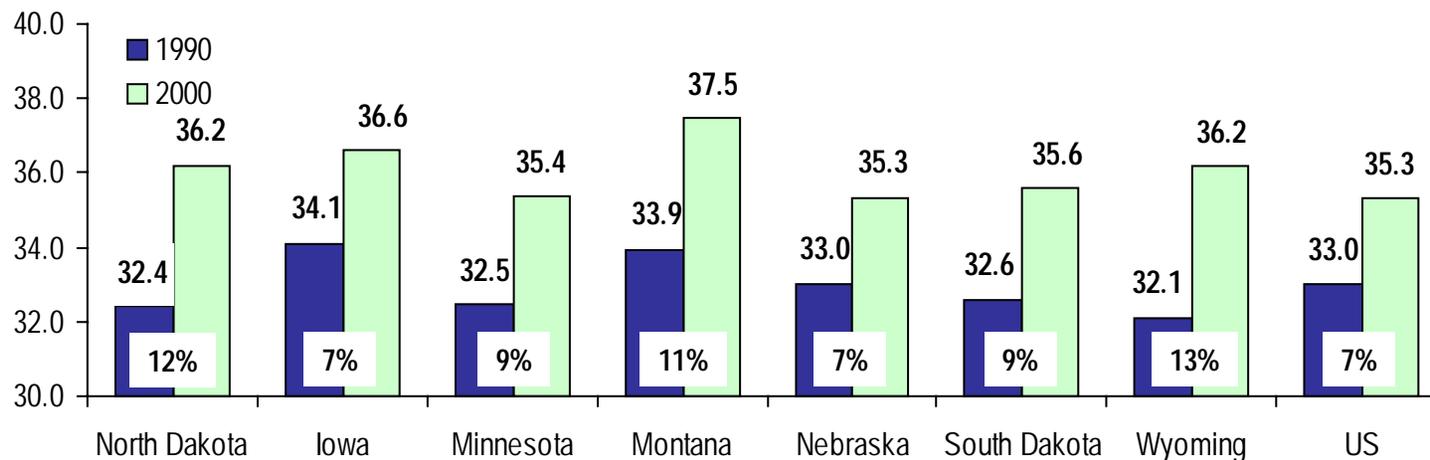
Persons 25 to 44 years of age



Source: US Census Bureau

Median Age Comparison, 1990 & 2000

Percent Change



Source: US Census Bureau

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Newly released US Census data indicates that the nation's population is aging. North Dakota is not immune.

- Over the last decade, North Dakota, the region, and the nation all experienced a decline in their share of population 25 to 44 years of age. This is the age group that most companies tend to review when making capital investment decisions.
- Between 1990 and 2000, the share of North Dakotans under the age of 25 fell from 38.1 to 36.4 percent, the second largest decrease among Northern Great Plains states behind Wyoming.
- During the same period, the state's share of residents 65 years or older increased by half a percentage point, while this age group's share fell both nationally and regionally.

Strategic Implications

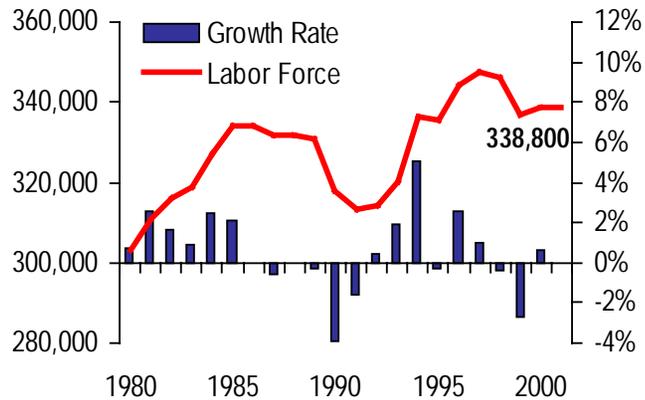
The US is clearly experiencing an aging population baby boomers reach retirement age and birthrates continue to fall across the country. Immigration has been a source of supply for the nation's under 25 population much like North Dakota's original settlers. Unfortunately, North Dakota has been a source of supply to many other destination states and communities. The quality and quantity of the workforce is now a prime measurement for private sector capital investment. If North Dakota's well-educated workforce can be retained and capital investments increase this will in great measure reverse the population decline and lead to overall higher incomes and prosperity.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

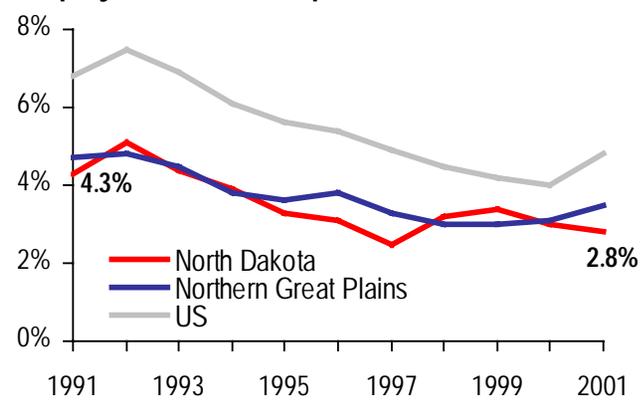
Labor Force Trends

North Dakota Civilian Labor Force, 1991 to 2001



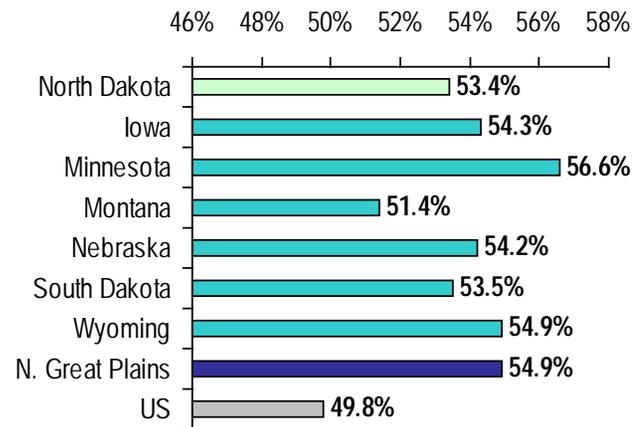
Source: US Bureau of Labor Statistics

Unemployment Rate Comparison, 1991 to 2001



Source: US Bureau of Labor Statistics

Labor Force Participation Rates Comparison, 2001



Sources: US Bureau of Labor Statistics; US Census Bureau

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

The growth in North Dakota's labor force throughout the 1990s presents a significant reversal of the trends the state experienced during the latter half of the 1980s.

- A very positive fact is that in 2001, both North Dakota and the Northern Great Plains region had a considerably larger percentage of their population participating in their workforces than the nation as a whole.
- North Dakota's civilian labor force increased by approximately eight percent despite having experienced a slight population decline during the same period,
- Unemployment rates in North Dakota dropped to 2.8 percent from 4.3 percent in the early 1990s, a trend similar to the region and the nation.

Strategic Implications

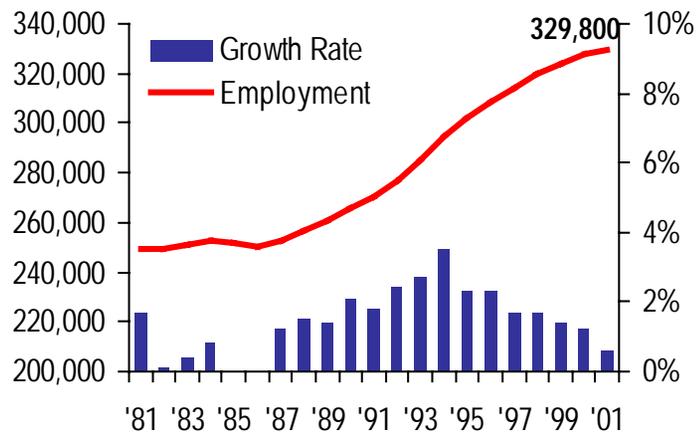
On one hand, the above statistics reflect a healthy workforce climate in North Dakota. The state's labor force is growing more rapidly than the overall population, and its unemployment rates have remained at historically low levels despite the current recession. These statistics also may point to some hidden challenges. North Dakota's low wage occupations are forcing a greater share of households to rely on dual incomes to make ends meet. 2) Compared to the nation, a larger percentage of older workers in the state are continuing to work rather than exit the workforce at traditional retirement or near retirement age. With renewed emphasis on growing the state's high tech economy, career path opportunities for young people will increase and emigration will be reduced. Emigration will be on a decline and as older workers will eventually go into retirement there will a pipeline filled with young workers. Also, older workers may take more advantage of traditional age retirement options.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

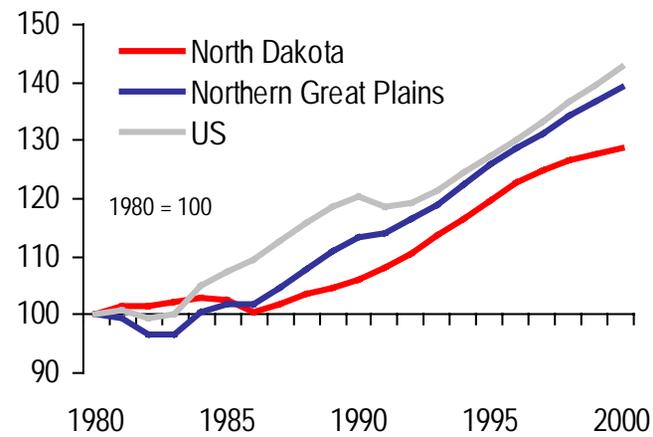
Employment Trends

North Dakota NonFarm Employment, 1981 to 2001



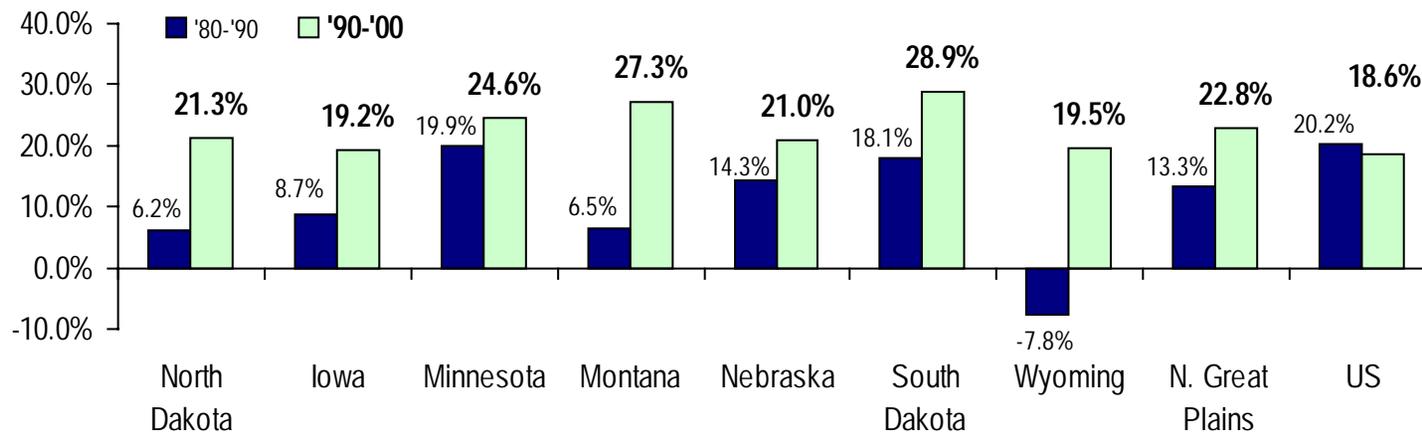
Source: US Bureau of Labor Statistics

Total Employment Index, 1980 to 2000



Source: US Bureau of Economic Analysis

Total Employment Growth Comparison, 1980 to 2000



Source: US Bureau of Labor Statistics

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Employment statistics for North Dakota indicate the state's economy has enjoyed a 24 percent increase in nonfarm payrolls since 1990, outpacing national employment growth for the last 11 years.

- During the same period, Northern Great Plains employment increased 25 percent while the US economy overall expanded 21 percent.
- From 1990 to 1994, North Dakota employment growth consistently outpaced the rest of the region and the nation, as the state enjoyed a compounded annual growth rate (CAGR) of 2.1 percent.
- Wage and Salary employment, which includes all workers regardless of industry, indicates that the North Dakota economy during the 1990s (21% increase) far exceeded its performance in the 1980s (6% increase).
- As expected, the downturn in the US economy in the last 18 months has also caused employment levels throughout the Northern Great Plains to fall.

Strategic Implications

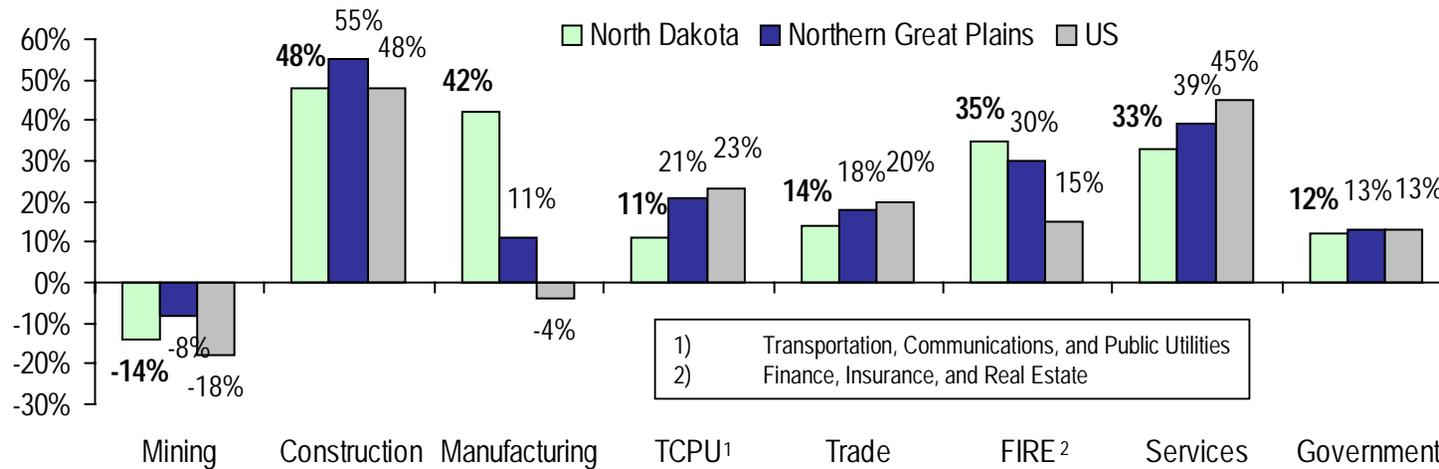
The above employment estimates point to an interesting trend in employment growth for North Dakota. For the last 20 years, the periods in which the state outpaces the rest of the country in terms of employment growth have come in times of national recession, a characteristic typically referred to as counter-cyclical. This further underscores the population's preference to remain in North Dakota, all economic consideration being equal. By strengthening the state's industrial clusters, the state can gain more than its fair share of regional jobs. A strong selling point for the state is, in fact, its strong work ethic and stability of its workforce in times of economic duress for the rest of the nation.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

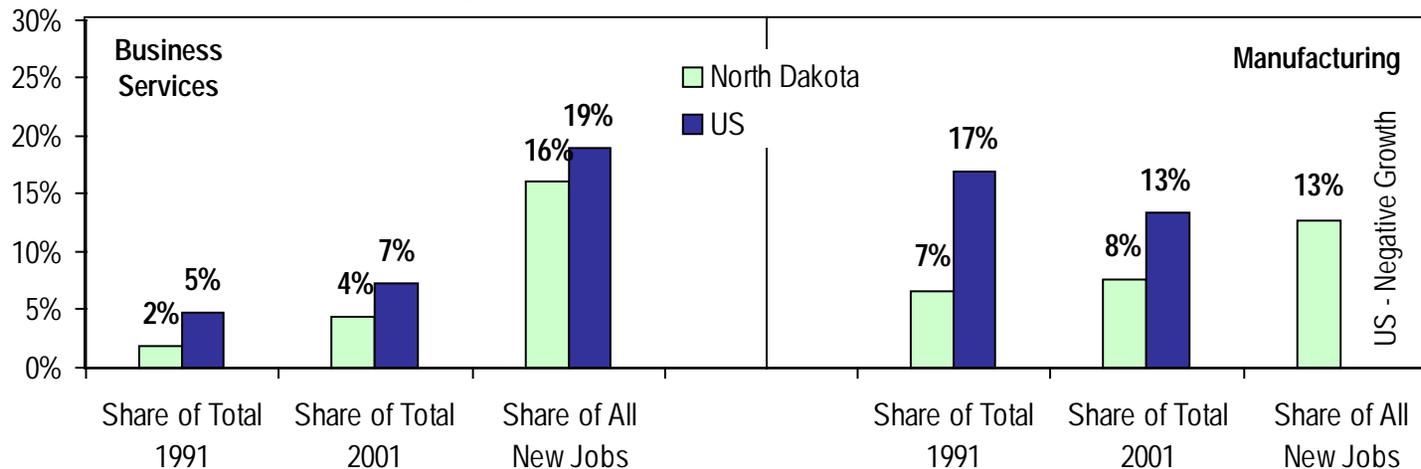
Employment by Industry

Growth Rate by Industry and Location, 1991 to 2001



Source: US Bureau of Labor Statistics

Business Services & Manufacturing Employment Comparison, 1991 to 2001



Source: US Bureau of Labor Statistics

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Since 1991, North Dakota has experienced its strongest industry growth rates in Construction and Manufacturing.

- North Dakota's Services sector created 23,300 jobs (33% increase), accounting for nearly 40 percent of all new jobs in the state, similar to national trends.
- The only industry sector in North Dakota that lost jobs during this 10-year period was Mining, which also experienced losses at the regional and national levels.

Business Services, a subsector of the larger Services industry, accounted for a greater job creation share in North Dakota than Manufacturing.

- Business Services accounted for 16 percent of all new jobs in North Dakota with the creation of 9,500 new positions. Across the country, Business Services accounted for 19 percent of total job creation.
- North Dakota increased its manufacturing share of employment from 7 to 8 percent in the 1990s contrasting sharply with the overwhelming the loss of US manufacturing jobs. North Dakota should be commended for greater progress than many states and even nations.

Strategic Implications

North Dakota exceeded the nation in the creation of manufacturing jobs during the last 10 years. Employment indicators released by the US Bureau of Labor Statistics point to a clear trend in the transition the national economy is making away from manufacturing towards a more services-oriented economy. Services include good paying jobs in legal, IT, engineering, software development, architectural, accounting, and research services, demanding and economically rewarding careers. North Dakota successfully grew this portion of its economy during the last decade and clearly the state has the ability and the capacity to further increase its growth. Such continued progress will help abate the out-migration trends among skilled workers

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

SECTORAL ANALYSIS

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

SECTORAL ANALYSIS

Location Quotients as Diagnostic Tool

AE defines industry sectors as highly integrated groups of businesses with strong vertical and horizontal linkages. This definition achieves a much higher level of detail than the standard classification of the 10 major industries (manufacturing, services, etc.). AE categorizes businesses according to their final product and how these products are related to each other and integrated along the vertical supply chain.

$$LQ = \frac{\frac{\text{Regional Industry Employment}}{\text{Total Regional Employment}}}{\frac{\text{National Industry Employment}}{\text{Total National Employment}}}$$

Traditionally, the economic growth of regional economies has been described in terms of the growth of a region's "basic" (or primary) industries. These industries typically export their goods or services outside the region, supporting ancillary industries such as retail, housing construction, and personal services. The locational distribution of these facilities was largely attributed to natural advantages (e.g., natural resources and climate), cost factors (e.g., distance to market, labor costs), and existing transportation infrastructure. However, new economic structures and the globalization of economies have put these competitive factors in a new perspective.

Increased competition and the emergence of technology have altered the location requirements of many businesses. Technology firms are increasingly drawn to regions because of formal and informal relationships with public sector institutions (such as education and training facilities) that can supply a trained pool of workers. These new linkages establish "developing industrial sectors" in which firms build relationships with existing specialized suppliers throughout a region. The presence of such firms may come as a result of entrepreneurship, corporate relocation, expansion of existing companies, or perhaps spin-offs. These concentrated sectors then attract additional supplier firms and supporting businesses from outside of the area. By creating a "critical mass" of production, labor, and information, related original

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

equipment manufacturers (OEMs) and supplier and sub-tier firms are attracted to regions with these developing sector concentrations to take advantage of the existing human and physical infrastructure.

To assess the strength of a sector in a regional economy, the location quotients are calculated by comparing the sector's share of total local employment to the sector's national share. This ratio will yield a value generally between 0.00 and 2.00, where 1.00 demonstrates an equal share percentage between the local and national economies. Sectoral concentrations greater than 2.00 indicate a strong sector agglomeration, while those less than 0.50 indicate extremely weak sectors.

Shift-Share Analysis as a Diagnostic Tool

Shift-share analysis is one way to account for the competitiveness of a state's industries and to analyze their potential contribution to its economic base. This analysis is utilized to identify employment changes in various business sectors over a specific period of time. Shift-share indicates threats and opportunities from regional, state, and industrial influences.

Shift-share analysis breaks down employment growth (or decline) in a state over a given time period into three components: (1) a regional growth effect, which assumes the growth (or loss) of employment in a state mirrors the regional trend, (2) an industry mix effect, which is the amount of change in employment the state would have experienced had each of its industries grown at their regional rates, less the regional growth effect, and (3) a competitive effect, which is the difference between the actual change in employment and the employment change to be expected if each industrial sector grew at the regional rate and thus determines the state effect of industry employment. The sum of these three effects equals the actual change in total employment within a state over a prescribed time period. This is a starting point for developing target industries.

North Dakota Economic Development Foundation: Strategic Plan

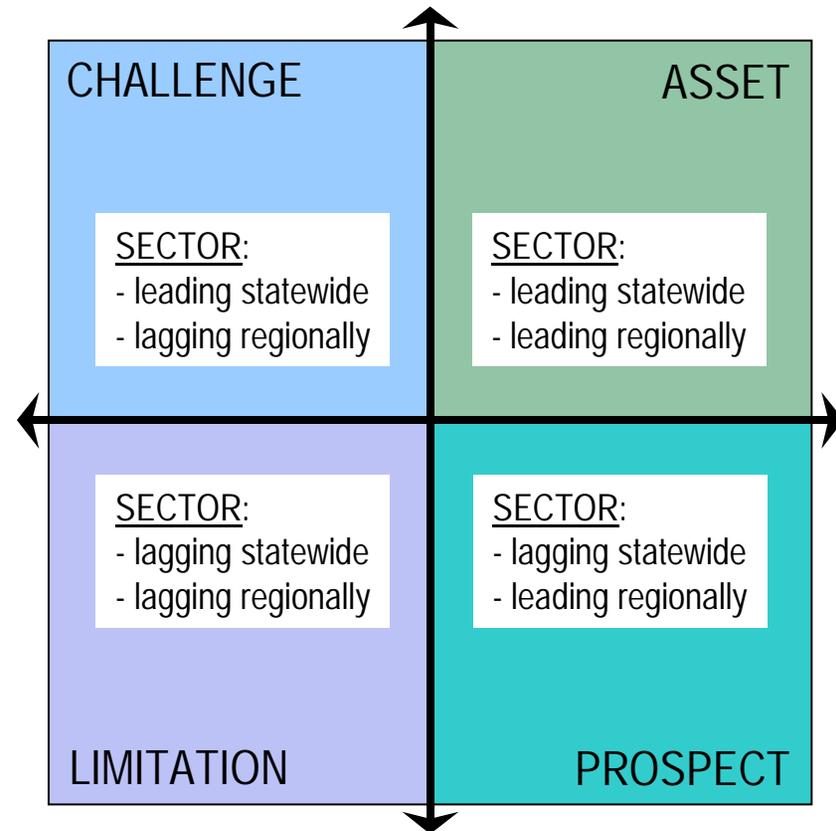
Economic Assessment

ASSET – statewide sector growth faster than overall statewide employment growth; regional sector growth faster than overall regional growth (fast statewide growth in a quickly growing sector)

PROSPECT – statewide sector growth slower than overall statewide employment growth; regional sector growth faster than overall regional growth (slow statewide growth in a quickly growing sector)

CHALLENGE – statewide sector growth faster than overall statewide employment; regional sector growth slower than overall regional growth (fast statewide growth in a regionally declining or lagging sector)

LIMITATION – statewide sector growth slower than overall statewide employment growth; regional sector growth slower than overall regional growth (slow statewide growth in a regionally declining or lagging sector)



North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

North Dakota Sectors

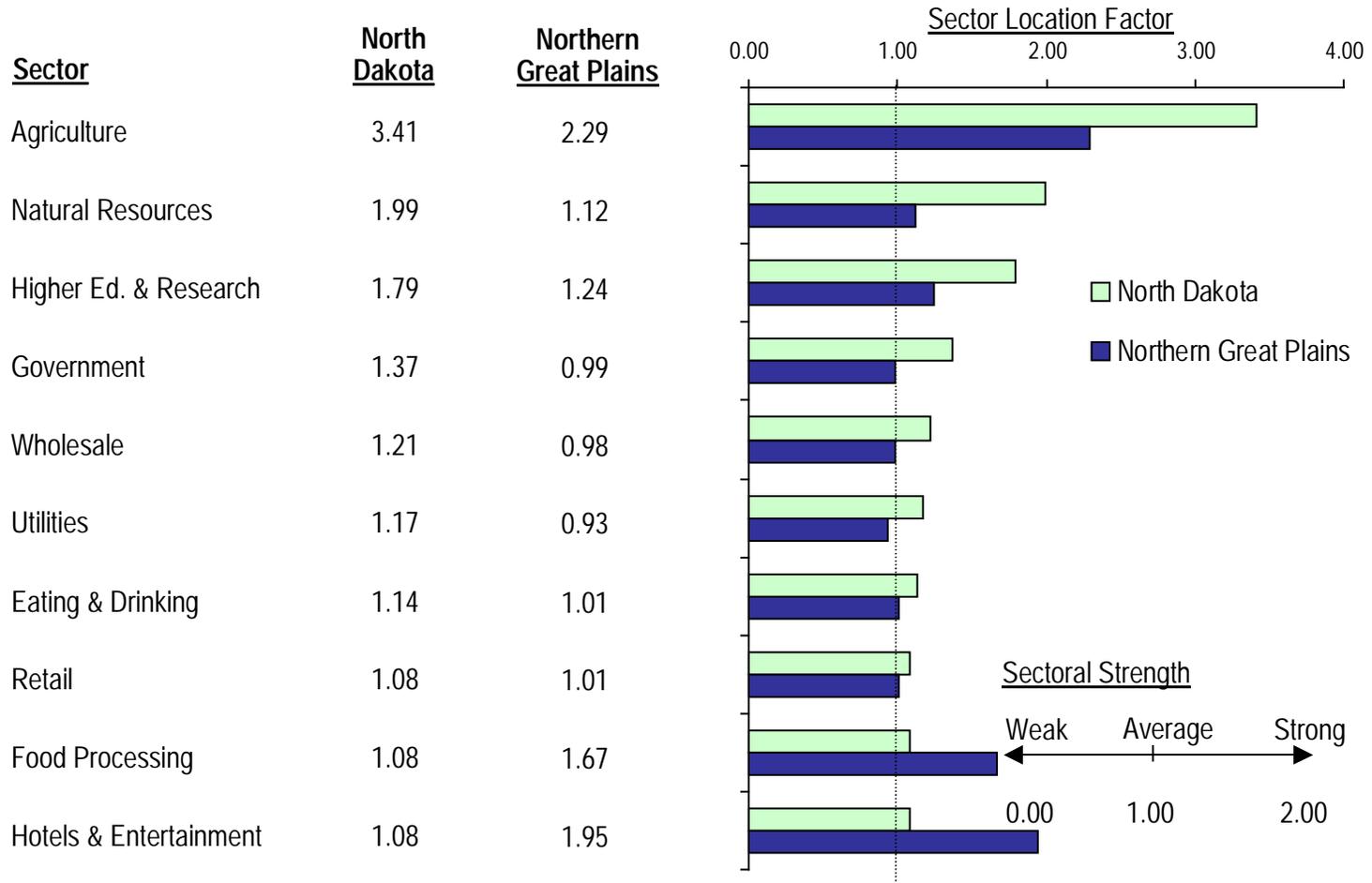
This list ranks industrial sectors for North Dakota and the Northern Great Plains ranked according to North Dakota's degree of specialization. The number of employees and businesses along with each firm's Standard Industrial Classification (SIC) code is provided by Dun & Bradstreet. AE has developed and uses its own proprietary classification system by which each SIC code is assigned to one of the following sectors.

Sectoral Employment, 2002							
Sector	Shift-Share	North Dakota			Northern Great Plains		
		Jobs	Firms	Ratio	Jobs	Firms	Ratio
Agriculture	<i>Asset</i>	23,284	9,176	3.41	305,060	124,252	2.29
Natural Resources	<i>Limitation</i>	4,012	278	1.99	44,045	2,879	1.12
Higher Ed. & Research	<i>Prospect</i>	14,302	111	1.79	193,539	2,266	1.24
Government	<i>Asset</i>	55,481	2,096	1.37	783,382	25,811	0.99
Wholesale	<i>Limitation</i>	22,459	2,672	1.21	354,692	37,778	0.98
Utilities	<i>Limitation</i>	4,608	254	1.17	71,187	3,788	0.93
Eat/Drink	<i>Challenge</i>	20,139	1,542	1.14	350,760	26,541	1.01
Retail	<i>Limitation</i>	46,116	5,020	1.08	845,354	91,628	1.01
Food Processing	<i>Challenge</i>	4,967	160	1.08	150,227	2,727	1.67
Hotels & Entertainment	<i>Asset</i>	13,199	1,209	1.08	228,783	22,230	0.95
General Services	<i>Challenge</i>	18,756	4,233	1.03	342,740	74,737	0.97
Health Services	<i>Limitation</i>	34,843	2,054	1.01	758,974	34,997	1.12
Civic Enterprises	<i>Prospect</i>	12,811	2,156	1.00	288,204	34,796	1.15
Logistics & Distribution	<i>Prospect</i>	9,019	1,188	0.95	190,859	17,079	1.03
Housing & Construction	<i>Prospect</i>	20,001	3,371	0.90	425,172	61,377	0.98
Software & IT Services	<i>Asset</i>	6,226	293	0.86	103,335	8,261	0.73
Financial Services	<i>Prospect</i>	15,579	1,980	0.86	443,575	30,861	1.25
Biotechnology	<i>Challenge</i>	3,313	99	0.83	58,461	2,138	0.75
Business & Prof. Services	<i>Asset</i>	37,885	4,972	0.77	809,516	100,610	0.84
Transportation Services	<i>Challenge</i>	2,871	241	0.75	56,163	3,971	0.75
Mass Media	<i>Limitation</i>	4,950	461	0.67	141,002	9,503	0.98
Aerospace & Defense	<i>Prospect</i>	1,183	14	0.54	20,956	268	0.49
Consumer Goods	<i>Challenge</i>	1,859	165	0.53	55,624	3,508	0.82
Communication Equipment	<i>Challenge</i>	650	10	0.52	20,733	271	0.84
Communication Services	<i>Asset</i>	1,837	210	0.46	46,135	3,559	0.59
Industrial Supplies	<i>Challenge</i>	2,460	236	0.35	130,928	6,458	0.96
Material Supplies	<i>Challenge</i>	2,279	189	0.34	143,343	4,893	1.08
Transportation Equipment	<i>Limitation</i>	1,261	58	0.32	43,652	910	0.56
Electronics	<i>Challenge</i>	792	31	0.27	56,738	976	1.00
Chemicals & Plastics	<i>Challenge</i>	1,509	72	0.26	72,117	2,288	0.63
Industrial Machinery	<i>Challenge</i>	469	39	0.23	28,988	934	0.73
Apparel & Textiles	<i>Challenge</i>	465	74	0.13	21,152	1,964	0.31
Computer Equipment	<i>Limitation</i>	62	13	0.05	18,544	318	0.78
Semiconductors	<i>Limitation</i>	0	0	0.00	3,548	68	0.16
TOTAL EMPLOYMENT		390,239	46,544		7,629,690	780,014	

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Sectoral Distribution: STRONG for North Dakota & Northern Great Plains



North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Key Findings – STRONG Sectors

By far the strongest location quotient (LQ) recorded by a North Dakota industry sector is in **Agriculture**, recording a value equal to 3.41 and employing nearly 23,300 workers statewide. In other words, the state employs over three times as many workers in Agriculture than would be expected, given the national rate. The state's high LQ in this sector points clearly to the extraordinarily important role North Dakota plays in the Great American Breadbasket. Indeed, the Northern Great Plains region as a whole excels in the raising of crops and livestock to feed the world's growing population.

North Dakota's second strongest LQ is found in **Natural Resources**, which includes oil and gas drilling, coal mining, metal mining, logging, and the mining of other nonmetallic minerals. The state employs approximately 4,000 workers in 278 firms throughout the state, registering an LQ of 1.99. North Dakota's Natural Resources assets lie mostly in oil, natural gas, and coal, primarily concentrated in the western and central portions of the state.

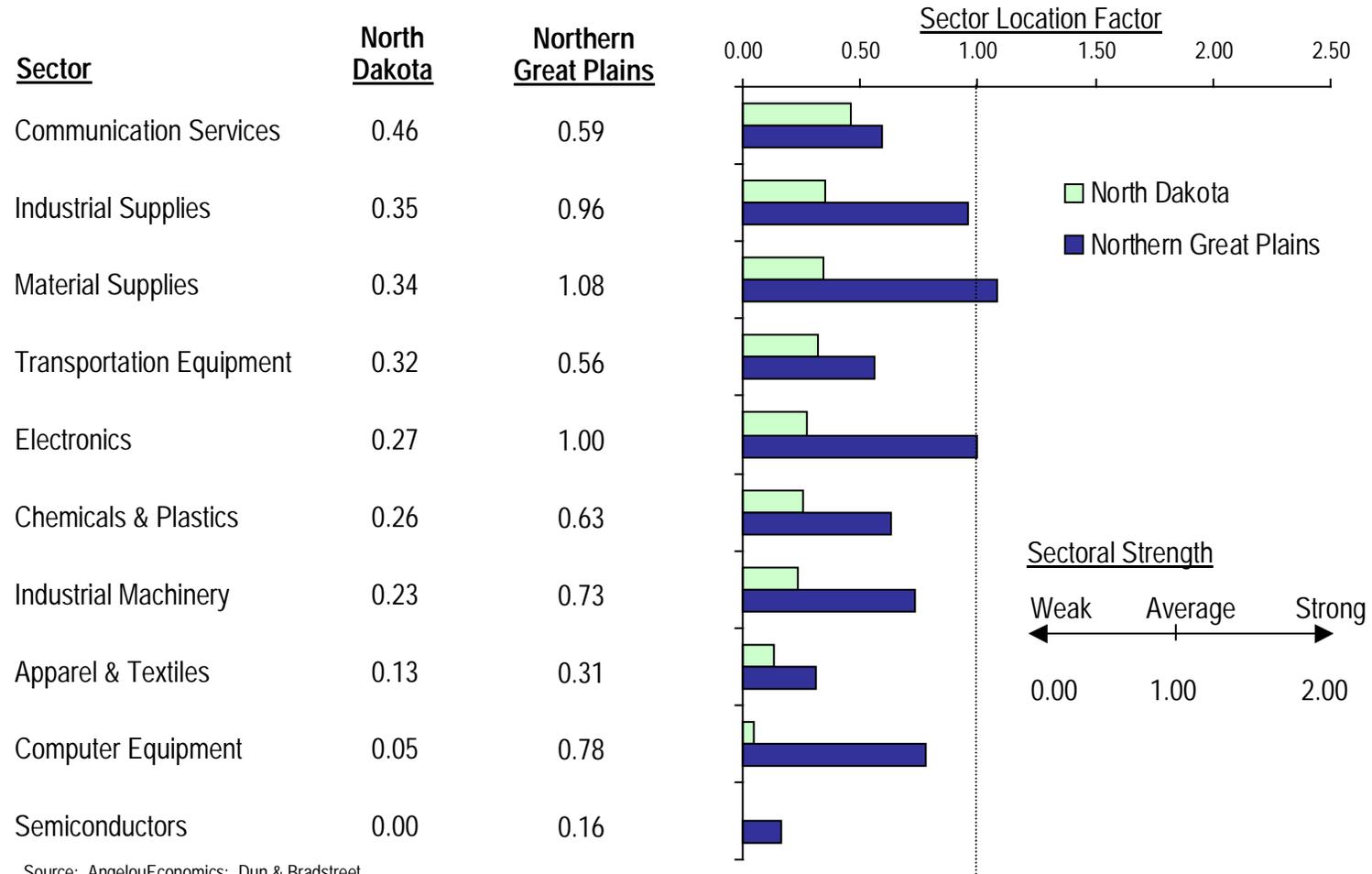
Higher Education & Research's high LQ of 1.79 reflects the great emphasis North Dakotans' have historically placed on educating their young people. This sector, which includes teaching professionals and staff in both public and private universities, junior colleges, and commercial and noncommercial research organizations, employs 14,300 at institutions across the state.

Other sectors of prominent strength in the state economy are **Government** (LQ 1.37), **Wholesale Trade** (1.21), and **Utilities** (1.17). The Wholesale Trade sector's strength is most likely related to the state's strong agricultural economy. Utilities, which includes electric services, gas distribution, water supplies, and irrigation systems, is likewise strongly influenced by North Dakota's strengths in Natural Resources and Agriculture.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Sectoral Distribution: WEAK for North Dakota & Northern Great Plains



Source: AngelouEconomics; Dun & Bradstreet

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Key Findings – WEAK Sectors

The listing of North Dakota’s weakest industries (LQ below 0.50) includes a number of leading technology sectors: **Communication Services** (0.46), **Electronics** (0.27), **Computer Equipment** (0.05), and **Semiconductors** (0.00). Despite this listing, Communication Services presents significant growth opportunities within the state. This potential will be described in greater detail in the Target Industry Evaluations portion of this report.

Technology Sectors, 2002

	North Dakota		N. Great Plains	
	Jobs	Ratio	Jobs	Ratio
Technology-Related Manufacturing	6,000	0.47	179,180	0.72
Aerospace & Defense	1,183	0.54	20,956	0.49
Biotechnology	3,313	0.83	58,461	0.75
Electronics	792	0.27	56,738	1.00
Computer Equipment	62	0.05	18,544	0.78
Communication Equipment	650	0.52	20,733	0.84
Semiconductors	0	0.00	3,548	0.16
Technology-Related Services	8,063	0.72	149,470	0.68
Communication Services	1,837	0.46	46,135	0.59
Software & IT Services	6,226	0.86	103,335	0.73
TOTAL TECHNOLOGY	14,063	0.59	328,450	0.70

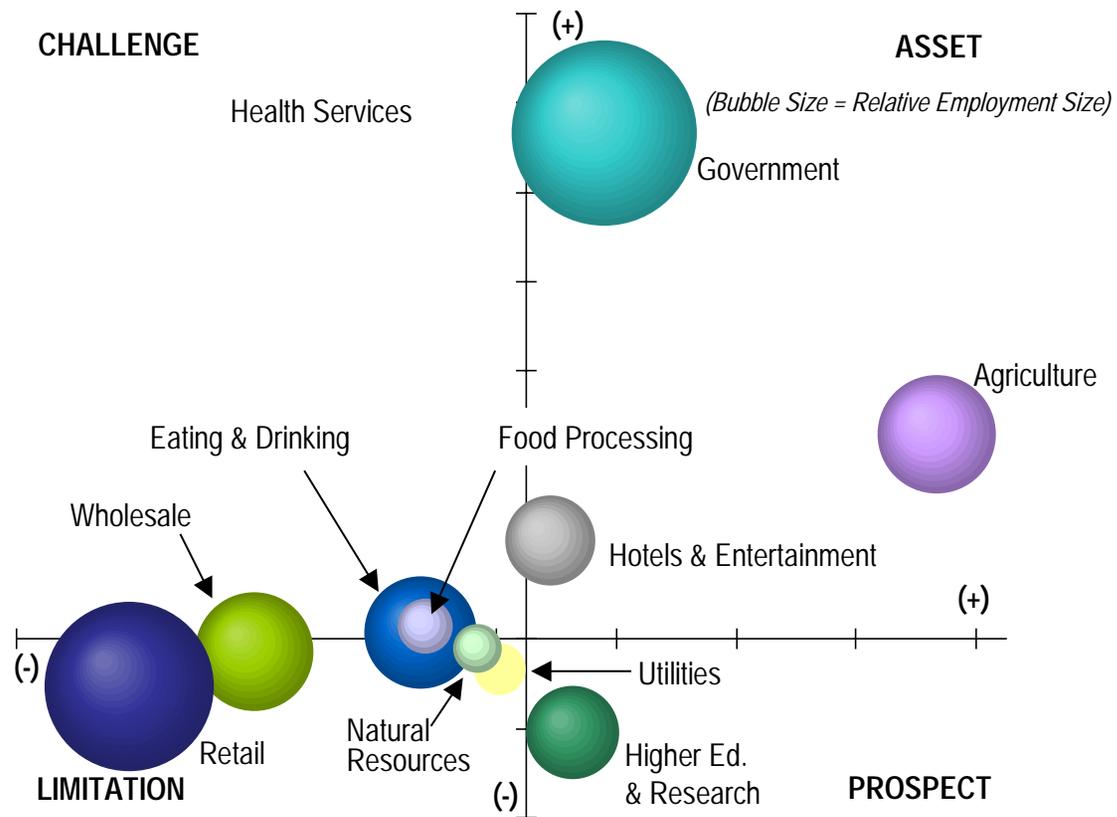
Technology-oriented industries are considered among the best paying and highest value-added sectors in the US. While North Dakota’s lack of such a large number of technology sectors may shield the state economy from the current economic downturn, the region may in the long term prove vulnerable to further workforce reductions as the US continues to shift toward a knowledge-based economy.

Despite North Dakota’s strength in Natural Resources, the state has been unable to capitalize on this competitive advantage in the high-value added **Chemicals & Plastics** sector. North Dakota registers only a 0.26 in this sector Mandan hosting its only refinery. Transportation costs affiliated with its geographic isolation from the major petrochemical complex on the Gulf Coast pose as a major limiting factor for the North Dakota Chemicals & Plastics sector.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

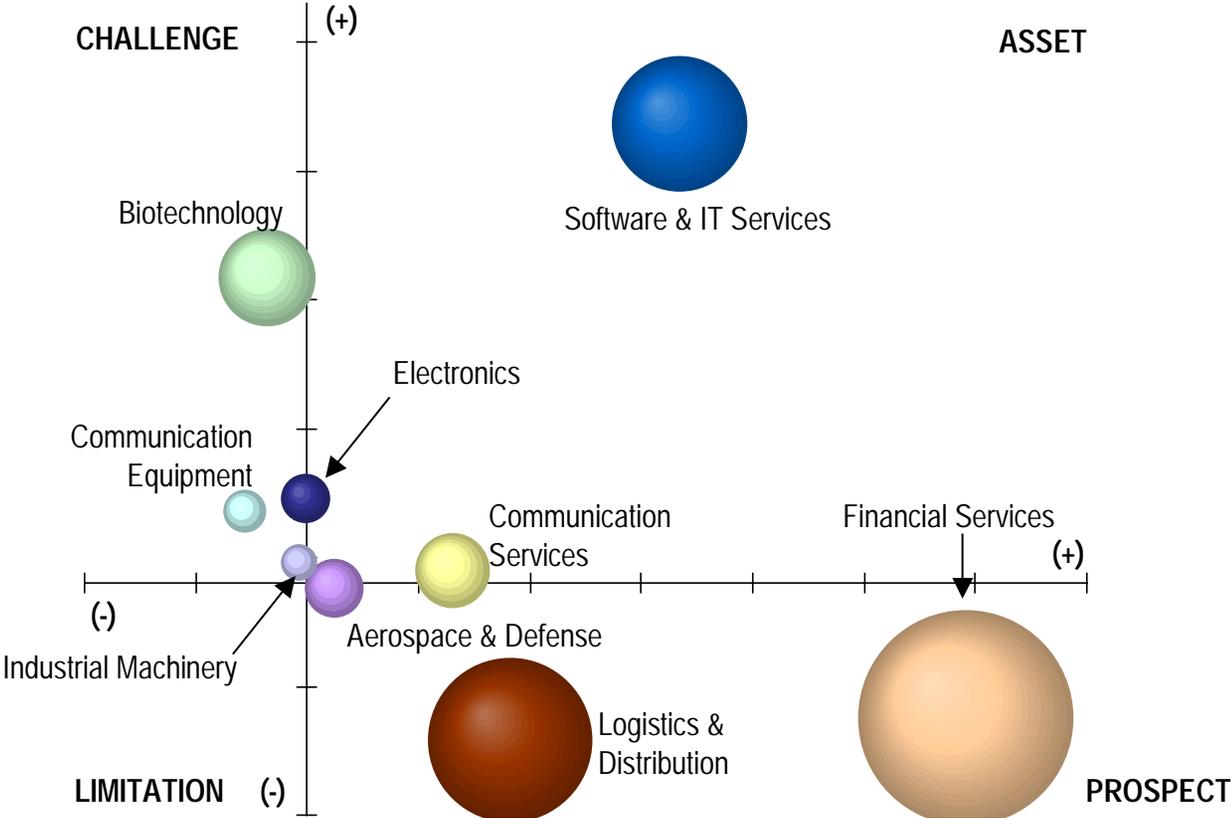
Shift-Share: STRONG Sectors for North Dakota



North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Shift-Share: SELECT Sectors for North Dakota



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Economic Assessment

Assets

According to employment trends for the past five years, North Dakota's greatest assets are in **Agriculture, Hotels & Entertainment, Business & Professional Services, Communication Services, Software & IT Services,** and **Government.** Approximately 138,000 jobs or 35 percent of all North Dakota workers are employed in these sectors.

Among North Dakota's commercial sectors that are assets, **Business & Professional Services** employs by far the largest number of workers (37,900). Although this sector currently only registers an LQ of 0.77, the 2002 ratio shows a marked improvement over the 0.63 LQ Business & Professional Services record in 1997. This sector includes legal, engineering, architectural, and accounting services. While this sector is growing at a rapid clip, Business & Professional Services presents a difficulty for state recruitment efforts but an opportunity for providing assistance for entrepreneurial development.

Hotels & Entertainment, which includes marinas, hotels, theaters, golf courses, amusement parks, and other recreation-related industries currently employs 13,200 workers statewide, registering an LQ of 1.08. Five years ago, this sector's LQ equaled 1.01, pointing to a possible emergence of North Dakota's tourism industry as beginning to serve more than the statewide population.

Combined, **Communication Services** (0.46) and **Software & IT Services** (0.86) only employ approximately 8,000 workers in the state, reflected in their relatively low LQs. Despite their existing low concentration in the state, both of these high-wage sectors are outpacing overall employment growth in both the state and region. As a result, North Dakota economic development efforts have seen laudable successes in both the Software & IT Services and Communication Services sectors.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Prospects

These statistics also point out possible prospects for North Dakota as recruitment, retention, and entrepreneurial efforts: **Higher Education & Research, Civic Enterprises, Logistics & Distribution, Housing & Construction, Financial Services, Aerospace & Defense, and Semiconductors.** Approximately 73,000 jobs or 19 percent of all North Dakota workers are employed in these sectors. Regionally, these sectors are growing at a faster rate than the economy as a whole. Within North Dakota, however, they are lagging statewide employment growth.

Statewide employment in **Higher Education & Research** is already at a very high level given North Dakota's 1.79 LQ in this sector, and therefore, future prospects for large gains may be limited. The state, however, can utilize this competitive advantage by encouraging the transfer of university research to commercial applications for strengthening other research and technology oriented sectors. In order for this to occur, a strong public-private partnership that is common among fast growing states and metropolitan areas is needed.

Although regional employment in **Logistics & Distribution** is increasing at a rapid pace, North Dakota's distance from large consumer markets and manufacturing centers may prove as a hindrance to strong future growth prospects.

Throughout the region, **Financial Services** employment is a top leader in employment growth by way of Minneapolis' emergence as a financial center and the opening of numerous call centers, especially in South Dakota. Given this regional advantage, Financial Services appears to be a strong prospect for the state, especially for customer care and back office enterprises. While some argue these operations have traditionally paid lower salaries, more recent industry trends suggest ongoing adjustments in its pay scale. Service centers are consistently increasing salaries and benefits in order to compete. Equally important, these establishments provide early career opportunities for recent high school and college graduates and provide supplementary income, largely disposable, for households with fewer than two full-time wage earners.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Challenges

North Dakota faces a number of sectoral challenges according to recent employment trends. Those with the highest LQs are **Eating & Drinking**, **Food Processing**, **General Services**, **Biotechnology**, and **Transportation Services**. These sectors are considered a possible threat to future growth based on their relatively lagging performance in the region but leading growth in the state. Approximately 60,500 jobs or 16 percent of all North Dakota workers are employed in these sectors.

Food Processing, which records one of the state's strong LQs (1.08), ranks as a challenge to future growth in North Dakota despite increasing payrolls at an above average rate during the last five years. Both regionally and nationally, Food Processing employment growth is a net drag on economic growth. This sector's site factors are highly influenced by location near either a major food source or consumer market taking into consideration labor costs. Undoubtedly, the Northern Great Plains possesses a competitive advantage for this sector, as the region registers a 1.67 LQ. North Dakota's recent rapid growth in this industry is likely the result of the state garnering its "fair share" of the regional pie through the state's competitive wage rate and friendly business climate.

Although **Biotechnology** is considered a challenge based on past employment growth, most analysts agree that this research-oriented sector will experience stronger growth in the coming years as recent developments begin to reach fruition. North Dakota's current 0.83 LQ in Biotechnology is a vast improvement over the state's previous 0.26 ratio, an indication that the state is rapidly gaining a better position for competition in this sector. Biotechnology includes medical instruments, laboratories, and other medical equipment; pharmaceuticals; diagnostic preparations; and biological research.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Limitations

Shift-share analysis reveals that **Natural Resources, Utilities, Wholesale and Retail Trade, Transportation Equipment, Health Services, Mass Media, Computer Equipment, and Semiconductors** are limitations on employment growth in North Dakota. Approximately 118,300 jobs or 30 percent of all North Dakota workers are employed in these sectors.

Despite the state registering its second-highest LQ (1.99) in **Natural Resources**, this sector is considered a limitation to rapid employment growth based on the past five-year trends. New job creation since 1997 in Natural Resources lags the overall regional and state economies. Despite this apparent lack of opportunity, the state can leverage its strength in oil, natural gas, and coal to generate employment growth in closely related sectors, such as Business & Professional Services, Housing & Construction, and Industrial Machinery.

Utilities, another sector recording a high LQ (1.17), is also categorized as a limitation for North Dakota. This sector includes power generation and other electric services, gas distribution, water supplies, and irrigation systems. Given the likelihood that the state has already implemented the necessary infrastructure to supply local industries and population and export what is not used, future large employment increases are doubtful. Still, North Dakota is nationally recognized as possessing the greatest potential of all states in the US for tapping wind power. While costs for generating wind power remain slightly above more traditional methods, technological improvements have recently cut those expenses drastically. Employment increases directly related to wind power generation, however, would be limited once the turbines and transmission lines are put in place. The state could still benefit from this abundant resource through facilitating the recruitment of turbine manufacturing facilities and fostering technological research from statewide labs.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

TARGET INDUSTRY EVALUATIONS & RECOMMENDATIONS

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

TARGET INDUSTRY EVALUATIONS

The North Dakota Economic Development Foundation (NDEDF) has commissioned AngelouEconomics (AE) to develop a roster of target industries. The requested analysis required AE to review and assess previous target industry recommendations to confirm the likelihood of success in a very dynamic and unpredictable global and national economy. A solidly based target industry evaluation allows local economic development leaders to focus their resources on those opportunities that can be reasonably expected to result in a positive outcome in a relatively short time line (two to four years). Nonetheless, any target industry recommendation is time sensitive and its strength can change almost overnight as a result of any number of possible economic, political and/or business events.

Consequently, the selection of target industries is both a science and an art. Traditional economic analysis is the science. Measurement tools such as location quotients and shift-share analysis represent the science. The art comes from applying intimate knowledge and judgment about given industries, usually gained from experience. The following recommendations should be re-assessed regularly at a frequency of every three to four years is common.

In fact there are some industry groupings that might have appeared recently as having potential for North Dakota, such as aerospace. However, a struggling national and international economy, world political events and other factors have delayed the potential for near to midterm results. North Dakota has a small emerging cluster in this industry grouping, but the current recession and the events of September 11th have delayed the immediacy of opportunity. That could change within a year or two; therefore, aerospace represents at least one industry sector that should be re-assessed in 2004 or 2005.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

The list of recommended targets is set at five in respect for the financial resources and capacity to pursue them. These targets are those assessed to represent the best opportunity for statewide accomplishment in the next few years. Further, the targets are sufficiently broad to be able to incorporate smaller niches that are emerging in the state's economy. For example, in Advanced Manufacturing, the state's day-to-day work may identify new opportunities during the early recovery in aerospace.

The following target industries are recommended:

- Advanced Manufacturing**
- Information Technology**
- Value-Added Agriculture**
- Tourism**
- Energy**

While some of the state's competitive advantages in these industries may not be readily apparent, the subsequent analysis clearly points to specific niche opportunities within these targets in which North Dakota can excel.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Target Industry Evaluations Snapshot

In the following pages, AngelouEconomics has taken into account North Dakota's economic strengths, national industry trends, and future growth expectations to assess the state's capacity to attract and foster growth through its target industries. In addition, AE provides NDEDF with clear niche opportunities within these broad categories that are the best prospects for retaining and attracting high-wage jobs and retaining educated workers.

ADVANCED MANUFACTURING

North Dakota's economy has historically been, and will most likely remain, firmly rooted to agriculture. Those niches within advanced manufacturing that present the greatest opportunities for the state to build upon that strength are **agricultural biotech** and **electronic products** for farm and food processing machinery. Agribusiness, like most industries, is currently undergoing a profound transformation with the implementation of new technologies. North Dakota is uniquely endowed with the potential to become the leader in agricultural-related technology manufacturing.

INFORMATION TECHNOLOGY

North Dakota has experienced measurable successes since the mid-1990s in employment growth through information technology (IT). The state can further solidify its burgeoning IT industry by nurturing entrepreneurial startups within specific niches of this broad industry. **Communication service centers** such as web hosting and server farms within the telecommunications sector, while **software development** that supports statewide strengths such as wind energy, agriculture, meteorology, appear to be North Dakota's greatest opportunities in IT.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

VALUE-ADDED AGRICULTURE

Value-added agriculture provides North Dakota with a strong opportunity to garner the “fair share” in this industry that the state has not yet attained. North Dakota can utilize its clear advantages in agriculture and exploit opportunities in both **agricultural biotech** and food processing by targeting highly processed “convenience foods”. An equally important, and divergent, market segment within food processing that is growing at a rapid pace is “**natural**” **foods**, which generally demands a higher price from wholesalers and consumers.

TOURISM

North Dakota’s greatest opportunity for increasing visitation to the state in the near term lies within the rapidly growing **heritage tourism** segment, especially among those who are already familiar with the state. Another likely industry segment with a potentially important impact is in **hunting and fishing**. In the long-term, the state will have much greater opportunities in tourism, as North Dakota becomes a recognizable business center through the successful implementation of its industry targets. Once **business travelers** become more familiar with the state and its offerings, North Dakota will experience a much greater influx of tourists from around the country.

ENERGY

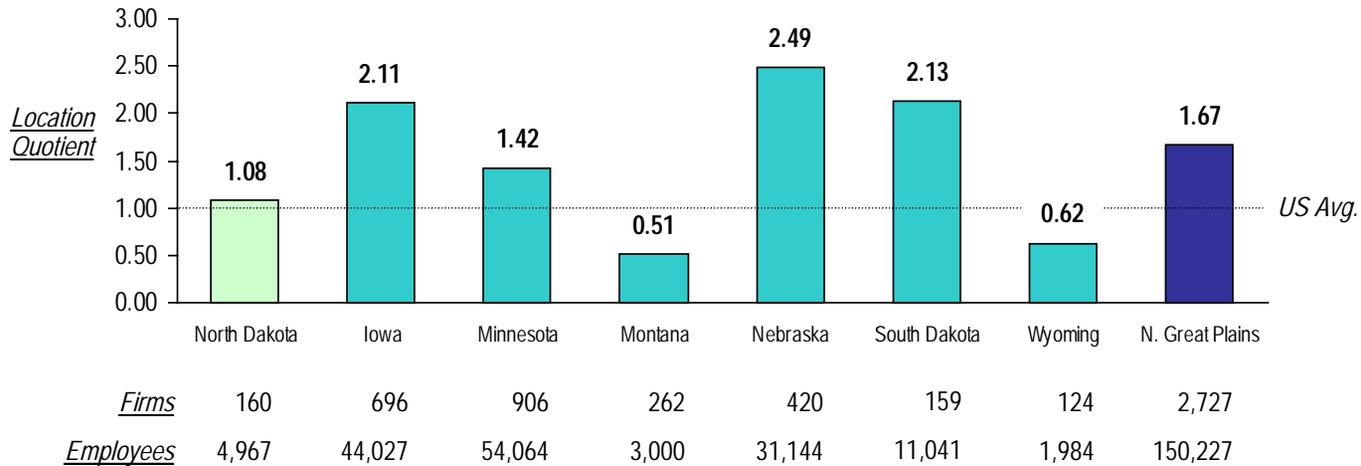
North Dakota is nationally recognized as having the greatest potential of any state in its capacity to produce energy through **wind power**. The economic impact of wind power is significant. According to a recent study, underlying each megawatt produced by wind power is the equivalent of 4.8 full time employees engaged in component production, wind generator manufacture and installation, operation and maintenance, and power distribution. The US Department of Energy states that if North Dakota’s full potential for wind power production was met, the state could potentially produce up to 1,180,000,000 megawatt-hours each year.

North Dakota Economic Development Foundation: Strategic Plan

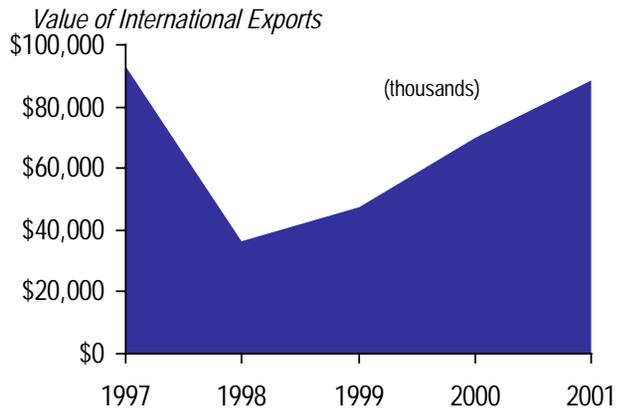
Economic Assessment

FOOD PROCESSING

Regional Sector Comparison

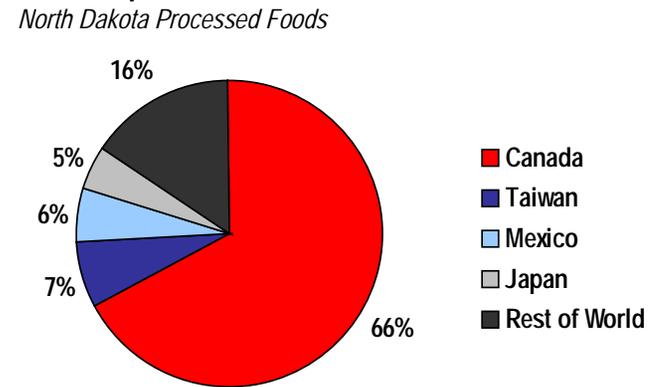


North Dakota Processed Foods, 1997 to 2001



Source: International Trade Administration

Share of Export Growth, 1998 to 2001



Source: International Trade Administration

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Value-Added Agriculture

Definition: The value-added agriculture industry includes establishments that manufacture or process foods and beverages for human consumption as well as related products such as meat packing plants, flour and other grain mill products, cereal breakfast foods, cookies and crackers, soybean mill oils, and food products machinery.

National Trends: Food processing is an extremely labor-intensive industry with nearly half of all employees classified as production workers. For the most part, this industry requires very little formal training, and most new workers can start by learning their necessary skills in a matter of days. However, the industry is gradually beginning to demand an increasing number of industrial and mechanical engineers along with computer programmers, systems analysts, and chemists who create and regulate new automation systems that improve efficiency and safety at plants across the country. But as the use of sophisticated automation systems increases, job growth in food processing is expected to decline nationally by three percent from 2000 to 2010, according to the US Bureau of Labor Statistics.

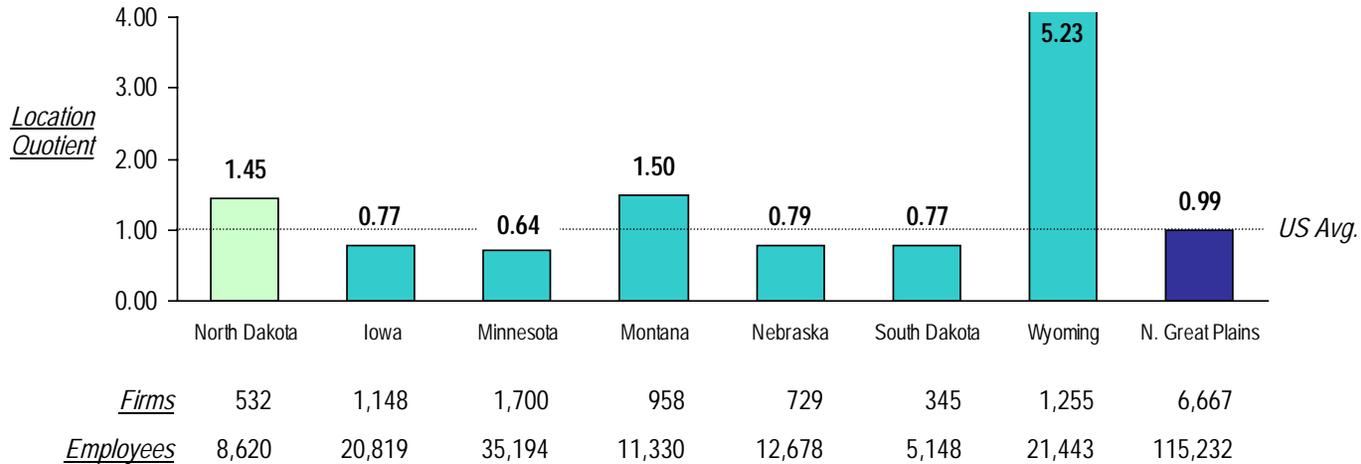
North Dakota Opportunities: North Dakota ranks as the largest US producer of spring and durum wheats, sunflowers, and barley, among other crops. The state currently displays an obvious competitive advantage in agricultural production, employing nearly three-and-a-half times as many workers as expected given national rates, but has shown difficulty translating that strength to food processing where it only employs an average number of workers. National trends in the food processing industry point to two contrary developments: a greater reliance on highly processed “convenience” foods and higher demand for specialty foods for niche markets. North Dakota development efforts for food processing should focus on the state capturing its “fair share” of this industry by embracing these divergent, high growth segments. Specialty production presents North Dakota with an opportunity to generate growth from higher impact sectors such as agricultural biotech and “natural” foods. In addition, food production has traditionally been a strong point in North Dakota’s economic, cultural and political foundations. To the extent that North Dakota has an international reputation, food has been a significant asset. Building on that identification will facilitate greater global recognition for the state.

North Dakota Economic Development Foundation: Strategic Plan

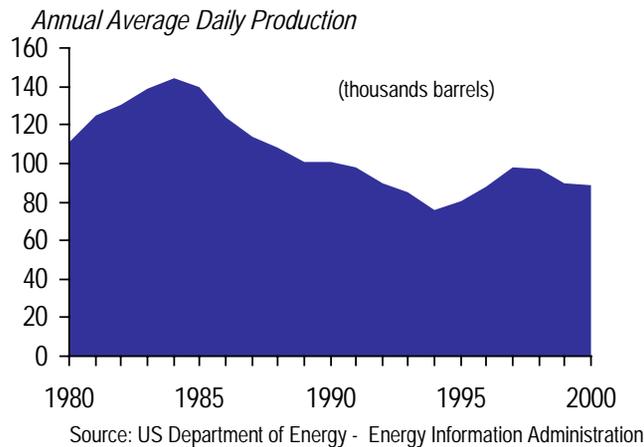
Economic Assessment

ENERGY

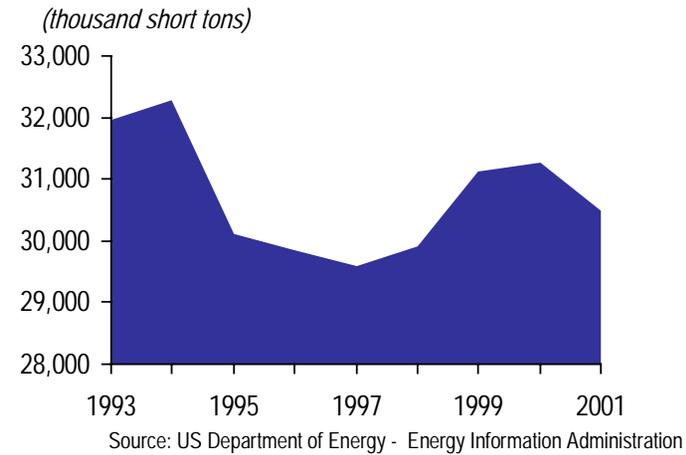
Regional Sector Comparison



North Dakota Oil Production, 1970 to 2000



North Dakota Coal Production, 1993 to 2000



North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Energy

Definition: The energy industry includes establishments from the natural resources and utilities sectors. Energy includes oil and gas exploration and drilling, coal mining, gas distribution, power generation and other electric services.

National Trends: Nearly half the states in the US have taken steps to deregulate their electric utility industries during the last few years, which is generally allowing competing power suppliers the right to use transmission lines of a former monopoly utility. Legislation in many states has required former monopolies to sell their generation assets to independent power producers that are increasingly responsible for larger shares of the world's electricity market. As a result, renewed interest in energy has sparked greater research and development to create new technologies while merger and consolidation activity among energy companies abounds. Some states, most notably California, have had unpleasant experiences with electric deregulation and, therefore, a renewed interest in conservation and alternative energy sources is emerging. Simultaneously, the US is rapidly becoming dependent on imported oil to serve its economy's growing appetite for energy – the wisdom of which is increasingly being questioned in the wake of the events of September 11th.

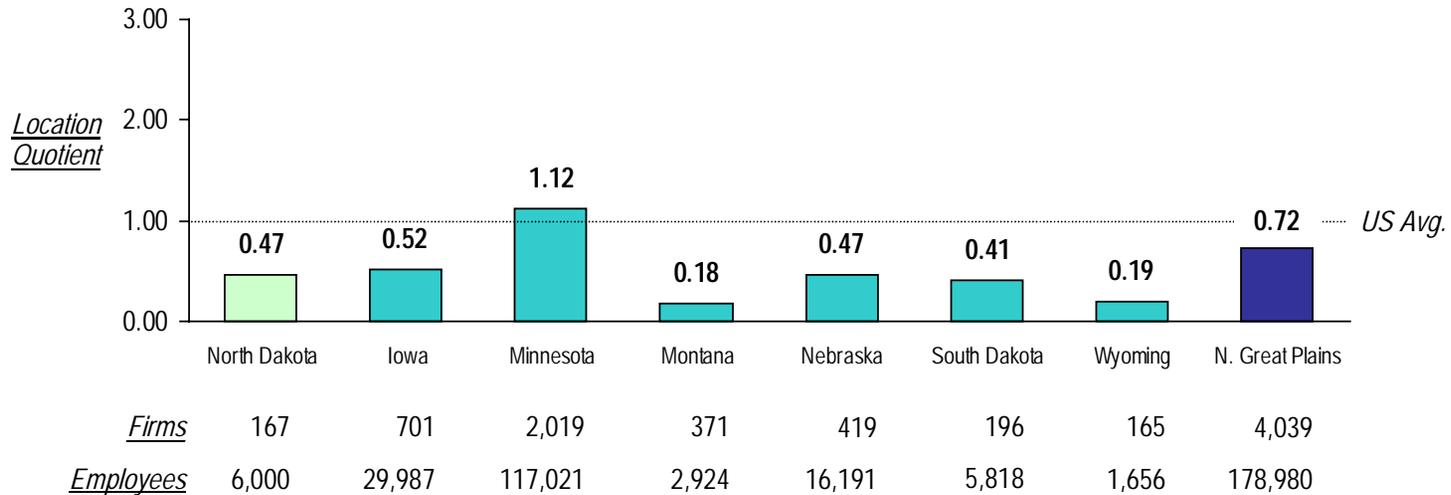
North Dakota Opportunities: Following national trends, production in both oil and coal in North Dakota has declined during the last decade. In 2000, the state accounted for just 1.6 percent of proven oil reserves in the lower 48 states and 1.8 percent of US oil production. Similarly, North Dakota's share of US coal production was only 2.9 percent. North Dakota's small population, however, allows the state to be a net exporter of energy. In 1999, North Dakota exported 60 percent or (0.55 quadrillion BTUs) of its energy from all sources to other parts of the country. As a result, the state is the nation's ninth exporter of energy. Massive restructuring in the energy industry is creating new opportunities for research and development, especially in conservation and alternative energies. North Dakota has a clear advantage in wind energy, and as costs for production continue to fall, the state should maximize this potential with a considerable impact.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

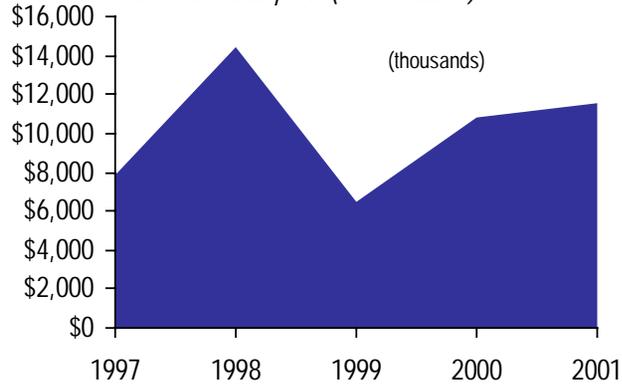
HIGH TECHNOLOGY MANUFACTURING

Regional Sector Comparison



North Dakota Computers and Electronic Products

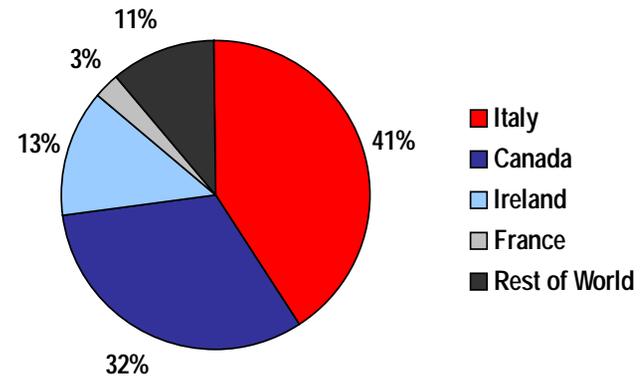
Value of International Exports (1997 to 2001)



Source: International Trade Administration

Share of Exports, 1998 to 2001

North Dakota Computers and Electronic Products



Source: International Trade Administration

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Advanced Manufacturing

Definition: Advanced manufacturing includes establishments from the aerospace & defense, biotechnology, electronics, computer equipment, communication equipment, and semiconductors sectors. Advanced production techniques are also revolutionizing the fabrication of goods in industries ranging from industrial equipment to agricultural machinery.

National Trends: Advanced manufacturing differs from traditional manufacturing in its heavier reliance on research and development staff than production workers and its greater demands for highly skilled workers. Advanced manufacturing is high value added and will become increasingly important to the domestic economy as associated facilities are more likely to remain in the US, while low value added plants will continue to seek lower labor costs abroad.

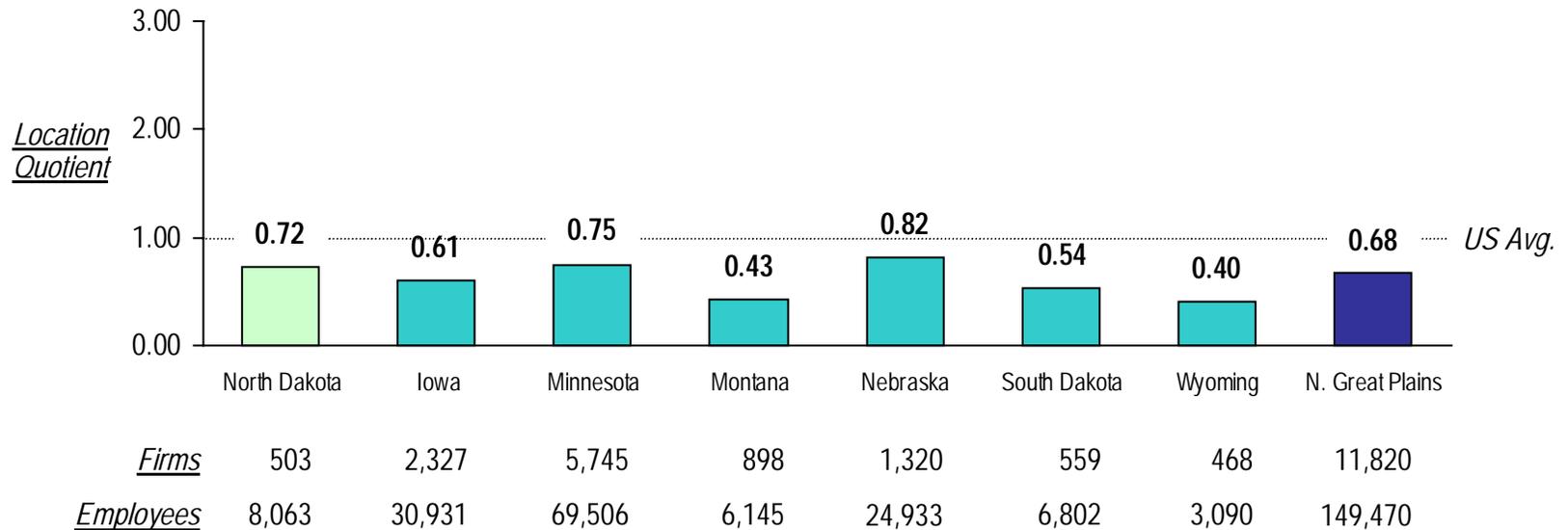
North Dakota Opportunities: Among high tech manufacturing industries, Biotechnology presents the greatest opportunity for the establishment of a competitive advantage in North Dakota. The state's rapidly growing biotechnology sector employs over half its tech-related manufacturing workforce and presents the state with the ability to carve out its own niche. Agricultural biotech, or bioengineering, promises to drastically alter the way farmers produce foods by genetically modifying (GM) both plants and animals for maximizing their productivity. While public concern over GM foods has recently slowed some advances, GM foods accompanied by corporate consolidation and vertical integration are playing increasingly important roles in agribusiness' desire to increase profits while producing more food at a lower cost. Due to the state's large agricultural economy and pursuit of higher value added related activities, North Dakota should also engage in the development of advanced manufacturing niches within farm machinery and food processing machinery. While the state's economy is likely to remain firmly rooted to agriculture for the coming years, North Dakota must fully realize its potential and maximize economic opportunities to build from this foundation.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

HIGH TECHNOLOGY SERVICES

Regional Sector Comparison



North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Information Technology

Definition: The information technology (IT) industry includes establishments from the communication services and software & other IT services sectors. On the telecommunications side, IT includes providers of cable and satellite TV services and also providers of wireless communication products and services. The Software & other IT services sector includes designers, developers, and marketers of computer software products, information technology consulting and systems integration, and Internet content providers.

National Trends: Possibly more than any other industry, IT is emblematic of the revolution that is transforming the US from an Industrial to an Information Age economy. Convergence in telecommunications was jump started by federal deregulation removing barriers of entry into cable operations by phone companies and allowing cable operators to offer broadband Internet access, competitive phone services, and digital video. Both software and telecom are undergoing growth pains as the fallout of dot.coms continues and a glut of broadband capacity must be overcome.

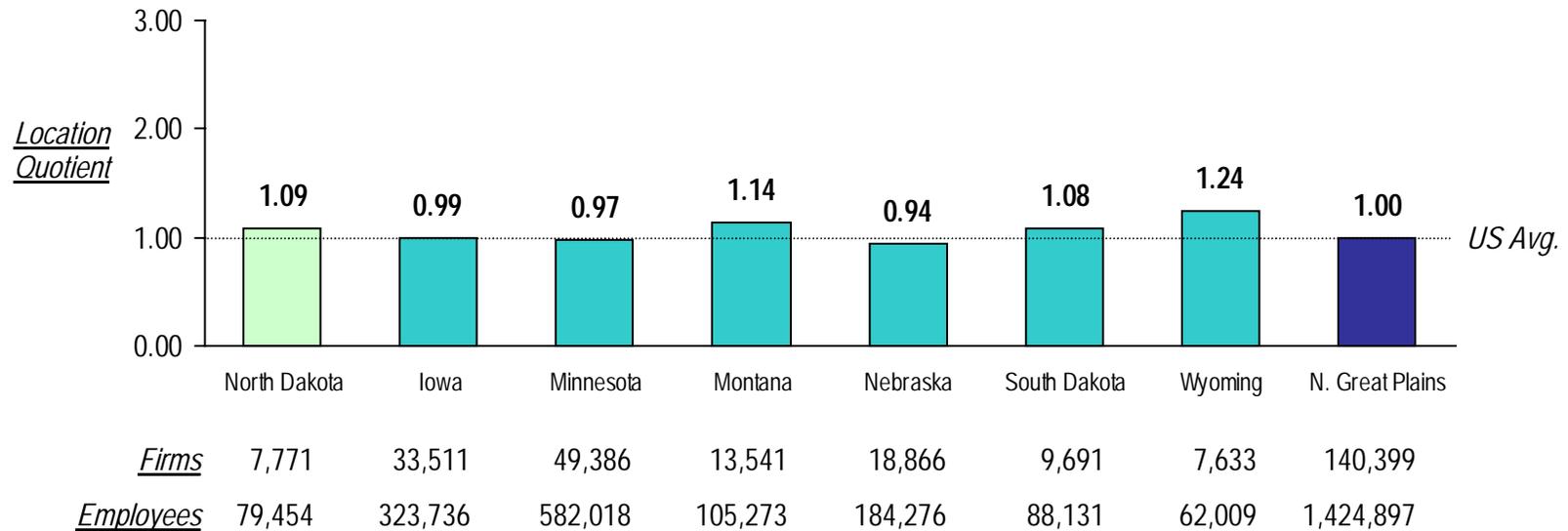
North Dakota Opportunities: Despite the ongoing difficulties in IT, most analysts agree this broadly defined industry will rebound, growing at a robust pace for the remainder of the decade. While the state has seen some successes through the recruitment of several call centers and the growth of Great Plains Business Solutions (now part of Microsoft), North Dakota's opportunities in IT will not be maximized by seeking dominant corporate players, but by nurturing a multitude of entrepreneurial startups out of the state's local talent pool. The state's greatest opportunities within telecommunications are customer service centers for telecommunication service providers, data communication centers, and Internet service providers and hosting services. Meteorological software development also appears to be an opportunity that could increase the efficiencies of agricultural production in the state and also support North Dakota's nascent wind power industry.

North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

TOURISM

Regional Sector Comparison



North Dakota Economic Development Foundation: Strategic Plan

Economic Assessment

Tourism

Definition: The tourism industry includes establishments from the hotels & entertainment, retail trade, and eating/drinking sectors. While not all employees within these sectors can be directly attributed to tourism, they provide an accounting for the state's capacity to service visitors to the state.

National Trends: Prior to 2001, an increasing number of US travelers ventured overseas due to the strength of the US dollar in comparison to other currencies. Similarly, economic difficulties overseas are reducing the number of international visitors to the US. Despite the current economic downturn and political uncertainty following September 11th, the tourism industry is expected to continue to see increased growth in the coming decade. But as the nation's population matures, so too will the type of destination visitors seek out. Since the nation's bicentennial, heritage tourism has emerged as a dominant factor in the US visitor industry.

North Dakota Opportunities: To increase visitation to the state, North Dakota has to deal with certain circumstances including its climate, a lack of nationally recognized historic icons and natural landmarks, and geographic isolation with limited air service. A recent study, however, shows that visitation to the state has increased by 500 percent during the last decade, but the majority of visitors come to the state to see friends and relatives. Only 28 percent of visitors to North Dakota are tourists who stay in motels and eat at restaurants, compared to the national rate of 39 percent. Given these real constraints, the state possesses opportunities that can modestly increase tourism. As North Dakota's economy grows and fosters value-added industries through technological innovation, the number of business travelers to the state will also increase. In addition, North Dakota's access to the Lewis and Clark Trail along the Missouri River along with the state's Native American heritage provide compelling factors for increasing tourism to the state. Also, the state can market its rugged, outdoor character to attract hunters and fishermen.

North Dakota Economic Development Foundation: Strategic Plan

Strategic Plan Goals and Strategies

Goal 1:

Develop a unified front for North Dakota based on collaboration, accountability, and trust.

Rationale:

Cities and states that have enjoyed success in economic development often have one thing in common: a unified message and practice of collaboration for economic development. This requires the various stakeholders and practitioners to agree on roles, messages, and goals, which is no easy feat. For example, municipalities, private sector businesses, chambers of commerce, local economic development agencies, and counties work together and are active members in the Economic Development Corporation of Utah (EDCU). The ability of the EDCU to present a common message that represents statewide interests helped them to improve corporate location consideration from 20% to 52%, based on executive surveys of Utah's industry targets.

North Dakota is a lightly populated state with limited resources competing nationally and internationally with countries, states, and municipalities that have greater resources dedicated to economic development. To effectively and efficiently use available resources, the state must continue to accelerate the culture of collaboration between economic development organizations, the North Dakota university system, and the private sector. Collaboration among the private sector, public sector, higher education and local economic development agencies is often a characteristic of successful state growth efforts. Conversely, competition or miscommunication is, more often than not, found in states experiencing far less robust growth. To its credit, the new Department of Commerce is praised for being both more responsive and

North Dakota Economic Development Foundation: Strategic Plan

more communicative to the needs of local economic developers, and this practice must continue. North Dakota's resources and capacity for economic development cannot afford to be divided into several organizations or directions, so the creation of a unified front that rises above partisanship and territorialism is essential for the state's economic future. It is important to note that collaboration does not require consolidation of North Dakota's economic development organizations since each organization whether it is NEI, EDND, or the DOC has strengths that can be utilized effectively by operating separately. The primary need is for the state's economic development players to coordinate efforts under a unified front so that resources are used more efficiently.

Lastly, North Dakota must leverage all available sources of support. The state's federal delegation in Washington, D.C. must work closely with the Governor and the state Legislature to secure funding for research and technology development projects. The Governor's office, the federal delegation, the North Dakota Assembly, the Foundation, and the DOC should work cooperatively to secure funding to increase economic development opportunities at all levels of government.

Strategies:

1. Expand The Foundation membership to include greater representation from the North Dakota university system, agriculture industry, and rural communities while maintaining private sector influence.

The Foundation should add board members from the University system, local economic development program(s) and rural communities.

Responsibility: Governor, North Dakota Assembly, the Foundation.

Timeline: Winter 2003

North Dakota Economic Development Foundation: Strategic Plan

2. Coordinate with GNDA's New Economy Initiative to enhance the state's economic development outcomes.

The NEI, sponsored by GNDA, has done significant work aimed at creating private sector networks that can provide input and support on issues such as economic development, fundraising, industry cross selling, and workforce development. The combined efforts of GNDA, the Foundation, and the DOC can help North Dakota reach its economic goals. The Foundation can facilitate discussion between the DOC and NEI leadership helping the two organizations determine how they may complement one another's implementation efforts.

Responsibility: The Foundation, DOC, GNDA.

Timeline: Ongoing

3. Expand communication and coordination between the Department of Commerce and local economic development organizations to create more economic opportunities.

Feedback from local economic development organizations appreciatively emphasized that the DOC has substantially improved communications. Nonetheless, a greater level of communication and partnership is needed between the two groups. An annual conference hosted by the Department of Commerce and the EDND that allows local economic developers, private sector leaders, and North Dakota university system leaders to provide feedback on the state's direction and practices is a potential vehicle for improving communication between the respective parties. Both groups have a mutual responsibility to improve communication and coordination and an annual conference can be a good step in implementing this strategy.

North Dakota Economic Development Foundation: Strategic Plan

Responsibility: EDND, DOC

Timeline: Summer 2002

4. Expand the Department of Commerce's role as a lead generator for North Dakota communities and provide a menu of services to support locally generated leads.

Local economic developers cannot expect to rely exclusively on the DOC for lead generation, although some do. However, the DOC can provide greater awareness to qualified communities about leads through electronic communication, telephone, traditional mail, marketing trips, tradeshow, etc. In addition, the DOC can assist local economic development officials in honing their skills by providing proposal development advice and marketing feedback through electronic communication and traveling workshops.

Responsibility: Governor, DOC and the North Dakota Assembly (greater funding and staffing may be needed).

Timeline: Summer 2002

North Dakota Economic Development Foundation: Strategic Plan

Goal 2:

Strengthen linkages between the North Dakota university system, economic development organizations, and the private sector.

Rationale:

Most prosperous states and cities maintain strong relationships between state university systems, economic development organizations and the private sector. Austin, the Research Triangle, Silicon Valley, the 128 corridor in Massachusetts, and Ann Arbor are examples of regions that have created and sustained successful partnerships between their local universities, economic development agencies, and the private sector. These communities are recognized internationally as leaders in economic growth; collaboration and strategic focus are the trademarks of their respective successes.

As indicated by the education statistics shown previously in the Economic Assessment section of this report, North Dakota has increased the educational attainment levels for its residents in the 1990s and that is a credit to the state's excellent education system. The expansion of the skilled talent pool in North Dakota is critical to the state's future success. North Dakota can retain skilled current residents and perhaps recapture former residents by bolstering its entrepreneurial climate. The development of regular collaboration between North Dakota university system, the private sector, and economic development can not only lead to entrepreneurial activity, but greater recruitment opportunities as well. North Dakota has several centers of national excellence in the university system, including the Odegard School for Aerospace Sciences and the Energy and Environmental Research Center at the University of North Dakota, as well as the Polymers and Coatings Department at North Dakota State University, which have not been exploited for their full economic development potential. Each of these centers of excellence receive calls, visits, and inquiries from national and international, public and private sector clients that may present potential opportunities for North Dakota if connections

North Dakota Economic Development Foundation: Strategic Plan

were strengthened. The successful regions share a commonality in that they are welcome recipients of new ideas. Entrepreneurial regions support intellectual curiosity and actively encourage its pursuit.

The centers of excellence have done an admirable job at producing technologies for clients that lead to product development; however, most of the commercialization of the technologies produced at the centers of excellence occurs elsewhere. The increased coordination between North Dakota university system, economic development, and the private sector can ensure that more commercialization opportunities are realized in North Dakota. Moreover, incentives to encourage in-state commercialization can be created.

The relationships between the private sector and the North Dakota university system enables the university system to develop and strengthen programs that meet the workforce and research needs of industries. Only strong bonds of communication between private sector leaders and North Dakota university system can encourage the development of programs and technologies that stimulate job growth and investment. North Dakota has improved its efforts to align its university system with the state's economic development goals; which is evident in the university system's strategic plan. Recent outreach by the university system to DOC indicates an eagerness to participate productively in the economic development process. This trend of tying the state's economic development strategies to the strengths of the university systems is a sound, long- term approach.

North Dakota Economic Development Foundation: Strategic Plan

Strategies:

1. Expand the promotion of the workforce development programs of Williston State College, Lake Region State College, Bismarck State College, and the North Dakota State College of Science to local employers.

Highlight those courses that meet skill demands of existing and target industries. North Dakota Workforce Training system program staff and local economic developers must be active in economic development marketing. For example, marketing information directed at employers promotes the fresh “supply” of skilled individuals coming out of the North Dakota Workforce Training system and encourages expansion in place rather than beyond state lines.

Responsibility: EDND, GNDA, North Dakota university system, DOC.

Timeline: Summer 2002.

2. Better connect state and local economic developers with incubator programs to encourage greater knowledge and support of emerging companies.

The Center for Innovation, the Technology Incubator, the Odegard School of Aerospace Science, the University Technology Park, and the Energy and Environmental Research Center at the University of North Dakota; and the Department of Polymers and Coatings and the NDSU Research Park at North Dakota State University are engines of entrepreneurial activity that have not been fully exploited. The local and state economic development community must establish regular meetings with these centers of excellence to

North Dakota Economic Development Foundation: Strategic Plan

determine potential opportunities for entrepreneurial development. Increased collaboration between private sector, economic development, and research centers will produce greater investment opportunities for the private sector.

Responsibility: North Dakota University System, EDND, DOC.

Timeline: Fall 2002

3. Develop a website that offers information about how North Dakota Universities meet the workforce needs of the state's target industries.

Create standardized marketing piece touting the universities' activities in target industry fields. This could be in the form of a one-page, well-designed flyer specific to each of the five target industries. Economic developers should include this tailored collateral in correspondence with prospects. Also, include this information on a prominently linked page within future community marketing websites.

Responsibility: North Dakota university system, DOC, Commerce Cabinet.

Timeline: Fall 2002.

4. Recommend the continuation of the North Dakota university system roundtable.

The Foundation can take big strides towards supporting the collaboration between North Dakota university system and the private sector by advising the Governor to support the continuation of the North Dakota

North Dakota Economic Development Foundation: Strategic Plan

university system roundtable. The existing forum between leaders from North Dakota university system and the private sector led to the successful drafting and implementation of the university system strategic plan.

Responsibility: Governor, North Dakota Assembly, the Foundation, Commerce Cabinet.

Timeline: Fall 2002.

5. Recommend university system advisory boards to take a greater role in economic development.

The Foundation should ask the North Dakota university system advisory boards to facilitate greater collaboration between the university system and the private sector. The partnership can result in increased funding for R&D at North Dakota's universities. The increased funding should be tied to private sector interests, which will accelerate the rate of commercialization of technologies generated at the universities.

Responsibility: University system, the Foundation, Commerce Cabinet.

Timeline: Fall 2002

North Dakota Economic Development Foundation: Strategic Plan

Goal 3:

Create quality jobs to retain North Dakota's current workforce and attract new higher skilled labor.

Rationale:

North Dakota's challenges force the state to contemplate its current economic development philosophy. Faced with high underemployment and slow population growth, North Dakota leaders have focused on quality job creation to resolve these issues. To spur job growth, the Department of Commerce has recently developed a strategy to recruit out-of-state businesses. This strategy has been successful; the DOC has assisted in the creation of 2400 new jobs in the past 12 months. In addition, the DOC has played an integral role in the state's entrepreneurial development by assisting in the creation of 24 startups in 2001. The combined effort to recruit strong companies while supporting the development of entrepreneurial activity is a difficult challenge to maintain given the state's limited resources. To sustain North Dakota's current recruitment strategy while encouraging emerging entrepreneurial and expansion opportunities, state leadership must adopt a policy to pursue opportunities that can provide the most promising targets

To encourage entrepreneurial and expansion opportunities, there must be increased public and private investment in economic development activity especially in equity, which can be in the form of a seed or venture capital fund. North Dakota's economic development efforts have been restrained by the lack of available investment capital, in 2001 North Dakota was ranked 46th out of 50 states in the number of venture capital investments and 40th out of 50 states in gross dollars expended in private research and development according to the Corporation for Enterprise Development. To stimulate growth, these rankings must be improved.

North Dakota Economic Development Foundation: Strategic Plan

Strategies:

1. Develop a set of business expansion initiatives.

North Dakota's existing businesses have demonstrated a commitment to and a deep understanding of the state, and thus provide strong targets for economic development activity. In general, economic development strategies aimed at business climate and workforce development serve the needs of business retention and expansion as well as recruitment. These firms should also be explicitly made eligible for programs aimed at recruitment, facilitating expansion in place rather than across state lines. It is important to realize that resident industry projects usually are more frequent but come with smaller increments of employment and investment.

As local firms express the need for expansion, local economic developers will be among the first to know. They must be encouraged to share this information with the DOC so that state resources can be marshaled to meet the needs of the firm. The Economic Development Association of North Dakota must be instrumental in leading this campaign, since the EDND members have the most detailed understanding of the needs of local businesses. The EDND can also look to the Small Business Development Center (SBDC) for assistance in working to meet the needs of local businesses. The SBDC is hosted at UND and works with several other universities in the state. The SBDC with its mission to focus the resources of the state's university system to meet the needs of local businesses can play an important role in implementing a business expansion policy. Expansion, no less than recruitment, requires capital improvements and workforce training, and the state should step in where needed.

Responsibility: EDND, SBDC, Department of Commerce

Timeline: Winter 2003.

North Dakota Economic Development Foundation: Strategic Plan

2. Refine workforce-training programs that provide the skills needed by target industries.

The Workforce Division of the DOC should survey executives from target industries to identify the critical skill sets needed in the workforce. Once the skills are identified, underemployed and unemployed people need to be encouraged to take courses in the targeted skills and this can be accomplished by distributing information about state and federal tuition assistance for individuals in those fields. Lastly, market those training programs to prospective clients including existing businesses in the target industry sectors.

Responsibility: North Dakota University System, DOC.

Timeline: Fall 2003.

3. Expand state government job training incentives for technical skills.

While North Dakota has job training incentives available to companies, including the New Jobs Training Program, there is little emphasis on the type of skill developed. It is imperative to focus job-training incentives on those skills most immediately demanded by high impact industries. Encourage legislators to support the focusing of targeted job training programs at the state level.

Responsibility: Governor, North Dakota Assembly, DOC.

Timeline: Winter 2005.

North Dakota Economic Development Foundation: Strategic Plan

4. Augment the existing information clearinghouses for new businesses that provide financing, market intelligence, and incentives information.

According to DOC Commissioner Lee Peterson, the Department was successfully involved in 22 business startups. This is an early indicator of the potential under the new North Dakota Department of Commerce and bringing awareness of this success to the economic development community and the North Dakota public will encourage more people to come forward with ideas. Posting this information on the existing information clearinghouse websites and also providing detailed information about financing, business plan development, market intelligence and incentives will assist in making North Dakota a more fertile climate for entrepreneurship which will attract investors and skilled workers to the state. In addition, the augmentation of the Business Information Centers and the One Stop Capital Shops sponsored by the Bank of North Dakota and the Small Business Administration (SBA) is a good step towards creating a greater entrepreneurial focus. The One Stop Capital Shops and the Business Information Centers have limited amounts of information online, and this can be improved to meet the needs of the state's entrepreneurs.

Responsibility: DOC, EDND, Bank of North Dakota.

Timeline: Spring 2003.

5. Build a privately funded seed stage or early venture capital fund with the assistance of the public sector.

Local economic developers, private sector leaders, and business incubator leaders all expressed the need for greater access to seed capital for growing companies in North Dakota. By encouraging the development of a seed capital fund, the Foundation can begin to alleviate this pressing need. The North Dakota Development Fund does fulfill this role; however, the available funding amounts are limited and should be expanded to meet the funding requirements for budding companies. The Bank of North Dakota is a potential

North Dakota Economic Development Foundation: Strategic Plan

source for a seed capital fund along with matching funds from the private sector. Because BND plays a leading role in the state and is heavily invested in its future, the bank's leaders and funding capacities should be asked to take a supporting role to the private sector's leadership in the provision and management of venture capital.

Responsibility: GNDA, the Foundation, North Dakota Assembly, Bank of North Dakota, DOC.

Timeline: Winter 2003.

6. Actively market entrepreneurial development successes.

To boost the culture of entrepreneurship: the university system, incubators, local economic developers, and the Department of Commerce must market their successes on websites and print media. By raising statewide awareness of success stories, North Dakota will better retain the entrepreneurial talent it needs. The holding of a venture capital conference, jointly hosted by the North Dakota university system, private sector, and state and local economic developers will be a good venue to promote successes, increase idea sharing, and facilitate access to financing.

Responsibility: University System, Department of Commerce, EDND.

Timeline: Spring 2003.

North Dakota Economic Development Foundation: Strategic Plan

Goal 4:

Create a strong marketing image to build on the state's numerous strengths, including workforce, education, and quality of place.

Rationale:

North Dakota suffers from an internal and external image problem. Internally, North Dakotans are unaware of the state's success and do not broadcast their own victories enough. The state's image nationally is undefined and is often only associated with the weather. In order to become more attractive to potential employers, residents, and visitors, North Dakota must mount an aggressive marketing campaign that promotes its strengths and unique character. Promoting quality of life, skilled workforce, and strong education system are not enough. The state should convey those strengths with a message that illustrates the state's agility and ability to be a home for business investment. North Dakota's small size must be portrayed as a positive: accessibility to government leaders and a strong business network puts the state at a unique advantage responding quickly and specifically to changing circumstances.

The development of a common message that represents the state's future vision and instills intrastate support and interstate recognition will better position North Dakota for economic growth.

North Dakota Economic Development Foundation: Strategic Plan

Strategies:

1. Measure North Dakota's image in various in state and out of state constituencies.

A biannual survey of business leaders and other stakeholders conducted by the DOC and the GNDA to identify positive and negative image factors will be the basis for the marketing campaign that conveys the state's strengths. Holding focus groups at trade shows or industry gatherings can be effective in determining state image, as well as be a selling point.

Responsibility: DOC, GNDA.

Timeline: Fall 2002

2. Develop a statewide internal marketing effort to improve the North Dakota's self image.

North Dakota must move beyond the present "survival is success" mentality in economic development. Promoting economic success through speaking engagements, websites, and print media will help improve the state's internal image.

Responsibility: Commerce Cabinet, DOC, EDND.

Timeline: Fall 2002

3. Continue and expand volunteer participation in external marketing trips.

North Dakota Economic Development Foundation: Strategic Plan

Building on individual stature and credibility, members of the Foundation Board can be spokespeople for the state's new vision and plan. In addition, The Foundation members' status makes each a good candidate to serve as a personal "ambassador" hosting and soliciting prospective economic development clients. The Foundation members' networks and intimate knowledge can be effective selling tools for North Dakota. The implementation of this recommendation may require amendments to the legislation that created the Foundation in order to protect the confidentiality of the prospective clients that visit North Dakota.

Responsibility: The Foundation, DOC.

Timeline: Start immediately, ongoing process.

4. Improve the common portal that presents the state's marketing message and include demographic, economic, and cultural information about the communities in the state.

A broad range of statistical information should be readily available. Search capabilities should allow visitors to identify communities and resources in a customized fashion. Finally, community-level data should be linked to and from local economic development websites. Growing North Dakota and Discovering North Dakota present the state's demographic, economic, and cultural information. However, a unified message that communities can rally around and customize is not currently available. North Dakota's unique character is not as prominent as it can be on the Discover North Dakota website, and should be updated following the completion of each image measurement survey.

Responsibility: DOC, EDND.

Timeline: Summer 2003

North Dakota Economic Development Foundation: Strategic Plan

Goal 5:

Accelerate job growth in diversified industry targets to provide opportunities for the state's long-term economic future.

Rationale:

A targeted approach to economic development reduces unproductive activity, such as recruiting industries that will not catalyze the existing industry base. The adoption of a targeted industry development strategy is essential to successful statewide economic development.

Strategies:

1. Encourage industry cross selling through an import substitution campaign.

The Economic Development Association of North Dakota along with the GNDA can initiate an import substitution program to help in-state suppliers better meet the needs of purchasers. Too often, states pressure in-state companies to buy without improving supplier capacity to meet market needs; those programs have proven flawed and short-lived. The program could teach suppliers to exploit existing marketing opportunities in North Dakota and review fiscal and regulatory policies to reduce uncompetitive requirements.

Responsibility: GNDA, EDND

Timeline: Fall 2002

North Dakota Economic Development Foundation: Strategic Plan

2. Recruit industries that complement supply chains for target industries and encourage entrepreneurial growth.

The DOC can survey the major industries in the state and determine their suppliers. From the survey a list of recruitment targets can be developed.

Responsibility: DOC, EDND, GNDA.

Timeline: Ongoing

3. Focus state tax incentives to support target industry development.

To bolster and attract the IT industry, North Dakota should consider offering research and development tax credits which have had proven success in several states. The tax credits often leverage public and private funding for new research. In addition, the state should consider offering high capital-intensive tax credits to support the manufacturing and energy industries. Examples of successful tax incentives are Florida's High Impact Performance Incentive grant and Florida's Capital Investment tax credit.

Responsibility: Governor, Commerce Cabinet, North Dakota Assembly, DOC.

Timeline: Winter 2003

North Dakota Economic Development Foundation: Strategic Plan

Goal 6:

Strengthen North Dakota's business climate to increase global competitiveness.

Rationale:

To improve its competitive advantages, North Dakota must be known as the "easiest place to conduct business" in the nation. North Dakota is already a favorable place to conduct business. Building on this requires consistent marketing of business climate factors such as workers compensation rates, per capita tax collections, high educational attainment and complemented with regular improvements resulting from the biannual surveys discussed below.

Strategies:

1. Conduct annual business climate surveys of private sector leaders to identify strengths and weaknesses.

A business climate survey will allow the Department of Commerce to isolate areas that need improvement and take the proper steps to address those weaknesses. In addition, focus groups at industry trade shows can also be effective in gathering information about North Dakota's business climate. The strengths discovered through this survey should be included in marketing information on websites and collateral materials, as well as the steps that have been taken to remedy weaknesses.

Responsibility: GNDA, DOC

Timeline: Summer 2003

North Dakota Economic Development Foundation: Strategic Plan

2. Calculate cost of doing business and quality of life indicators and compare against regional and national competitors every two years.

The DOC should identify several factors to measure North Dakota against regional and national competitors. The benchmark comparisons should be used for planning purposes. Various published business climate rankings provide a comprehensive index of critical factors. These publications can be used to monitor the state's effectiveness at improving its business climate and the state's image. In addition to business costs, North Dakota's strengths in education and quality of life are extremely important to a state's image and ranking.

Responsibility: GNDA, DOC

Timeline: Fall 2003

North Dakota Economic Development Foundation: Strategic Plan

Implementation of the North Dakota Strategic Economic Development Plan

Foundation Mission, Vision, and Goals

A major product of this strategic planning effort was the development of Vision and Mission Statements for the North Dakota Economic Development Foundation. The Vision and Mission Statements were developed during a facilitated workshop with members of the Foundation and the consulting team.

The Foundation's vision and mission statements are listed below:

Vision

With respect for North Dakota values and quality of life, the North Dakota Economic Development Foundation will be a catalyst in creating quality employment opportunities making North Dakota a competitive partner in the global economy.

Mission

The Foundation will advise and support North Dakota's Governors and the Department of Commerce by:

- Establishing aggressive, yet realistic performance goals for the state's economic development;
- Creating a system to monitor and evaluate the state's performance in meeting its economic development goals; and
- Facilitating productive collaboration among the state's legislators and economic development partners both public and private.

North Dakota Economic Development Foundation: Strategic Plan

In addition to developing a Vision and Mission, the Foundation also guided the consulting team in developing six core goals for economic development in the State of North Dakota. These goals are:

- ❖ Develop a unified front for economic development based on collaboration, accountability, and trust.
- ❖ Strengthen linkages between the state's higher education system and economic development organizations and private businesses.
- ❖ Create quality jobs to retain North Dakota's current workforce, and attract new high-skilled labor.
- ❖ Create a strong marketing image that builds on the state's numerous strengths, including workforce, education, and quality of life.
- ❖ Accelerate job growth in sustainable, diversified industry targets to provide opportunities for the state's long-term economic future.
- ❖ Strengthen North Dakota's business climate to increase global competitiveness.

What Will the Foundation Do?

Guided by the parameters contained in SB 2032, the Foundation developed a consensus on its core roles and niche in North Dakota's economic development arena at the April 2002 strategic planning workshops. This consensus was developed following a series of facilitated exercises and a presentation on how various states operate public/private economic development partnerships. The consensus that emerged from the group attending the workshops was that the Foundation's core functions should be to:

- **Core Function One:** Advise current and future governors and the Commissioner of the Department of Commerce on economic development matters;

North Dakota Economic Development Foundation: Strategic Plan

- **Core Function Two:** Develop and update a strategic plan for economic development for the State of North Dakota that will primarily be implemented by the DOC;
- **Core Function Three:** Develop an accountability system to regularly measure the state's progress and the implementation of the strategic plan; and
- **Core Function Four:** Raise private sector funds to conduct traditional marketing activities and to support any Foundation administrative expenses.

A major point of consensus is that the Foundation would *not* be involved in the operations of the DOC or any programs. Another key point of consensus was that the Foundation would not require a permanent, full-time staff to fulfill its core functions, and that it would coordinate activities through existing DOC staff members. None of the organizational models presented to the Foundation as possible approaches to operationalize the Foundation (e.g., Kansas, Inc; the Oregon Progress Board; the Indiana Economic Development Council) were viewed as relevant approaches for organizing the Foundation in North Dakota.

Each of the four core function areas is discussed in more detail below, including proposed next steps and a broad discussion of the necessary resources to carry out these functions. In addition, the consulting team added a fifth core function called "Coordinate Existing Economic Development Initiatives". To fulfill the Foundation's role as a catalyst for economic growth, the consulting team strongly recommends that the Foundation take a leadership role in forming collaborations and ensuring that resources and efforts are not duplicated.

Core Function One: Advising the Current and Future Governors

A key role of the Foundation is to provide the current and future governors with strategic advice and counsel on economic development matters. One specific example given earlier in this plan is that the Foundation should advise the Governor

North Dakota Economic Development Foundation: Strategic Plan

to continue the Higher Education Roundtable. The process by which this input is transmitted to the Governor is critical since poor communication processes could lead to both wasted effort and knowledge.

The consulting team proposes that the Foundation take the following steps to implement its role as Gubernatorial Advisor.

Task 1-1: Invite the Governor or his designee to attend relevant portions of the Foundation's quarterly meetings

Task 1-2: Consult with the Governor or his designee to help craft quarterly meeting agendas so that issues of relevance are discussed and private sector input is received on the most current issues or policy questions. The Foundation should not meet simply to meet, but should use the opportunity to exchange ideas, review how the state is doing, and when appropriate hear from regional or national experts on various topics of interests.

Task 1-3: Provide early input into the Governor's Executive budget advising how the budget priorities will affect the state's ability to grow its economy and implement the strategic economic development plan.

Task 1-4: Report regularly on the economic progress according to the performance measurement system recommended.

Task 1-5: as discussed earlier in the strategic plan adding representation from local economic development professional(s), agriculture, and higher education can strengthen the Foundation's current composition.

Resources Needed: As described above, the Foundation made it clear to the consulting team that it did not want a permanent staff. However, to accomplish Tasks 2 and 3 listed above, some outside staff assistance may be necessary. For Task #3, staff can be pulled from the DOC to assist the Foundation members in drafting the necessary documents.

North Dakota Economic Development Foundation: Strategic Plan

Core Function Two: Developing a Strategic Plan and Monitoring DOC's Implementation of the Plan.

The North Dakota Assembly recognized that it is not sufficient for the Foundation to develop strategic goals and propose action items to be implemented by DOC and walk away. Nonetheless, it is critical to note that the Foundation will not be involved in the actual implementation or operationalizing of this strategic plan. That is largely the job of the DOC. As such, the Foundation should concentrate on the following tasks:

Task 2-1: Rollout the Strategic Plan to key stakeholders and the general public. Provide advance briefing on the plan to key stakeholders prior to rollout and try to obtain some type of national coverage on the state's plan and performance measurement system.

Task 2-2: Propose modifications to the Foundation's enabling legislation to designate the Chair, or a designee, of the Foundation as a member of the Commerce Cabinet. Currently, the Commerce Cabinet consists of directors of each of the DOC divisions and of the executive heads (or designees) of various agencies, including the State Board of Higher Education, the Bank of North Dakota, the Department of Agriculture, and Job Service North Dakota. This change will improve communication and enable the Foundation to actively monitor implementation of the strategic plan and keep abreast of relevant budgetary issues. This change will also enable the Foundation to meet its statutory mandate to monitor tourism and economic development activities.

Task 2-3: Hold quarterly sessions with DOC staff to discuss implementation of key action items. The strategic plan subcommittee should participate in these meetings and report back to the Full Foundation at its meetings. For efficiency, these sessions can immediately precede Foundation Board meetings.

Task 2-4: Compile and publicize an annual progress report that evaluates the extent to which the DOC has undertaken the activities suggested in the Strategic Plan.

Task 2-5: Review and update the Strategic Plan in approximately five years. A large part of the new plan should focus on changes over the past five years in the State and whether certain recommended actions yielded positive results. Events like international calamities, economic shifts, etc. may cause a need to review the plan more frequently

North Dakota Economic Development Foundation: Strategic Plan

Resources Needed:

Developing the annual progress report recommended in Task 2-4 will require outside assistance. Modifying the Strategic Plan in approximately five years would require the assistance of an independent third party.

Core Function Three: Developing an Accountability/Performance Measurement System

Developing a system for monitoring and measuring the state's economic performance represents a critical step forward for the State of North Dakota. The mere act of stepping forward, publicizing the baseline data, and setting ambitious, yet realistic targets for the future illustrates that the state is serious about accomplishing key economic development goals. There is an inherent risk in the state not meeting targets, but without setting strong targets, North Dakota will stagnate.

It is critical to note that there are a number of external factors beyond the immediate control of state government (e.g., interest rates, federal farm policy, natural disasters) that will have a significant impact on whether the state meets certain performance targets. It is also important to note that while the DOC (not the Foundation) will be charged with implementing the strategic actions designed to help the state meet its performance benchmarks, it is unreasonable to assign 100 percent accountability to a single state agency for the economic well-being of the entire state.

A proposed list of specific performance benchmarks is explained below in greater detail.

Resources Needed: *The credibility of the performance reports would be enhanced if an independent third party performs the calculations, wherever possible. It is typically appropriate to allow DOC to report the findings of the third party's calculations.* The consulting team recommends that the Foundation contract with either a university or qualified research

North Dakota Economic Development Foundation: Strategic Plan

firm to implement the accountability/performance measurement system. It is clearly important to coordinate with DOC on establishing performance targets, since the task of compiling the data and assessing progress and shortcomings is best performed by an independent third party with strong involvement and oversight by the Foundation.

Core Function Four: Raising Private Sector Funds

Another core function of the Foundation is to raise private sector dollars. The funds should be used not only to cover the Foundation's relatively modest administrative expenses (meeting costs, implementation of accountability system, future strategic plans), but also to supplement the state's business recruitment and retention program. For example, as mentioned earlier in this plan, Foundation members should work with the DOC to serve as ambassadors for the State of North Dakota.

Task 4-1: Develop a written fundraising plan with specific targets and proposed fundraising methods. The plan should consider the need to establish a "trustee" as recipient of the contributions and assure that disbursements are made only according to established policy and procedure. The plan should suggest that a multi-year total amount be raised, vis-à-vis raising funds on a project by project basis. In addition, the plan should recognize that it would probably be viewed as a protocol violation for DOC staff to be direct solicitors of funds. This leaves only professional fund raising or direct Board member solicitation.

Task 4-2: Develop written policies and procedures regarding who can solicit funds, who can use money and for what purpose, and disbursement processes. The purpose of these written policies is to avoid any conflicts of interest and to ensure that DOC staff time is not used for any activities that are prohibited under North Dakota law.

Resources Needed: The Foundation may need to seek the advice and assistance of the Attorney General's office regarding the drafting of policies and procedures, and the interpretation of pertinent statutes.

North Dakota Economic Development Foundation: Strategic Plan

Core Function Five: Coordinate Existing Economic Development Initiatives

As described earlier in this plan under Goal 1, “Develop a unified front for economic development based on collaboration, accountability, and trust,” North Dakota is a small state, but has no shortage of economic development organizations and initiatives.

Task 5-1: Review and update the database of all existing economic development organizations and efforts. The list should include local, regional, and statewide efforts.

Task 5-2: Coordinate with the Greater North Dakota Association’s (GNDA) New Economy Initiative (NEI) to enhance the state’s economic development outcomes. The NEI, sponsored by GNDA, has done a commendable job creating private sector networks that can be used to provide input and support to entrepreneurial development, fundraising, industry cross selling, and workforce development among other things. The combined efforts of GNDA, The Foundation, and the DOC can only help North Dakota in reaching its economic goals. Current Foundation members that are also involved with NEI should take the lead to facilitate discussions between the DOC and NEI leadership to help the two organizations determine how they may complement each other’s implementation efforts.

Task 5-3: Include a section in the annual progress report on the implementation of the North Dakota Strategic Plan for Economic Development (See Task 2-4 above) that describes the extent by which diverse organizations have been working together towards common goals, and the role that the DOC and the Foundation has played in coordinating such efforts.

Resources Needed: DOC can provide staff assistance for the database recommended under Task 5-1. The staff assigned to develop the annual progress report under 2-4 should also develop the update on coordination activities recommended under Task 5-3.

North Dakota Economic Development Foundation: Strategic Plan

Proposed Performance Measurement System

As described earlier in this chapter, the State of North Dakota should be commended for taking the bold step of implementing an economic development performance measurement system. North Dakota is joining the ranks of states like Oregon, North Carolina, Minnesota, and Indiana who have developed benchmarks to monitor their state's economic performance. The performance measurement system proposed in this plan provides North Dakota an excellent opportunity to demonstrate positive results and build confidence among the general public that the state is heading in the right direction and can be a strong, competitive player in the global economy.

The purpose of the performance measurement system proposed for North Dakota is to clearly communicate how effective North Dakota is at meeting the six goals outlined in this strategic plan. The appendix to this plan provides a detailed listing of the proposed performance indicators for each of the six goals. The 21 indicators selected by the consulting team serve the basic purpose of flagging whether the North Dakota economy is getting better, worse, or staying the same. The indicators selected by the consulting team are largely measures of accomplishment, not, measures of activity. This is because North Dakota should focus on monitoring and evaluating the **results** of actions. The indicators were selected after reviewing indicators used in leading edge performance measurement organizations like the Oregon Progress Board and Joint Venture in Silicon Valley, and customizing them to fit the economic situation and priorities in North Dakota. All indicators meet the following “good indicators” test. In other words, the indicators recommended for North Dakota:

- Reflect the economic collective concerns of North Dakota policymakers and the public at large.
- Can be measured using reliable and easily accessible data
- Focus on accomplishments rather than activities.

North Dakota Economic Development Foundation: Strategic Plan

It is important to note that the proposed performance measurement system focuses on high-level changes in the state's economic conditions, not programmatic changes. For example, the recommended three core indicators are:

- Net Job Growth
- Average Annual Wage Growth
- Net Migration Growth

The three indicators listed above will track whether North Dakota has experienced meaningful changes in its economy, not whether the DOC has implemented a specific program. The extent to which the DOC has implemented the actions recommended in this plan will be actively monitored through other means (see discussion on Core Function 3 above), but will not serve as the backbone of the state's economic development performance measurement system. Rather, the proposed performance measurement system is outcome oriented and focuses on:

- Identifying indicators of various conditions in the state's economic development;
- Determining a baseline status of those conditions;
- Establishing ambitious, yet realistic targets for the state over the next ten years,
- Tracking the extent to which targets have been met; and
- Sharing that information with North Dakota policymakers and the general public on an annual basis in the form of an economic development report card or snapshot.

North Dakota Economic Development Foundation: Strategic Plan

Benchmarks

Benchmarks	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
GOAL 1: DEVELOP A UNIFIED FRONT FOR ECONOMIC DEVELOPMENT BASED ON COLLABORATION AND ACCOUNTABILITY.											
Site Selection Ranking of North Dakota Department of Commerce											
Share of local economic development organizations participating in Statewide Marketing Strategy											
		30%	40%	50%	54%	55%	56%	57%	58%	59%	60%
GOAL 2: STRENGTHEN LINKAGES BETWEEN THE STATE'S HIGHER EDUCATION SYSTEM AND ECONOMIC DEVELOPMENT ORGANIZATIONS AND PRIVATE BUSINESSES.											
Academic R&D Expenditures as Percent of Gross State Product											
	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.6%
Industry R&D Expenditures as Percent of Gross State Product											
	0.2%	0.4%	0.5%	0.7%	0.9%	1.1%	1.3%	1.5%	1.6%	1.8%	2.0%
GOAL 3: CREATE QUALITY JOBS THAT RETAIN NORTH DAKOTA'S CURRENT WORKFORCE, AND ATTRACT NEW HIGH-SKILLED LABOR.											
Net Job Growth											
	1,800	1,400	1,700	2,700	4,300	8,400	9,000	9,600	10,300	10,800	11,600
New Private Sector Businesses per 100,000											
	174	77	105	162	257	509	543	575	615	654	696
Average Annual Wage											
	\$26,252	\$27,389	\$28,688	\$30,167	\$31,847	\$33,752	\$35,812	\$38,049	\$40,510	\$43,175	\$46,113
Net Migration											
	2,088	662	1,302	2,768	4,410	6,070	7,781	9,586	11,470	13,456	15,573
GOAL 4: CREATE A STRONG MARKETING IMAGE THAT BUILDS ON THE STATE'S NUMEROUS STRENGTHS, INCLUDING WORKFORCE, EDUCATION, AND QUALITY OF LIFE.											
Positive National/Out of State Media Exposure (favorable mentions)											
		10	20	30	40	45	46	47	48	49	50
Number of North Dakota Department of Commerce Web Site Hits per Month											
	10,920	11,466	12,039	12,641	13,273	13,937	14,634	15,366	16,134	16,941	17,788
Number of Leads Generated by the North Dakota Department of Commerce											
	140	160	175	190	205	208	211	214	216	218	220
GOAL 5: ACCELERATE JOB GROWTH IN SUSTAINABLE, DIVERSIFIED INDUSTRY CLUSTERS TO PROVIDE OPPORTUNITIES FOR THE STATE'S ECONOMY.											
Net Job Growth in Manufacturing											
	300	200	200	300	600	1100	1200	1200	1300	1400	1500
Net Job Growth in Business Services											
	400	200	300	500	900	1800	2000	2200	2400	2600	2900
New Private Sector Businesses in Manufacturing											
	5	3	3	5	10	18	20	20	22	23	25
New Private Sector Businesses in Business Services											
	19	9	14	24	42	85	94	104	113	123	137
Number of Utility Patents per 100,000											
	17.9	19.5	21.2	22.9	24.5	26.2	27.9	29.6	31.2	32.9	34.6
GOAL 6: STRENGTHEN NORTH DAKOTA'S BUSINESS CLIMATE TO INCREASE GLOBAL COMPETITIVENESS.											
Gross State Product (Annual Growth Rate)											
	2.3%	3.6%	3.5%	3.4%	3.3%	3.2%	3.1%	3.0%	2.9%	2.8%	2.7%
Venture Capital Investments (thousands)*											
	\$700	\$2,734	\$5,658	\$8,773	\$12,078	\$15,574	\$19,260	\$23,137	\$27,204	\$31,461	\$35,909
Merchandise Export Value (per capita)											
	\$1,306	\$1,329	\$1,368	\$1,440	\$1,528	\$1,651	\$1,757	\$1,865	\$1,997	\$2,146	\$2,299

*Source = PricewaterhouseCooper/Venture Economics/NVCA Moneytree Survey

External economic factors, such as national economic performance will require these benchmarks to be reassessed as time passes. No state agency can be held accountable for the economic performance of an entire state.

North Dakota Economic Development Foundation: Strategic Plan

Next Steps

The consulting team has established the baseline data for each of the 21 indicators, and have established what its economists consider reasonable, yet ambitious targets. The next steps for the Foundation are to:

Task 1: With assistance from state government, determine the recommended performance indicators and targets and confirm their appropriateness based on the availability of data.

Task 2: Identify a government agency to assemble and track the necessary data to track the indicators contained in the performance measurement system.

Accountability and the Relationship Between the Foundation and the DOC

The Foundation is responsible for developing measures of success (i.e. performance indicators), recommending strategic actions to meet key economic development goals, and monitoring and evaluating the state's progress towards meeting those goals. While Foundation members will play a role in some statewide marketing and coordinating efforts, the DOC and other relevant state agencies are ultimately responsible for achieving the targets established as part of the proposed performance management system. The Foundation will provide guidance, oversight, and serve as the state's economic development watchdog, but the DOC will be largely responsible for actually implementing the actions designed to bring the state to a higher level of economic prosperity and opportunity.

As mentioned earlier in this chapter, it is critical to emphasize that there are a number of external factors beyond the immediate control of state government (e.g., interest rates, federal farm policy, natural disasters) that will have a significant impact on whether the state meets certain performance targets. It is also important to note that while the DOC (not the Foundation) will be charged with implementing the strategic actions designed to help the state meet its performance benchmarks, it is unreasonable to assign 100 percent accountability to a single state agency for the economic well-being of the entire state.

North Dakota Economic Development Foundation: Strategic Plan

Best Practices in Performance Measurement

The *Index of Silicon Valley* is an annual collection and report of information that creates a profile of the economy and quality of life in Silicon Valley, California. The *Index* was created by an organization known as *Joint Venture*, a coalition of community, business, government, education and community leaders that grew out of concern about the area's economy and quality of life.

The *Index* tracks 35 indicators that were selected by Joint Venture and a group of more than 60 community experts. The indicators measure the overall long-term condition of the region, reflect the interests and concerns of the entire Silicon Valley community, are statistically measurable, and measure accomplishment, not activity.

For each of the 35 indicators, the *Index* explains two things:

- Why that particular indicator is important to track in the first place
- How Silicon Valley is doing relative to that indicator.

The Oregon Progress Board is frequently cited as the nation's leading performance measurement organization. Oregon's system is statewide in nature and covers all aspects of state government ranging from the environment to the economy to education and health care. All benchmarks are specifically linked to the state's 20-year strategic plan called "Oregon Shines."

Oregon organizes its Economy Indicators into five categories: (1) business vitality; (2) economic capacity, (3) business costs, (4) income, and (5) international. The Progress Board staff consults with the relevant state agencies to develop and refine targets. Each year, the Board publishes a "Benchmark Performance Report" that provides detailed information on how the state has performed relative to each benchmark. For each measure, the Progress Board assigns a grade and provides a detailed discussion of relevant information such as why the indicator is important, how is the state doing and why, what needs to be done to improve or sustain performance, what state agencies are directly involved in affecting the indicator. The appendix of this report contains an excerpt from the 2001 Performance Report.

In addition to establishing and monitoring a set of social and economic benchmarks, the Indiana Economic Development Council compiles an annual analysis of how Indiana fared in various state rankings produced by national organizations and publications such as the Corporation for Enterprise Development, Site Selection, and Regional Financial Associates. A copy of the 2000 Compilation is included in the Appendix of this plan. The Council analyses the state's rankings in terms of what they say about Indiana as both a place to do business and a place to live. The Council also analyses how Indiana performed in the various rankings relative to past years. The Compilation is not limited to economic indicators. Other areas like the environment and child well-being are reviewed as well.

North Dakota Economic Development Foundation: Strategic Plan

Summary of Immediate Recommended Next Steps

This final chapter should provide the Foundation with a clear set of actions it must take to continue to meet its statutory mandates. Some of these actions are more critical than others. As such, the table below outlines a set of critical actions that should be initiated as soon as possible.

Action	Responsibility	Recommended Deadline
Hold meetings with DOC leadership and local economic development organizations to brief them on the contents of the strategic plan	Foundation Strategic Planning Committee and consultant team.	July 30, 2002
Develop a course of action to operationalize the strategies that fall within their realm of responsibility	North Dakota Department of Commerce Commissioner and Division heads.	September 1, 2002
Foundation should develop a fundraising strategy and set of written fundraising policies and procedures to avoid any appearances of conflict of interest	Foundation Executive Committee	October 1, 2002
Identify necessary staff resources to implement the proposed performance measurement system	Foundation Strategic Planning Committee with input from entire Foundation.	November 30, 2002
Hold first quarterly accountability meetings with DOC staff to determine progress made on implementing the strategies contained in the plan	Foundation Strategic Planning Committee	December 15, 2002
Publish an annual economic development report for North Dakota	DOC	January 2004.