

**Report:**  
**THE GREATER LINCOLN REGION**



**Presented to:**  
Greater Lincoln Workforce Investment Board/City of Lincoln  
Lincoln Partnership for Economic Development

**Funded by:**  
Workforce Investment Act (WIA) Title I, Regional Innovation Grant  
Awarded by the US Department of Labor, Employment and Training Administration

**REPORT:**  
The Greater Lincoln Region

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Prepared by:



## ACKNOWLEDGEMENTS

AngelouEconomics would like to express our appreciation to the Executive Committee as well as the numerous individuals that contributed to this process for their invaluable input on key issues identified in the Greater Lincoln Region.

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## EXECUTIVE SUMMARY

### EXECUTIVE SUMMARY

With its central U.S. location, young educated population, strong network of higher education institutions, emerging food and agricultural research facilities and a dynamic corporate presence, the Greater Lincoln Region bears a number of vital assets. These assets, if properly leveraged can not only help offset the near-term economic challenges confronted by the region, but can set a long-term path toward strengthening and transforming common predominant industry sectors while building a foundation for emerging value-add ones, all of which can be significant sources of jobs and prosperity for the region.

The first RIG project report (*Greater Lincoln Regional Economic Scan*) examines the common and unique characteristics of the 12-county RIG area, identifying the underlying economic factors that define it as a potentially viable economic “region.” It identifies a series of demographic and labor market trends and challenges and lays the framework for which to examine new target industry opportunities. With input from public and private leaders throughout the 12-county RIG region, the *Asset Map and Target Industry Analysis* report (report #2) inventories and maps information that has never been aggregated for the full region. This report aims to achieve four objectives:

- Identify a set of high-growth high-wage industry clusters that serve as “targets” for the region’s economic and workforce development efforts;
- Identify occupations within these target industries that are not strongly concentrated in the region currently (as a means for focusing future workforce job training initiatives);
- Highlight a series of challenges that the region will face in pursuing these industry opportunities and the pipeline of talent that supports them.
- Present initial strategy “opportunities” as a foundation for the last report – the regional strategic plan.

The second report provides an in-depth analysis of key strengths, opportunities, and areas for improvement in the region as it attempts to build strong industry clusters in five target areas: **Advanced Manufacturing, Health Services, Agriculture and Life Sciences, Transportation and Logistics, and Business Services and Information Technology.**

Through supplier connections, shared workforce requirements and mutual business activities, these target opportunities, and specific niches, share a symbiotic relationship and represent both traditionally strong regional industries as well as important emerging opportunities that can help the region become a much more competitive location.

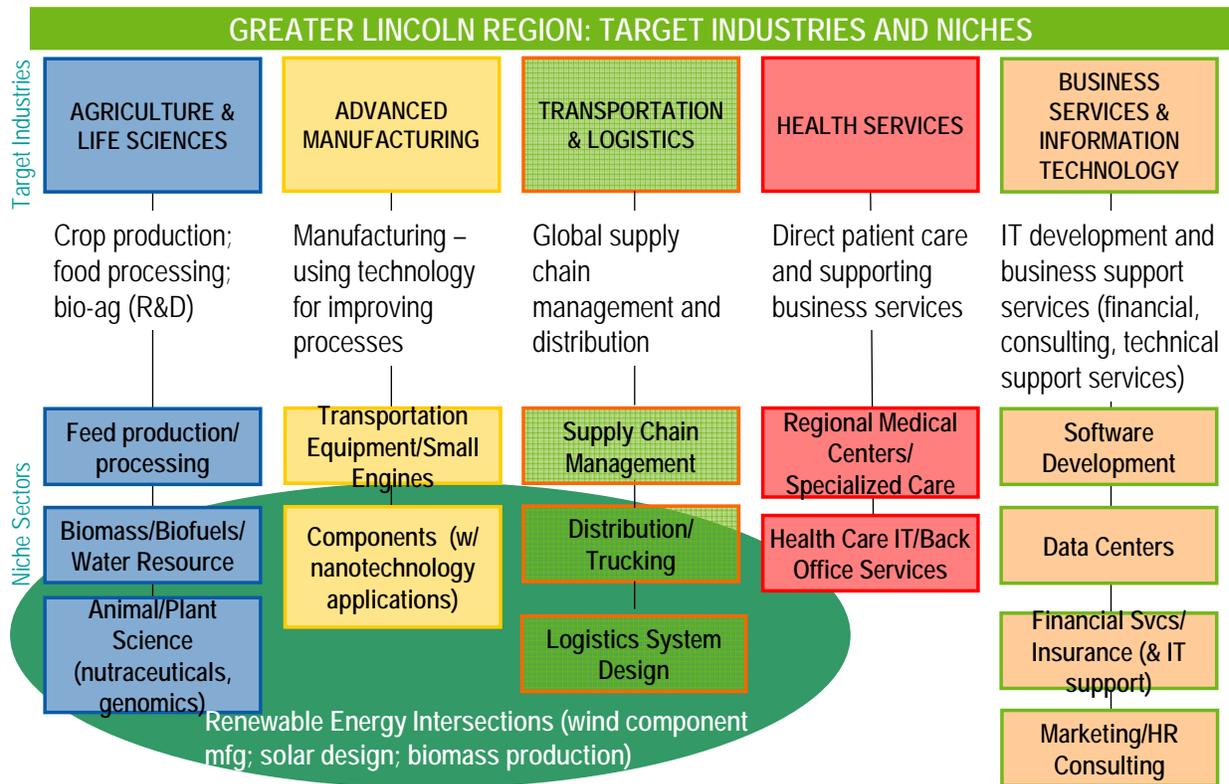
#### RIG PROJECT BACKGROUND

The Greater Lincoln RIG Project is a 12-county collaborative initiative to generate opportunities for further regional economic prosperity. The initiative is a partnership of the Greater Lincoln Workforce Investment Board, City of Lincoln, the Lincoln Chamber of Commerce and Partnership for Economic Development, and the Lincoln Area Development Partnership. Other active lead organizations include the Southeast Community College, the University of Nebraska-Lincoln, and Peru State College

Following the framework of the U.S. Department of Labor’s Workforce Innovation in Regional Economic Development (WIRED), this initiative will identify the economic and workforce development assets within the region and develop a strategy to strengthen the capacity of area education and workforce systems to meet demands of strong and emerging target industries.

The project follows a four-phased approach: 1) form core leadership team; 2) understand the region’s economic strengths and challenges; 3) map the region’s key assets and identify workforce demands from high growth industries; 4) devise strategies, leverage resources, and implement

## EXECUTIVE SUMMARY



As the region positions itself to take advantage of these opportunities it must address several underlying economic issues (slow wage growth, inability to capture innovation) as well as some specific critical challenges:

### EDUCATION/WORKFORCE DEVELOPMENT

#### **K-12 not an active component of regional economic development**

While research shows strong K-12 systems across the region, early education must be an integral part of regional economic development by providing students critical “career awareness” opportunities specific to the region.

#### **The workforce system can be more unified and further aligned to target industries and emerging occupations**

While the region benefits from a strong network of two- and four-year higher education institutions with a mix of program offerings, there may be an opportunity to leverage these assets to develop a more unified ‘system’ that anticipates and effectively responds to existing and future industry needs across the region. The challenge will remain in ensuring there are enough graduates of these important programs (with some level of industry experience) to meet anticipated demand in growing (health care) and emerging (life sciences or biotechnology, IT/creative industries, renewable energy) industries. As this report highlights, engineering talent (mechanical, software), specifically, is underrepresented in the region but greatly in demand across target industries

#### **Responsive community college system but limited capacity for meeting customized training demand**

The Southeast Community College system has an exceptional reputation for meeting academic needs in the region but may need to do more to reach directly to the regional business community to understand customized training needs and to articulate SCC existing training capabilities.

## EXECUTIVE SUMMARY

### **Improving regional hiring efforts through cross-institutional collaboration**

In addition to coordinated academic programming and job training, the region's institutions can do more to connect to employers for their *hiring* needs. Across industries, employers mentioned their reliance on UN-L and SCC for finding qualified workers. However, a majority believe a much stronger connection and more seamless path can be developed between institution career service offices and employers.

## **ENTREPRENEURSHIP/INNOVATION**

### **Entrepreneurship support networks need to be strengthened**

Relative to the rest of the nation, the Greater Lincoln Region faces significant challenges in commercializing innovation that occurs within the area. With limited funding and patenting activity, there is little innovation being captured by the region, impacting regional economic development efforts (Nebraska ranks 49<sup>th</sup> in a recent Kauffman Foundation study of national venture capital funding availability). This is a critical challenge for the region as emerging technology start-ups are increasingly capital-intensive relying heavily upon VC firms, angel networks, or foundations to bridge the gap between an idea and traditional financing. Specific challenges include:

- Disconnected small business and entrepreneurship programs throughout the region and maze of resources making it especially challenging for entrepreneurs in more rural areas.
- Local early-stage funding resources are newly formed with investors with limited technical expertise
- Limited physical space/financing options/networking opportunities for both "lifestyle" and high-growth entrepreneurs.

### **Innovation Campus research targets must be aligned to economic development industry targets**

The UN-L Innovation Campus presents an important opportunity for the region to encourage private entrepreneurs to work with research faculty and expand economic development throughout. While planning for this campus is still underway, that effort should inform and be informed by this RIG strategic plan. It appears core UN-L research competencies will be focused upon food, animal health, and water resources. These are closely tied to regional economic development industry targets identified in this report – placing increasing importance on the connection between the University and LPED and other economic development entities.

### **UN-L research "outcomes" must be directly tied to regional economic development**

As Innovation Campus and other UN-L research facilities develop, there may be an opportunity to more robustly tie to job and business development in counties outside of Lancaster. During interviews, outlying counties expressed a disconnect with UN-L from an economic development perspective. This was most often characterized as a lack of awareness of innovations emerging from the university that may have applications for regional firms (i.e. encouraging higher value-add production).

## **REGIONALISM/ECONOMIC DEVELOPMENT**

### **Region is at a disadvantage in attracting new corporate locates because "regionalism" thinking is only at nascent stages**

As identified in the first report, by and large, stakeholders across the region recognized that while "regionalism" is endorsed as a concept, public officials still need convincing that, in operation, it can generate an actual return on investment. The current county-by-county business attraction efforts (i.e. responding separately to IDED leads and RFPs) present a major challenge to potential new businesses seeking regionally consistent information and a single-point-of contact. A regional economic development group that supports individual county efforts may be beneficial.

## EXECUTIVE SUMMARY

The *Greater Lincoln RIG Project* has shed light on Southeast Nebraska's greatest economic and workforce development opportunity: **To be competitive the region must transition to a knowledge-based economy that supports innovative industry clusters where entrepreneurship and highly skilled workers will be the driving forces of the economy.**

Given this "vision," three principles underlie this economic and workforce development strategic plan: **1) regionalism** where cities and counties within Southeast Nebraska share resources and integrate initiatives; **2) economic and workforce development alignment** where education and job training programs are directly aligned to industry needs; and **3) innovation** where new ideas and technology will be at the center of new job creation.

The RIG Action Plan comprises a set of strategies that support this transition and ultimately make the region more competitive. **The plan identifies the following goals and recommendations:**

GOALS	RECOMMENDATIONS
<p><b><u>EDUCATION</u></b> Enhance the Pipeline of Skilled Workers and Become a Talent Magnet</p>	<ul style="list-style-type: none"> <li>▪1.1 Expand Project Lead the Way and formation of other STEM programs</li> <li>▪1.2 Develop career pathways and align them with region's target industry sectors</li> <li>▪1.3 Expand SCC career academy programs (Focus programs)</li> <li>▪1.4 Promote target industry occupations in K-12 systems &amp; expand organized internship programs</li> <li>▪1.5 Develop a talent attraction/retention campaign</li> </ul>
<p><b><u>WORKFORCE DEVELOPMENT</u></b> Better Integrate Economic and Workforce Development</p>	<ul style="list-style-type: none"> <li>▪2.1 Align workforce "system" with target industries</li> <li>▪2.2 Enhance community college outreach to employers</li> <li>▪2.3 Expand distance education opportunities including mobile training labs</li> <li>▪2.4 Expand regional labor market data and analyses</li> <li>▪2.5 Host periodic regional State of the Workforce event</li> <li>▪2.6 Develop regional industry roundtables to understand employer workforce needs</li> <li>▪2.7 Develop a new Center of Excellence in Advanced Manufacturing</li> </ul>
<p><b><u>ENTREPRENEURSHIP</u></b> Expand Resources to Foster Entrepreneurship</p>	<ul style="list-style-type: none"> <li>▪3.1 Develop a regional entrepreneurship resource portal/clearinghouse</li> <li>▪3.2 Better integrate entrepreneurship training into K-16 for students and teachers</li> <li>▪3.3 Start an Entrepreneurial Capital Access committee and establish regional venture fund</li> <li>▪3.4 Expand upon existing VC/angel networks and ensure investors understand target industries</li> <li>▪3.5 Enhance networking opportunities and regionalize existing initiatives</li> <li>▪3.6 Promote successes to create image as entrepreneurial hub</li> <li>▪3.7 Expand existing incubation efforts on bio-ag-based ventures</li> </ul>
<p><b><u>INNOVATION</u></b> Integrate Economic Development &amp; Tech Transfer</p>	<ul style="list-style-type: none"> <li>▪4.1 Strengthen UN-L/LPED partnership</li> <li>▪4.2 Engage LPED/LAD in Innovation Campus efforts</li> <li>▪4.3 Enhance regional private sector awareness of UN-L innovation</li> </ul>
<p><b><u>BUSINESS ATTRACTION/RETENTION</u></b> Enhance Business Attraction/Retention Efforts</p>	<ul style="list-style-type: none"> <li>▪5.1 Unify the RFP process for new projects</li> <li>▪5.2 Refine joint marketing around targets including regional niche specializations</li> <li>▪5.3 Develop annual regional "Market Analysis" report</li> <li>▪5.4 Develop regional brand and more comprehensive website</li> <li>▪5.5 Increase the entertainment and recreational opportunities throughout the region</li> <li>▪5.6 Enhance business retention efforts through greater information sharing and regionalization</li> <li>▪5.7 Understand and better connect regional supply chain</li> </ul>
<p><b><u>ORGANIZATIONAL CHANGE</u></b> Explore Redesign of Key Structures</p>	<ul style="list-style-type: none"> <li>▪6.1 Establish a formal regional economic development umbrella organization</li> <li>▪6.2 Explore a new non-profit WIB operating model</li> <li>▪6.3 Incorporate a set of "regionalism" performance metrics</li> </ul>

## EXECUTIVE SUMMARY

This plan provides the region an ambitious strategic roadmap to implement **over the next 3-5 years**. It represents achievable options for the region that are designed to be led by three primary entities – the existing Workforce Investment Boards, SCC, and LPED/LAD (i.e. regional group as explored within this plan). However, several organizations are to play critical roles, including all of the county Economic Development Organizations (EDOs), chambers of commerce, UN-L, and other regional 2- and 4-year institutions, among others. This plan is not meant to be a list of recommendations as unfunded mandates – but rather a list of achievable strategies to be supported financially by potential additional grant funding or other means.

Communities today are operating in an increasingly global and knowledge-based economy. Transnational corporations are driving economic growth and are, themselves, fueled by skilled and highly educated employees. Local economic prosperity, then, is dependent on the extent to which communities can grow their set of ‘assets’ and position themselves to compete on this global stage to attract both investment and talent. In this advanced economy – and in a time where resources are scarcer than ever – communities that “regionalize” are gaining the competitive edge.

Because economies transcend political boundaries with business transactions and workforces moving within and across communities, it only makes sense that localities work to align public and private resources across counties in support of key driving regional industries. Collaborating to leverage these assets that are spread throughout a region will expand recognition in the marketplace.

This is, in essence, the premise of the Greater Lincoln Regional Innovation Grant (RIG) Region strategic planning initiative. It addresses this critical reality – Lincoln, by itself, cannot continue to compete with other powerful regional collaboratives across the country. And if Lincoln has difficulty in getting that ‘recognition,’ than certainly, a Beatrice, a Seward, or a Falls City cannot go it alone either. Together, however, they can become a formidable player on the global stage.

## INTRODUCTION: REGIONAL ECONOMIC SCAN

### INTRODUCTION

Communities today are operating in an increasingly global and knowledge-based economy. Transnational corporations are driving economic growth and are, themselves, fueled by skilled and highly educated employees. Local economic prosperity, then, is dependent on the extent to which communities can position themselves to compete on this global stage to attract both investment and talent.

More and more communities are learning that competitive advantages in this advanced and integrated economy are gained through a “regional” approach that transcends county boundaries. Communities need to look beyond their local borders to build relationships and combine resources in order to more effectively expand recognition in the marketplace. Regions, not individual cities, are the locus of competitive advantage in the new economy – an economy where human capital plays a much more important role in company and community prosperity.

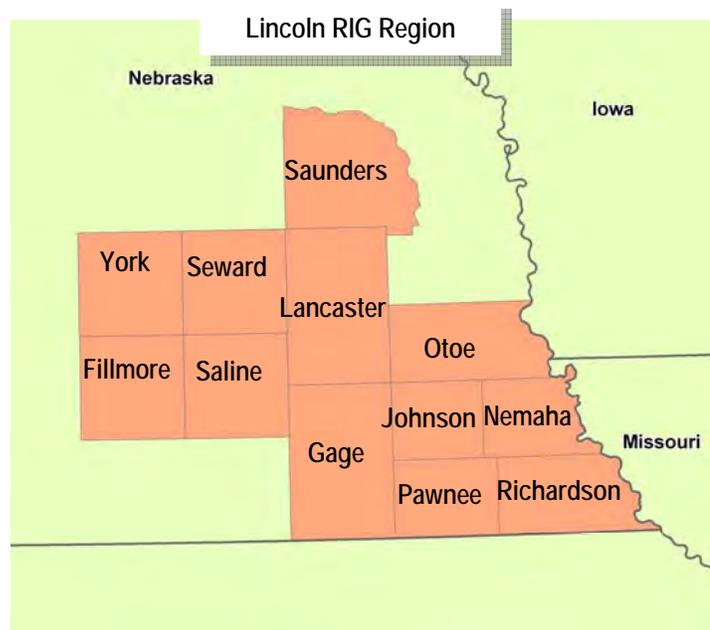
### GREATER LINCOLN RIG REGION

The Greater Lincoln Regional Innovation Grant (RIG) Region has potential for this type of regional dynamism. Incorporating the state capital of Lincoln and a total of 12 contiguous counties in southeast Nebraska, the region is defined by shared demographic and economic challenges, its common labor shed, and a diversified industry base. While the Lincoln metro’s economy is shaped by strong financial/insurance services, higher education and government, and a growing health care cluster; the surrounding counties have concentrated strengths in specialized manufacturing, food processing, and agriculture. The roughly 25,000 square-mile RIG Region includes 411,000 people and 11,400 businesses that provide more than 209,000 jobs.

A number of underlying economic issues shape the Greater Lincoln Region. With slow job and population growth, the region faces some significant labor market hurdles. However, a strikingly diverse and increasingly higher-wage industry base, strong education attainment rates, and relatively low business costs are pushing regional incomes toward a strong growth trajectory. And while the region has experienced a significant slowdown during the recent economic recession, it, like the state, has weathered the storm well as evidenced by its remarkably low unemployment rates.

The region also brings together a multitude of important assets that, if leveraged

appropriately, can position the area for enhanced economic growth, making regional collaboration worthwhile. The University of Nebraska-Lincoln (UN-L), with 20,000 students, over \$120 million of R&D annually and a new 1.6 million square foot Innovation Campus that will be dedicated to enhancing life science research and regional entrepreneurship, will continue to be the major driver of innovation in the region. The region also has a network of additional 2- and 4-year public and private institutions (Southeast Community College, Peru State, Concordia, Doane College, Nebraska Wesleyan, York College, and Kaplan University) spread throughout with state-of-the-art facilities and a multitude of academic program offerings. Southeast Community College (SCC), which services the entire 12-county RIG region across three campuses (as well as three additional counties), is, in many ways, the regional “common thread” or workforce development connection point. The region is home to a number of major



## INTRODUCTION: REGIONAL ECONOMIC SCAN

corporate operations from Novartis, Kawasaki, Cargill, Duncan Aviation, Toro, State Farm, ADM, and Nationwide, as well as a myriad of smaller high growth firms, all of which employ a significant number of people and engage in important research and testing of new technologies. A network of entrepreneurship, small business development centers, and other resources also exist that will help the region strengthen common predominant industry sectors like healthcare, financial services, and food processing, while building a stronger foundation for emerging value-add ones such as renewable energy and life sciences.

This RIG project is further cementing regional and public-private collaborations that are already in existence. SCC, the regional Workforce Investment Boards, UN-L, the Lincoln Chamber of Commerce/Lincoln Partnership for Economic Development, and the Lincoln Area Development Partnership have started to work closely together defining common issues and marketing the region externally. The Greater Lincoln RIG project will build on this work, identifying the economic and workforce assets of the region and devising specific regional strategies that capitalize on these strengths – all through a unified vision for building the long-term talent pipeline for the right jobs and spurring innovation regionally.

Through the transformative mega-regional plan, the capacity of area education and workforce systems will be strengthened to meet the demands of strong and emerging target industries – ensuring that the region can realize its collective economic potential and compete on a global stage.

# REGIONAL ECONOMIC SCAN

## REPORT ORGANIZATION & CRITICAL ISSUES

This Economic Scan is the first in a series of reports and is designed to examine both the common and unique characteristics of the Greater Lincoln region *today*, while identifying the underlying economic factors that define it as a potentially viable economic “region.” The report evaluates the current state of affairs that are most critical to industry growth, incorporating both interviews and roundtable discussions with regional leaders and quantitative data independently compiled by AngelouEconomics.

The report is broken into two sections:

- An **Economic Scan of the region** that evaluates the demographic and economic trends shaping its current situation and compares Greater Lincoln to competitor communities.
- A discussion of **Critical Issues** that identifies key strengths, weaknesses, opportunities and constraints and sets the framework for issues to be addressed in the Asset Map and Strategic Plan.

The Critical Issues section identifies eleven (11) issues for the region, a summary of which is presented here:

Greater Lincoln Region: Strengths and Challenges Summary	
Economic Development	Positioned along major interstates, with access to national air cargo transporters, and situated centrally with access to markets in three different states, the Region bears a number of locational assets. Relatively friendly business climate and strong physical infrastructure (in and around metro area in particular) provide opportunities to build on current strong industry sectors including health care, transportation, and financial services, while tapping into emerging plant science and renewable energy clusters – all of which will be important in creating sustainable high wage jobs and a more “global” presence for the region.
Workforce Development	Region benefits from a young educated workforce and strong education and post-secondary components (K-12 systems, SCC, UN-L among others). As the region grows and capitalizes on key high-impact industries, it must integrate economic and workforce development efforts to ensure that the local workforce has the right competencies to feed into new growing businesses that will require a number of highly skilled professionals. Additional collaboration across institutions and increased awareness of job training resources will be critical, especially to ensure growing dislocated workforce is retrained for new opportunities. As was noted in the recent Gallup study for the Nebraska Department of Economic Development, strong jobs within the region are the most important factor for attracting Nebraskans that have left the State and want to return.
Entrepreneurship & Innovation	Although Region has strong technology foundation, availability of capital and other resources for emerging start-ups are extremely limited. UN-L’s Innovation Campus will play a crucial role in regional economic development especially if regional target industries can align to targeted research competencies and an enhanced technology transfer effort.
Regional Leadership	Conceptually, leaders throughout 12 counties actively support the concept of “regionalism.” However, county and city public officials need significant convincing that cooperation and resource sharing is worthwhile and will yield significant return. <i>Intra</i> -regional economic disparities (between Lincoln metro area and rural counties) must also be addressed for all of the region to benefit.

## REGIONAL ECONOMIC SCAN

### ECONOMIC SCAN

The Economic Scan serves as the foundation for the next project report – the Target Industry Analysis and Regional Asset Map – that will identify and inventory specific economic development assets that can be leveraged to drive economic growth in certain target industry sectors and create a pipeline of talent aligned to these industry needs.

To gain a better understanding of trends within the Greater Lincoln Region, this Economic Scan compares it to two regional competitors: greater Des Moines (IA)<sup>1</sup> and greater Madison (WI)<sup>2</sup>. These regions were selected in part because they have been considered Midwest competitors of greater Lincoln and because of similar geographic and economic characteristics. In addition, these benchmarks are multi-county designated “regions” as identified through similar U.S Department of Labor grant programs. To provide additional perspective, the Lincoln metropolitan statistical area (MSA) was included in most analyses. The Lincoln MSA includes Lancaster and Seward counties.

In its effort to provide an understanding of the current economy and potential for future growth, the Economic Scan is built around a set of indicators organized into 8 areas:

- Regional Interdependencies & Current Economic Downturn
- Demographics
- Economic Trends
- Human Capital
- Innovation
- Business Climate, Infrastructure and Quality of Life
- Industry Cluster Potential (Project Next Steps)

Throughout the report, the characterization of the “Region” refers to the 12 county RIG area, also known as the Greater Lincoln Region. Various Greater Lincoln Region assets are also showcased to demonstrate the collective strength of the region.

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<sup>1</sup> Including the Des Moines metropolitan area and 8 surrounding counties

<sup>2</sup> Including the Madison metropolitan area and 6 surrounding counties

## REGIONAL ECONOMIC SCAN

### AT A GLANCE

The At-A-Glance table is a brief summary of many of the data points that are discussed in further detail throughout this report. Generally, the Greater Lincoln Region performs well in certain indicators against benchmark regions. The Greater Lincoln region's unemployment rate (today and over the longer term, as identified later in the report) has been consistently and significantly lower than other regions. Also, importantly, its mix of educated young professionals (those aged 25-44), while on par with the nation as a whole, is significantly higher than the benchmark regions. This population, with their earning potential and propensity to drive innovation, is a critical part of a region's

AT A GLANCE						
	Greater Lincoln Region	Greater Des Moines	Greater Madison	Lincoln MSA	Nebraska	USA
Population (2008 Estimate)	410,555	678,810	780,678	295,486	1,783,432	304,059,721
Population Growth ('00-'08)	6.4%	9.1%	19.2%	10.3%	4.1%	7.8%
Unemployment Rate, May. 2009*	4.5	6.0	8.4	4.2	4.7	9.1
Labor Force Growth ('03-'08)	3.7%	4.5%	6.5%	6.2%	5.4%	5.6%
Median Household Income (2008)	\$50,593	\$54,485	\$58,650	\$53,425	\$49,928	\$52,599
% Bachelor's Degree + (2008)	30.1%	32%	36.3%	35.5%	27.9%	27.8%
% in 25-44 Age Group (2008)	27.6%	20.7%	18.5%	29.7%	25.9%	27.4%

\* Not Seasonally Adjusted

Source: U.S. Census Bureau, Bureau of Labor Statistics, Decision Data Resources, AngelouEconomics

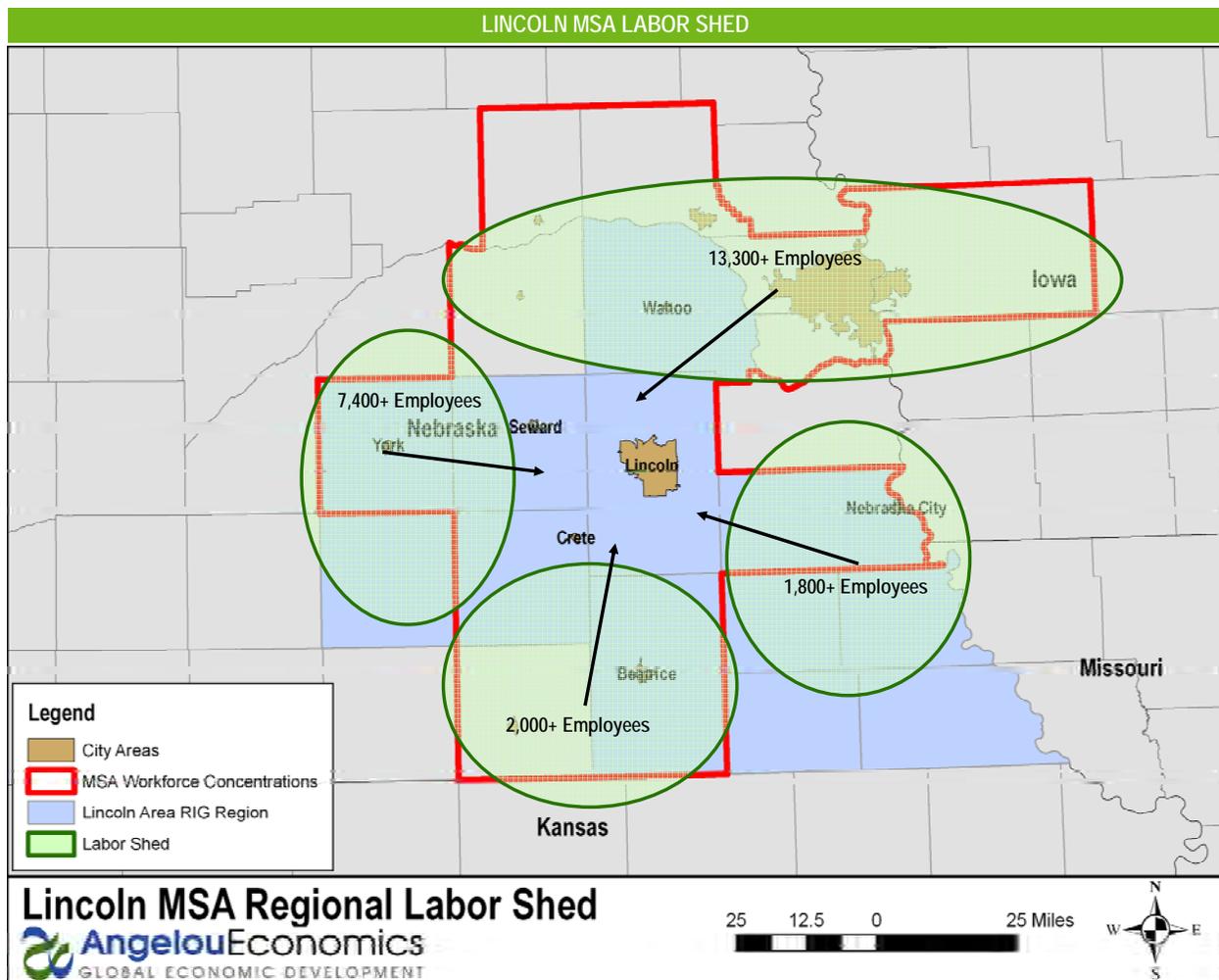
economy. A potential issue for the region is its overall slow labor force growth. This percentage – especially as it is compared to the Lincoln MSA percentage – reflects, in part, an aging population in the rural counties surrounding Lincoln, and slower overall job growth.

## REGIONAL ECONOMIC SCAN

### GREATER LINCOLN REGION: EVIDENCE OF REGIONAL ECONOMIC INTERDEPENDENCIES

The region includes 411,000 people and 12,300 businesses that provide more than 209,000 jobs. The area's strong transportation network (interstate highways, rail, air), concentration of post-secondary institutions, and common industry base in food processing/agriculture, manufacturing, and healthcare sustains a natural labor shed as people commute across the 12-county area for jobs, educational opportunities, and services.

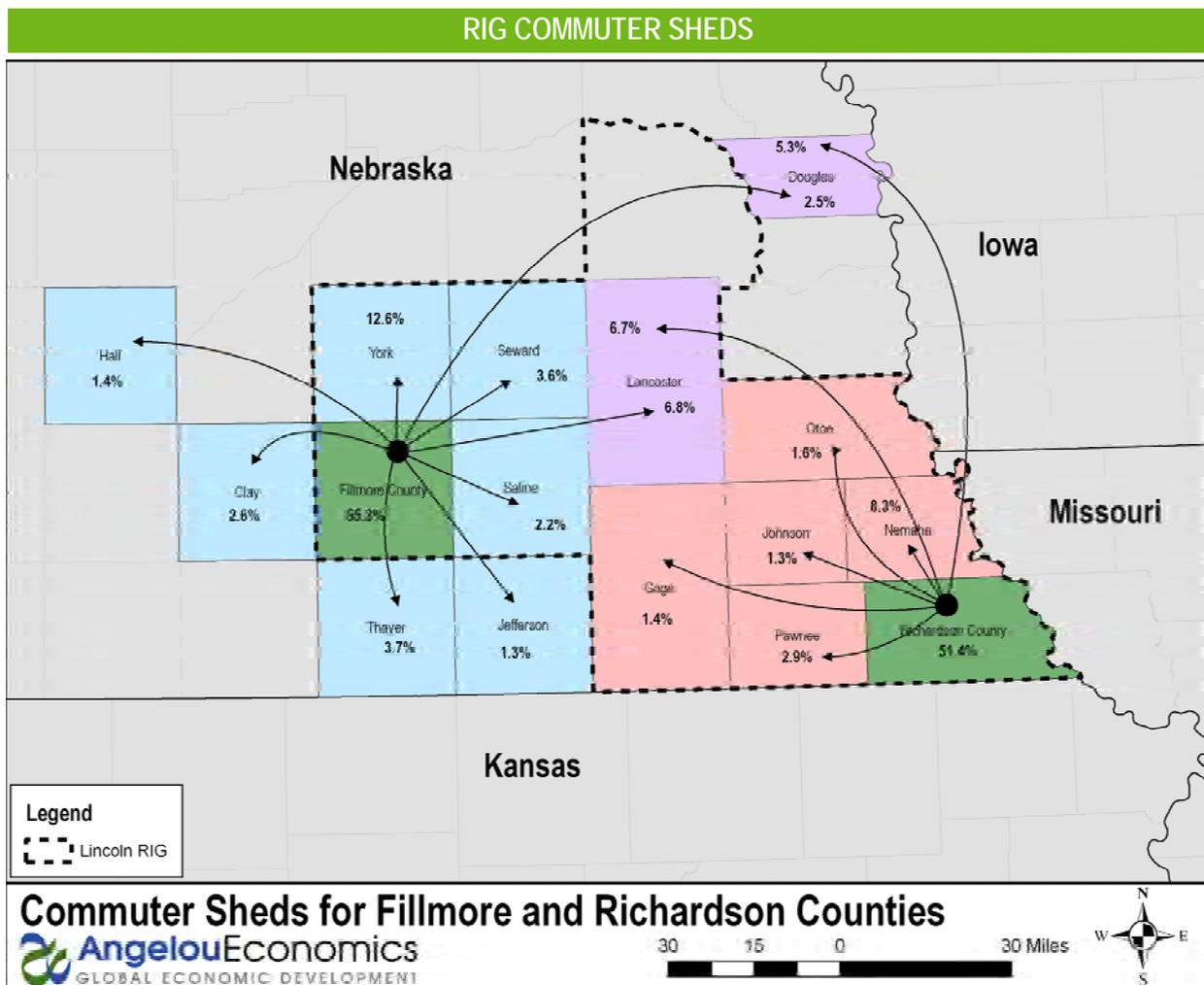
The labor shed for the region, which represents the area around the region from which an employment center draws a majority of its commuting workers, reveals evidence of these intertwined regional economies. The map below shows the labor shed of the Lincoln Metropolitan Statistical Area (MSA) and the distribution of workers. More than 25 percent of its workers are pulled from the 60 mile radius, across regional geographical and political boundaries including Iowa and Missouri. It is clear, however, that the 12-county Greater Lincoln Region makes up the core of this shed. Of note: Omaha is also a significant part of the Greater Lincoln Regional labor shed and the region may consider capitalizing on a broader "region" (beyond just the 12 counties) in the future.



## REGIONAL ECONOMIC SCAN

Commuter patterns – where workers who live in one location are driving to (as compared to where employment centers are pulling workers from) – are also a good indicator of economic interdependencies. The map below shows the commuting patterns of residents of Richardson and Fillmore Counties, two of the counties within the region. Eighty one percent of Fillmore County residents and 74 percent of Richardson County residents work within the 12-county region.

Evidence of economic and fiscal interdependence, then, is clear in this 12-County area: every day workers from these two counties travel to employment opportunities in almost every other county within the region, providing evidence that the region shares not only labor, but infrastructure and trade patterns.



# REGIONAL ECONOMIC SCAN

## THE GREATER LINCOLN REGION AND THE RECENT NATIONAL ECONOMIC DOWNTURN

While this report is designed to assess *longer-term* underlying economic, demographic, and labor market trends, it is important to analyze the information within the context of the current national economic crisis and how the Greater Lincoln Region has been affected from a labor perspective. When possible, this economic scan provides a more detailed analysis of recent trends.

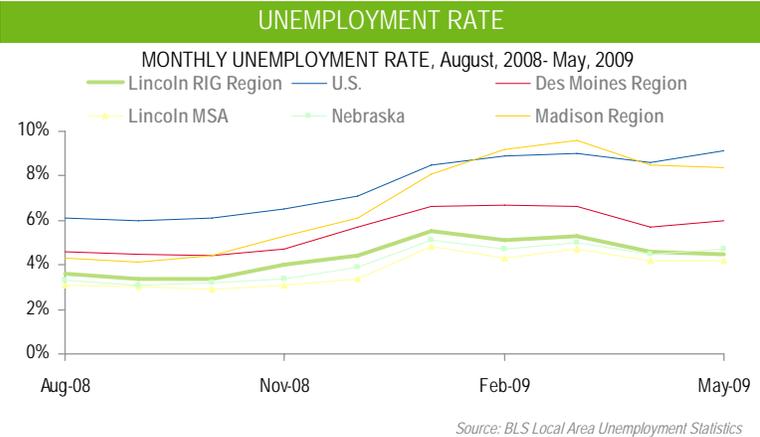
For the past several years, the Greater Lincoln Region has experienced significantly lower unemployment rates than the nation. During the current recession, this gap has grown as the national unemployment rate (now at 9.1 percent) is twice that of the region. The Greater Lincoln Region, and the state as a whole, also fair very well compared to the regional benchmarks.

Like most regions throughout the country, businesses have slashed inventory and reduced production as both corporate clients and consumers have become more hesitant to make significant purchases. Several high profile layoff announcements in Lancaster, Seward, and Beatrice, in particular, were made in 2009. This has caused layoffs at companies across the region like Kawasaki Motors, American Meter, Exmark Manufacturing, and Burlington Northern Santa Fe (BNSF). While some of these layoffs follow cyclical manufacturing patterns, the numbers were higher and the layoffs were made earlier than is typical.

With recent global trends, unemployment insurance claims throughout Nebraska have increased significantly. In 2007, nearly 68,000 claims for unemployment benefits were initiated. In 2008, that number grew nearly 21 percent, to 82,000 claims. If the rest of 2009 reflects claims into July, Nebraska may have to address as many as 116,000 initial claims, 72 percent more than the state had two years ago.

Higher claims rates have also translated into more benefits payments. 2008 payments of \$101 million were 16 percent greater than in 2007. As of July 2009, unemployment benefits payments had already reached nearly \$120 million for the year.

Overall, the regional economy has been hit hard and will continue to face some workforce development challenges in the coming years. However, by and large, the economy is still in very good shape compared to most states and regions throughout the country. The rest of the report examines some of the factors behind this stability.



LAYOFFS	
NUMBER OF EMPLOYEES LAID OFF BY COUNTY 3 <sup>RD</sup> QTR 2008-2 <sup>ND</sup> QTR 2009	
<b>Lincoln RIG Region</b>	<b>2379</b>

Source: Nebraska Workforce Development Department of Labor

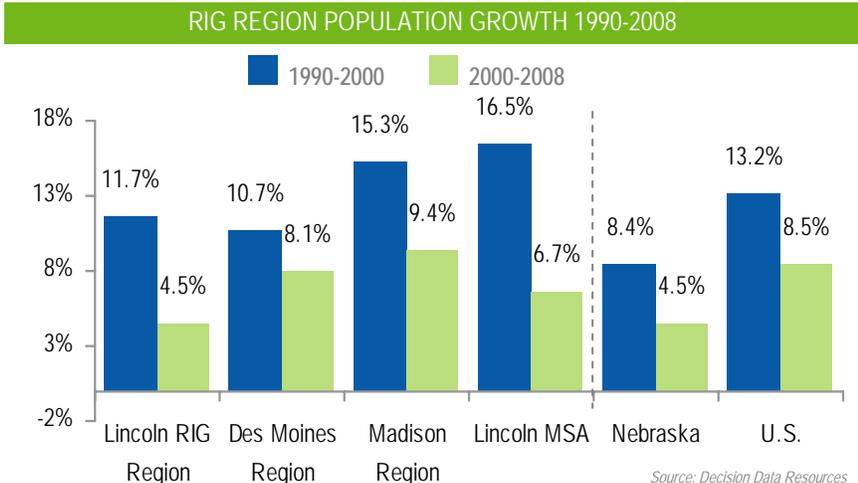
# REGIONAL ECONOMIC SCAN

## DEMOGRAPHIC PROFILE

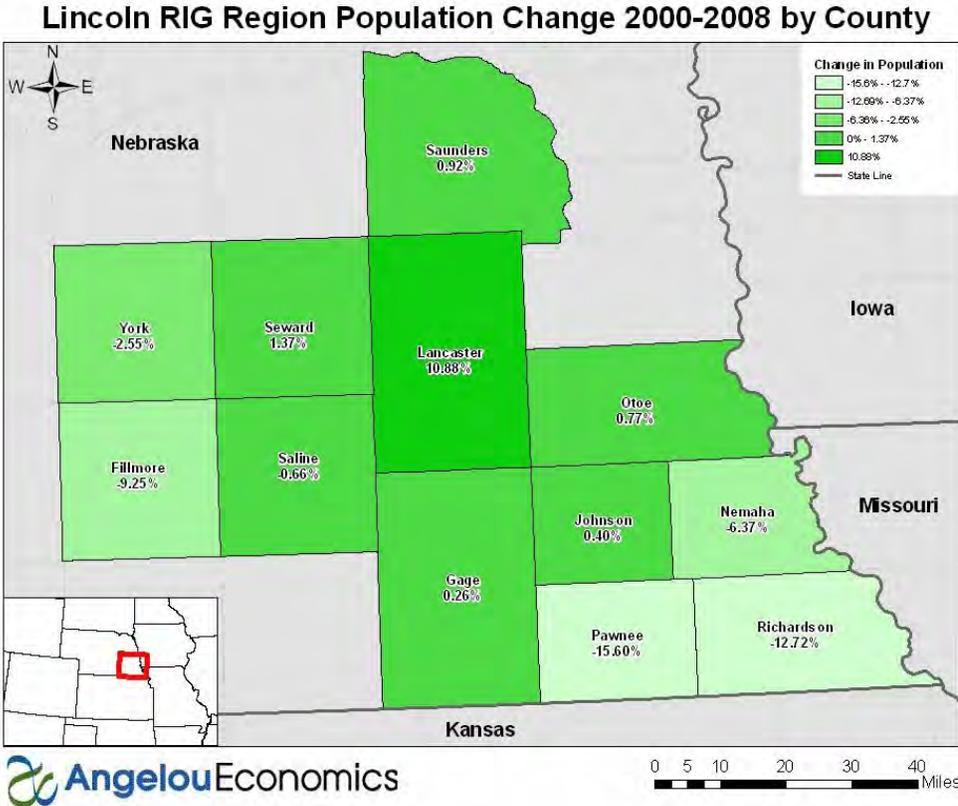
This assessment of the Greater Lincoln Region's demographic trends serves as a snapshot of the population dynamics shaping the area. Indicators highlighted include migration, age distribution, and income levels.

### POPULATION GROWTH & MIGRATION

Since 1990, population growth in the region has lagged mildly behind the nation. The regional population, estimated currently at 410,555, has grown by 4.5 percent since 2000, just slightly more than half the national rate. While slower population growth is not essential for a strong economy, it does suggest the region has little in-migration and mostly sustains the current population rather than being a major "destination" for younger workers.



The map to the right highlights the great disparity in population growth intra-regionally. Not surprisingly, most growth has occurred in and around the Lincoln metro area. Over the past eight years, in fact, most counties have experienced no growth or an actual loss of population. As the agriculture industry continues to consolidate and become less labor-intensive, these outlying counties will continue to face demographic and labor market challenges.

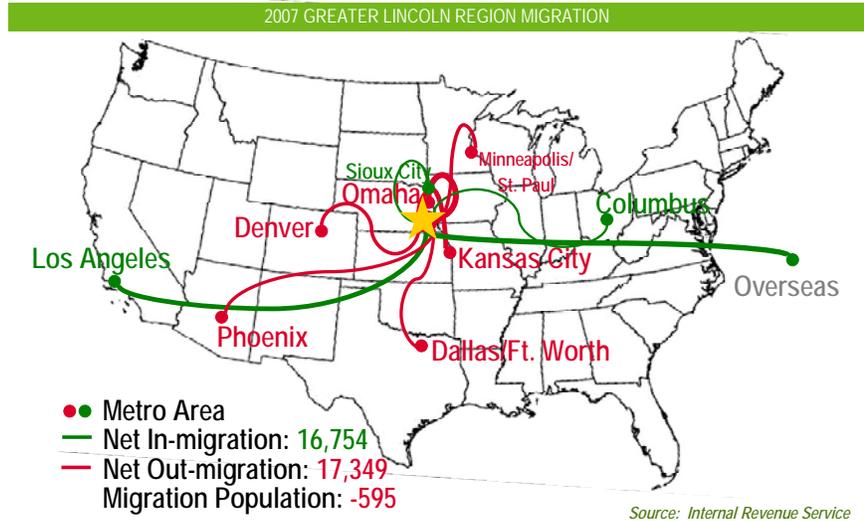


# REGIONAL ECONOMIC SCAN

The region's population expansion has come entirely from within the area (with a net loss of 595 people in 2007 due to migration). While the latest figures show nearly 16,754 people moved into the Greater Lincoln Region, 17,349 moved out. This is probably the most contributing factor to the region's slower-than-average growth rate. The majority of the United States growth is due to in-migration from other countries and growing life expectancies. Without in-migration, the region must rely on fertility rates outstripping fatality rates for population growth.

## AGE DISTRIBUTION

An aging population is a nationwide challenge with significant economic and workforce development implications. The State of Nebraska, in particular, has been highly affected by this trend for some time. The Greater Lincoln Region, however, while aging, has not been impacted nearly as hard. Its median age, at 35.1, is lower than all benchmarks, the state and the nation as a whole. In addition, along with the Madison region, it is the only area to have gained population in the young professional demographic (25-44) in the past decade. This age group, often part of a community's "creative class" and almost always the engine of innovation, is very important for economic growth. At 17.7 percent, the Greater Lincoln Region's growth in those at or near retirement is much slower than other benchmarks and the nation. This is a key advantage for the region.



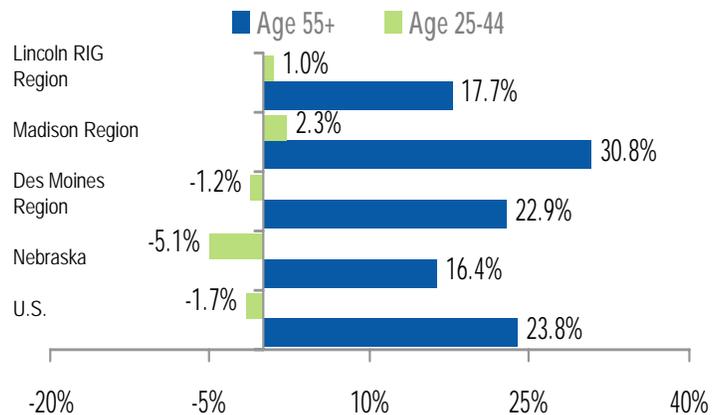
## MEDIAN AGE 2008

Lincoln RIG Region	35.1
Des Moines Region	36.1
Madison Region	36.8
Iowa	36.0
U.S.	36.9

Source: U.S. Census Bureau

## AGING POPULATION

GROWTH IN POPULATION AGE 25-44 AND AGE 55+, 2000-2008



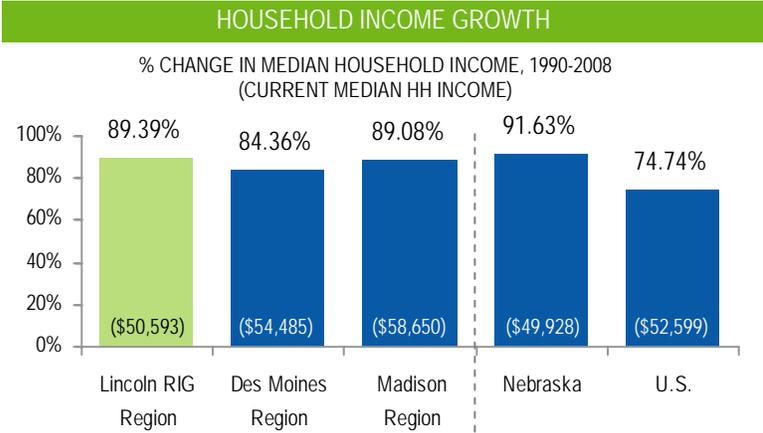
Source: Decision Data Resources

# REGIONAL ECONOMIC SCAN

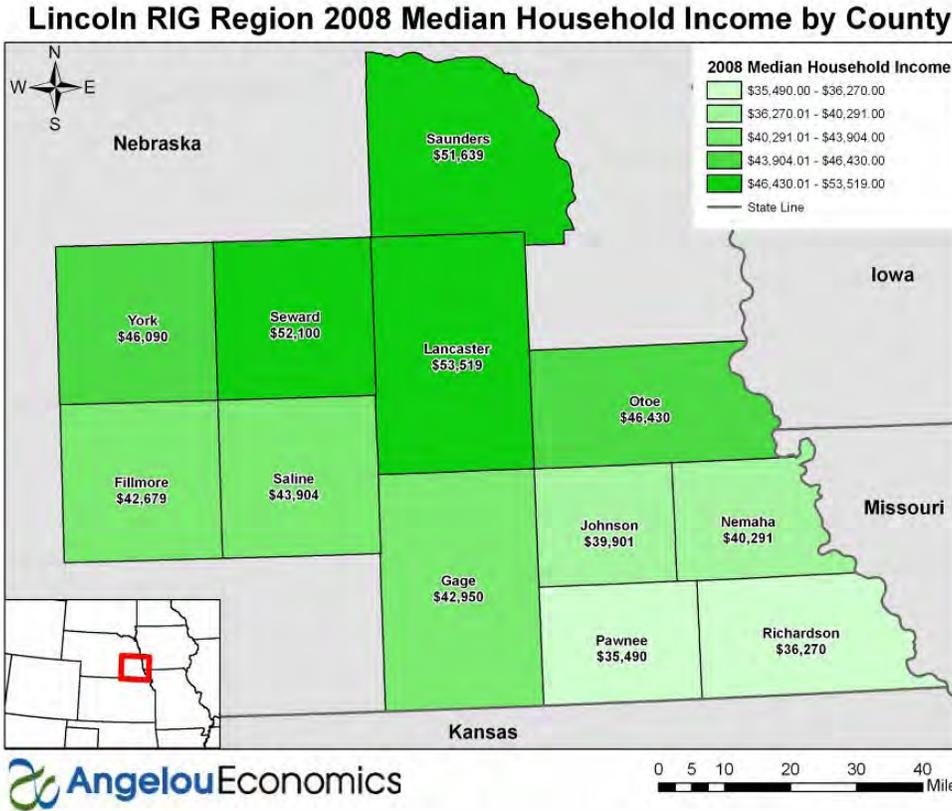
## INCOME LEVELS

Regional average household and per capita incomes (\$50,923 and \$28,950 respectively) across the region are slightly lower than national and benchmark incomes. However, income growth has been quite strong over the past several years in the both the region and the state. This is, in part, a reflection of the success the region has had in securing higher wage industry sectors that now make up a significant part of the regional economy.

As the map below shows, however, there is a significant disparity in income levels within the region. Again, the differences are seen most starkly between Lancaster and surrounding counties and rural counties to the southeast.



Source: Decision Data Resources



## REGIONAL ECONOMIC SCAN

### DEMOGRAPHIC TRENDS SUMMARY

- ✓ Population growth, especially in outer counties, has slowed significantly over the past decade.
- ✓ Despite concerns from stakeholders that the region is losing young workers (i.e. a “brain drain” challenge), the data shows a low median age and growth in the 25-44 year old demographic – a critical competitive strength for the region.
- ✓ While incomes still remain relatively low, the regional high growth trend is a positive sign and reflects the region’s balanced and increasingly “white collar” economic base.

# REGIONAL ECONOMIC SCAN

## ECONOMIC TRENDS

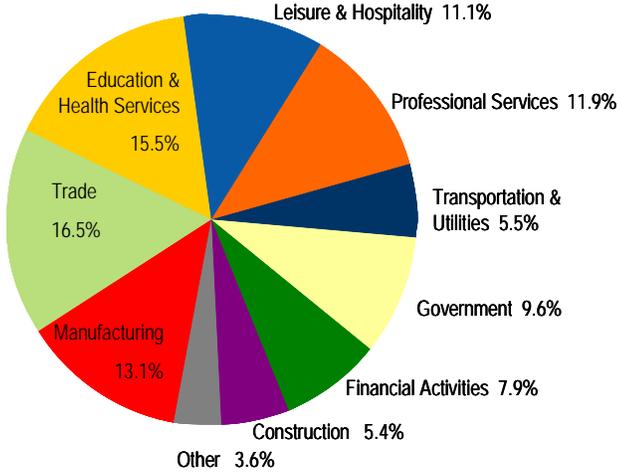
This section highlights the Greater Lincoln Region's job creation trends, composition of the existing employment base and local industry growth patterns. This information will set a foundation for exploring different industry niche sectors that will be important for the region to build upon.

## CURRENT ECONOMIC BASE AND BUSINESS CREATION

The Greater Lincoln Region has a very diverse industry presence across super sectors. Of the ten non-farm sectors, none make up more than 17 percent of the entire region's labor force, and more than half each have 10 percent or more of employment. The region's industry base is almost a mirror reflection of the U.S' industry.

### INDUSTRY EMPLOYMENT

GREATER LINCOLN REGION EMPLOYEES PER INDUSTRY SUPERSECTOR, 2008



Note: 2008 numbers are preliminary Source: BLS Quarterly Census of Employment and Wages

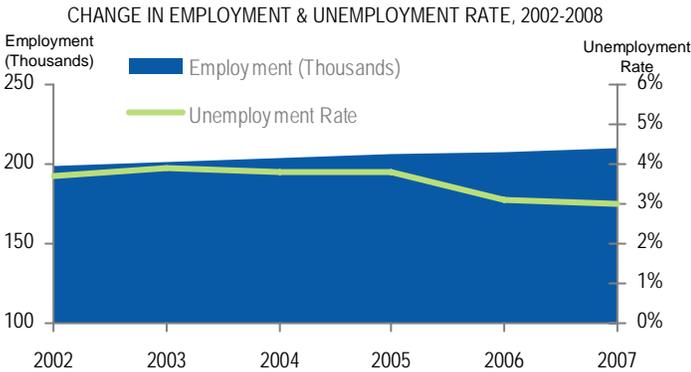
## JOB CREATION

Employment in the region grew at a steady rate of 3.7 percent over a five-year period, with nearly 210,000 people employed in 2008. While below national and benchmark trends, this demonstrates some stability with potential for sustainable growth. While many places have contracted substantially over the past 18 months, the Greater Lincoln has had a much smaller loss.

As expected, a disparity in job creation exists throughout the region, with metropolitan areas driving business creation and employment growth. As of 2008, the Lincoln MSA had grown 6.2 percent, more than any benchmark but the Madison region.

In general, regional unemployment rates have remained at least two full percentage points below the national average. The global recession has only increased this difference between southeast Nebraska and the nation. As of May 2009, regional unemployment was at 4.5 percent, nearly half the national 9.1 percent rate.

### GREATER LINCOLN REGION EMPLOYMENT & UNEMPLOYMENT RATE

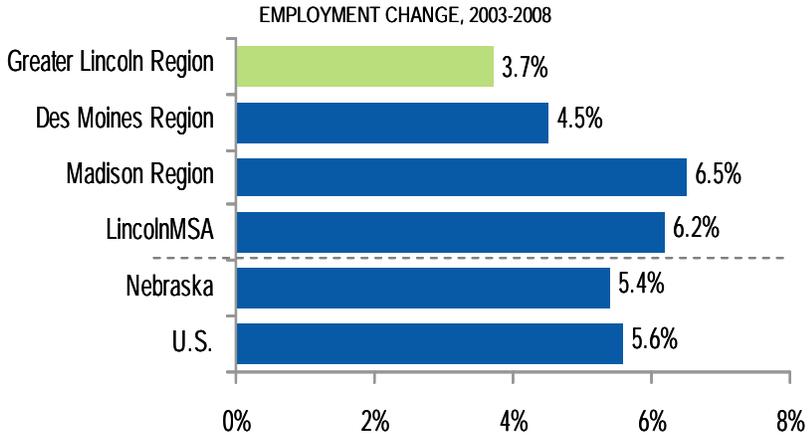


Source: BLS Quarterly Census of Employment and Wages; BLS Local Area Unemployment Statistics

# REGIONAL ECONOMIC SCAN

The region's steady employment gains – close to 7,500 jobs over the past several years – reflect some targeted economic development success and a well-diversified economy. The largest growth in actual employment numbers occurred in the trade, transportation, and utilities sector (e.g. wholesale trade, warehousing, transportation, manufacturing firms), a sector that has also been growing nationally. However, business and professional services has been growing at a much greater rate as a percentage of its previous workforce. This demonstrates strong regional growth in distribution of goods manufactured and produced in the Greater Lincoln Region, but a trend-shift towards more service oriented work, including business and professional services, education and health services, and financial activities – industries with generally higher concentration of well-paying occupations.

## JOB GROWTH IN THE LINCOLN RIG REGION



Note: 2008 numbers are preliminary Source: BLS Quarterly Census of Employment and Wages

## NEW JOBS IN THE GREATER LINCOLN REGION, 2003-2008



Note: 2008 numbers are preliminary Source: BLS Quarterly Census of Employment and Wages

## REGIONAL ECONOMIC SCAN

While the region has done well to capitalize upon growing high-impact industry opportunities, several sectors are showing signs of decline. Manufacturing, which has been in slight regional decline for some time in light of globalization trends, lost more than 1,400 jobs prior to the current recession. Others, such as construction, have declined mainly out of the global slowdown that stemmed from the overleveraged and overpriced real estate market. Importantly, these losses, including the Information sector (e.g. software, telecom), are very much in line with national trends, which reflects the symptoms of a larger economic illness – and something that could turn around once the economy begins to recover.

The region strongly reflects the nation in employment breakdown and only varies from the benchmarks in a few ways. For instance, the Greater Lincoln Region has less financial activities employment than the Des Moines and Madison regions. However, it has more employment within education and health and manufacturing.

While the Greater Lincoln Region experienced losses in four major sectors by *employment*, it gained in the number of *business establishments* in all sectors except for government and information. Nationally, businesses have been shrinking in the average size by employees while labor force has continually grown. This has caused establishment growth to outpace employment growth in almost every sector. The region's 6.7 percent business growth rate is nearly double the employee growth rate of 3.7 percent. While this national trend towards growth in smaller businesses makes attracting large firms less common and more challenging, it does reduce a region's dependence on a single major employer. The Greater Lincoln Region, which matches benchmarks and the nation in this trend, is building a more economically diverse market that is less susceptible to the challenges facing a single business or industry.

2008 EMPLOYMENT BREAKDOWN				
	Greater Lincoln Region % Total	Greater Des Moines % Total	Greater Madison % Total	USA % Total
Trade (wholesale + retail)	16.50%	18.62%	17.60%	18.40%
Education and Health	15.47%	13.90%	12.70%	15.54%
Manufacturing	13.12%	11.41%	16.17%	11.58%
Professional Services	11.85%	12.39%	12.21%	15.33%
Leisure & Hospitality	11.11%	10.50%	11.78%	11.59%
Government	9.64%	6.54%	8.96%	6.43%
Financial Activities	7.85%	14.08%	8.32%	6.90%
Transportation & Utilities	5.46%	3.51%	2.72%	4.18%
Construction	5.44%	5.46%	5.59%	6.17%
Other	3.55%	3.58%	3.95%	3.88%

Source: Bureau of Labor Statistics QCEW

### TOP GREATER LINCOLN REGION EMPLOYERS

1.	University of Nebraska-Lincoln	5,000-10,000
2.	State of Nebraska	5,000-10,000
3.	Lincoln Public Schools	5,000-10,000
4.	BryanLGH Medical Center	5,000
5.	B&R Stores	2,200
6.	Ameritas Life Insurance	1,000-2,500
7.	City of Lincoln	1,000-2,500
8.	Duncan Aviation	2,000
9.	Hy-Vee Stores Inc.	1,000-2,500
10.	Lancaster County	1,000-2,500

Source: York County Development Corporation, Nebraska Dept. of Econ. Dev., Lincoln Area Development Partnership, InfoUSA, Hoovers

## REGIONAL ECONOMIC SCAN

The fastest growing sectors by establishments align with employment trends of professional services, education and health services, and financial activities. While there are many employers in the region that employ more than 1,000 employees, none employs more than 10,000 people. This can be a positive for the region, as its success is not dependent on one or a few major employers. Additionally, large employers like state and public institutions, are sources of stable, long-term employment.

### ECONOMIC TRENDS SUMMARY

- ✓ The region sustains a highly diversified industry base – a primary factor in its stable economy during this recent economic downturn.
- ✓ While overall job creation is slow, the region has gained employment over the past several years in some important higher-wage industry sectors including financial services, health care, professional services, and transportation and utilities.
- ✓ Unemployment rates have remained well below national averages even during this recent economic recession. Much of this, however, is attributable to the slow regional population growth that has occurred.
- ✓ While manufacturing employment, at 13 percent, has declined nationally and regionally due to the recession and globalized production trends, it is still a significant part of the regional economy. The region actually experienced growth in the number of manufacturing businesses in the area despite its employment losses – indicating a mix of smaller manufacturing firms with similar or greater productivity levels.

# REGIONAL ECONOMIC SCAN

## HUMAN CAPITAL

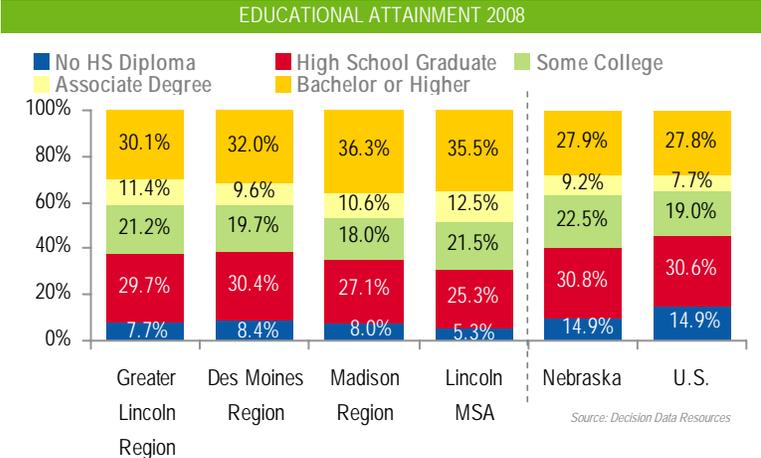
This section assesses the Greater Lincoln Region's base of available and skilled professionals to support an innovation-driven economy. Educational attainment is one indicator, as are the type of degrees received. Regions with an established pipeline of young professionals with advanced degrees in science, technology, engineering and math programs, for example, will provide a deep talent base upon which to recruit and nurture high-impact and competitive industries. In addition, the quality of K-12 systems that provide young people foundational skills and expose them to different career options is critical to developing the region's overall human capital.

### EDUCATIONAL ATTAINMENT

With over 30 percent of the adult population holding a bachelor's degree or higher, the Greater Lincoln Region has higher levels of educational attainment than the state and the U.S. as a whole. The region fares as well as the other regional benchmarks when associates degrees are added.

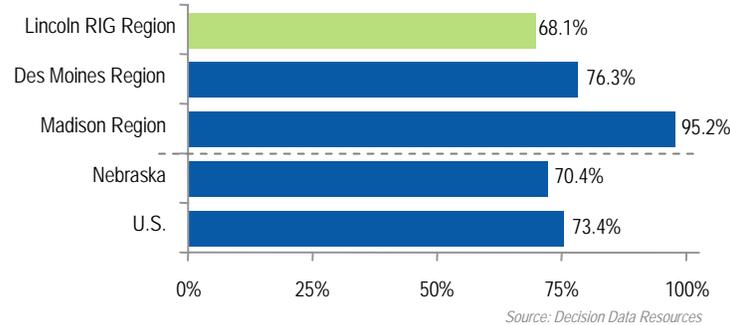
There are two issues of concern, however, for the region: 1) the disparity within the region between metropolitan and rural counties (the Lincoln MSA has 35.5 percent adults with a bachelor's degree, while Otoe and Gage counties, for example, are at 19 percent and 17 percent respectively – see page 21); 2) growth in educational attainment levels are lagging its benchmarks, the state, and the nation as a whole.

Ensuring that the region maintains these education levels is critical moving up the



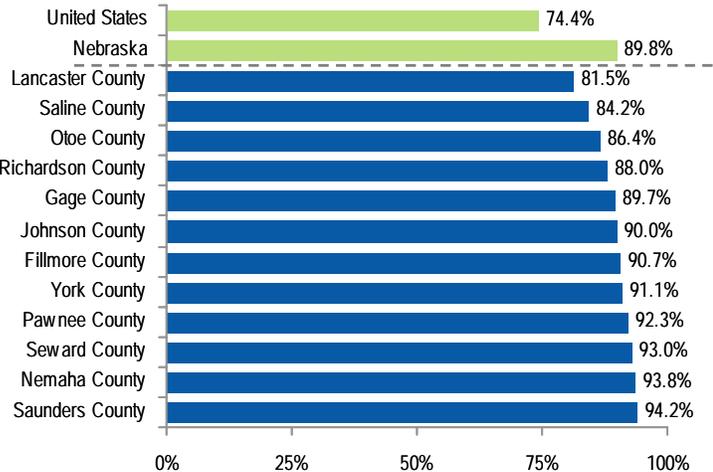
### GROWTH IN EDUCATIONAL ATTAINMENT

GROWTH IN POPULATION 25+ WITH A BACHELORS DEGREE OR HIGHER, 1990-2008



### HIGH SCHOOL GRADUATION RATE

LINCOLN RIG REGION COUNTIES MAJOR SCHOOL DISTRICTS 2008 GRADUATION RATE



NOTE: County data represents one major school district in each county. Source: Nebraska Department of Education, Digest of Educational Statistics

# REGIONAL ECONOMIC SCAN

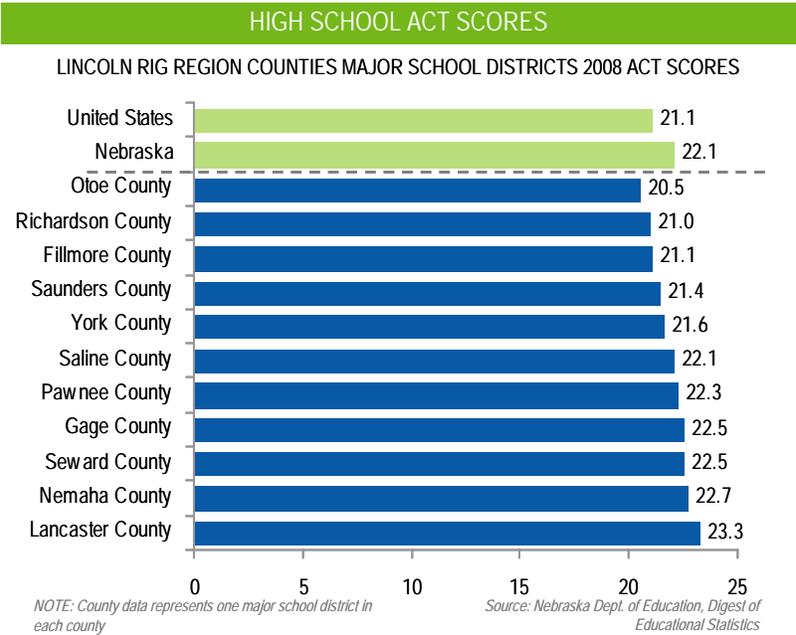
industry value-added “food chain” replacing sub-sectors with growing, higher-tech, higher-wage sectors (e.g. business and professional services, software/IT, life sciences, etc).

## K-12 PERFORMANCE

At a secondary schooling level, the region appears to be performing extremely well. High school graduation rates average well above 80 percent. This is well above the national graduation rate and on par or better with statewide trends.

While there was greater fluctuation in ACT scores relative to state and national averages, the Greater Lincoln Region still compares favorably, matching or even outstripping national and state level scores.

While ACT scores were on par with state and national rates, the region shows specialized strengths in math testing. While almost all counties had more than half of their students scoring higher than the national average on standardized math tests, some counties had more than three-fourths of their students scoring better than the nation. Such high scores is a competitive advantage for these students and for the region, which can help position it to develop a pipeline of technically-skilled young professionals who have the engineering and math competencies which are increasingly in demand by high growth industries.



GREATER LINCOLN REGION EDUCATIONAL INSTITUTIONS				
School/College/University	Main Location	Type	Awards offered	Student population
University of Nebraska-Lincoln	Lincoln, NE	4-year	Associate's; Bachelor's; Master's; Post-master's certificate	22,973
Southeast Community College	Lincoln, NE	2-year	<1 year certificate; 1 & 2 years certificate; Associate's	9,603
Peru State College	Peru, NE	4-year	Bachelor's; Master's	2,307
Nebraska Wesleyan University	Lincoln, NE	4-year	Bachelor's; Postbac certificate; Master's; Post-master's certificate	2,107
Doane College	Lincoln, NE	4-year	Bachelor's; Master's	1,649
Concordia University	Seward, NE	4-year	<1 year cert.; Bachelor's; Postbac. cert.; Master's; Post-master's certificate	1,279
Union College	Lincoln, NE	4-year	Associate's; Bachelor's; Master's	1,009
York College	York, NE	4-year	Associate's; Bachelor's	404
BryanLGH College of Health Sciences	Lincoln, NE	4-year	Associate's; 2 but <4 years certificate; Bachelor's; Master's	397
Nebraska Institute for Technology	Lincoln, NE	2-year	Asscolates	N/A

Source: National Center for Education Statistics

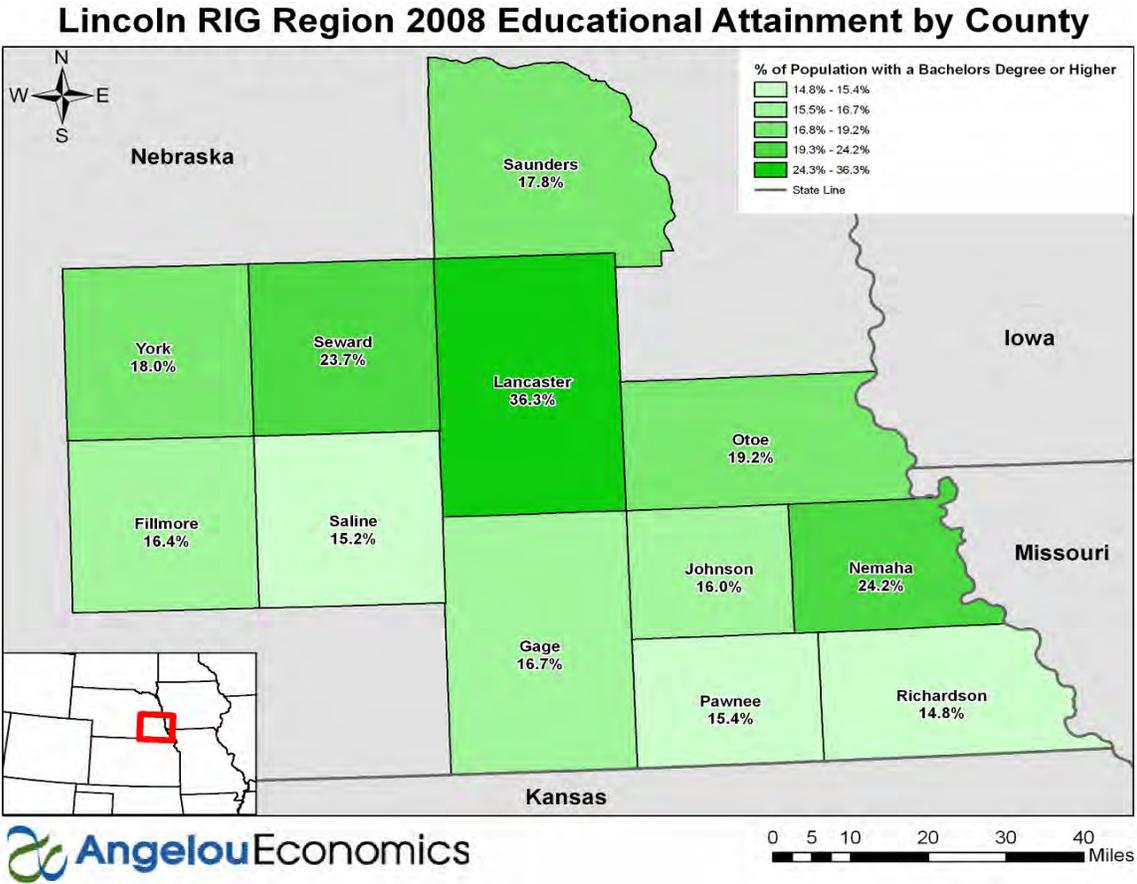
# REGIONAL ECONOMIC SCAN

## REGIONAL EDUCATIONAL ASSETS

The region brings to bear a number of post-secondary educational assets from the University of Nebraska-Lincoln to Southeast Community College to Concordia University and Peru State, among others. These institutions have exceptional reputations and draw students from around the world. Through articulation agreements and other initiatives, many of these schools work together and, according to economic development stakeholders, are responsive to regional industry needs. These institutions, together, provide a diverse array of educational and technical training opportunities to meet a broad mix of industry skill demands within the region. In addition, most schools are expanding online education opportunities in a move to access students in surrounding more rural counties.

Also of note, are the strong higher-education/workforce/economic development connections occurring especially in the more rural areas of the region. For example, the SCC-Beatrice Campus, until recently, was the co-location of workforce service programs and Gage County economic development. These types of partnerships are crucial for ensuring industry attraction efforts are tied closely to job training initiatives – something that can be a critical asset for the entire region.

The next report, the Asset Map Report, will look closely at growing regional occupations and competencies and assess them generally with the current mix of programs offered within the region.



## REGIONAL ECONOMIC SCAN

### HUMAN CAPITAL SUMMARY

- ✓ Regionally, education attainment is moderately high. Not surprisingly, given the presence of the state university, there are pockets of extremely educated professionals – a crucial asset to tap.
- ✓ High school graduation rates are strong but, comparatively, the slow growth in adult residents with bachelor's degrees indicates high school graduates are directly entering the workforce, likely through farming or manufacturing jobs; and/or college graduates are relocating to areas they perceive to have additional amenities and higher wage job opportunities.
- ✓ With a very strong community college system, a major public university, and numerous high-quality liberal arts colleges throughout the region, the region has the ability to train and retain workers with a diverse array of skill sets and competencies. This will continue to be a tremendous asset for the region.

**Regional Asset: Peru State College**  
Peru, Nebraska  
Student Population: 2,307

**PERU STATE COLLEGE**

Peru State College is a four year liberal arts institution with academic programs in arts and sciences, education, professional studies, and various graduate programs including a Master of Science in Education and a Master of Science in Organizational Management.

**Regional Asset: Southeast Community College**

**Southeast community college**

Southeast Community College has locations in fifteen counties in Southeast Nebraska and has more than twenty campus locations. The mission of the Southeast Community College is to "provide quality career/technical and academic educational opportunities for the students, businesses, and communities of our district". Southeast Community College has more than 50 academic programs in areas including Associate of Arts, Associate of Science, Associate of Applied Science, and Associate of Occupational Studies. Their continuing education programs include classes in Business and Real Estate, Technology and Computers, Drivers Education, Family and Consumer Science, Food and Culinary, Health, and Personal Enrichment. SCC also operates various workforce and business development programs, including "Train the Trainer" boot camp and QuickBooks training. The SCC Entrepreneurship Center provides training and mentorship integrated with a business incubator.

**Regional Asset: Concordia College**  
Seward, Nebraska  
Student Population: 1,279

**CONCORDIA UNIVERSITY**

Concordia University is a private Liberal Arts school with over 40 majors and minors to choose from. The school has been identified by the U.S. News and World Report as a top baccalaureate colleges in the Midwest.

**Regional Asset: University of Nebraska - Lincoln**  
Lincoln, Nebraska  
Student Population: 22,973

**UNIVERSITY OF  
Nebraska  
Lincoln**

The University of Nebraska at Lincoln is one of the premier land-grant universities in the nation. Established in 1869, the University is a leader in research and is also known for its many projects dedicated to science. The University of Nebraska-Lincoln is a research-extensive institution with a prime focus on undergraduate education. Signature programs include creative arts, computer science, business management, and information technology.

## REGIONAL ECONOMIC SCAN

### Regional Asset: Doane College

Crete, Nebraska

Student Population: 2,950



Doane College was the first liberal arts and sciences institution in Nebraska. It is home to over 50 undergraduate and three graduate level degree program offerings.

### Regional Asset: Nebraska Wesleyan University

Lincoln, Nebraska

Student Population: 1,805



Nebraska Wesleyan University is a private, 4-year liberal arts university, with almost 50 undergraduate major programs and 3 master's programs.

### Regional Asset: Union College

Lincoln, Nebraska

Student Population: 914



Voted as one of the top-tier Midwestern baccalaureate colleges by U.S. News and World Report, Union College provides major offerings in over 50 programs.

### Regional Asset: York College

York, Nebraska

Student Population: 396



York College is a small liberal arts college in York, Nebraska. It has over 7,500 alumni from more than 25 undergraduate programs.

### Regional Asset: Kaplan University

Lincoln, Nebraska

Student Population: 429



With over 16 program offerings at its Lincoln Campus, Kaplan University is structured to prepare students for rapid entry into the workforce. Systems include hands-on experience, on the job training, and accelerated programs.

# REGIONAL ECONOMIC SCAN

## REGIONAL INNOVATION

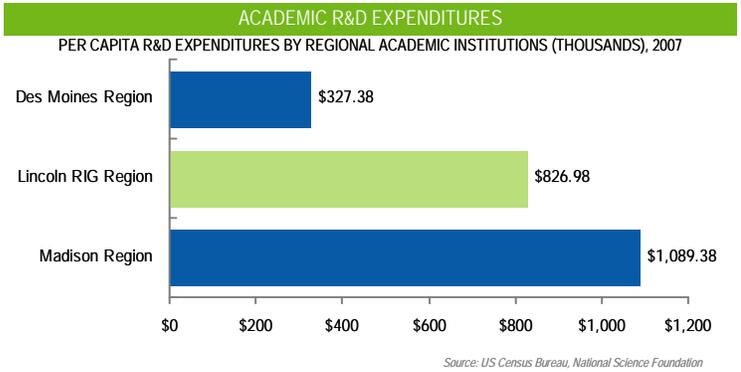
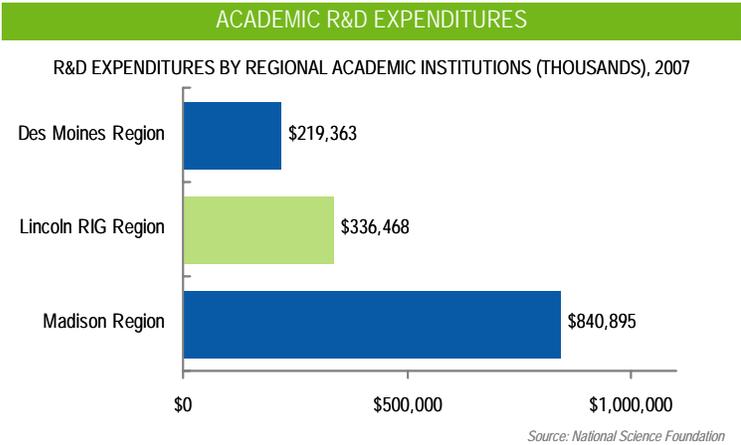
From renewable energy to creative media, all high-wage, growing industries are dependent on technological innovation. During economic downturns, the opportunity costs of innovation drop dramatically; commercial and industrial space costs less and higher skilled workers are more abundant. Communities can successfully foster innovation by supporting human capital (education), funding pre-commercial technology (research and development), protecting intellectual property (patents), and encouraging company start-ups through venture capital.

### RESEARCH AND DEVELOPMENT

Major funding for research and development flows through universities, where new technologies are tested and often incubated before they emerge on the commercial market. In 2007, the Greater Lincoln Region had more than \$336 million in research dollars expended within the area. While significantly more than the Des Moines region, it is far less than Madison's University of Wisconsin, which, as a university system, has the 2<sup>nd</sup> highest R&D level in the country.

On a per capita basis, the Madison region still outpaces the Des Moines and Greater Lincoln regions. However, the Greater Lincoln Region is much more competitive when considered in light of its population.

UN-L's research activities have grown substantially over the past decade (now with more than \$120 million of R&D investments annually) with continued advances in agricultural and food science, water resource, and nanotechnology disciplines. The planned 250-acre Innovation Campus, modeled after a similar R&D park at North Carolina State University, presents an excellent opportunity to capitalize on university R&D and promote regional economic development.



# REGIONAL ECONOMIC SCAN

## VENTURE CAPITAL FUNDING

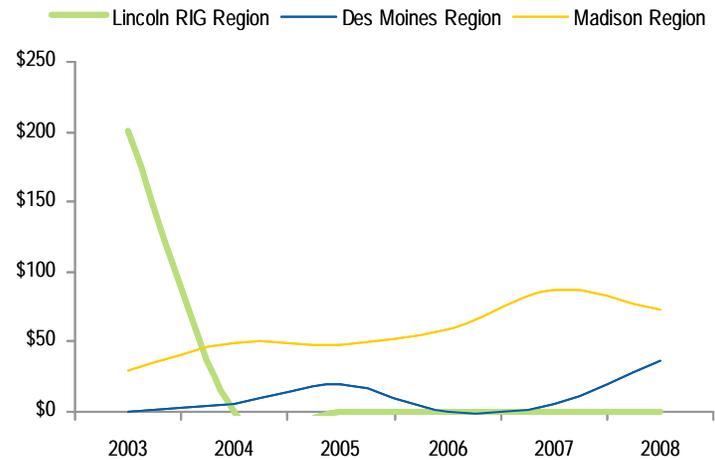
Technology inventors and start-ups require access to business and entrepreneurial networks to get the support they need to move new technology from conception to the marketplace. Furthermore, entrepreneurs and start-ups need early stage funding to support their development, and later stage funding for hiring workers and product launches. The amount of venture capital investment or private equity to early stage, high-growth companies, is a particularly telling measure of innovation commercialization. While research and development dollars demonstrate the general of research and innovation taking place, the presence of venture capital shows these innovations to be commercially viable and potentially useful to society.

Venture capital investment within the Greater Lincoln Region has been sporadic and very limited. Ranked 49<sup>th</sup> out of 50 states by the Kauffman Foundation for venture capital investment, this is a key area that the region needs to address in order to keep competitive. In fact, since 2003, there has been little to no VC funding in the region whatsoever.

Stakeholders identified this as a major issue for not only southeast Nebraska but the state as a whole. In order for the region to actually commercialize innovations coming from local institutions and businesses, it must have early stage capital available that can bridge the gap between an idea and traditional financing.

## VENTURE CAPITAL FUNDING

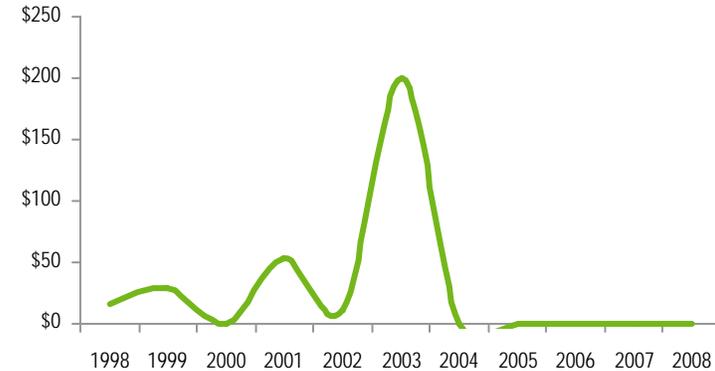
VC FUNDING (\$MILLIONS), 2003-2008



-Data represents the Congressional District encapsulating the Regions Source: PWC Money Tree,

## VENTURE CAPITAL FUNDING

LINCOLN RIG REGION VC FUNDING (\$ MILLIONS), 1998-2008



-Data represents Nebraska Congressional Districts #1 and 3 Source: PWC Money Tree

**Regional Asset: University of Nebraska Technology Park**  
 Lincoln, Nebraska

**UNIVERSITY OF NEBRASKA TECHNOLOGY PARK**

The University of Nebraska Technology Park is a cooperative partnership of the University of Nebraska Foundation, University of Nebraska and private sector investors. Founded in 1996, the Technology Park is now home to 19 companies and organizations that employ 1,366 people.

The park provides access to university resources, technology transfer assistance, research funding resources, highly competitive lease rates, high-speed data services, and on-site expansion building options.

# REGIONAL ECONOMIC SCAN

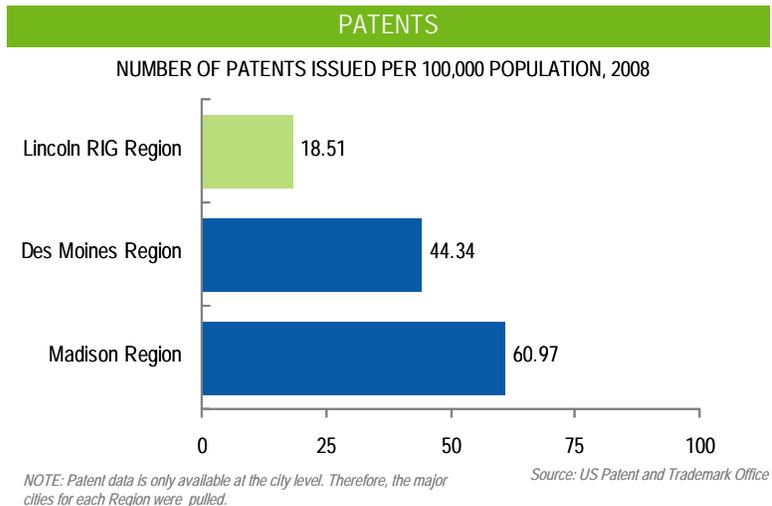
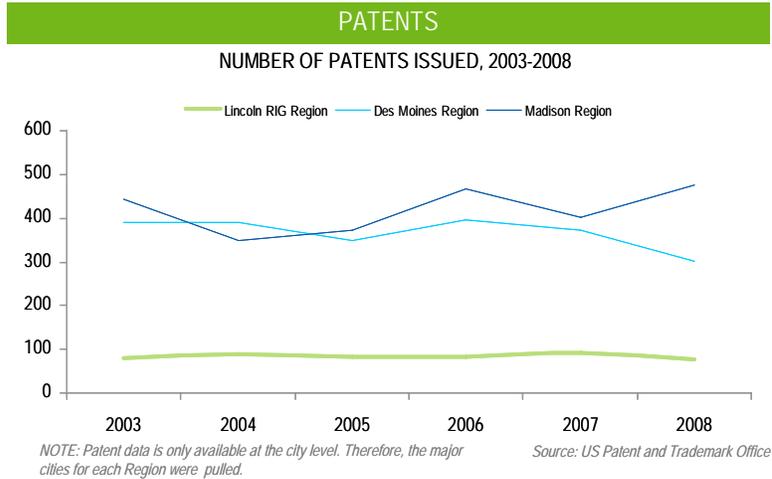
## PATENTS

Patents play a vital role in the advancement of science and technology, fostering innovation through intellectual property. They also provide another indication of the level of research and development activities taking place in a region.

The Greater Lincoln Region has solid patent activity, but it is much less than both the Des Moines and Madison regions. Despite receiving more research and development funding than the Des Moines region, fewer patents come out of those efforts within the Greater Lincoln Region. Interviews with UN-L leaders suggest this may be due to the fact that a significant amount of research that occurs locally is commissioned by local and regional businesses to solve specific problems rather than to necessarily develop new technologies.

Beyond the numbers however, it is important to note the regional activity in entrepreneurship at many institutions, including UN-L and SCC. UN-L continues to develop its technology transfer program to more actively pursue partnerships with venture capital firms as well as local

businesses to help solve production and efficiency problems. In addition, SCC has developed an entrepreneurship center that offers SCC students business model training and incubator space with business and legal mentoring services to help fledgling businesses develop.



**Regional Asset: Invest Nebraska Corporation**

The Invest Nebraska Corporation helps to foster growth of new and developing companies. In addition to helping companies acquire funding from sources such as angel investors, networking is a large part of what the organization provides for its member companies. The mission of the corporation is to “promote capital formation for, and provides operating assistance to, high impact entrepreneurs and investors in Nebraska.”



# REGIONAL ECONOMIC SCAN

## INNOVATION SUMMARY

- ✓ Relative to the rest of the nation and the benchmarks, the Greater Lincoln Region faces significant challenges in commercializing innovation that occurs within the area. With limited funding and patenting activity, there is little innovation being captured by the region, impacting regional economic development efforts.
- ✓ In spite of these challenges, several critical “innovation drivers” are emerging that will hopefully position the region to commercialize new technologies and ensure financial benefits stay local. UNL’s research programs (e.g. Beadle Center researchers, who, in eleven years of operation, have secured over \$100 million in research funding) are growing and the university is planning for the development of a 1.6 million square foot Innovation Campus situated adjacent to campus to link researchers and the private sector.
- ✓ Like most areas that are seeking to build a stronger economic base, there is a demand in the Greater Lincoln Region for better support for developing “home-grown” entrepreneurs – including stronger training programs, more robust networks, early stage venture capital funding, and more focus from the public sector on building existing small business.

**Regional Asset: Nebraska Angels**

Nebraska Angels focuses on the growth of “early-stage” companies within the state. It is a not for profit program which is committed to the transfer of knowledge to companies during early growth. The Nebraska Angels invests in businesses that have the potential to “achieve high growth, strong market position, and sustainable advantages.” The Nebraska Angels typically contribute to companies that they believe have the ability to receive upwards of \$50 million in revenue within the first few years.



**Regional Asset: Nebraska Center for Entrepreneurship**  
Lincoln, Nebraska

**Nebraska Center for Entrepreneurship**  
Creating growth and competition in local businesses

Consistent with its role as a part of Nebraska’s Land Grant University, the Nebraska Center for Entrepreneurship (NCE) strives to fulfill the University of Nebraska’s responsibility to students who aspire to create jobs. NCE’s experientially-oriented curriculum teaches theory and skills that have been associated with the highest probability of entrepreneurial success. The undergraduate entrepreneurship curriculum consists of 8 courses. The NCE also offers 5 elective courses at the graduate level.

**Regional Asset: Investors, Inventors, and Entrepreneurs Club (I2E Club)**  
Southeast Nebraska

**I2E Club**  
Inventors, Investors & Entrepreneurs

The Investors, Inventors, and Entrepreneurs Club (I2E Club) was developed to support an entrepreneurial culture in Southeast Nebraska. Funded through a Building Entrepreneurial Communities Act (BECA) grant, I2E Club is administered through the Kimmel Education and Research Center at UNL’s Cooperative Extension. The Club connects existing business leaders with budding entrepreneurs to build relationships and exchange advice on business challenges in the market.

# REGIONAL ECONOMIC SCAN

## BUSINESS CLIMATE, INFRASTRUCTURE AND QUALITY OF LIFE

This indicator area measures the capacity of the region to support business expansion and development opportunities. It identifies factors (outside of workforce development) most critical to small, medium, and large employers in deciding where to locate or expand operations.

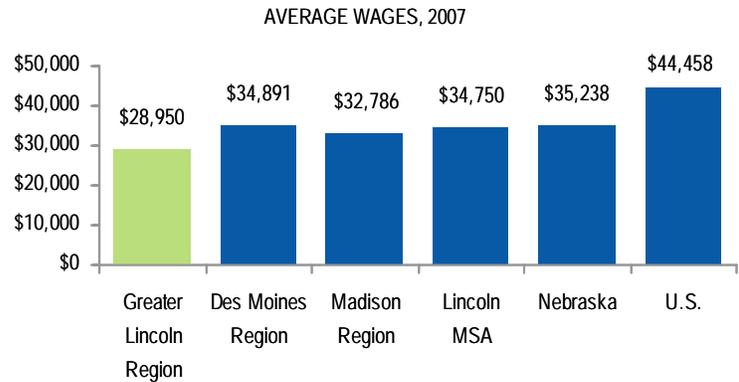
### LABOR COSTS & TAX STRUCTURE

Average wages in the Greater Lincoln Region are extremely low. In fact, in 2007, at \$28,950, wages were more than 35 percent lower than national average wages and 18 percent lower than all Nebraska's average wages. This is a double-edged sword. While businesses seek competitively priced regions for better profitability, they also want communities that have appropriately skilled labor. While the region clearly has high-skilled labor, and in SCC and UN-L, large institutions educating young smart talent, wage levels must be properly addressed to make it a selling point rather than a detractor.

Also of concern, wage growth has been slow and appears to have flattened resulting in a slightly larger gap with competitor communities.

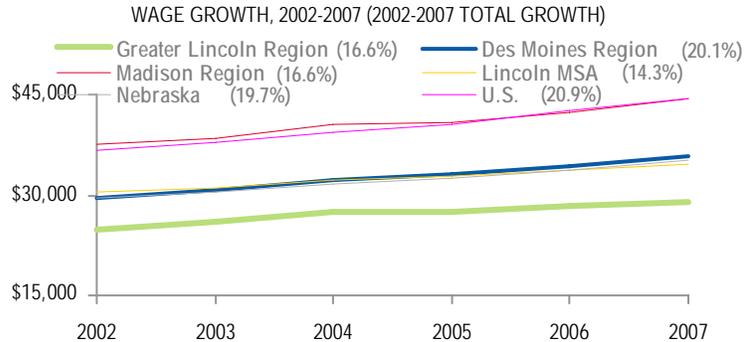
Tax burden can be a pivotal factor in a company's site location decision. Competitive tax rates are important to business attraction at varying degrees based on a company's stage of development. Manufacturers and many service companies are highly sensitive to tax rates and incentives. Nebraska, as a state, is in the mid-range of corporate taxes and gross sales and receipts taxes, two rates important to businesses. Additionally, income and property taxes are near the national

### LABOR COSTS



Source: BLS Quarterly Census of Employment and Wages

### WAGE GROWTH



Source: BLS Quarterly Census of Employment and Wages

PER CAPITA TAX COLLECTION BY STATE AND STATE RANK (1 IS HIGHEST), 2006								
	State & Local Property Tax		State & Local Corporate Tax		Individual Income Tax		General Sales & Gross Receipts	
	Per Capita	State Rank	Per Capita	State Rank	Per Capita	State Rank	Per Capita	State Rank
Nebraska	\$1,270	17	\$149	22	\$878	21	\$1,244	28
Wisconsin	\$1,444	11	\$209	10	\$1,337	7	\$1,449	14
Iowa	\$1,144	21	\$96	42	\$838	26	\$1,128	40

Source: Tax Foundation

# REGIONAL ECONOMIC SCAN

average, too. In general, the state and region are competitive tax-wise.

While tax rates are competitive, some stakeholders expressed concern with government's ability to continue providing existing services without raising taxes. These concerns mainly applied to infrastructure, such as roads, bridges, water, and sewer systems.

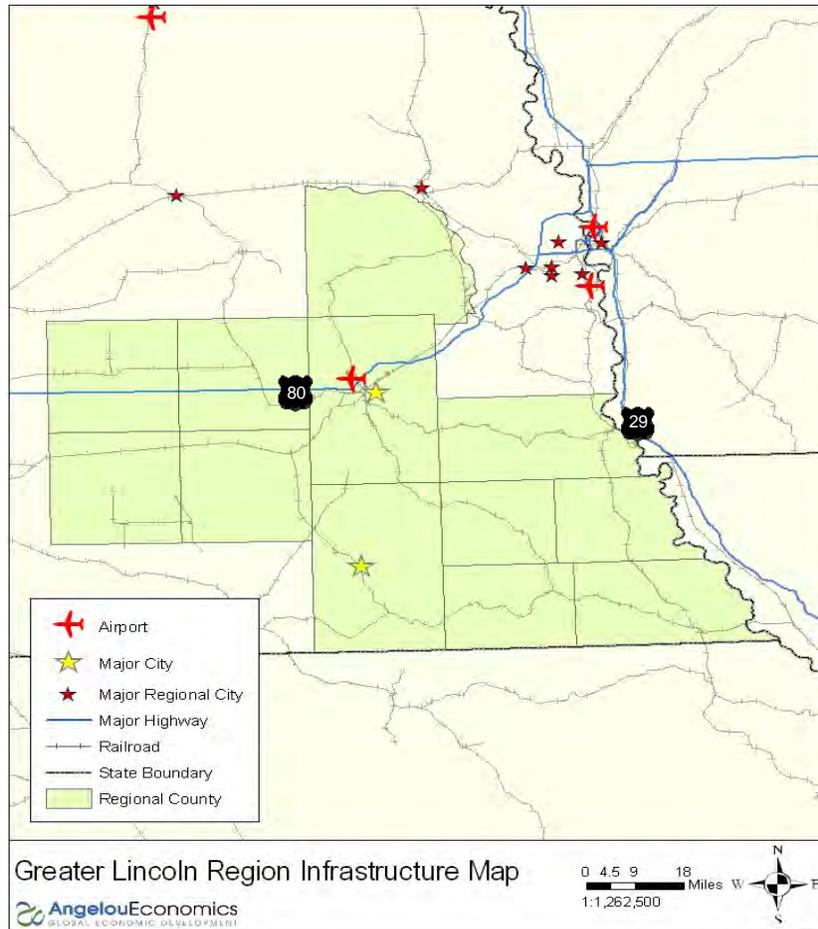
## INFRASTRUCTURE

There is no doubt that investments in basic infrastructure components such as railroads, highways, and ports, as well as communication infrastructure such as broadband and wireless, are critical to addressing complicated regional economic and workforce development challenges.

Transportation accessibility appears to be strong regionally. The Greater Lincoln Region is served by a major highway, strong rail access, and two strong regional and international airports (Lincoln and Omaha). Interstate 80 provides strong east-west access while US Highways 81, 77, 75, and 73 provide moderate north and south access, respectively. Interstate 29, which runs inside the western Iowa border, also provides strong north-south access. In 2008 nearly 190,000 people flew through the Lincoln Airport and 4.4 million flew through Epply Airfield in Omaha/Council Bluffs.

Through interviews and roundtable discussions, employers indicated high satisfaction with the quality of the region's transportation system. In fact, a significant number – mostly in the manufacturing sector – pointed to the region's central U.S location and strong interstate and rail systems that allow efficient movement of goods, as a primary reason their business is located in the area. While there is some frustration over north-south access, it appeared that east-west access was more important for most employers.

While transportation accessibility appears to be strong, like most areas around the country, infrastructure maintenance will be a key to continued economic success. Economic developers in outlying regional counties identified potential concerns in ensuring quality and access to water, roads, and broadband, in particular, is there to meet expected industry demand. In addition, outlying counties highlighted an important challenge in increasing their stock of shovel-ready sites as a means to improve their viability in competing for company expansions and new locates.



# REGIONAL ECONOMIC SCAN

While the region is generally competitive, it does face some real estate pricing challenges. Between the second quarter of 2007 and the first quarter of 2009, Class A office space increased from less than \$18.00 per square foot to \$19.14. Class B office space had similar price gains. However, the second quarter of 2009 has shown a slight decline in prices, with an asking price of \$19.00 per square foot, down fourteen cents. While industrial rates have remained fairly level, with gains of less than one dollar in a year for rental rates, retail trends have jumped sharply since Q3 2008. According to Grubb & Ellis Pacific Realty, average asking rents increased twelve cents in the last quarter alone. Retail rental rates are expected to decline however, as retail vacancy rates across the country and within the Greater Lincoln Region have increased and are expected to continue to do so.

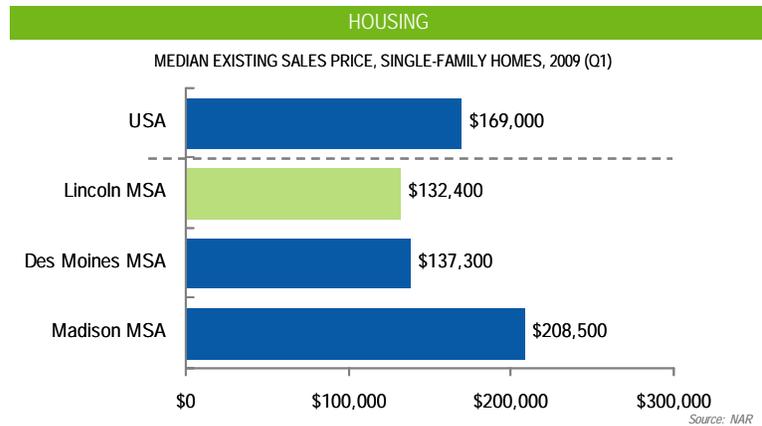
## QUALITY OF LIFE

Quality of life indicators are a combination of several factors, some that are quantifiable and some that are not. Taken together they provide a picture of how attractive a place is to both live and work – a critical factor for attracting and retaining both industry and talent.

Cost of living data is unavailable for the Greater Lincoln Region. However, the majority of price variations between locations occur due to differences in housing costs. By examining housing prices, it is possible to get a relatively clear picture of cost of living differences between regional benchmarks.

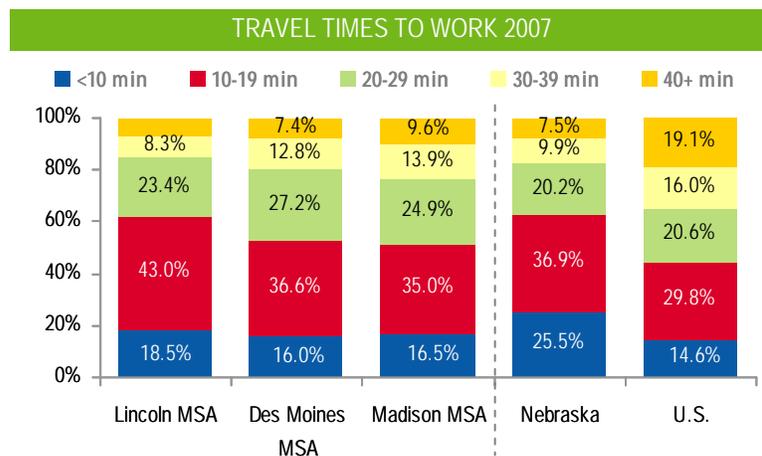
## COST OF HOUSING

The National Association of Realtors only provides sales of single family homes for metropolitan areas. Assuming the metro area for each benchmark is the most expensive area, the Greater Lincoln Region compares very favorably to benchmarks as well as to the nation as a whole. Housing is 22 percent less within the region than within the entire United States. At the same time, metro wages are 21.8 percent less than national rates. This demonstrates that while housing is less expensive, wages are proportional, suggesting that the Greater Lincoln Region has a cost of living almost exactly on par with the national average.



## TRAVEL TIME TO WORK

The Greater Lincoln Region's workforce spends less time sitting in traffic than the average worker in the U.S. Over 60 percent of workers have a commute less than 20 minutes, compared to only 45 percent of the nation. A short commute time demonstrates affordable homes relative to income and low congestion on



## REGIONAL ECONOMIC SCAN

major arterials, things that both employees and employers prefer.

Overall, focus group participants identified strong “quality of life” factors for the region and the metro area, with its low cost of living and steady job growth, has been nationally recognized for its potential as a destination for young professionals. In addition, the outlying RIG counties, with their extremely low cost of housing, wealth of recreational opportunities, and extremely low crime rates, present attractive places for younger workers who are starting and raising families.

Focus group participants, however, also spoke about the need for more cultural and recreational amenities in the area that could be an avenue for attracting additional visitors and creating a destination for young twenty-something professionals.

### BUSINESS CLIMATE, INFRASTRUCTURE, AND QUALITY OF LIFE SUMMARY OF KEY FINDINGS

- ✓ Overall, in terms of business attraction, the Greater Lincoln Region is cost competitive with areas around the Midwest, and certainly more competitive than coastal regions that have typically less land to develop, higher tax rates, and higher costs of living for employees.
- ✓ Low labor costs are certainly a double edge sword – while attractive to employers, they are prohibitive in attracting and retaining young educated professionals. As companies face increasing competition and a deep recession, more attention will be placed on controlling costs. This is especially true for manufacturing companies, where wages account for a significant percentage of total company costs. By and large, this region, with lower costs of living, reasonable tax burden, and wages are competitive with most of the country.
- ✓ Because manufacturing, agriculture, and trade are major components of the region’s economy, high quality physical access to national markets is important. However, as professional services and innovation-oriented industries grow (and demand skilled workers) the region can gain a competitive advantage by ensuring that infrastructure development and maintenance is completed in a holistic fashion and tied to regional economic development plans.
- ✓ With a low cost of living and easy commutes, the region offers a number of quality-of-life advantages that can help in efforts to attract and retain both business investment and young people. However, the region can certainly benefit from attracting additional cultural and recreational amenities, including world-class museums, performing arts centers, festivals, etc.

# REGIONAL ECONOMIC SCAN

## Connective Workforce and Economic Development Organizations

The Greater Lincoln Region features a number of regional and county economic development organizations, workforce groups, and business coalitions, all of which are actively promoting economic objectives – and doing so collaboratively in some cases.

**The Lincoln Chamber of Commerce**, which, with over 700 business members, is the premier business association within the Lincoln metro area.

**The Lincoln Partnership for Economic Development**, a public-private collaboration affiliated with the Lincoln Chamber, guides the Lincoln metro area’s economic development activities, including business attraction, retention/expansion and entrepreneurial development.

**The Lincoln Area Development Partnership (LAD)**, a group of 11 southeast Nebraska city/county economic development organizations (all within the RIG region), formed recently to conduct regional joint marketing initiatives.

**The Greater Lincoln Workforce Investment Board**, with the **City of Lincoln** and the **Southeast Community College** system, provides workforce investment oversight for the Lancaster and Saunders Counties, aimed at enhancing job training opportunities for regional workers and employers. **The Greater Nebraska Workforce Investment Board** plays a similar role as the Greater Lincoln Workforce Investment Board, and it services the majority of the state’s more rural counties including several within the Greater Lincoln Region. Each of these boards oversees five one-stop career centers that fall within the 12-county region that provide an array of hiring, training, and workforce development facilitation services.

There are also a number of city and county economic development organizations throughout the region that engage in local business attraction and retention efforts. Many of these entities, together, make up the LAD group.

- ### Local Economic Development Organizations
- Auburn Development Committee
  - Downtown Lincoln Association
  - Falls City Economic Development and Growth Enterprise, Inc.
  - Fillmore County Economic Development
  - Gage County Economic Development, Inc.
  - Greater Wahoo Development Foundation
  - Lincoln Chamber of Commerce
  - Lincoln Partnership for Economic Development
  - Milford Chamber of Commerce
  - Pawnee City Development Corporation
  - River Country Economic Development Corporation
  - Seward County Development Corporation
  - Southeast Nebraska Partners for Progress
  - Syracuse Area Economic Development Corporation
  - York County Development Corporation

# REGIONAL ECONOMIC SCAN

## ASSESSING INDUSTRY CLUSTER BASE

While the “Economic Trends” section identified industry super-sectors that provide the economic foundation of the region, an industry cluster base analysis looks at more specialized sectors and compares the cluster’s share of total local employment to the cluster’s national share. This analysis yields important information about industries in which the Greater Lincoln Region is *currently* strong. A later report will identify which industries and specific niche industries are not only strong today, but will continue to grow in the future – thus making them potential economic development targets.

The Greater Lincoln Region enjoys key cluster strength as well as significant employment in the following industries: electronics, agriculture, higher education and research, health services, and transportation equipment.

STRONGEST INDUSTRIES FOR THE GREATER LINCOLN REGION			
Industry	Employment	Businesses	LQ
Electronics	2,416	31	2.26
Agriculture	7,603	3,081	2.04
Higher Ed. & Research	7,162	150	1.86
Health Services	23,464	1,024	1.38
Transportation Equipment	1,933	26	1.27
Food Processing	2,423	61	1.27
Government	27,466	846	1.22
Civic Enterprises	6,429	1,035	1.21
Financial Services	7,910	976	1.12
Eat/Drink	10,528	697	1.06
General Services	10,780	2,208	1.02
Retail	23,326	2,439	1.02

Source: Dun & Bradstreet

**Electronics** — With a location quotient more than twice the nation average, the electronics industry has been an important sector for the region, with everything from electronic control systems manufacturing to hardware design and engineering by companies such as Digitec. This industry has slowed recently however and overall is not a major employer for the region.

**Regional Asset: Nebraska Center for Excellence in Electronics**  
Lincoln, Nebraska

The Nebraska Center for Excellence in Electronics (NCEE) is a nonprofit organization that provides facilities for product compliance testing and consulting. Located within Nebraska Technology Park, the facility is a collaboration between higher education, industry, and government. The site houses some only publicly available testing facilities for the electronics sector in the country.



**Agriculture** — More than 4 percent of the region’s workers are employed in the agriculture industry. Opportunities for growth in this industry exist through adoption of emerging technologies and processes, as well as higher

## REGIONAL ECONOMIC SCAN

valued-added production—organic farming, niche farming, biofuels, and the increased use of technology in production and marketing.

**Higher Education and Research** — Education and research has become one of the most important sectors. Growing nationally, education is becoming a significant export good for the US as well as providing the edge that has arguably kept the nation competitive internationally over the past few decades. With a location quotient of 1.86, the Greater Lincoln Region has a strong advantage in this sector.

**Health Services** — With a location quotient above the average of 1, health services comprises more than 12 percent of regional employment. Recognized as a growing sector regionally and nationally, this field is only expected to grow as baby boomers reach retirement.

**Transportation Equipment** — While the recent decline in the economy has exacerbated manufacturing within the United States, especially regarding transportation (see GM, Chrysler, and Ford), most of the transportation equipment manufacturing within the Greater Lincoln Region is comprised of farm, lawn care, and alternative vehicle manufacturing. This has helped the region, relatively speaking, to avoid such drastic manufacturing losses as many “car towns” in the Midwest have had to face. Even so, big name companies in the area, such as Kawasaki, Toro, and Duncan Aviation, have still had to make layoffs deeper and earlier than typical manufacturing cycles require.

It is worth noting again that the Greater Lincoln Region has a strongly diversified economy. The largest industry only has twice the national average employment, and most businesses have a location quotient near 1, which puts them on par with the national employment rates.

## CRITICAL ISSUES

### UNDERLYING REGIONAL ECONOMIC ISSUES

The Greater Lincoln Region has a very steady and resilient economy. A well-balanced industry portfolio continues to guard the region against the current economic downturn even in the face of mass layoffs in the food processing and manufacturing sectors. At a time when the national rate is expected to reach or exceed 10 percent, the Greater Lincoln Region has one of the lowest unemployment rates in the country.

While overall job growth continues to be slow, the region has experienced job gains and secured new company locates within some critical high-wage industries, including trade and transportation, health services, and information technology and financial activities – all of which has helped spur strong income level growth over time. A growing young professional population and a strong business climate are other foundational strengths that will position the region for future economic development opportunities.

These positive trends are countered by several fundamental regional challenges including slow population growth, slow growth of its educated workforce, and lower labor costs (which, while appealing to industry, will continue to make it difficult to attract and retain educated young talent).

### CRITICAL ISSUES (CHALLENGES AND OPPORTUNITIES)

As the Greater Lincoln Region seeks to foster a more economically competitive environment predicated on developing high-skilled, high-wage jobs, key strategic implications of that decision must be at once recognized and addressed. Through analysis of data and trends, **AngelouEconomics has identified eleven (11) economic and workforce development issues that warrant such attention** – represented here as both challenges and opportunities for the region. It must be noted that the following analysis of strategic issue areas is not designed to be exhaustive. Rather, it is a concise assessment of the issues that will have the greatest impact on future workforce development efforts throughout the region.

#### Workforce Development

##### **Issue 1: Opportunity to better connect Southeast Community College, UN-L, Peru State, Concordia, and other post-secondary institutions around preparing a skilled regional workforce**

While the region benefits from a strong network of two- and four-year higher education institutions with a mix of program offerings, there may be an opportunity to leverage these assets to develop a more unified 'system' that anticipates and effectively responds to existing and future industry needs across the region. Each offers distinct advantages (SCC with leading academic and technical programs and physical campuses throughout the region; Peru State with growing online service offerings; Concordia with state-of-the-art facilities, etc.) While articulation agreements between some of these schools exist more enhanced integration may be appropriate especially as emerging target industry clusters (with new occupational requirements) are identified.

##### **Issue 2: Responsive community college system but limited capacity for generating awareness of customized training services.**

The Southeast Community College system has an exceptional reputation for meeting academic needs in the region but may need to do more to reach directly to the regional business community to understand customized training needs and to articulate SCC existing training capabilities. SCC customized training programs appear well linked to dominant and/or growing industries regionally (e.g. health care, financial services, component manufacturing). However, SCC does not currently have the resources to conduct additional and targeted outreach

## CRITICAL ISSUES

necessary to enhance enrollment and ultimately serve more employers, especially those that have accessed state incumbent worker training dollars.

### **Issue 3: Opportunities for enhancing pipeline of skilled workers**

The slow growth of an educated workforce is a concern for the region. This indicates a trend of high school graduates directly entering the workforce (likely through lower-wage manufacturing, agriculture, or service jobs) and/or college graduates relocating to other regions they perceive to have additional amenities and higher wage job opportunities. While AngelouEconomics will examine specific occupational shortages in the next report, it is likely that the Lincoln region suffers (as the state does) from a shortage of highly educated students with backgrounds in science, engineering, and math. This base of highly skilled students is critical to positioning the region to ultimately “move up the value chain” into higher-growth, more technology-based, and higher wage industry opportunities.

SCC (often through career academy programs) is actively engaged in regional K-12 skill development initiatives across a number of different industry sectors. Ensuring these initiatives are tied to emerging regional target industry areas and connected to other planned efforts (e.g. career academies being planned currently in Nebraska City) will maximize resources. School systems (K-12) in the region obviously play a significant role in generating career awareness and experiential learning opportunities in science and math disciplines, although, according to some stakeholders, they have historically not been an active stakeholder in regional economic development discussions.

### **Issue 4: Opportunity to more actively engage private sector in workforce development strategic initiatives**

There does not appear yet to be active or consistent employer participation in strategic discussions around regional job training efforts. While occurring sporadically and in pockets throughout the region, formalized avenues through which employer input on hiring and training needs is captured (and through which new/refined curriculum is developed) are limited. These formalized venues become even more critical in today's economic downturn where identifying ‘early warnings’ of potential massive layoffs is critical to determining dislocated worker response opportunities.

## **Entrepreneurship, Innovation and Tech Transfer**

By and large, regional stakeholders recognize that a critical aspect of sustainable economic competitiveness for the Greater Lincoln region is building a strong support network that encourages innovation through the development of entrepreneurship. Several specific key issues emerged:

### **Issue 5: Supporting “community” entrepreneurship**

A critical aspect of sustainable economic competitiveness for the Greater Lincoln Region is building a strong support network that provides the tools needed for “home grown” entrepreneurship and small business. Efforts to provide aspiring entrepreneurs with the appropriate resources will help not only attract and retain young workers but it will also assist older dislocated workers – an increasingly critical target population in this down economy. There is no lack of individual entrepreneurial and small business support programs throughout southeast Nebraska, from SCC's Entrepreneurship Center (including incubator space) to various “Main Street” and small business support programs in outlying regional communities to University of Nebraska-Lincoln's Center for Entrepreneurship and sponsored Inventors, Investors, and Entrepreneurs Club . However, stakeholders overwhelmingly agree that more can be done to connect these initiatives and provide aspiring entrepreneurs an easier way to navigate through regional and statewide support resources to successfully develop and launch a business.

## CRITICAL ISSUES

### **Issue 6: “High Technology” entrepreneurs – providing the capital and networking opportunities for entrepreneurs to succeed**

Nebraska ranks 49<sup>th</sup> in a recent Kauffman Foundation study of national venture capital funding availability. This is a critical challenge for the region as emerging technology start-ups are increasingly capital-intensive relying heavily upon VC firms, angel networks, or foundations to bridge the gap between an idea and traditional financing.

There is sentiment in the region that leadership around these issues is gaining momentum. However, the funding has just not been generated (an issue that has been accentuated during this recent recessionary period). Several specific challenges were identified as causes for why there has been limited commercialization of new products and why high-tech entrepreneurs often leave the region.

- 1) Angel networks, like Nebraska Angels, that typically provide early-stage equity are newly formed and it will take several more years for investments to show returns.
- 2) Venture capital – critical to take companies to mid and later stages – is invested sporadically and in limited amounts. Anecdotal evidence shows that when companies within the region reach a certain growth stage they tend to move elsewhere where VC funding is more abundant and accessible.
- 3) There is limited regional and statewide support for small business and entrepreneurship programs (504 loan programs, SBIR) that provide businesses with research and development support and long-term financing for fixed assets.
- 4) Very few opportunities exist for regional innovators to network with potential investors within the region increasing exposure of new ideas.

### **Issue 7: Opportunity to drive/connect innovation – if it is targeted to specific industries and accessible to the greater region**

The UN-L Innovation Campus presents a great opportunity to encourage private entrepreneurs to work with research faculty and expand economic development throughout the region. While planning for this campus is still underway, that effort should inform and be informed by this RIG workforce development plan. This RIG plan will identify economic development targets (in the next phase) that are likely to be synergistic with core UN-L research competencies, such as food processing, animal health, water resources, and plant science.

In addition, as Innovation Campus and other UN-L research facilities develop, there may be an opportunity to more robustly tie to counties outside of Lancaster. During interviews, outlying counties expressed a disconnect with UN-L from an economic development perspective. This was most often characterized as a lack of awareness of innovations emerging from the university that may have applications for regional firms. As R&D and technology transfer becomes more of a focal point for the university, outlying counties may benefit from gaining a more clear understanding of the match between regional business' core competencies and innovations that are available for licensing.

## **Economic Development**

### **Issue 8: Job training and business attraction/retention not necessarily tied to target industries**

The next AngelouEconomics report will closely examine which mix of business sectors provides the Greater Lincoln region the best opportunities for long-term, sustainable high-wage job creation. Based on current regional strengths, stimulus funding opportunities, as well as feedback gathered, industries such as Health Care, Food Processing/Agriculture/Life Sciences (plant sciences) Renewable Energy (e.g. green building, wind, geothermal), Finance/Insurance (and IT – as it connects to financial transactions), Advanced Manufacturing, and

## CRITICAL ISSUES

Transportation/Logistics (technology, equipment) all show promise and will be reviewed closely. All regional economic and workforce development programs/efforts should then be aligned to these targets.

### Regionalism

Strengthening regional partnerships will not only help in becoming more competitive as a geography but will help in generating specific economic and workforce development future funding opportunities (as federal agencies like the U.S. Department of Labor and other job training grant funding sources increasingly require communities to demonstrate regionally collaborative relationships).

#### Issue 9: “Regional” thinking at nascent stage

Conceptually, economic and workforce development leaders throughout the 12 counties actively support “regionalism.” There appears to be strong interest to use this RIG project to “set the table” (as one stakeholder described it) for learning how to better share information and resources across city and county lines in an effort to attract and retain new businesses and skilled workers. The Lincoln Area Development Partnership (LAD), a group of 11 southeast Nebraska city/county economic development organizations, is an excellent example of this emerging regional appeal. The group was formed recently to conduct regional joint marketing initiatives, although it is still very much in its early stages of development continuing to determine its formal structure and long-term objectives.

However, by and large, stakeholders across the region recognized that public county and city officials still need a significant amount of convincing that regionalism is a worthwhile concept that generates a return on investment. As one stakeholder mentioned, “We can all agree that regionalism is important, but it is a different matter when push comes to shove and a new project locate lands in Gage County and not Lancaster.” Regional identification (i.e. branding) and leadership buy-in, therefore, will continue to be important principles if this is to become a sustained effort.

To that end, stakeholders agreed that LAD, LPED, and other leadership groups must persistently articulate the economic and financial benefits of regionalism throughout all 12 counties. Interestingly, there is sentiment among the LAD group, that when it comes to new potential business attraction projects, there historically has been very few that pitted one county against another in the 12-county region.

In addition, as the region continues think through how to operationalize 12-county regional economic and workforce development concepts, it must not overlook the tie to the Omaha region, which data reveals is a significant part of the Greater Lincoln Region’s labor shed.

#### Issue 10: Regionalism is good – but be wary of intra-regional issues

As the region seeks to unify economic and workforce development efforts to enhance competitiveness, it needs to be wary of *intra*-regional economic disparities. Not surprisingly, there is a significant difference between the metro Lincoln area and surrounding county economies:

- *Education and income levels* - While high as a region, there is a striking disparity between Lancaster County (36% with at least a bachelor’s degree) and Otoe (19%) or Gage (17%) counties, for example.
- *Physical infrastructure and sites*– Water availability/quality, roads, broadband, and the availability of shovel-ready sites, in particular, were identified as major concerns in outlying rural counties in terms of meeting future industry demand.

To be competitive as a region, it will need to build on the strengths and assets (often found in the metro area), while ensuring outlying areas are enhancing resources.

## CRITICAL ISSUES

### Governance

#### Issue 11: Putting the pieces in place for a governance or leadership structure

The strategies that are ultimately developed through this project will need a formalized leadership team accountable for their execution. Currently, several existing groups will likely play an important role in this effort: LAD, Lincoln Area WIB, Greater Nebraska WIB, SCC, LPED, along with the informal RIG Executive Committee.

In the short term, these groups will need to consider who will lead implementation efforts including securing funding for execution. In the longer-term there may be justification for a more formalized strategic “regional” group(s) that helps to guide economic and workforce development efforts on a 12-county basis. Although focused currently on marketing and business attraction efforts, LAD is a great example of how a ‘grassroots’ regional alliance can form to serve a multi-county need. LPED or LAD taking on a larger role would ultimately have significant implications in the way business attraction activities within the region are accomplished and a major repurposing such as that would require significant thought and leadership buy-in.

### PROJECT NEXT STEPS

The Economic Scan is a first step in the process of developing a Workforce Development Strategy for the Greater Lincoln Region. The next critical action item will be to look more closely at target industries and identify specific regional economic and workforce development assets that can be leveraged to cultivate dynamic clusters. Assets to be inventoried will include:

- Higher education programs (academic and technical)
- Research institutions and program focuses
- Occupations and skill sets demanded by target industries and the existing base of current talent
- Entrepreneurship/Small business centers

The Asset Map will closely examine each county within the region and the specific strengths it brings to bear.

# INTRODUCTION: TARGET INDUSTRY AND ASSET MAP ASSESSMENT

## INTRODUCTION & REPORT ORGANIZATION

### ASSET MAP AND TARGET INDUSTRY ASSESSMENT

The first report of this project, the *Greater Lincoln Region Economic Scan*, examined both the common and unique characteristics of the Greater Lincoln Region and identified the underlying economic, demographic and labor market factors that define it as a potentially viable economic “region.” The report served as the foundation for this regional *Asset Map and Target Industry Analysis*, which identifies and inventories specific economic and workforce development assets that can be strengthened and leveraged to drive economic growth in certain target industry sectors and create a pipeline of talent aligned to these industry needs.

More specifically, the Asset Map is designed to examine five target industry opportunities for the Greater Lincoln Region: *Advanced Manufacturing, Agriculture and Life Sciences, Transportation and Logistics, Business Services and Information Technology, and Health Care*. For each target industry, this report describes the industry and its national growth trends; regional strengths and potential as related to broader trends and specific industry niches; relevant regional economic and workforce development assets; and occupations and skill sets required within the industry and available in the region.

The report is organized in the following format:

#### Target Industry Profiles

Brief descriptions of each of the five target industry opportunities with regional overviews and a local “value proposition” that describes why each opportunity should be an industry target.

#### Occupational Analysis

An identification of key workforce requirements for each target industry and an analysis of how the Greater Lincoln Region “matches up” in terms of occupational concentration.

#### Asset Inventory & Analysis

Identification and mapping of key economic and workforce development assets or resources across the region. Assets include:

- *Higher Education and Job Training Assets:* Colleges, universities and worker training programs within the region
- *Research and Development Assets:* All known public, private or public-private research efforts taking place
- *Entrepreneurship Assets:* Networking groups, early-stage capital, incubators, and entrepreneurship support groups
- *Leadership Group Assets:* Organizations that lead economic development efforts within the region

Assets identified are those that cut across all industry targets.

#### Transition to Recommendations

Finally, the report summarizes the key issues and findings to date and identifies several key “strategy opportunity areas” that will be further detailed in the final strategic planning report.

# TARGET INDUSTRY ANALYSIS: INTRODUCTION

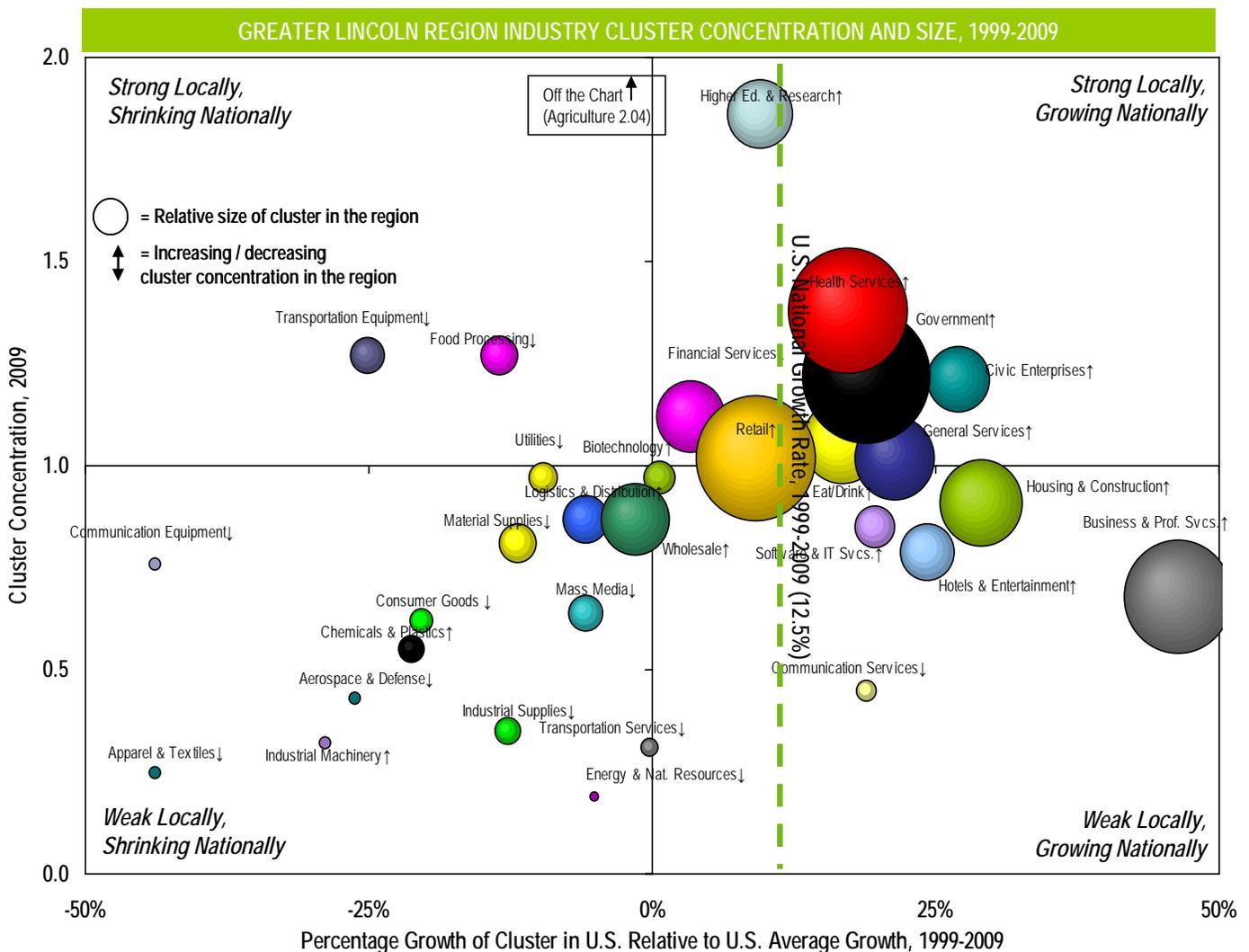
## TARGET INDUSTRY CLUSTERS

The development of competitive clusters is one of the key generators of regional wealth. A cluster develops when businesses in interrelated industries choose to locate within close proximity to each other in order to take advantage of a region's inherent advantages. These businesses then become interdependent on each other and, in the process, enhance their operating environments and ultimately grow to be more competitive on the global landscape. As this happens, company profitability rises, wages increase, and the region yields significant benefits.

For this report, we conducted a cluster analysis of the region to determine which industries are dominant. These clusters were analyzed to relative to national and regional growth trends and local assets that benefit the clusters were identified. In conjunction with the community vision identified through an extensive public input process, this analysis provided a basis for the identification of the Greater Lincoln Region's target industries.

## INDUSTRY CLUSTER ANALYSIS

Informed by a series of regional roundtable discussions, employer survey data, and information gathered through the *Economic Scan* (Report #1), AngelouEconomics examined industry trends and regional assets in an effort to identify the most promising target industries for the Greater Lincoln Region.



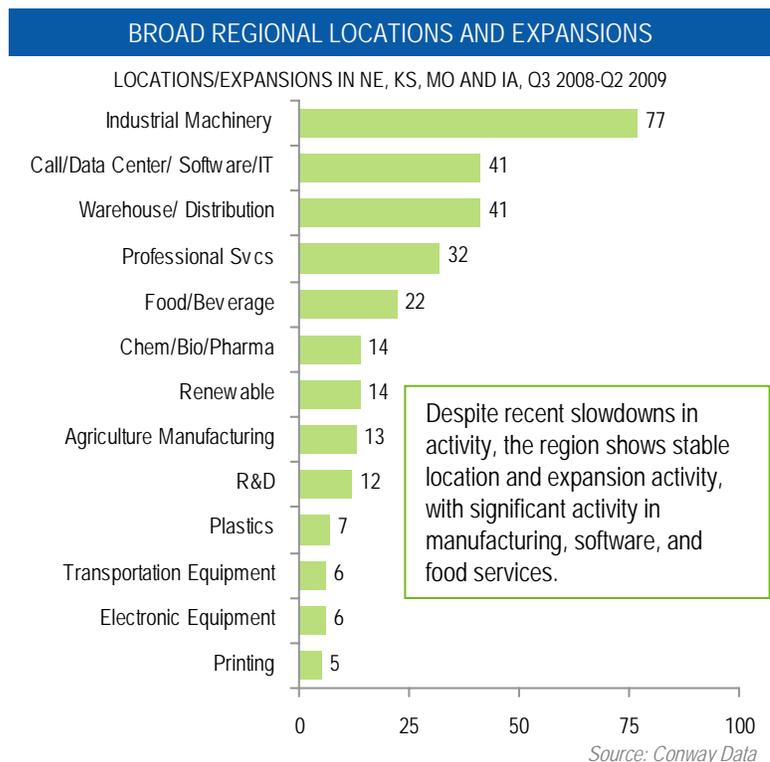
## TARGET INDUSTRY ANALYSIS: INTRODUCTION

The figure above displays the results from a shift-share analysis conducted to determine the strength of local industry clusters relative to the national economy. The method utilized to make this comparison is the Location Quotient (LQ) technique which compares the cluster's share of total local employment to the cluster's national share. This location quotient will yield a value generally between 0 and 2, where a result of "1" demonstrates that the cluster commands an average (expected) share of the local economy. Cluster location factors greater than 2 indicate a strong cluster agglomeration, while those less than .5 indicate extremely weak clusters. The bubble chart reveals several specific findings:

- The region's industry base portfolio is well diversified with concentrated employment in a number of different industry sectors. Importantly, many of the region's cluster strengths (health services, IT, financial services, business and professional services) are also growing nationally meaning the region will likely experience overall wage growth in the future while maintaining low unemployment.
- Two of the region's strong industries, transportation equipment and food processing are both shrinking nationally. While this trend can potentially be a 'red flag,' it also symbolizes an opportunity to capitalize on local industry strengths in an effort to create a more unique specialization.
- In addition, while the recent decline in the economy has further impacted manufacturing within the U.S., especially regarding transportation (see GM, Chrysler, and Ford), most of the transportation equipment manufacturing within the Greater Lincoln Region is comprised of farm, lawn care, and alternative vehicle manufacturing.
- Despite declines in employment associated with farm consolidation and advances in technology, agriculture remains heavily concentrated in the region.
- As expected, higher education and research has become an increasingly important sector for the region. Growing nationally, education is becoming a significant export good for the U.S. as well as providing the edge that has arguably kept the nation competitive internationally over the past few decades. With a location quotient of 1.86, the Greater Lincoln Region has a strong advantage in this sector.

While important to understanding regional industry specializations, the shift-share analysis (bubble chart) provides only a quantitative snapshot of the region. This information must be further combined with an understanding of regional economic strengths, broad industrial trends and potential (see figure to the right highlighting recent regional corporate locates), and synchronization with the regional vision identified through RIG project roundtables and interviews.

This process assisted in establishing economic development targets that truly match the region's capacities and desires. While the current national downturn has had a major negative impact on a number of different industries nationally, some, namely health care and technology (computer systems design, internet



## TARGET INDUSTRY ANALYSIS: INTRODUCTION

services and data processing), are, and will continue to grow. In addition, most economists believe that industries that were performing well prior to the recession (e.g. financial services, retail, life sciences, etc.) will likely rebound again in 2010 and continue on their growth trajectories.

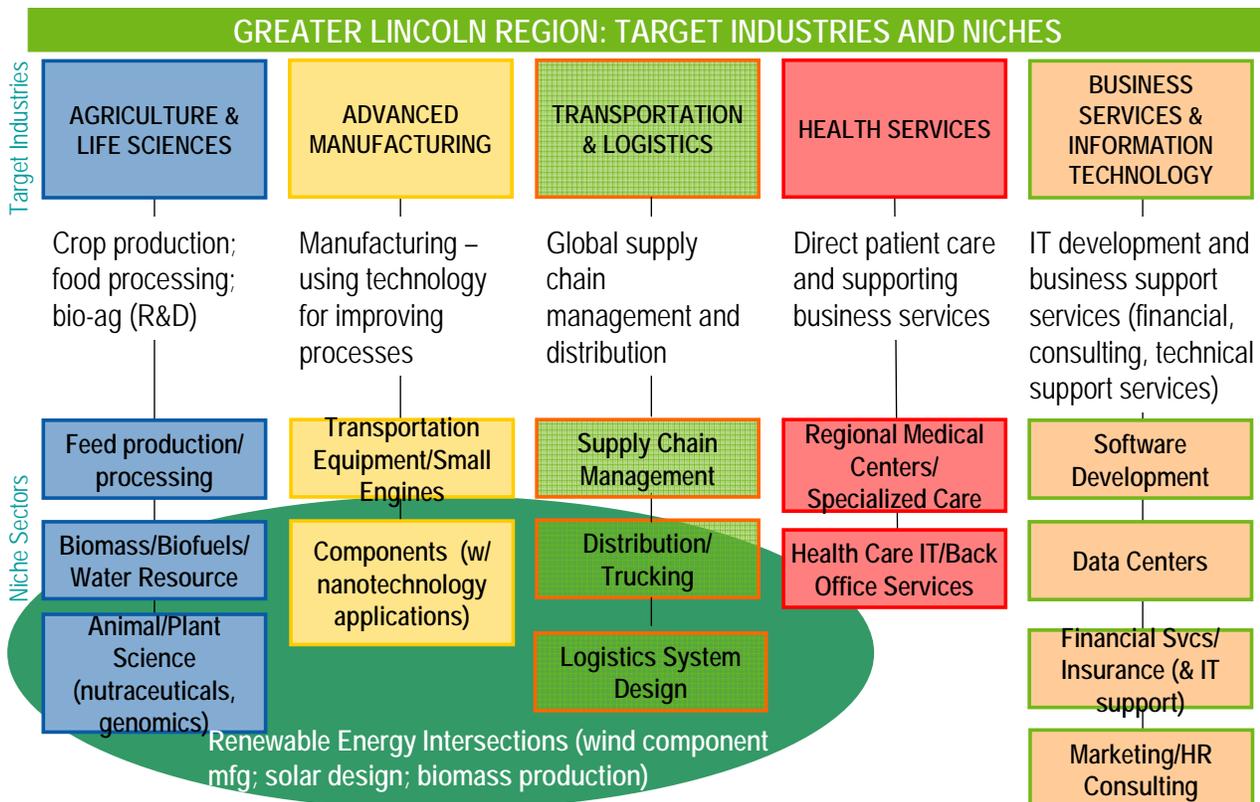
## GREATER LINCOLN REGIONAL TARGET INDUSTRY OPPORTUNITIES

Despite some underlying labor market and economic challenges, the Greater Lincoln Region brings to bear a number of key assets, many still untapped, that put it in an excellent position to capture growth from high-powered and emerging industries. *Ultimately, the region's competitive advantage will lie in its ability to transition to a knowledge-based economy driven by high-tech industries, innovation, and highly skilled labor.*

Through roundtable discussions with community stakeholders, a review of industry growth patterns, and an understanding of the region's current assets, AE has identified the following five target industry opportunities for the RIG region: **Advanced Manufacturing, Health Services, Agriculture and Life Sciences, Transportation and Logistics, and Business Services and Information Technology.** These industries demonstrate potential for long-term economic growth.

For the purposes of this study, AngelouEconomics has separated the targets into five industry groups, although there is a strong degree of mutual dependence between industries given the significant overlap between with regards to services, production, and research and development. These symmetries and intersections should be seen as fundamental assets to the region, potentially maximizing the return on investments.

The figure below highlights the target industries and niche sectors. AngelouEconomics does not recommend that niche sectors be identified specifically as "targets." Clearly, this would yield too many targets, and the synergies between them would be lost. Grouping niche sectors within main heading "targets" can yield many positive results



## TARGET INDUSTRY ANALYSIS: INTRODUCTION

and streamline regional marketing, business attraction and workforce development initiatives.

### Emerging Target Industry Opportunities: 1) Renewable Energy and 2) Tourism

With some of the nation's largest wind resources, growing wind farms and supporting manufacturing facilities (especially in the western portion of the state), Nebraska is positioned to stake a claim in the growing renewable energy sector. While the Greater Lincoln Region will not likely be a leader in large-scale wind component manufacturing or wind generation, it can support wind and other renewable energy sources (i.e. biomass, geothermal), for example, through smaller advanced manufacturing, supply chain activities, and life science research and development. Overall, this sector does not rise to the level of a "target industry" for the region, but more of a niche sector within several broader targets. As the state continues to determine its future level of support for the industry (currently it is one of only a handful of states that does not have a Renewable Portfolio Standard in place setting targets for energy usage from renewable sources), this industry's capability for generating significant numbers of jobs in the Greater Lincoln Region remains in question.

In addition to renewable energy, "tourism" is an emerging industry opportunity for the region. The region has a growing number of cultural and recreational amenities (Arbor Day, Lied Conference Center, Legacy Lake, Lincoln's proposed arena, etc.) upon which to build. Additional attention paid to drawing younger professionals, especially, (through festivals and musical and sporting events, for example) will be important for a tourism sector to become a major job generating industry cluster for the region. Lincoln's Vision 2015 initiative is addressing these "quality of life" issues and will hopefully identify some broader regional connections.

### A note on Regionalism and target industries

The targets industry opportunities identified are to be viewed as targets for the 12-county RIG region. It must be recognized, however, that differences intra-regionally (based on topography, workforce skills, infrastructure, and other assets) yield different "specializations." Given certain infrastructure advantages and the University of Nebraska-Lincoln presence, for example, the metro Lincoln area is obviously better suited for industries reliant upon research-

	Target Industries and Niches: Intra-regional Breakdown		
Target Industries	Niche Sectors		
	For Outlying More Rural-regions	For Lancaster County	
	Raw Materials Commodities	Services Manufacturing	R&D Creative Sectors
Agriculture & Life Sciences	feed production; food processing; biofuel development; sub-regional R&D hubs	biofuel/biomass development; water resources; animal/plant science R&D	
Advanced Manufacturing	transportation equipment; electronics; component manufacturing	transportation equipment; electronics/ nanotechnology	
Transportation & Logistics	distribution/warehousing/trucking	logistics management; information technology (supporting global supply chain activities)	
Health Services	specialty health care services	regional medical centers hub; health care IT (back office)	
Business Services & Information Technology	data centers	software development; finance/insurance (and IT support); HR management consulting;	

## TARGET INDUSTRY ANALYSIS: INTRODUCTION

and design (e.g. life sciences, logistics management, software development). Similarly, with less-expensive land costs and applicable workforce skills, outlying more rural counties typically make a more suitable target for larger data centers, manufacturing operations and processing plants. The table below highlights these variations.

Finally, one additional critical point with regard to the region's five target industry opportunities: given the varying degrees of "success" the region has already had with attracting firms within these industries, the Greater Lincoln region's approach to further building these clusters and their niches will be very different. The different types of targets are summarized here:

- **"Core Targets."** These are industry clusters in which Greater Lincoln currently enjoys a regional and, in some cases, a national specialization. Primary objectives include *retaining* these industries and ensuring a support structure exists (e.g. capital, workforce development, etc.) to grow new small business spin offs and entrepreneurship opportunities – especially those that are built upon innovative technological applications.
- **"Emerging Opportunities."** These are emerging industries nationally (and regionally in some cases) that are growing and provide high wage job opportunities. Greater Lincoln does not necessarily enjoy a specialization in these sectors yet, but with additional support structures in place, these are attainable in the longer-term.

Core Targets	Emerging Opportunities
<p>High local concentration, driven by local and regional demand; industries expected to continue to grow (some more slowly than others).</p>	<p>Small to no concentration locally yet but growing nationally/regionally and expected to continue (although unclear how fast). RIG region positioned to capitalize.</p>
<p>Will need critical support structures (e.g. capital, skilled workforce, customer base). Small business spin offs/ entrepreneurship) can be a focus.</p>	<p>Requires new programs and strong relationships with regional R&amp;D universities.</p>
<ul style="list-style-type: none"> <li>• <b>Business Services &amp; IT</b> (Financial services)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Advanced Mfg</b> (Using more advanced product lines, renewable energy components, nanotech)</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Agriculture &amp; Life Sciences</b> (Crop production, food processing)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Life Sciences</b> (Animal/plant Science R&amp;D and testing, nutraceuticals, plant genomics)</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Logistics/Distribution</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Business Services &amp; IT</b> (Data centers, HR Management Consulting, Health IT, Software)</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Advanced Mfg</b> (Transportation equipment)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Health Services</b></li> </ul>

The following pages provide more depth and analysis within each target industry. For each target, we identify and define the industry and niches, outline national and local industry growth trends, identify local assets and challenges in supporting the target industry, and discuss location criteria and industry requirements. Importantly, this document is not meant to be an exhaustive analysis of Greater Lincoln's strengths in the target industries, but rather is intended to inform the city of the trends, nuances, and location criteria of the industries in order to better position it to recruit and retain companies within the target industries.

# TARGET INDUSTRY PROFILES: AGRICULTURE & LIFE SCIENCES

## AGRICULTURE & LIFE SCIENCES

### Industry Overview

The agriculture and life sciences industry, as defined for the Greater Lincoln Region, includes a wide spectrum of the agricultural value chain: the cultivation and harvesting of plants and the management of animals for products such as dairy and meat (production); the manufacturing or processing of food, beverages, and related products (food processing); and the emerging technological advances and scientific research into genetics and bioinformatics that will increase yields, enhance soil and water quality, and ultimately improve nutrition and health to consumers (biotechnology).

AGRICULTURE & LIFE SCIENCES	
NAICS Description	
111	Crop Production
112	Animal Production
115	Agriculture and Forestry Support Activities
3111	Animal Food Manufacturing
3116	Animal Slaughtering and Processing
3119	Other Food Manufacturing
312	Beverage and Tobacco Product Manufacturing
325	Chemical Manufacturing
3391	Medical Equipment and Supplies Manufacturing
5417	Scientific Research and Development Services

Despite technological advancements that continue to reduce labor requirements in the traditionally labor intensive food production industry, national employment has remained virtually flat since 2003. Although jobs may continue to be lost due to changes in harvesting and processing methods, these will likely be offset by increases in high-skilled and high-wage jobs associated with more automated and information-intensive methodologies associated with new technologies (as evidenced by the growing wage level). Additionally, bio-agriculture is an area of potential high growth that applies the genetic and biological research within the biotechnology sector to improving food quality through genetic modification, creating chemical feed stocks, finding new sources for pharmaceuticals, and developing nutraceuticals, essential extracts of nutrients from food products.

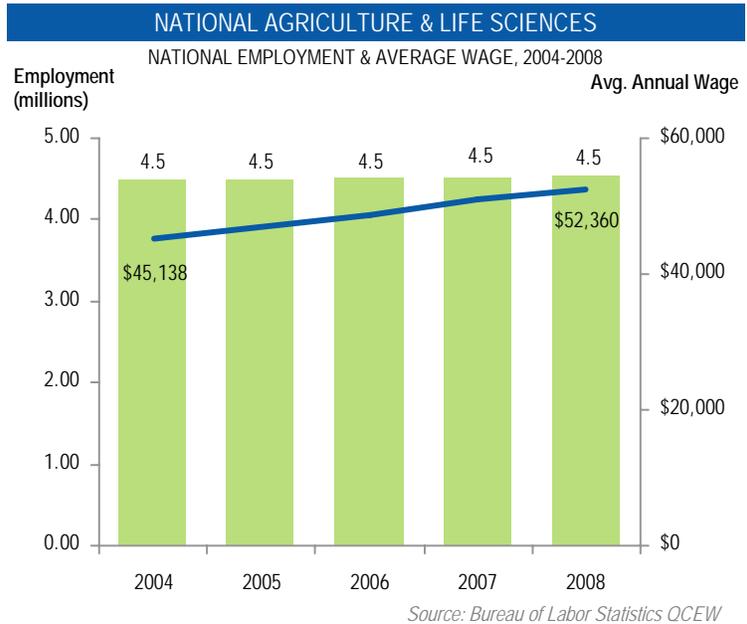
Similarly, bioinformatics research conducted in the biotechnology and health care sectors help to better understand biological processes and how to make agricultural products and cultivation techniques more effective.

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While the broader biotechnology industry has taken a hit in this recession (more than 110 of the 343 publicly traded companies have laid off employees or put projects on hold) industry experts predict that innovation will continue to be the driving force of job growth once the economy rebounds. In 2007, over \$80 billion worth of R&D funding was invested in food manufacturing and life sciences, with chemical manufacturing alone garnering over \$55 billion.

The food processing segment of the industry is expected to continue to experience growth as the U.S. population expands. However, changes in preferences and technologies will affect the shape of the industry. The increased demand for corn and other biological products for biofuels and biomass within the renewable energy sector will also continue to drive agricultural demand for some time. Building upon natural synergies that exist between agriculture and life sciences R&D will be necessary to take full advantage of the opportunities that will continue to arise from the growing green economy.

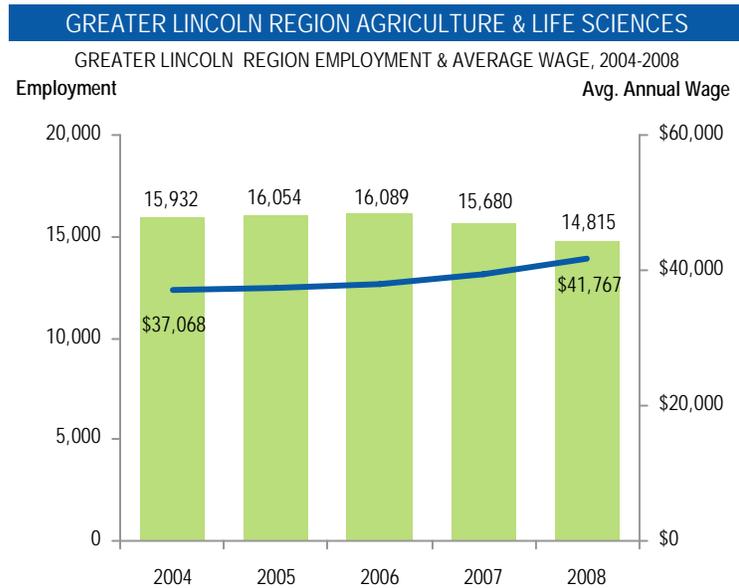


## TARGET INDUSTRY PROFILES: AGRICULTURE & LIFE SCIENCES

### Local Trends

Southeast Nebraska includes traditionally high yield farmland and has long been a national hub for agriculture and food processing. From the fields of soy beans and corn to the large Cargill and Harvestore feed and commodity silos dotting the landscape, agriculture and food processing is a major part of the economy for the entire state. In 2007 alone, Nebraska produced more than 1.47 billion bushels of corn, surpassing all other states but Illinois and Iowa.

With strong ties to the agricultural sector, food processing contributes a large share of employment to the regional manufacturing base. Meanwhile, the presence of large food processing and biotechnology firms, such as Pioneer Hybrid International in York County, ADM, and Pfizer (operating its largest manufacturing site for veterinary pharmaceuticals) provides a strong base for increasing research and development and improving the food processing capacity of the region. Despite some recent plant closures and job layoffs in the food processing sector, the 12-county region still includes nearly 15,000 jobs in the larger industry and enjoys a significant specialization nationally.



Source: Bureau of Labor Statistics QCEW and US Census QWI

### AGRICULTURE & LIFE SCIENCES INDUSTRY: SAMPLE OF RECENT REGIONAL CORPORATE LOCATE ACTIVITY

City	Company	Size (SqFt)	Jobs	Investment (\$ millions)	Type
Deshler	Reinke	400,000	30	3	Farm Machinery
Waterloo	Syngenta Seeds, Inc.	N/A	10	27	Distribution
Hastings	Hastings Irrigation Pipe Co.	16,000	10	2	Irrigation Pipes Mfg
South Sioux City	NIRE	20,000	NA	130	BioDiesel fuel Mfg
Omaha	ConAgra Foods	126,000	120	15	Food Mfg
York	Monsanto	230,000	30	155	Seed Production
Lincoln	Cook's Hams, Inc	N/A	100	10	Food Mfg

\*Since 2<sup>nd</sup> Quarter 2008

Source: Conway Data

While activity within this sector has declined during the current recession, there is still activity centering on manufacturing, including the production of farm equipment, food, and biofuel. With venture capital dropping off substantially, there is little to no activity in higher value-added biotechnology enterprises at the moment. However, in

## TARGET INDUSTRY PROFILES: AGRICULTURE & LIFE SCIENCES

the longer term opportunities for regional growth in this industry exist through the adoption of emerging technologies and processes, as well as higher valued-added production—niche farming, biofuels, and the increased use of technology in production and marketing. Many of these subsectors are directly tied to advancements in bioinformatics, genetics, and health care, which can be applied to the production and application of crops and specialty derivatives such as nutraceuticals, an advanced form of nutritional supplement. The University of Nebraska's Center for Biotechnology has been helping advance the goals of bioscientific research and development within the region as well as the scientific community. In addition, UN-L's Innovation Campus provides an enormous opportunity to increase research and commercialization, especially around core UN-L biotechnology activities: bioinformatics, flow cytometry, genomics, mass spectrometry, microscopy, plant transformation, and protein, and algae research which provides a direct tie into renewable energy via cellulosic ethanol.

With university extension programs, rural outreach initiatives (e.g. REAP and EDGE), and focused agri-business postsecondary programming, the Greater Lincoln Region also has some components of a solid 'support infrastructure' industry firms and entrepreneurs. The SCC Beatrice Campus offers programs in Agriculture Business and Management Technology (providing students opportunities to manage farmland and learn the business management skills to keep a farm financially solvent); and UN-L has a number of academic programs focused on both the science and business sides of the industry.

### NICHE SECTORS

#### **Feed production/Bulk**

Nebraska, as well as the entire multi-state region, is one of the strongest production centers for the raw materials (soy beans, corn and other grains) necessary for bulk feed production. The Greater Lincoln Region is positioned strongly to grow the feedstock and then ship to processing centers throughout the region. With its network of transportation nodes, the region can continue to ship out processed goods from that hub to the rest of the country.

#### **Biomass/Biofuels/Water Resources**

With the region's strong agricultural capabilities and biofuel infrastructure, it is well-suited to capture the production of raw materials, as well as that of higher value-added goods such as wood pellets, ethanol, and biodiesel fuel. Abundant water reduces costs and shortage concerns for these industries that require large volume for manufacturing processes. With significant agricultural production, particularly of corn, the region had been taking advantage of opportunities for biofuels and biomass. While the volatility of corn and soy prices and the continued difficulty accessing credit has stalled investment in this sector (and makes the long-term viability of biodiesel uncertain for the region) there will continue to be market demand for broader alternative fuel and energy sources (especially as fossil fuel prices continue to escalate), making ethanol production, other biomass (i.e. algae), and geothermal production/technologies, important for the future.

#### **Animal/Plant Science (nutraceuticals, genomics)**

With the right resources, the region stands to further capture biotechnology activities related to plant genomics, biofuel applications (which is tied to renewable energy activities), and other agriculture related subsectors that are currently being researched at the University. With its access to a quality workforce and public research infrastructure, the region provides value to research organization, testing, and logistics firms in this sector. Corporations in and just outside the Greater Lincoln Region are engaged in R&D and distribution of nutraceuticals that target a variety of health challenges, from diabetes to obesity to heart disease.

Importantly, most of these life science R&D niche companies are not necessarily major job generators. However, they pay extremely high wages and have the potential to grow over time.

## TARGET INDUSTRY PROFILES: AGRICULTURE & LIFE SCIENCES

### Agriculture & Life Sciences

KEY ASSETS	KEY CHALLENGES & OPPORTUNITIES
<ul style="list-style-type: none"> <li>✓ High-yield farmland and existing concentration of food processing presence</li> <li>✓ Growing concentration of R&amp;D activity</li> <li>✓ UN-L Tech Park and new Innovation Campus include plans to target bio-ag companies</li> <li>✓ Strong workforce supply (biochemists, food scientists, biology technicians)</li> <li>✓ Existing tiered higher education system response (including plethora of farming, agri-business, and engineering and physical science programs)</li> <li>✓ Strategic location with access to inputs as well as growing consumer markets</li> </ul>	<ul style="list-style-type: none"> <li>▪ Competition for university-driven bio-agriculture R&amp;D is fierce</li> <li>▪ Agriculture and processing sub-sectors facing consolidation and layoffs, respectively</li> <li>▪ Venture capital – critical to life science startups – almost nonexistent in the region</li> <li>▪ Space (i.e. lab/incubators) will be critical to moving up the value chain</li> <li>▪ City (Lincoln and others throughout the region) economic development efforts must be strongly tied to UN-L Innovation Campus research plans and broader tech transfer efforts</li> <li>▪ Emerging R&amp;D and tech niches are high-wage opportunities, but not necessarily major job generators</li> </ul>
VALUE PROPOSITION	
<p>The Region has a long and successful history of agriculture and food processing, with high yield farmlands and premier processing operations. With its strategic location, natural resources, and agricultural workforce, the region stands to continue to capture market share within these sub-sectors. In addition, with targeted university-driven research and economic development generated through technology commercialization, the region is well positioned to take advantage of opportunities in renewable energy (biofuels and biomass) and biotechnology aimed at improving cultivation techniques and impacting human health (e.g. plant genomics and nutraceuticals).</p>	

## BUSINESS SERVICES AND INFORMATION TECHNOLOGY

### INDUSTRY OVERVIEW

This industry cluster is comprised broadly of four sub-sectors: primary services including 1) financial services/insurance; 2) software development<sup>3</sup> 3) business services (i.e. consulting, web development); and secondary services such as 4) back-office support operations, accounting and payroll services, and processing facilities, including data centers.

These services are essential to almost any business and will likely grow in conjunction with activities in all other target industries, particularly health care and logistics. Both primary and secondary business and information services depend on internet, telecommunications and IT services for everyday operations. These services also rely on innovative software applications to improve efficiency and to expand their offerings to clients in an effort to gain a competitive advantage in the marketplace. There is a great deal of overlap and interdependence between the subsectors of this industry.

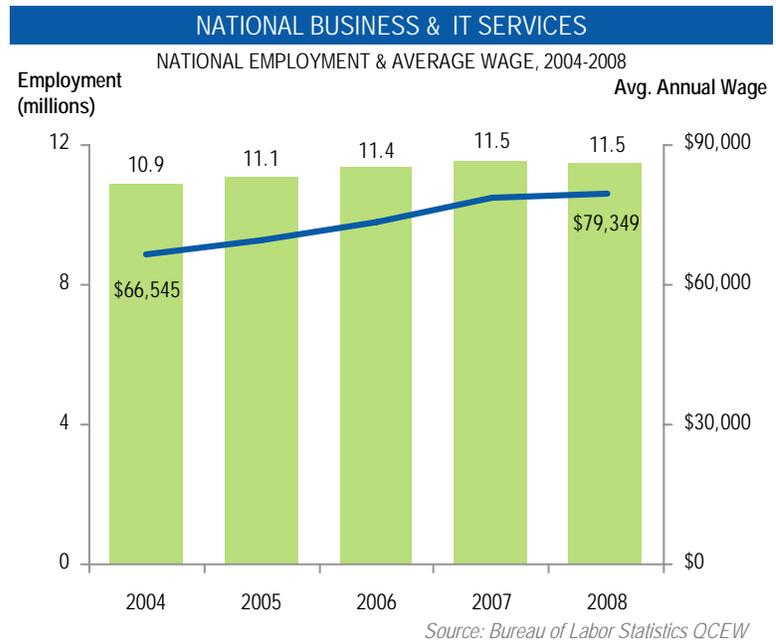
### BUSINESS SERVICES & INFORMATION TECHNOLOGY

#### NAICS Description

5112	Software Publishers
517	Telecommunications
518	Data Processing, Hosting and Related Services
519	Other Information Services
521	Monetary Authorities – Central Bank
522	Credit Intermediation and Related Activities
523	Securities, Commodity Contracts, Investments
524	Insurance Carriers and Related Activities
525	Funds, Trusts and Other Financial Vehicles
531	Real Estate
533	Lessors of Nonfinancial Intangible Assets
5415	Computer Systems Design and Related Services
5416	Management and Technical Consulting Services

While this sector has shed jobs nationally over the past year, it has proven to be quite resilient to national and global economic swings over time. Since 2003, employment has gained steadily due to the increased deployment of data centers to handle the tremendous growth in data storage, as well as the increase in consulting and services as more and more U.S. companies outsource and explore the complexities of growing internationally. Employment in this sector peaked in 2007 at 11.5 million employees.

Although in upcoming years growth may slow relative to the recession, demand for business and IT services is anticipated to remain strong, as the growing financial services and health care sectors will require increasing levels of back office support, and overseas expansion will require the skills of talented engineering, IT and management consultants throughout the U.S.



<sup>3</sup> Software and IT encompasses computer programming services, prepackaged software, data processing, information retrieval services, website hosting, internet search, computer systems design, and telecommunications. All of these fields are expected to grow in the coming years. Employment in software publishing is expected to grow by 32 percent between 2006 and 2016, far outpacing the anticipated national employment growth rate of 11 percent.

## TARGET INDUSTRY PROFILES: BUSINESS SERVICES & INFORMATION TECHNOLOGY

Importantly, this industry provides high-wage positions with excellent job prospects for professionals in the coming years. Wages in the industry are far above the national average and grew by over 19 percent between 2004 and 2008 alone.

### REGIONAL TRENDS

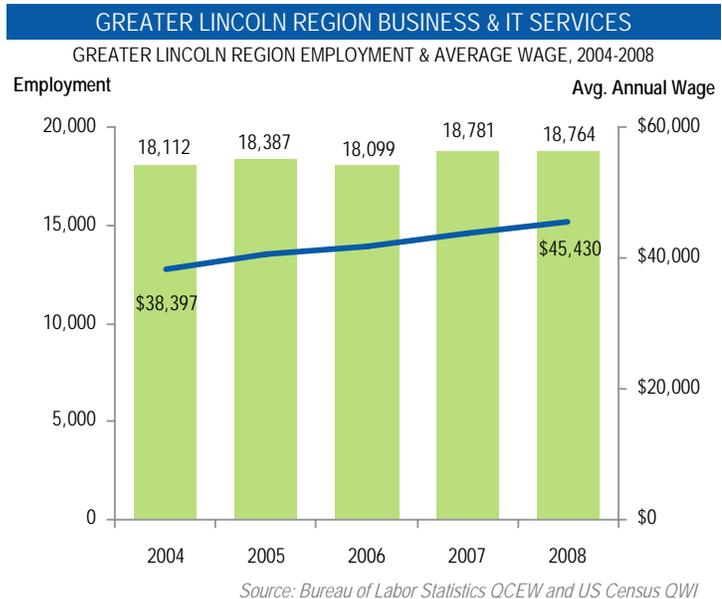
Because this industry relies so heavily upon a strong telecommunications infrastructure, proximity to air travel and client businesses, as well as access to a highly educated workforce, this is likely to be a sector where the Lincoln metro area garners the majority of intra-regional market share.

Lincoln already benefits from a base of major financial service corporations including State Farm and Ameritas, as well as numerous well-capitalized banks with a regional presence including Pinnacle, Union Bank, U.S. Bank, Wells Fargo, and Tier One. In addition, beyond the financial services sector, the metro area includes a significant base of small to mid-size information technology and consulting firms. The region can continue to build a niche within software development and back office/technical support services for the growing health care and financial industries. As health care expands and the digitizing of medical records and financial service operations becomes more prevalent, the Greater Lincoln region is very well positioned to capture market share in technical support services, project management, and web development for Medicare/Medic

aid-related and mortgage and credit card contracts, for example. The city already has a growing base of firms that perform these functions.

Outside of the Lincoln metro area, where electricity and land are relatively inexpensive,

the region's specialization will continue to be in data management and technology service centers (e.g. data centers). These facilities and back-office operations fit well into a lower-cost environment that has large parcels of available land.



### BUSINESS SERVICES AND INFORMATION TECHNOLOGY INDUSTRY: SAMPLE OF RECENT REGIONAL CORPORATE LOCATE ACTIVITY

City	Company	Jobs	Investment (\$ m)	Type
Lincoln	Perot Systems	150	27	IT Services
Lincoln	Fiserv	300	20	Financial Software
Omaha	LinkedIn	100	10	Internet Networking
La Vista	Yahoo	50	14	Data Center
Lincoln	Cornhusker Growth	30	3	Banking Services
Omaha	WebEquity Solutions	35	2	Lending Software

*\*Since 2<sup>nd</sup> Quarter 2008*

*Source: Conway Data*

## TARGET INDUSTRY PROFILES: BUSINESS SERVICES & INFORMATION TECHNOLOGY

The network of higher education institutions in the region includes a vast array of programs that support the development of a specialized workforce for this industry. UN-L, Peru State, Concordia University, SCC, and Doane College all provide business management, administration, and finance programs. Additionally, there is a strong software and web development sector within the region due to the strong influence of UN-L. The Jeff S. Raikes School of Computer Science and Management at UN-L offers high level education opportunities in business and computing fundamentals in enterprise information and software systems, for example.

Much of Nebraska's recent growth within business and information services/technology has come in the form of back office support and IT services. Many of the largest projects were for IT service and IT support service centers, which maintain databases or provide IT support to field technicians maintaining external systems. There have also been a number of businesses locate and expand lately that specialize in software development. Much of this has been in the form of online banking and lending software.

### NICHES

#### Software Development

The software sector is comprised of computer programming services, prepackaged software, data processing, and information retrieval services. Demand for software is driven by efficiencies derived through computer automation and data management. Potential areas of growth are in gaming, regulatory compliance software, open source software, security software, virus protection software, anti-spam software, and business intelligence software.

#### Data Management/Centers

Data centers are operations that provide digital information storage for customers and corporate clients. They are composed of clusters of computers and network switching gear that allows efficient and highly reliable transfer of data. Excess capacity exists from the the late 1990s build out, but many corporations have transitioned away from outsourcing data center management and are developing new centers. These facilities are increasing in importance (the number of servers has grown from 2.6 million to 11.6 million in the past decade) and many are co-developed with small software development operations. With its competitive utility costs, and available land outlying sub-regions remain competitive for these projects (although strong fiber infrastructure will continue to be an issue).

#### Financial Services/Insurance (and IT Support)

The financial services and health care industries (both heavily concentrated in the Lincoln metro area) will require increasing levels of back-office and IT support. Support staff in the financial services sector performs a variety of record-keeping duties tracking revenues coming into and leaving organizations as well as providing customer support.

#### HR Management Consulting

Lincoln, in particular, has an emerging cluster in "human resource management consulting" service firms. Gallup and National Research Corp are world leaders in market research and consulting services and the metro area has captured a handful of smaller survey research/management consultant and IT spin-offs (e.g. Kenexa and Talent Plus, etc.) that continue to grow. HR management consulting is an area that has strong niche potential for the region.

## TARGET INDUSTRY PROFILES: BUSINESS SERVICES & INFORMATION TECHNOLOGY

### Business Services & Information Technology

KEY ASSETS	KEY CHALLENGES AND OPPORTUNITIES
<ul style="list-style-type: none"> <li>✓Wealth of graduates from local colleges and universities in business management, IT, and engineering</li> <li>✓Existing company presence that is growing/access to larger customer base</li> <li>✓ Growing health care and financial services industries provide great connect with tech support</li> <li>✓Strong telecommunications infrastructure in metro area</li> <li>✓Inexpensive utilities and land relative to US</li> <li>✓Access to airport</li> <li>✓Customized training/job training programs targeted in this sector</li> </ul>	<ul style="list-style-type: none"> <li>▪ Some business costs (i.e., real estate) are less competitive with western portion of state</li> <li>▪ Education levels strong but not growing fast enough in the region</li> <li>▪ Limited number of direct flights from airport</li> <li>▪ Physical infrastructure issues in rural counties</li> <li>▪ Limited seed/venture capital funding</li> <li>▪ Wages are extremely low in this sector compared to the nation</li> </ul>
VALUE PROPOSITION	
<p>With the growing clusters in health and financial services/insurance in the region (and the increase in digitizing of medical and financial records) Lincoln can continue to build its niche within software development and technical support services, project management, and web development for these sectors. The university presence, strong workforce, and more robust entrepreneurial support can help spur this "creative industry." Outlying counties, with their competitive business costs, stand to gain from the larger IT firms trend of developing new data centers in more rural locations.</p>	

# TARGET INDUSTRY PROFILES: HEALTH SERVICES

## ADVANCED MANUFACTURING

### INDUSTRY OVERVIEW

The advanced manufacturing sector is defined by a set of activities that focus on the design, manufacturing, and assembly of complex products utilized in a range of modern industries, including telecommunications, farm equipment, health care, and energy supply. While this industry includes the manufacturing of very different products, they are connected by their technically advanced design, manufacturing, and assembly processes and a common set of workforce requirements, including a dependence on technically trained workers with computer-aided and advanced manufacturing and machinery operation skills.

ADVANCED MANUFACTURING	
NAICS Description	
325	Chemical Manufacturing
326	Plastics and Rubber Products Manufacturing
332	Fabricated Metal Product Manufacturing
3336	Turbine and Power Transmission Equipment Manufacturing
334	Computer and Electronic Product Manufacturing
3353	Electrical Equipment Manufacturing
3359	Other Electrical Equipment and Component Manufacturing
336	Transportation Equipment Manufacturing
3391	Medical Equipment and Supplies Manufacturing

Historically, the manufacturing industry has been a major driver of the U.S. economy; however, advances in technology and the removal of global trade barriers have led to increased domestic productivity and foreign competition. This has led to increased U.S. output, but a reduction in the number of manufacturing jobs across the country. Despite employment declines, manufacturing still accounts for 14 percent of U.S. employment.

Advanced manufacturing has been targeted by the U.S. Department of Labor as a high growth industry and to this that end, the agency has announced a series of investments totaling more than \$105 million to address the workforce needs of advanced manufacturing. While the overall number of manufacturing jobs continues to contract during the current period of economic recession, a widening skills gap exists as industry employers are having increased difficulty filling positions that require technical expertise and experience. This shortage of skilled labor has placed certain occupations in high demand and has helped fuel wage growth in the sector. Between 2004 and 2008, wages have risen by over 13 percent and the current average wage in advanced manufacturing is well above the combined national average.



The appetite for renewable energy sources will also fuel growth in this industry as advances in processes and technologies associated with manufacturing often overlap with green initiatives. Investments, from both the federal government and the private sector, are being made in the area of advanced manufacturing of renewable systems and components, such as wind turbines, solar technology, geothermal heating and cooling systems, and bio-energy equipment, as well as the sustainable manufacturing of traditional goods.

### REGIONAL TRENDS

## TARGET INDUSTRY PROFILES: HEALTH SERVICES

There is no question that the industry, regionally, has suffered under the recent economic downturn, as manufacturing businesses have reduced production in response to the slowdown in corporate and consumer purchasing. Several high profile layoff announcements in Lincoln, Seward, Auburn, and Beatrice, in particular, were made in 2009. Still, with Kawasaki, Duncan Aviation, Toro, and a host of smaller engine and farm equipment companies dotting the region, advanced manufacturing (with close to 20,000 jobs) remains a concentrated and stable industry here.

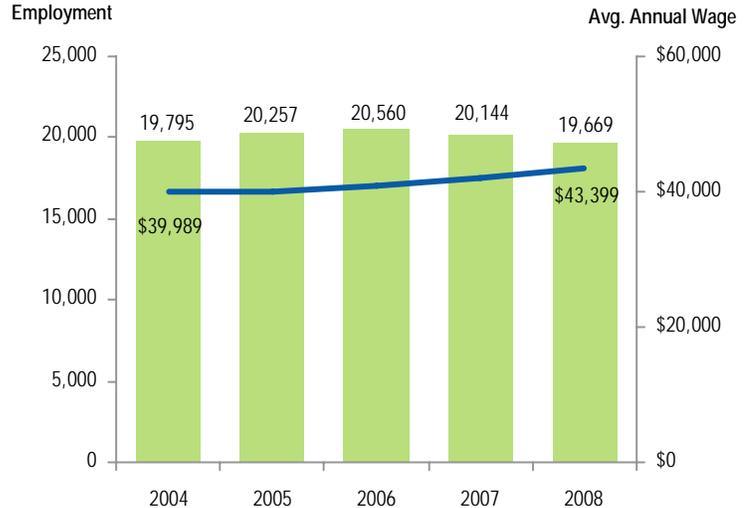
With the appropriate support structure, the region remains well positioned to build upon existing strengths in its niche advanced manufacturing sectors, some of which have direct links to expanding manufacturing cross-sectors such as biotechnology product manufacturing (e.g. Novartis Consumer Health, Inc. in Lincoln) and renewable energy machinery and component manufacturing. Additionally, the region's strong multi-nodal transportation network helps serve manufacturing efforts, allowing both the easy import of component supplies and the distribution of finished products, including bulky and difficult to transport goods, such as wind turbines.

A multi-tiered education support structure exists within the region supporting this industry. SCC, across all three regional campuses, provides numerous offerings for manufacturing workers, from small motors mechanics to welding to nondestructive testing technology. It has also designed numerous customized training programs for existing manufacturers within the region. Although engineering skills are less concentrated in the region (see next section) UN-L's College of Engineering graduates roughly 150 engineers each year, with additional strong graduate programs in industrial and mechanical engineering.

From an economic development perspective, near-term efforts should be focused upon maintaining existing market share by assisting firms to expand research and development activities and enhance product lines. By applying cutting-edge techniques to existing processes, local facilities can increase value-add and improve their utility to the overall company.

### GREATER LINCOLN REGION ADVANCED MANUFACTURING

GREATER LINCOLN REGION EMPLOYMENT & AVERAGE WAGE, 2004-2008



Source: Bureau of Labor Statistics QCEW and US Census QWI

### ADVANCED MANUFACTURING INDUSTRY: SAMPLE OF RECENT REGIONAL CORPORATE LOCATE ACTIVITY

City	Company	Size (SqFt)	Jobs	Investment (\$ millions)	Type
Blair	Northstar Wind Towers	NA	80	24	Modular Wind Towers
Minden	Royal Plastics	36,000	49	6	Aircraft Parts
Lincoln	GTE Industries		30	5	Auto Mfg
South Sioux City	Omega Industries	25,000	N/A	3	Railroad Mfg
Lincoln	Lincoln Composites	60,000	10	7	Auto Mfg
Lincoln	HTI Plastics	35,000	na	4	Plastics Mfg

\*Since 2<sup>nd</sup> Quarter 2008

Source: Conway Data

## TARGET INDUSTRY PROFILES: HEALTH SERVICES

### NICHES

#### **Transportation Equipment**

While the recent decline in the economy has further impacted manufacturing within the United States, especially regarding transportation (see GM, Chrysler, and Ford), much of the transportation equipment manufacturing within the Greater Lincoln Region is comprised of farm, lawn care, and alternative vehicle manufacturing. This has helped the region, relatively speaking, to avoid such drastic manufacturing losses as many “car towns” in the Midwest have had to face.

#### **Component Manufacturing**

The Greater Lincoln Region has a presence in assembly and some component manufacturing which may provide an opportunity to target major component suppliers as well as pursue the growing regional renewable energy sector (e.g. wind turbine components). This region’s strong transportation equipment concentration provides the region a potential entree into this faster growing niche sector. There are also opportunities in geothermal component manufacturing (a niche sector that the state is actively exploring). Geothermal technologies, which rely on the constant temperature of the ground beneath the uppermost layer of soil, have the capability of providing electrical production with virtually no emissions. The two types of geothermal power plants—flash steam and binary cycle—rely on many of the same components, including turbines, generators, and cooling towers. Additionally, binary cycle plants rely on heat exchangers, condensers, and pumps. The skills sets of persons currently employed in the manufacture of these and similar products could easily transfer to the production of geothermal components.

#### **Electronics/Nanotechnology**

While electronics has declined nationally, nanotechnology is quickly becoming a viable commercial technology. New electronics fabrication technology utilizing nanotechnology will require high skilled labor and competitively priced land and utilities, assets that the Greater Lincoln Region has in abundance. While not one of its core research competencies necessarily, UN-L, through its Materials Research Science and Engineering Center, is performing some cutting edge nanotechnology research with support from the National Science Foundation. If the state continues to actively pursue renewable energy projects, the region, in the longer-term, can seek to attract R&D and small manufacturing operations that are focused on improving turbine component technology and manufacturing and distribution processes through nanotechnology applications for example.

## TARGET INDUSTRY PROFILES: HEALTH SERVICES

### Advanced Manufacturing

KEY ASSETS	KEY CHALLENGES AND OPPORTUNITIES
<ul style="list-style-type: none"> <li>✓ State and regional tax advantages</li> <li>✓ Extensive transportation network including rail, interstate, and air</li> <li>✓ Central location and proximity to end-users</li> <li>✓ Good regional technical and engineering training programs</li> <li>✓ Existing concentration in transportation/small engine and electronics manufacturing</li> <li>✓ Available technically-skilled workforce</li> <li>✓ Affordable and reliable utilities</li> <li>✓ Land costs (in outer counties) very competitive in-state</li> </ul>	<ul style="list-style-type: none"> <li>▪ Many regional firms have older product lines and processes</li> <li>▪ Outsourcing and regional layoffs</li> <li>▪ No clear picture of regional supplier chain networks</li> <li>▪ Infrastructure (i.e. road, telecommunications) in more rural areas need improvement</li> <li>▪ Limited number of shovel-ready sites in outer regions for new potential projects</li> <li>▪ Opportunity to better support small business spin-off activity</li> </ul>
VALUE PROPOSITION	
<p>With its inexpensive business costs, existing manufacturing base with a skilled workforce, and superior location, the region will remain competitive in transportation and engine manufacturing and supply chain activities. As the region works to enhance existing manufacturing product lines and apply traditional strengths in other manufacturing related industries (e.g. renewable energy components) it will benefit through greater innovation and higher wages.</p>	

# TARGET INDUSTRY PROFILES: HEALTH SERVICES

## TRANSPORTATION / LOGISTICS

### INDUSTRY OVERVIEW

Transportation and Logistics/distribution are two sectors of the same industry that are highly interconnected because of the nature of the services being provided. In recent years, there has been a trend toward consolidation in the industry, resulting in larger firms that are increasingly involved in more than one of the various subsectors.

Logistics is the process of planning, implementing, and controlling the efficient flow of goods and services through the supply chain from producer to consumer. Transportation (or distribution) includes all freight carriers (air, water, trucking, and intermodal) and warehousing. As virtually every product sold in America moves through distribution channels, the industry is responsible for transporting a third of the nation's GDP. The movement of these goods, a \$300 billion industry, is increasingly coordinated by high-tech means such as global positioning satellites, real-time internet tracking, and just-in-time inventory systems.

Distribution will continue to be serviced by "lower-tech" transportation suppliers, including trucks, airplanes, and ships. Logistical coordination, on the other hand, is a high value-added service that will drive industry growth in coming years. Technical workers dominate employment in this field. It is composed of advanced just-in-time coordination and the related electronic devices, often called "track and trace." Federal Express pioneered the service side of distribution, and more established companies have been racing to catch up, including the United States Postal Service.

Market trends such as globalization and outsourcing of logistics services have been a boon to this industry, spiking growth in the early part of the 21<sup>st</sup> century. These same trends mean that transportation and logistics firms have to keep up with the ever-changing, increasingly complex realities of national and international trade routes, networks and operating agreements.

The transportation and logistics industry employed 7 million people in 2008 and employment is expected to grow in upcoming years, although not likely as quickly as some economists had predicted prior to the current recession. To maintain viability, logistics businesses will have to evolve from providing forwarding and warehousing services to being IT driven supply chain providers.

### TRANSPORTATION / LOGISTICS

#### NAICS Description

481	Air Transportation
482	Rail Transportation
4832	Inland Water Transportation
4841	General Freight Trucking
4881	Support Activities for Trucking
4882	Support Activities for Rail Transportation
4883	Support Activities for Water Transportation
4884	Support Activities for Road Transportation
4889	Other Support Activities for Transportation
4921	Couriers and Express Delivery Services
493	Warehousing and Storage
5413	Architectural and Engineering Services
5415	Computer Systems Design and Related Services
541614	Process and Logistics Consulting Services
5417	Scientific Research and Development Services
92612	Transportation Program Administration

### NATIONAL TRANSPORTATION / LOGISTICS



Source: Bureau of Labor Statistics QCEW

### REGIONAL TRENDS

## TARGET INDUSTRY PROFILES: HEALTH SERVICES

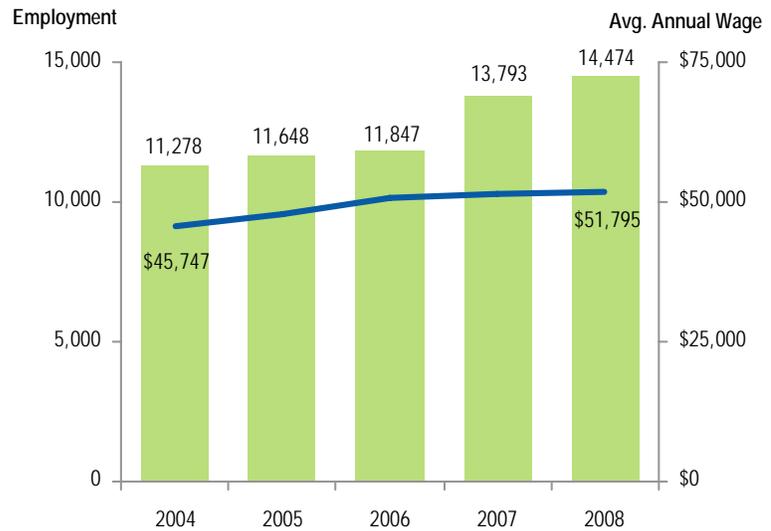
The Greater Lincoln Region is well positioned to benefit from the transportation and logistics sector. Interstate 80, arguably the strongest east-west arterial connecting central California to the east coast, runs directly through Lancaster, Seward, and York Counties. In addition, Interstate 29 runs north-south, and connects with Interstate 35, providing great access for regional manufacturers, suppliers, and distributors. The western portion of the region is also serviced by U.S. 81 travelling north and south. The region is strategically located as a midway point between two major hubs, Minneapolis and Dallas, between which a significant amount of NAFTA traffic is transported.

Besides having great road access, the region enjoys a strong rail system. Both Union Pacific (UP) and Burlington Northern Santa Fe (BNSF) have major lines running directly through the region, with major switching operations in Lincoln that redistribute trains in literally all directions throughout the country. The Lincoln Airport currently has approximately 163,000 people fly in to and out of its gates annually. While no cargo currently flies through Lincoln, the airport provides an excellent opportunity to further build out this industry cluster – there is 300-400 acres of land around it that could still be developed.

In addition to the locational advantages, the region brings to bear some R&D assets that provide an opportunity to take advantage of high value-add logistics segments of this particular sector. For example, UN-L's Transportation Center continues to perform research around freight forwarding software and other means for managing major logistics operations for companies. To the extent the region can capitalize on this and identify new firm opportunities this can become an important job generating sector for the region.

### GREATER LINCOLN TRANSPORTATION / LOGISTICS

GREATER LINCOLN REGION EMPLOYMENT & AVERAGE WAGE, 2004-2008



Source: Bureau of Labor Statistics QCEW and US Census QWI

### TRANSPORTATION AND LOGISTICS INDUSTRY: SAMPLE OF RECENT REGIONAL CORPORATE LOCATE ACTIVITY

City	Company	Jobs	Investment (\$ m)	Type
Sidney	Cabela's	300	18	Retail Distribution
Lincoln	Lincoln Industries	100	10	Distribution
Omaha	IPG GIS US Inc	35	8	Foods Distribution
Lincoln	Sysco Corporation	30	3	Wholesale Distribution

\*Since 2<sup>nd</sup> Quarter 2008

Source: Conway Data

## NICHES

### Freight Forwarding

Freight forwarders provide logistics services to companies of all sizes, routing shipments through third-party transportation modes, including passenger air carriers and air freight lines, oceangoing container lines, intermodal rail operations and trucking lines. Freight forwarders dominate the international air transportation markets, controlling more than 85% of the volume of trade flows. Freight forwarders continue to expand into other modes, particularly

## TARGET INDUSTRY PROFILES: HEALTH SERVICES

container shipping via sea. This subsector has grown particularly quickly over the past ten years because of its ties to international trade.

### Logistics Management

The logistics systems design and software niche is a growing market that is aimed at optimizing the performance of people, places, and processes (increasing efficiencies in shipping, warehousing, and cargo transportation). One of the key areas of interest is in supply chain management. Large corporations that specialize in distribution of goods like FedEx, UPS, Walmart, and Amazon require very sophisticated logistics systems to track shortages, surpluses, bottlenecks, and costs. Logistics operations manage these systems.

This is also a niche where the region can plug into growing statewide renewable energy sector as wind component manufacturing firms (if they expand in the region), for example, will rely upon logistics firms to plan for the distribution of high-tech component parts. The region's strong multi-modal transportation network helps serve manufacturing efforts, allowing both the easy import of component supplies and the distribution of these finished products.

### Distribution & Warehousing

Speed and efficiency play a large role in the storage and distribution of food and agriculture. Food distributors handle a wide array of products, from supplying local restaurants to shipping commodities nationwide. Agriculture distribution firms are typically clustered around substantial agricultural communities in order to acquire and deliver the goods while still fresh. These firms also benefit from having food processing companies nearby, as distributors can handle both the ingredients and the end product.

With the Greater Lincoln Region's strong transportation connectivity, it can be a good location for distribution facilities to serve the Midwest and to bridge the east and west coasts (and where rural areas, especially, can plug in potentially). In addition, while a relatively small part of the total logistics and distribution industry, warehousing has grown substantially since the late 1990s. Traditional warehouse services of product receipt, storage, and distribution have grown to include repacking, quality control, light assembly, packaging, sorting, and third-party inventory management to help companies manage supply chain issues.

## TRANSPORTATION/LOGISTICS

KEY ASSETS	KEY CHALLENGES & OPPORTUNITIES
<ul style="list-style-type: none"> <li>✓ Transportation accessibility is strong with two major interstates and strong north-south access</li> <li>✓ Central location and strong rail system allow efficient movement of goods</li> <li>✓ Competitive utility and land costs (across the region)</li> <li>✓ Shovel-ready land with limited slope issues in certain parts of region</li> <li>✓ SCC provides strong transportation and technician programs</li> <li>✓ State/regional tax advantages (e.g. no inventory tax)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Limited number of direct flights through airport</li> <li>▪ Airport, as an asset, is underutilized with parcels of developable land</li> <li>▪ Physical infrastructure issues (primarily road and telecommunications) in rural areas</li> <li>▪ UN-L Transportation Center provides access to advanced logistics work (opportunity for capturing higher-value industry firms)</li> </ul>
VALUE PROPOSITION	
<p>The Region's central location, multi-modal transportation network and access, and proximity to several different sub-markets provides significant value to companies seeking to distribute goods across the country, including those requiring large, level plots. Additional development around the airport will be critical to bolstering this cluster, as well as the connect to workforce and innovation coming from UN-L around engineering and advanced logistics.</p>	

# TARGET INDUSTRY PROFILES: HEALTH SERVICES

## HEALTH SERVICES

### INDUSTRY OVERVIEW

The health care sector engages in the treatment and prevention of disease and the enhancement of human physical and mental well-being. Industry establishments integrate advances in medical technology into the provision of medical, nursing, allied health, and social assistance services. The health research sector combines innovative technological problem-solving and increasingly specific knowledge of genetic, molecular, and cellular processes to create pharmaceuticals or improve a variety of products and services across a wide spectrum of industries. This research serves to drive innovation in a variety of other sectors, including agriculture and biotechnology. Increased health care requirements of the regional aging population will likely accelerate the need for affiliated business and professional services, such as health insurance operations.

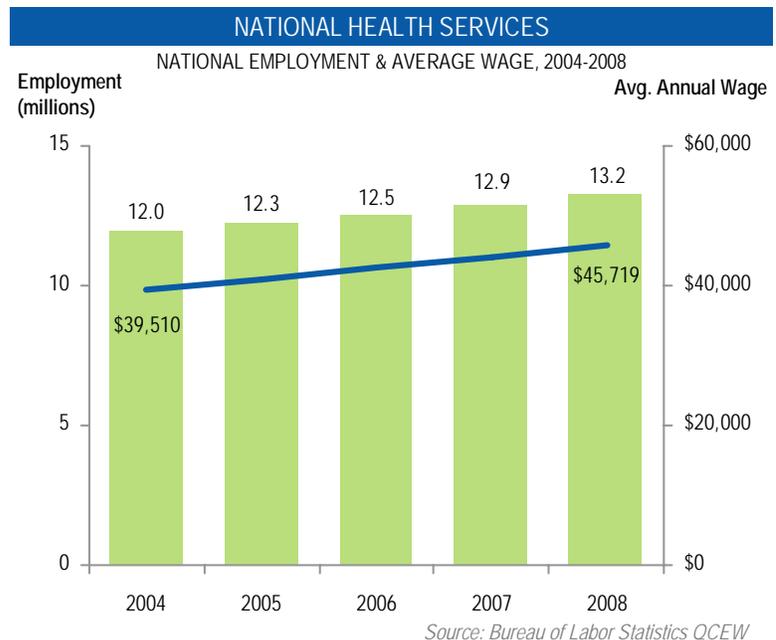
HEALTH SERVICES	
NAICS Description	
621	Ambulatory Health Care Services
622	Hospitals
623	Nursing and Residential Care Facilities

Health care is currently the largest industry in the nation and is expected to generate 2.5 million new jobs over the next five years, according to the Bureau of Labor Statistics. In 2007, the U.S. spent more than \$2.26 trillion on health care, more than \$7,400 per person. The health care industry is made up of about 580,000 business establishments and currently employs more than 14.8 million workers in both the public and private sectors.

Currently hospitals make up the smallest percentage of business establishments in the health care industry, but they are the largest employers in the sector. Hospitals, both public and private, are expected to remain major employers, but home health care services are expected to see the greatest amount of growth, with employment increasing by over 55 percent in the next seven years.

In addition to natural market growth, health services is getting an infusion of \$148 billion from the American Recovery and Reinvestment Act (ARRA), which includes not only provisions for subsidizing COBRA for unemployed workers, but also provides nearly \$38 billion for research, developing new health centers, and creating a new health information technology network. President Obama is also pushing a new universal health care program, which, if enacted, will add millions of premium-paying Americans into the health insurance market, undoubtedly affecting the industry.

### REGIONAL TRENDS



## TARGET INDUSTRY PROFILES: HEALTH SERVICES

In many ways, health services is an emerging industry sector for the region. While once a small “service”-based industry, it has now become a major economic and employment engine for the entire region. With a growing and aging population, service needs will continue to increase.

The Greater Lincoln Region has multiple, strongly networked, health systems that provide services throughout the area, including the Bryan LGH Health System which has 583 licensed beds in two locations and a reputation for cardiology and cardiovascular surgery and research excellence.

Saint Elizabeth Regional Medical Center is another such system. Thompson ranks it as a Top 100 Hospital in the nation as well as a Magnet hospital for its nursing excellence. Beyond its two stand-alone urgent care centers and three physical therapy centers, the system provides home and hospice services as well as a physician network of family and specialty care clinics.

In addition to the region’s strong medical systems, the region benefits from excellent health care training programs. While there are occupational shortages within certain areas (e.g. nurses, physicians, etc) many institutions within the area (SCC provides technical degrees in x-ray and sonography; Peru State offers a Surgical Technology and Respiratory Care program; and UN-L provides training in these fields as well as medical doctor training and medical research) are also building additional capacity.

As the Greater Lincoln Region continues to age (24 percent increase in those 55+ over the past two decades), health care services are likely to have an increased focus on elder care, home care, and outpatient care. The region’s base of health care employers can be built upon by attracting specialty clinics and health care providers that supplement the in-patient care offered by existing hospitals.

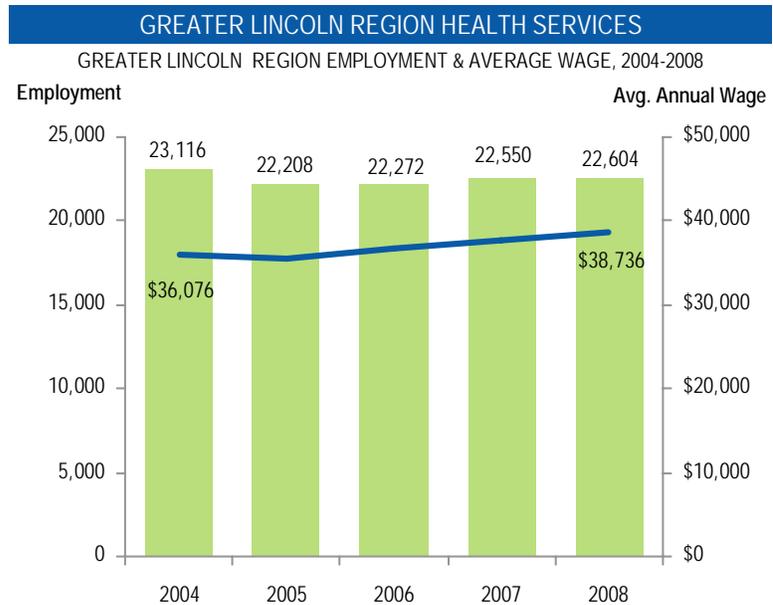
### NICHES

#### Specialized Health Care Service Centers

Currently, individuals ages 65 and older represent nearly 15 percent of Nebraska’s total population – a significant portion. As this population – and the region itself – continues to grow, the Greater Lincoln Region is in position to attract regional medical centers with specialized services that fill gaps not being serviced by the existing and new acute care hospitals in the region. Regional medical centers that offer diagnostics, surgery, and ongoing nursing care, along with specialized pediatric, neuroscience, cancer, substance abuse, or diet control care could be viable niche targets.

#### Health Care IT (Back Office)

While there is some uncertainty regarding health care and how electronic medical files will be developed, it is assured that the industry will continue moving to an electronic records keeping system. Specializing in Health Care IT will reap benefits as the sector matures and possibly develops into a standardized system. In addition, administrative functions such as scheduling appointments, collecting and processing payments, handling billing inquiries, and



Source: Bureau of Labor Statistics QCEW and US Census QWI

## TARGET INDUSTRY PROFILES: HEALTH SERVICES

managing late or default payment issues have become increasingly important to the industry. RIG region communities with existing office space and located near regional medical centers can capture some of this growth.

### HEALTH SERVICES

KEY ASSETS	KEY CHALLENGES & OPPORTUNITIES
<ul style="list-style-type: none"><li>✓ Aging population increasing demand</li><li>✓ Strong network of existing health care providers</li><li>✓ Growing sector (several new and planned medical centers)</li><li>✓ Strong presence of retirement and end of life care centers</li><li>✓ Adequate infrastructure (ease of transportation cross region)</li></ul>	<ul style="list-style-type: none"><li>■ Not a lot of medical research regionally</li><li>■ Recruiting and retaining top talent and meeting specific occupational demand</li><li>■ National industry uncertainty and health care reform</li><li>■ Many jobs (health care support workers, home health aides) will be lower paying</li></ul>
VALUE PROPOSITION	
<p>The region's aging population and network of transportation thoroughways and available land give it an advantage for health service firms and regional medical centers. The region is in position to attract regional medical centers with specialized services that fill gaps not being serviced by the existing acute care hospitals. In addition, as the industry continues to transform technologically, Lincoln, in particular, will be positioned to capture more IT support services. For the region to harness health care research and become a player in wider biotechnology applications (beyond just plant/veterinary science) it must build a closer connection to Omaha and the University of Nebraska system medical research program.</p>	

## OCCUPATIONAL ANALYSIS

### OCCUPATIONAL ANALYSIS SECTION

Critical to capitalizing on the target industry opportunities will be the region's ability to build a workforce to ensure that qualified workers can meet new job demand. Across the region's target industries, workforce requirements run the gamut from highly-educated engineers and scientists researching breakthroughs in new technologies to more technically-skilled production workers and machine operators. As the region positions itself to take advantage of more advanced technologies for its product lines and move up the industry "value chain" these occupations will likely require some additional training to fully transition their skills to the new industry opportunities.

The following analysis provides an overview of the target industry workforce requirements including specific employer occupational demand. It includes two sub-sections:

- **Target Industry Occupational Trends**, including those most in-demand, hard-to-fill, and emerging (as aligned to the target industries)
- **Review of Dislocated Workers and general Transferable Skills**

Analysis is based on information gathered through employer surveys<sup>4</sup>, quantitative labor market data, and interviews and focus groups.

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<sup>4</sup> The survey included 60 total respondents and was administered to employers across the region. The sample included those companies that fall within the following broad target industries (as a means of aligning to the Greater Lincoln RIG industries): Information Technology, Advanced Manufacturing, Food Processing and Life Sciences. *See Appendix A for more details.*

# OCCUPATIONAL ANALYSIS

## TARGET INDUSTRY OCCUPATIONAL TRENDS: INTRODUCTION

A critical aspect of further developing these industry opportunities in the RIG region is cultivating a pool of talent with the appropriate skills for firms to be competitive. This section identifies the specific growing occupations of the proposed target industries and highlights the current concentration of these occupations within the RIG region. This data provides an understanding of what jobs will continue to be in demand and how the region's workforce development system can position itself to support the future regional economic development goals through job training and education.

### Methodology

Occupational information in this section was gathered from a combination of Bureau of Labor Statistics data and data gleaned from an employer survey conducted by AngelouEconomics in the RIG region<sup>5</sup>. Much of the findings are based on occupational location quotients which quantify both how concentrated a particular occupation is in a particular industry as well as what makes the RIG region's occupational mix unique in comparison to the national average.

### Top Occupations in Demand in the U.S.

Below are the top occupations "In Demand" in the U.S per target industry sector. "In Demand" occupations are those that meet three criteria:

- Occupations that have a high occupational LQ (above 1.0), meaning the occupation makes up a significant portion of the industry itself.
- Occupations that are projected to grow over the next 8-10 years.
- Occupations that were determined to be "in-demand" by RIG regional employers through an employer survey conducted by AE.

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<sup>5</sup> See Appendix A for a description and full analysis of the survey.

# OCCUPATIONAL ANALYSIS

## ADVANCED MANUFACTURING

Multiple machine tool setters, operators, and tenders, metal and plastic

Industrial engineering technicians

**Industrial engineers**

**Welders, cutters, solderers, and brazers**

**Team assemblers**

Mechanical engineers

Engineering managers

**Electrical engineers**

Electrical and electronic engineering technicians

Mechanical engineering technicians

## AGRICULTURE AND LIFE SCIENCES

Slaughterers & meat packers

**Biochemists and biophysicists**

Meat, poultry, and fish cutters and trimmers

**Chemists**

Chemical technicians

**Food scientists & technicians**

**Biological technicians**

**Natural science managers**

**Food and tobacco roasting, baking, and drying machine operators**

Food batchmakers

## BUSINESS SERVICES & IT

**Computer software engineers, applications**

Financial analysts

Computer software engineers, systems software

Computer systems analysts

**Network systems and data communications analysts**

Management analysts

Network and computer systems administrators

Database administrators

**Sales representatives, services**

Market research analysts

TOP 10 IN- DEMAND  
OCCUPATIONS, U.S.  
(by RIG target industry)

## HEALTH CARE

**Dental hygienists**

**Physical therapist aides**

Dental assistants

**Surgical technologists**

**Medical assistants**

Physical therapist assistants

**Physician assistants**

**Respiratory therapists**

**Physical therapists**

**Registered nurses**

## BUSINESS/PROFESSIONAL SERVICES

**Computer software engineers, applications**

Computer software engineers, systems analysts

Computer systems analysts

First-line supervisors/managers of helpers, laborers, and material movers, hand

First-line supervisors/managers of transportation and material-moving machine and vehicle operators

**Network systems and data communication analysts**

Network & computer systems administrators

**Computer support specialists**

**Bus and truck mechanics and diesel engine specialists**

Logisticians

**BOLD TYPEFACE:** Occupations that are in demand nationally and in which the RIG Region currently has a competitive advantage (i.e. a stronger concentration than the U.S. as a whole)

# OCCUPATIONAL ANALYSIS

## TARGET INDUSTRY OCCUPATIONAL TRENDS: BREAKDOWN

This section provides regional occupational snapshots, highlighting occupations within each target industry that are in demand nationally and identifies how the RIG region “measures up” in terms of its current concentration of those jobs. Occupation concentration data was collected through the *U.S. Bureau of Labor Statistics’ Occupational Employment Statistics*.

The following pages are organized by target industry and each chart summarizes eight key data points:

- 1 2 **The Top Ten In-Demand Occupations** – As identified in the previous page, these are occupations within a particular industry that have a high occupational LQ and are projected to grow nationally.
- 3 **Average annual wages** for that particular occupation within the region.
- 4 **RIG Regional Makeup of “In-Demand” Occupations** – the RIG region’s current occupational concentration of the top ten In-Demand Occupations. An LQ of higher than 1 means that the region has a higher than average concentration of that particular occupation – and thus a competitive strength.
- 5 **Education and Training Requirements** for that particular occupation.
- 6 **Workforce Priority Areas** – These are occupations that regional employers – through a regional employer survey – identified as “in-demand” (i.e. occupations they are likely to hire a lot of in the coming years) and “difficult-to-fill” (i.e. occupations that they often need to look outside the region for talent when hiring).
- 7 **Key Findings** – Combining the quantitative analysis with the survey data, these are key “takeaways” identifying potential occupations for which job training resources may appropriately be focused.

AGRICULTURE & LIFE SCIENCES: Top Ten “In-Demand” Occupations, U.S.			RIG Region Makeup of “In Demand” Occupations (Local Occupational Concentration)	Education and Training Requirements	SURVEY FINDINGS	
Occupational Title	2006 - 2016 U.S. Growth	Avg. Annual Wages (2007)			<span style="background-color: yellow; border-radius: 50%; padding: 2px 5px;">6</span>	
<span style="background-color: yellow; border-radius: 50%; padding: 2px 5px;">1</span> Slaughterers & meat packers	<span style="background-color: yellow; border-radius: 50%; padding: 2px 5px;">2</span> 13%	<span style="background-color: yellow; border-radius: 50%; padding: 2px 5px;">3</span> \$26,980	<span style="background-color: yellow; border-radius: 50%; padding: 2px 5px;">4</span> 0.5	<span style="background-color: yellow; border-radius: 50%; padding: 2px 5px;">5</span> Moderate-term on-the-job training	Occupations Most in Demand	
Biochemists and biophysicists	16%	\$59,230	5.5	Doctoral	Occupations Hardest to Fill	
Meat, poultry, and fish cutters and trimmers	11%	\$21,970	0.7	Short-term on-the-job training		
Chemists		Example	2.0	Bachelors	<ul style="list-style-type: none"> <li>• Supervisors</li> <li>• Computer Operator Specialists</li> <li>• Engineers (chemical, all others)</li> </ul>	
Chemical technicians		\$32,850	1.0	Associates		
Food scientists & technicians	10%	\$45,830	2.5	Bachelors		
Biological technicians	16%	\$31,730	2.3	Bachelors		
Natural science managers	11%	\$88,590	1.7	Bachelors+ work experience		
Food and tobacco roasting, baking, and drying machine operators	11%	\$21,780	1.4	Short-term on-the-job training		
Food batchmakers	11%	\$31,650	0.3	Short-term on-the-job training		

### FINDINGS

- Not surprisingly, there is great disparity between wages/training requirements for traditional food processing/agriculture jobs vs. R&D-based life science fields.
- However, the region should experience a growth in occupations across highly-skilled professionals, entry-level production jobs and technical specialists, warranting a unified post-secondary institution response to this industry.
- The region’s existing specific occupational strengths in chemistry, 7 food science, and biology technician disciplines, in particular, makes it competitive for emerging biotechnology opportunities.
- The RIG Region’s occupational strengths within this industry will be a key advantage for attracting new value-add agriculture and life science industries. From a job training perspective, the continued integration of technology applications into science curriculum will ensure that technical workers (i.e. computer operators) are familiar with a variety of operating systems, providing a foundation for emerging sustainable agriculture, nutraceutical, plant genomics and other niche fields tied to future Innovation Campus research and spin-off opportunities.

# OCCUPATIONAL ANALYSIS

## AGRICULTURE AND LIFE SCIENCES

AGRICULTURE & LIFE SCIENCES: Top Ten "In-Demand" Occupations, U.S.			RIG Region Makeup of "In Demand" Occupations (Local Occupational Concentration)	Education and Training Requirements	SURVEY FINDINGS	
Occupational Title	2006 - 2016 U.S. Growth	Avg. Annual Wages (2007)			Occupations Most in Demand	
Slaughterers & meat packers	13%	\$26,980	0.5	Moderate-term on-the-job training	<ul style="list-style-type: none"> <li>•Maintenance &amp; Repair Workers</li> <li>•Computer Operator Specialists</li> <li>•Supervisors</li> </ul>	
Biochemists and biophysicists	16%	\$59,230	5.5	Doctoral		
Meat, poultry, and fish cutters and trimmers	11%	\$21,920	0.7	Short-term on-the-job training	<b>Occupations Hardest to Fill</b> <ul style="list-style-type: none"> <li>• Supervisors</li> <li>• Computer Operator Specialists</li> <li>• Engineers (chemical, all others)</li> </ul>	
Chemists	9%	\$47,850	2.0	Bachelors		
Chemical technicians	6%	\$32,850	1.0	Associates		
Food scientists & technicians	10%	\$45,830	2.5	Bachelors		
Biological technicians	16%	\$31,730	2.3	Bachelors		
Natural science managers	11%	\$88,590	1.7	Bachelors+ work experience		
Food and tobacco roasting, baking, and drying machine operators	11%	\$21,780	1.4	Short-term on-the-job training		
Food batchmakers	11%	\$31,650	0.3	Short-term on-the-job training		

### FINDINGS

- Not surprisingly, there is great disparity between wages/training requirements for traditional food processing/agriculture jobs vs. R&D-based life science fields.
- The region should experience a growth in occupations across highly-skilled professionals, entry-level production jobs and technical specialists, warranting a unified post-secondary institution response to this industry.
- The region's existing specific occupational strengths in chemistry, food science, and biology technician disciplines, in particular, makes it competitive for emerging biotechnology opportunities.
- The RIG Region's occupational strengths within this industry will be a key advantage for attracting new value-add agriculture and life science industries. From a job training perspective, the continued integration of technology applications into science curriculum will ensure that technical workers (i.e. computer operators) are familiar with a variety of operating systems, providing a foundation for emerging sustainable agriculture, nutraceutical, plant genomics and other niche fields tied to future Innovation Campus research and spin-off opportunities.

# OCCUPATIONAL ANALYSIS

## ADVANCED MANUFACTURING

ADVANCED MANUFACTURING: Top Ten "In-Demand" Occupations, U.S.			RIG Region Makeup of "In Demand" Occupations (Local Occupational Concentration)	Education and Training Requirements	SURVEY FINDINGS	
Occupational Title	2006 - 2016 U.S. Growth	Avg. Annual Wages (2007)			Occupations Most in Demand	
Multiple machine tool setters, operators, and tenders, metal and plastic	3%	\$32,280	0.6	Moderate-term on-the-job training	<ul style="list-style-type: none"> <li>• Assemblers and Fabricators</li> <li>• Machine Operators</li> <li>• Helpers – Production Workers</li> </ul>	
Industrial engineering technicians	10%	\$49,190	0.6	Associates Degree		
Industrial engineers	20%	\$63,910	1.4	Bachelor's Degree		
Welders, cutters, solderers, and brazers	5%	\$32,020	1.4	Postsecondary vocational award	<b>Occupations Hardest to Fill</b> <ul style="list-style-type: none"> <li>• Engineers</li> <li>• Maintenance &amp; Repair Workers</li> <li>• Sales Representatives (tie)</li> <li>• Supervisors/Managers (tie)</li> </ul>	
Team assemblers	0.1%	\$29,940	1.2	Moderate-term on-the-job training		
Mechanical engineers	4%	\$65,270	0.7	Bachelor's Degree		
Engineering managers	7%	\$95,990	0.5	Bachelor's Degree+ work exp.		
Electrical engineers	6%	\$64,750	1.1	Bachelor's Degree		
Electrical and electronic engineering technicians	4%	\$44,070	0.9	Associate Degree		
Mechanical engineering technicians	6%	\$47,750	0.9	Associate Degree		

### FINDINGS

- Although the advanced manufacturing sector is expected to suffer further employment losses over the next five years, specific occupational categories within the industry are projected to experience growth. Importantly, the majority of new jobs will require either a bachelor's or associate degree.
- Given the region's strong base in food processing (as depicted earlier) and equipment/engine manufacturing, its current occupational competitive strength in advanced manufacturing lies in industrial engineering.
- Outside of industrial, however, engineering talent (including technicians) is underrepresented in the RIG Region's workforce supply, but greatly in demand.
- There are demonstratable salary increases from even minor occupational training upgrades.
- While there may not be large volume of these workers hired, experienced sales and first-line supervisory positions are very difficult to find in the region and pay well.
- Immediate demand will continue for welders, assemblers and production workers. However, as manufacturing processes become more sophisticated and computerized, it will be necessary to build regional engineering talents, particularly when trying to capture emerging and complex fields such as renewable energy, advanced logistics, and life sciences. Given the types of jobs expected to grow in the years ahead, it remains crucial for the region to establish strong connections to educational assets, including all four-year universities and SCC.

# OCCUPATIONAL ANALYSIS

## TRANSPORTATION & LOGISTICS

TRANSPORTATION & LOGISTICS : Top Ten "In-Demand" Occupations, U.S.			RIG Region Makeup of "In Demand" Occupations (Local Occupational Concentration)	Education and Training Requirements
Occupational Title	2006 - 2016 U.S. Growth	Avg. Annual Wages (2007)		
Computer software engineers, applications	45%	\$59,110	1.5	Bachelor's Degree
Computer software engineers, systems analysts	28%	\$56,540	0.6	Bachelor's Degree
Computer systems analysts	30%	\$61,800	0.9	Bachelor's Degree
First-line supervisors/managers of helpers, laborers, and material movers, hand	13%	\$42,210	0.9	Work experience in a related occupation
First-line supervisors/managers of transportation and material-moving machine and vehicle operators	10%	\$48,800	0.6	Work experience in a related occupation
Network systems and data communication analysts	53%	\$54,650	1.5	Bachelor's Degree
Network & computer systems administrators	27%	\$61,250	0.7	Bachelor's Degree
Computer support specialists	13%	\$38,850	1.3	Associate Degree
Bus and truck mechanics and diesel engine specialists	12%	\$33,220	1.1	Postsecondary vocational award
Logisticians	17%	\$69,260	0.6	Bachelor's Degree

### FINDINGS

- Unlike many of the industries proposed for the region, the logistics and distribution industry provides relatively high-paying jobs that require little formal education. Bachelor's programs in computer system and administration will be important, but so will warehousing/distribution management programs that require short- to moderate-term on-the-job training.
- Growth in the industry is broad spread, with the fastest growing occupations in transportation and supply chain management, sales representation, and supervisory services.
- Additional growth will come from freight forwarding agents, cargo representatives, and truck drivers.
- The region has an ample supply of available computer software engineers (applications), data analysts, and engine specialists. As the region builds niches in emerging areas like logistics systems design, other occupations/competencies to be developed include: systems analysts, distribution manager, and logisticians – positions that will require a combination of technology and management competencies.

# OCCUPATIONAL ANALYSIS

## BUSINESS SERVICES AND INFORMATION TECHNOLOGY

BUSINESS SERVICES & INFORMATION TECHNOLOGY: Top Ten "In-Demand" Occupations, U.S.			RIG Region Makeup of "In Demand" Occupations (Local Occupational Concentration)	Education and Training Requirements	SURVEY FINDINGS
Occupational Title	2006 - 2016 U.S. Growth	Avg. Annual Wages (2007)			Occupations Most in Demand
Computer software engineers, applications	45%	\$59,110	1.5	Bachelor's Degree	<ul style="list-style-type: none"> <li>• Programmers</li> <li>• Sales Agents</li> <li>• Computer Specialists</li> </ul>
Financial analysts	34%	\$60,530	0.4	Bachelor's Degree	
Computer software engineers, systems software	28%	\$56,540	0.6	Bachelor's Degree	<b>Occupations Hardest to Fill</b> <ul style="list-style-type: none"> <li>• Programmers</li> <li>• Sales Agents</li> <li>• Systems Engineers</li> </ul>
Computer systems analysts	29%	\$61,800	0.9	Bachelor's Degree	
Network systems and data communications analysts	53%	\$54,650	1.5	Bachelor's Degree	
Management analysts	22%	\$59,390	0.7	Bachelor's Degree+	
Network and computer systems administrators	27%	\$61,250	0.7	Bachelor's Degree	
Database administrators	29%	\$54,680	1.0	Bachelor's Degree	
Sales representatives, services	28%	\$48,160	1.2	Work experience in a related occupation	
Market research analysts	20%	\$53,280	1.4	Bachelor's Degree	

### FINDINGS

- The fastest growing occupations are primarily highly-skilled technical professionals.
- The RIG Region has a deep pool of workforce talent in computer and software engineering (applications) talent, a key occupation across industries.
- While the Region has a growing IT workforce, it is less competitive when it comes to IT-integrated "business service" positions (i.e. financial analysts, management research analysts, software developers, and sales reps with an IT or business background).
- National changes within the financial and health care industries (e.g. digitizing records, etc.) will no doubt have an impact on several key supporting IT occupations.
- To truly capture additional regional growth in this sector (especially around software development and smaller IT-based creative industries), additional training will be needed for a variety of business management, sales, and systems engineering (an interdisciplinary field of engineering) occupations and competencies.

# OCCUPATIONAL ANALYSIS

## HEALTH SERVICES

HEALTH SERVICES: Top Ten "In-Demand" Occupations, U.S.			RIG Region Makeup of "In Demand" Occupations (Local Occupational Concentration)	Education and Training Requirements
Occupational Title	2006 - 2016 U.S. Growth	Avg. Annual Wages (2007)		
Dental hygienists	30%	\$60,610	1.8	Associate's Degree
Physical therapist aides	24%	\$19,480	1.3	Shorter-term on-the-job-training
Dental assistants	29%	\$30,210	0.9	Moderate-on-the-job-training
Surgical technologists	25%	\$36,200	1.3	Postsecondary Vocational Award
Medical assistants	35%	\$25,910	1.3	Moderate-on-the-job-training
Physical therapist assistants	32%	\$40,410	0.8	Associate's Degree
Physician assistants	27%	\$90,210	2.5	Master's Degree
Respiratory therapists	23%	\$48,200	1.5	Associate's Degree
Physical therapists	27%	\$56,660	1.7	Masters Degree
Registered nurses	24%	\$50,460	1.1	Associate's Degree

**SURVEY FINDINGS\***

\*Extrapolated from a separate southeast Nebraska health care survey conducted in summer of 2009.

**Occupations Most in Demand**

- Nursing Aides, Orderlies, and Attendants
- Registered Nurses
- Healthcare Support Workers

**Occupations Hardest to Fill**

- Registered Nurses
- LPNs, LVNs

### FINDINGS

- The RIG region's core health care strengths include physician assistant and therapist positions, most of which are in the middle-to higher-end of health care provider jobs.
- While it is unclear how proposed national health care changes may impact future occupational needs, the region, like many throughout the country, is facing a nursing shortage and healthcare organizations are concerned that there will not be enough viable applicants in the future.
- As the regional population ages and this industry expands (as it is likely to do), specialized occupational employment, particularly in radiologic technologists, acute care, and physical therapist aides will become increasingly more important.
- Additional workforce training will be needed for medical assistants (dental, physical therapist) and registered nurses, all of which are in demand and some of which pay well-above-average wages for the region. As the region and industry become more specialized and innovation-based, additional workforce focus may be needed on bio-engineers, informatics, and genetics – those studying and applying medical technologies and the process of transferring medical research to commercial devices and technologies (i.e. the direct connect to the bio-ag industry).

## OCCUPATIONAL ANALYSIS

### RENEWABLE ENERGY\*

*\*Not a target industry for the Greater Lincoln Region but an important niche sector*

RENEWABLE ENERGY: Top Ten "In-Demand" Occupations, U.S.			RIG Region Makeup of "In Demand" Occupations (Local Occupational Concentration)	Education and Training Requirements
Occupational Title	2006 - 2016 U.S. Growth	Avg. Annual Wages (2007)		
Plumbers, pipefitters, and steamfitters,	11%	\$41,470	0.8	Long-term on-the-job training
Electricians	7%	\$37,540	1.0	Long-term on-the-job training
Electrical Engineers	6%	\$64,750	1.1	Bachelor's Degree
Electrical and electronic engineering technicians	4%	\$44,070	0.9	Associate Degree
Civil engineers (technicians)	18% (10%)	\$63,710 (\$40,160)	1.3 (2.3)	Bachelor's (Associate)
Construction managers	15%	\$62,640	1.5	Bachelor's Degree
Mechanical engineer technicians	6%	\$47,750	0.9	Associate Degree
Welders, cutters, solderers, and brazers	5%	\$32,020	1.4	Postsecondary vocational award
Sheet metal workers	7%	\$42,570	0.6	Long-term on-the-job training
Solar installers, technicians, foremen, and systems designers	NA	NA	NA	NA

### FINDINGS

- The top-10 in-demand occupations for renewable energy indicate the importance of infrastructure investments, energy efficiency improvements, and the importance of the wind sub-industry in driving employment growth in the renewable energy industry as a whole.
- Though the region is largely underrepresented in some top in-demand occupations, regional occupational strengths in certain engineering specializations and computer specialists will also be important for meeting this industry's workforce requirements.
- With wind (component manufacturing, distribution) likely to be the shorter-term job generator in the region, traditional manufacturing and construction laborer jobs will be in demand. As the industry matures – and if the state capitalizes on industry opportunities – solar panel design, biofuels, and geothermal will become growing niche sectors meaning architectural drafters, civil, and mechanical engineers and technicians, will play an important role in economic expansion.

# OCCUPATIONAL ANALYSIS

## DISLOCATED WORKERS & TRANSFERRABLE SKILLS

While the Greater Lincoln Region has weathered the recession relatively well, its manufacturing and food processing businesses have been impacted by client and consumer decisions to limit purchasing resulting in slashed inventory and reduced production. Several high profile layoff announcements in Auburn, Lancaster, Seward, and Beatrice, in particular, were made in 2009, with layoffs at Kawasaki Motors, American Meter, Exmark Manufacturing, and Burlington Northern Santa Fe (BNSF) to name a few. While some of these layoffs follow cyclical manufacturing patterns, the numbers were higher and the layoffs were made earlier than is typical. Workers most often impacted have been machinists, production, and maintenance workers.

### LAYOFFS

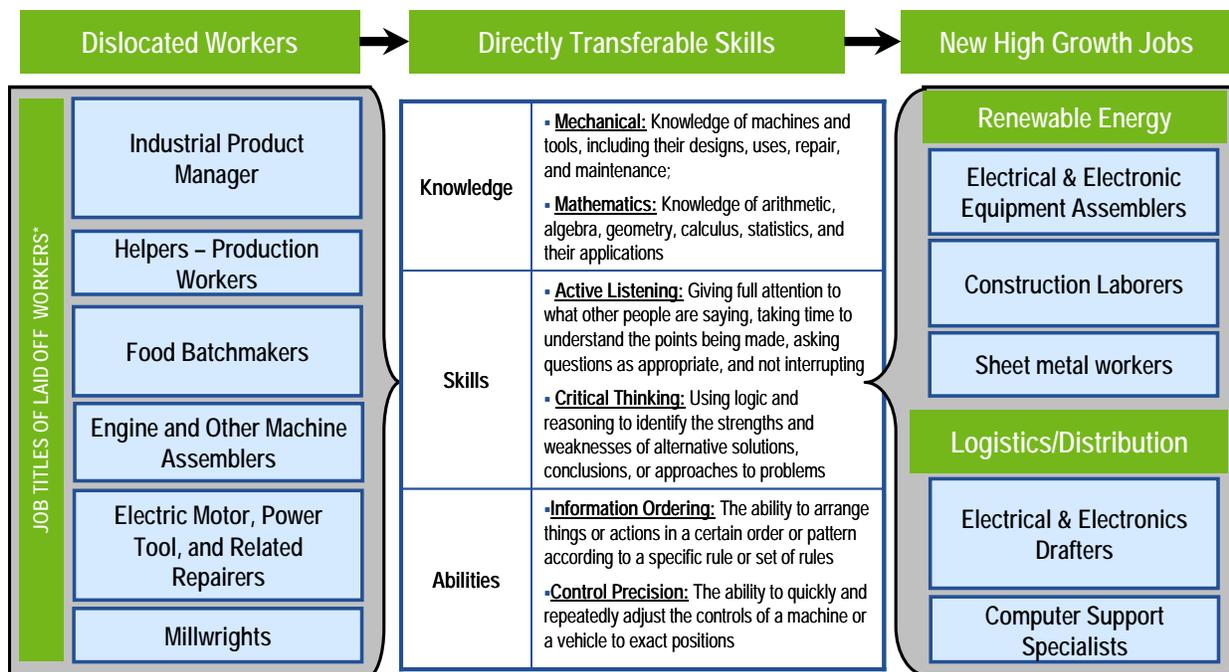
NUMBER OF EMPLOYEES LAID OFF BY COUNTY 3<sup>RD</sup> QTR 2008-2<sup>ND</sup> QTR 2009

Lincoln RIG Region **2379**

*Source: Nebraska Workforce Development Department of Labor*

From a workforce development perspective, retraining dislocated workers has become a high priority for the region. The most direct path to reemployment for these workers is to identify occupations within higher-growth sectors within the region that have direct ties to these workers' skill sets and competencies – and begin to refine job training bridge programs to create matches.

## REVIEW OF RIG DISLOCATED WORKERS\* AND POTENTIAL NEW OPPORTUNITIES



\* From firms that have laid off 50+ workers in past 4 qtrs (Meadow Gold, Elster, ExMark, Kawasaki, Molex, Duncan, Lincoln Industries, Lester Electrical)  
 AngelouEconomics; O\*Net

The Greater Lincoln Region, with its rich history in manufacturing and food processing, has a competitive strength in occupations such as welding, soldering, and brazing, and sheet metal working. Fortunately, occupations such as machine operators, equipment mechanics, and other technically skilled manufacturing workers, with traditional on-the-job-training and apprenticeship programs, are in significant demand across certain industries. While the renewable energy industry, for example, has developed a variety of cutting edge technologies to capture, convert, and conserve energy, the renewable energy industry's workforce will be fundamentally based on upgrading and refining the skills required by traditional manufacturing, trades, science, and engineering workforces. Unlike other recent technological revolutions (i.e. computer hardware and software programming), the renewable energy

## OCCUPATIONAL ANALYSIS

industry's value chain closely resembles other industries. Similarly, the logistics and distribution industry – also a “high growth” industry sector – consists of a high concentration of computer support specialists, electrical drafters, and maintenance and engine specialists. With a minimal amount of training and/or certification, the region's dislocated workers can be primed for these positions in the future.

The chart above provides an example of how the competencies and skills within several existing industries (Advanced Manufacturing and Food/Agriculture) can be transferable to emerging industries (Transportation/Logistics and Renewable Energy). These industries share many of the same competencies (i.e. “knowledge,” “skills,” and “abilities” as defined by the U.S. Department of Labor's Bureau of Labor Statistics).

While renewable energy (e.g. wind turbine component manufacturing; solar panel design and manufacturing) may not yet be a major employer for the region, because of its natural resources and strategic location, southeast Nebraska will find job creation opportunities in this industry. Thus, it is imperative that the community's workforce development system begin to prepare for the training needs in this industry and other targets.

See *Appendix B* for a listing of “new and emerging” occupations aligned to the RIG region's target industries. Southeast Community College and other regional service providers should utilize this information and the “transferable skills” information as a foundation for identifying occupational alignments and refining curriculum around these high-growth occupational opportunities.

# OCCUPATIONAL ANALYSIS

## CROSS-CUTTING OCCUPATIONAL FINDINGS

For the purposes of this study, AngelouEconomics has separated the targets into five industry groups. However, because there is a strong degree of mutual dependence between industries given the significant overlap with workforce requirements, many of the key occupations (e.g. software engineers, network analysts, etc.) identified in the previous section are not confined to a specific sector. These symmetries and intersections should be seen as fundamental assets to the RIG Region, potentially maximizing the return on investments. Success in any one sector within advanced manufacturing, for example, increases the potential labor pool for less locally mature sectors. Looking across target industry occupational requirements, AngelouEconomics identified the following themes.

1) Given the target industry symmetries, the workforce development response should focus on cross-cutting competencies, not necessarily specific occupations.

Cross-Cutting Occupations and Competencies					
Occupational Category/Competency	Product Development-Based Industries			Services-Based Industries	
	Advanced Manufacturing	Ag/Life Sciences	Logistics/Distribution	Business Services & IT	Health Care
Machine & equipment operation/maintenance	●	●			
Engineering (industrial, mechanical, electrical, civil, software)	●	●	●	●	●
Engineering Technician (mechanical, electrical)	●		●		
Production Supervision	●	●	●	●	
Sales/Marketing	●	●	●	●	
Business Operations (including HR and financial)	●	●	●	●	●
Computer Systems (analysts/managers)	●	●	●	●	●

Across the five target industries, seven occupational categories emerge as common to many of the target sectors. These are occupations and competencies that are “in demand” (i.e. have a high occupational LQ and are projected to grow) - and, therefore, could be regional workforce training and education priority areas. *See Appendix B for emerging occupations within industries.*

These cross-cutting occupations and competencies highlight the shared workforce requirements of the five industry opportunities. While the engineering demands across industries may differ in terms of specific technological applications or knowledge, for example, the general set of competencies (e.g. for mechanical engineers – the understanding of mechanical design, ability to operate machines, etc.) will be very similar.

## OCCUPATIONAL ANALYSIS

### 2) A competitive region will be one with a 'versatile' workforce – including workers with technical knowledge and skills combined with strong business and management aptitudes.

Looking across the target industry occupational requirements, a key finding emerges: most of the "in demand" jobs require workers to have a technical or science-based background with important business management functional expertise (i.e. an ability to supervise workers, understand customer relationships, etc.). Therefore, from a regional job training response perspective, the integration of a variety of technology and management applications into science curriculum (and vice versa) will ensure that technical workers are trained to perform effectively in entry-level positions and positioned to rise within the field. While, at the same time, they will have the familiarity to navigate a variety of operating systems, an increasingly important competency in emerging occupations.

### 3) Engineering talent is underrepresented in the RIG Region's workforce, but greatly in demand across industries

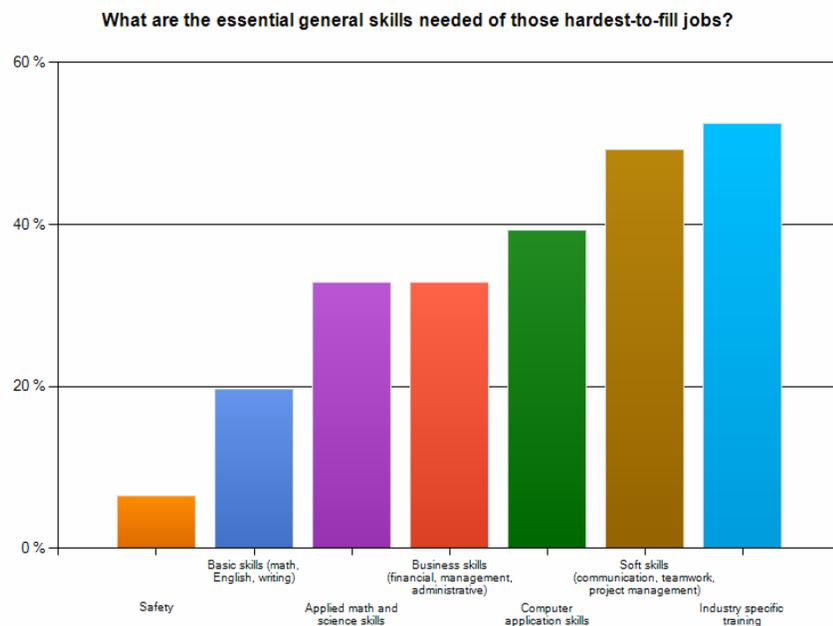
As in many areas throughout the country, engineers (industrial, electrical, mechanical, and civil) are currently in high demand across industries. Because of its traditional food processing and manufacturing base, the region has strengths within industrial design (manufacturing engineers, process engineers, etc.). However, it has significantly less concentration in the other disciplines (mechanical engineers, software engineers in applications) that are, and will continue to be, in high demand. The region's ability to better connect UN-L engineering students to existing design jobs in the region is critical.

### 4) Growing and emerging occupations fall generally within specialized science and engineering categories

A review of the emerging occupations (see *Appendix B*) across industries reveals a growth in both specialized engineering and technician jobs and those occupations using high-technology applications. Bioinformatic Technicians, for example, analyze and interpret molecular data in assisting scientists in areas such as pharmaceuticals, medical technology, and proteomics. In health care, the industry is expecting an increase in Informatics Nurse Specialists who assist in the design, development, and ongoing modification of computerized health care systems, increasingly more important given the recent federal stimulus package which allots significant resources toward digitizing medical records.

### 5) A strong concentration of high-technology talent in the region may help support the transition of traditional industries toward more innovative sectors

Thanks in part to the region's historically strong electronics sector, and growing niche software development and web design sectors, the region's concentration of computer software engineers is strong and potentially could be tapped not only for long-term growth in the Business Services & Information Technology target industry, but in helping to transition other industries (e.g. agriculture/food processing) into a more biotechnology-based sector. It can also help to further cultivate Lincoln's "creative industries" sub-sectors (e.g. marketing, software design, and human resources consulting).



## OCCUPATIONAL ANALYSIS

### 6) “Hardest to fill” positions, as identified by Greater Lincoln regional employers, match occupational data and support the notion that both soft skill and industry-specific training will continue to be important

The employer survey that AE conducted yielded many interesting findings, including specific occupations that were identified as the “hardest to fill” within the region (engineering and machine operators rank 1 and 2). Of these positions, employers indicated the significance of finding employees who possess both industry-specific training as well as essential soft skills (e.g. arriving to work on time, communicating with customers, etc.). *See Appendix A for complete survey results.*

This provides further justification into the importance of enhancing customized training programs outreach (as well as state job training resources). SCC, while very well regarded throughout the region for its academic programs and placements, has little capacity to perform robust outreach to employers to identify specific training needs and new technologies.

### 7) Given the nature of the target industries and the different intra-regional industry specializations, skills development will be needed across education levels.

To capture growth in the target industry areas, the region will need to focus on producing highly educated workers (e.g. engineers, scientists with bachelor’s and master’s degrees) as well as technically-skilled workers (e.g. technicians, tradesmen with associates degrees or certificates). While wages within the “in-demand” occupations tend to increase along with levels of degree attainment, there is a significant demand for occupations that require less than a bachelor’s degree that pay at least \$50,000.

### 8) Employers across industries agree – although the labor market has weakened, they expect standard challenges (i.e. labor shortage) to apply soon again in southeast Nebraska.

Business leaders, from food processing plants, manufacturing firms, and IT companies, acknowledge that the current labor market favors employers (with some claiming hundreds of applications for a single job posting). However, by and large, most private sector leaders expect this to be a short-term issue and that historical problems findings qually workers in the region will reappear soon.

9) Educated, skilled, AND experienced talent is hard to find and retain – meaning high-growth businesses often have to go outside the region to find workers  
Engineers, programmers, machinists, nurses, physicians are all difficult-to-fill positions where employers must go outside the region to find talent. However, many regional post-secondary programs that address those occupations exist in the region. So the most important issues may be:

- Limited job ‘matching’ occurring (graduates unaware of existing companies within the region and job openings – and vice versa)
- Lower wage levels driving graduates away
- Need for increased awareness of regional career opportunities at K-12 levels as a means of expanding the pipeline of “homegrown” professionals.

#### List the most critical challenge to recruiting skilled workers for your business (Three most recurring)

1. Recruiting/retaining higher skilled talent and management (competing with coasts in wages and quality of life factors)
2. Finding workers with the appropriate employability skills (i.e. soft skills)
3. Industry experience (development of requisite industry-specific knowledge in college graduate pool)

*AngelouEconomics survey*

## OVERALL FINDINGS

### ASSETS

While the target industry profile section defines the sector opportunities for the region and identifies general strengths that the region holds, the Asset Map section identifies and inventories specific economic and workforce development assets that exist within the region that can be leveraged to drive innovation and economic growth in the target industry sectors. These assets – described largely in the 1<sup>st</sup> report – can take many shapes from research facilities to venture capital firms to premiere post-secondary institutions that educate regional workers in the targeted industry disciplines. These assets, in effect, take the form of capabilities that directly or indirectly support the growth and competitiveness of a particular cluster. Assets identified here include:

- **Higher Education and Job Training** – Higher education institutions and adult job training programs educating and training people to sustain industry growth.
- **Entrepreneurship/Small Business Development** – Technical assistance and capital to support a regional small business or would be entrepreneur take an idea to market and grow a business. Examples include business accelerators/incubators and small business development centers as well as venture capital firms, financial firms, and foundations providing direct risk capital.
- **Research and Development** – Cutting edge research and development completed by both post-secondary institutions and private companies. Examples include research laboratories and research institutions as well as large firms with significant R&D and product development capacities.
- **Leadership/Connective Organizations** – Public/private networks that guide local and regional economic and workforce development efforts  
Examples include regional/local economic development organizations, WIBs, sector consortium, chambers of commerce, collaborations, etc.

Other assets or resources such as “physical infrastructure” (i.e. transportation nodes, site availability, etc.) are also critical to industry cluster and economic growth. This information was highlighted in the *Economic Scan* (Report #1) and mentioned again briefly in the *Industry Profile* section of this report.

Given the symmetries between the Greater Lincoln Region's target industry opportunities, it is logical that most assets in the region can support the growth of multiple (if not all) industries. However, to provide additional depth into the two emerging industries (agriculture/life sciences and advanced manufacturing) specific maps were developed that focus on the unique assets that can strengthen these opportunities.

The Asset Map inventory is not meant to be exhaustive, as much as it is a means to identify key stakeholders and initiatives in which to leverage. Most importantly, the map should help to create awareness of the capabilities that support industry growth *regionally* and identify where partnerships and resources can be shared.

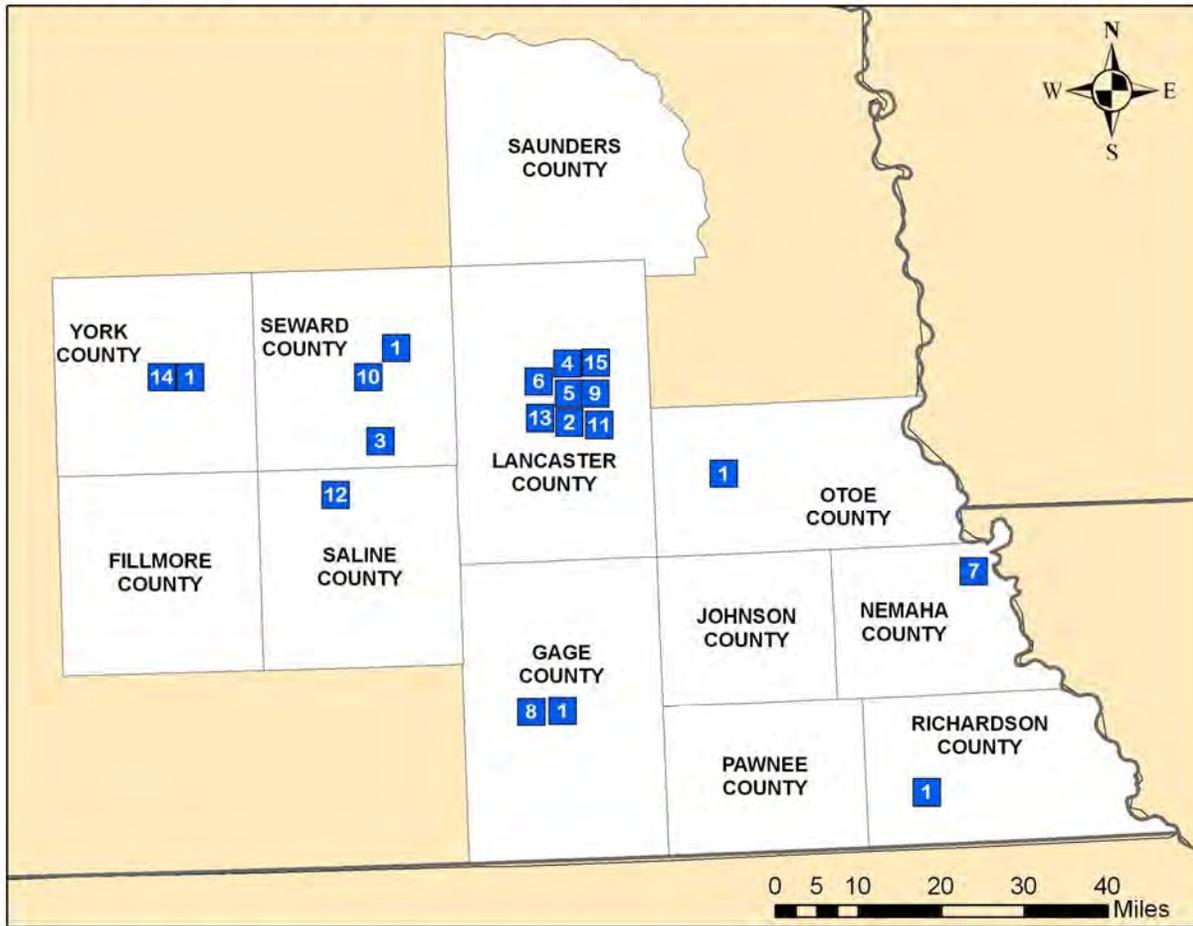
# OVERALL FINDINGS

## HIGHER EDUCATION & JOB TRAINING

### Higher Education Assets

The region has a strong network of higher education institutions (both 4-year universities and Southeast Community College) producing pools of talent that support all five target industry opportunities. The University of Nebraska-Lincoln is the state's, flagship, land-grant, Carnegie Research I/Research-Extension university with comprehensive undergraduate and graduate program offering and signature offerings in creative arts, computer science, business management, information technology, and the biosciences – all aligning to the region's target industry clusters. The University has a direct presence in other parts of the region including extension programs designed to provide

## Post-Secondary Education & Workforce Development



### Post-Secondary Education/Workforce Development

- |   |  |
|---|--|
| <b>1</b> Certified Affiliate One-Stop Career Center     | <b>8</b> Southeast Community College – Beatrice Campus |
| <b>2</b> Certified Comprehensive One-Stop Career Center | <b>9</b> Southeast Community College – Main Campus     |
| <b>3</b> Southeast Community College – Milford Campus   | <b>10</b> Concordia University                         |
| <b>4</b> Doane College – Lincoln Campus                 | <b>11</b> UN-L: Main Campus                            |
| <b>5</b> Kaplan University – Lincoln Campus             | <b>12</b> Doane College                                |
| <b>6</b> Nebraska Wesleyan University                   | <b>13</b> Union College                                |
| <b>7</b> Peru State College                             | <b>14</b> York College                                 |
|   | <b>15</b> BryantLGH Nursing School                     |

## OVERALL FINDINGS

continuing education and research and development services to a wide variety of residents in the more rural areas of the region.

Southeast Community College and the other 4-year institutions within the region have exceptional reputations and draw students from around the world. Through articulation agreements and other initiatives, many of these schools currently work together and appear quite responsive to regional industry needs. Together, these institutions provide a diverse array of educational and technical training opportunities to meet a broad mix of industry skill demands within the region. In addition, most schools are expanding online education opportunities in a move to access students in surrounding more rural counties.

### Job Training

The state has several key job training programs that provide grants to targeted industry firms offering new and incumbent worker training. These programs have a reputation of being relatively flexible in terms of usage and application.

SCC, through its customized training program, is one critical job training service provider providing flexible training schedules and services to regional employers. In some cases, especially in the rural areas, there are important higher education/workforce/economic-development connections occurring. On the SCC-Beatrice Campus, for example, is a co-location of workforce service programs and the Gage County economic development entity. These types of partnerships are crucial for ensuring industry attraction efforts are tied closely to job training initiatives – something that can be a critical asset for the entire region.

### Nebraska's Job Training Programs

#### Nebraska Advantage

Administered by the Nebraska Department of Economic Development, the program is designed to provide employee training assistance to businesses that maintain, expand and diversify the state's economic base. Program priorities:

- Customized training projects that result in increased investment and new employment.
- Customized training projects that involve retraining of existing workers to upgrade their skills as a result of investment in new capital.

#### Nebraska Worker Training Program

Operated under the Nebraska Department of Labor, the program supports the training, retraining, and skills upgrading of incumbent workers through the provision of grants. Funds are provided directly to the employer with the employer making further distributions to any training providers as necessary.

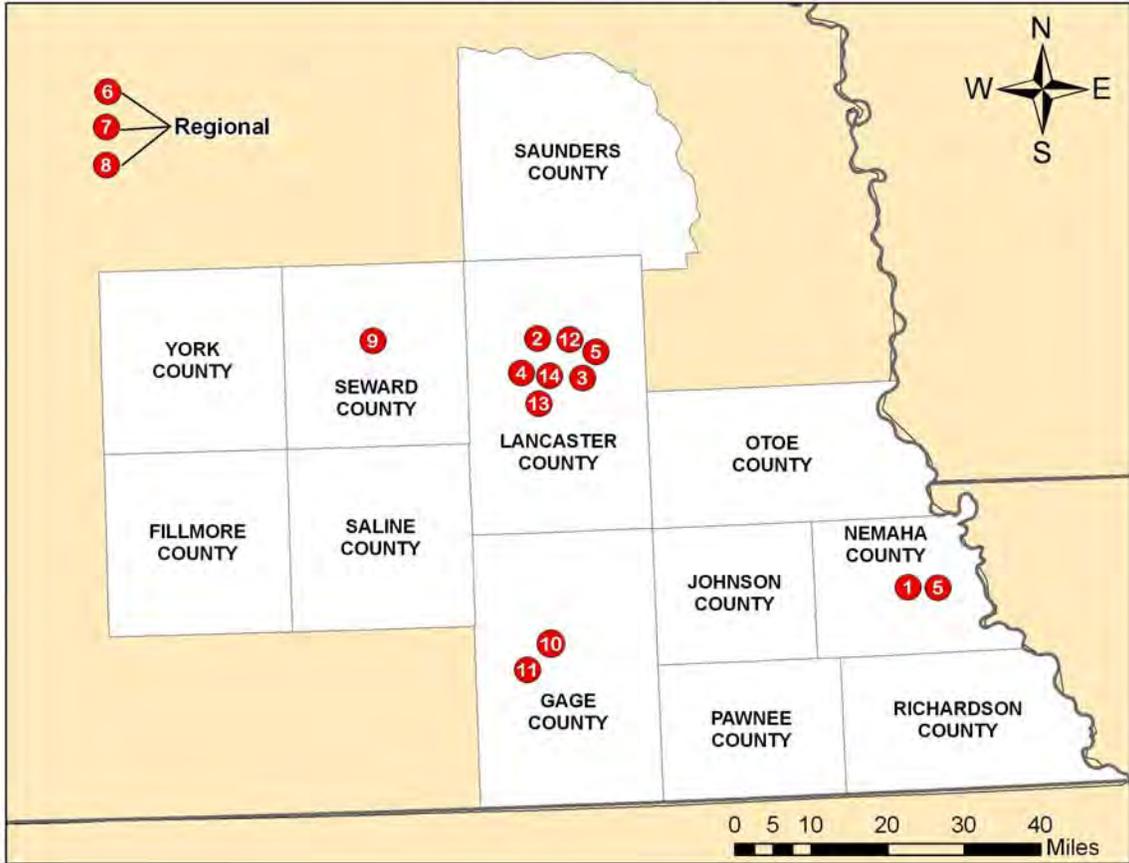
# OVERALL FINDINGS

## ENTREPRENEURSHIP/SMALL BUSINESS DEVELOPMENT

There is no lack of individual entrepreneurial and small business support programs throughout southeast Nebraska, from SCC's Entrepreneurship Center (including incubator space) to various "Main Street" and small business support programs in outlying regional communities to state-sponsored Inventors, Investors, and Entrepreneurs Clubs operated through the University of Nebraska system and administered, in part, through critical regional initiatives such as the Southeast Nebraska Partners for Progress (*see Leadership map*). They are proving to be effective means for engaging rural would-be entrepreneurs especially around innovations in agriculture and natural resources.

The challenge will remain in ensuring all of these entrepreneurial and R&D-based assets are aimed at spurring economic development – by focusing on targeted growing industries, and ensuring that the appropriate structure is in place (i.e. capital, technical assistance, physical space, social networking) *and accessible* to support the movement of technology into the marketplace across the region. Importantly, the area already has a number of regionally-based projects with which to build upon.

### Entrepreneurship



**Entrepreneurship**

- 1 Auburn Development Council
- 2 Invest Nebraska Corporation
- 3 Lincoln SCORE
- 4 Nebraska Angels
- 5 Nebraska Business Development Center
- 6 Nebraska EDGE
- 7 Rural Enterprise Assistance Program/Center for Rural Affairs
- 8 UN-L Extension Programs
- 9 Seward County Young Professionals
- 10 Southeast Community College – Beatrice Campus & Chamber of Commerce Entrepreneurial Division
- 11 Southeast Community College: Entrepreneurship Center
- 12 Turbine Flats
- 13 UN-L Food Entrepreneur Assistance Program
- 14 UNL Center for Entrepreneurship

## OVERALL FINDINGS

### R&D/INNOVATION

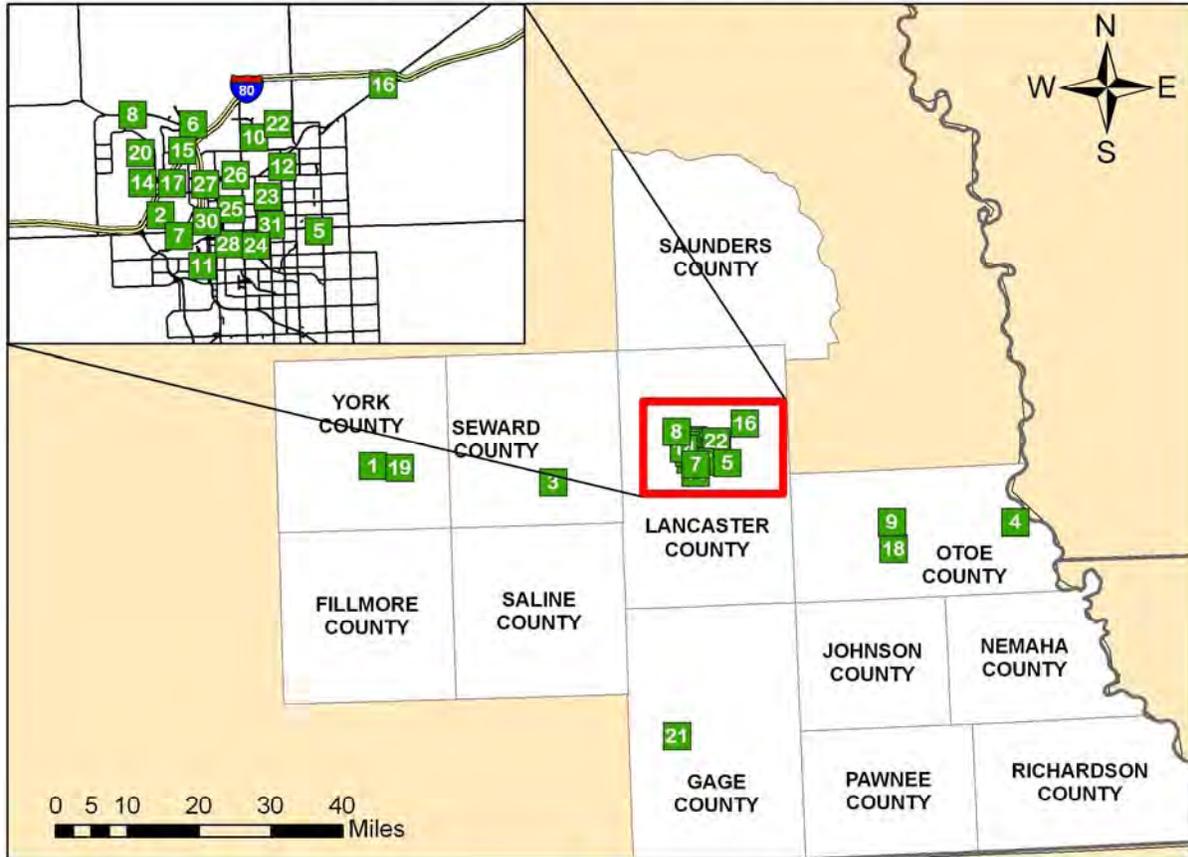
There is no question that the University of Nebraska-Lincoln will continue to be the hub of R&D and driver of innovation throughout the region. The institution's research activities have grown substantially over the past decade (now with more than \$120 million of R&D investments annually) with numerous university research centers providing continued advances in animal pharmaceuticals, genetics research, food product development and safety, transportation software, and biochemistry.

UN-L's Tech Transfer office has recently enhanced efforts to catalyze innovation commercialization through a number of means, including increased publishing of patents that can be commercialized, networking with local investors and national venture capital managers, and connecting private industry with faculty. University entrepreneurship and innovation infrastructure components such as Innovation Campus and the Raikes School will become increasingly important for the region as it moves to connecting innovation with economic development pursuits.

In addition to innovation growing out of educational research, the private sector has been a catalyst for new products in the region. Kawasaki, for example, is using the downturn in the recreational vehicles market as an opportunity to increase design and production space for passenger rail car production at its Lincoln plant. In addition, smaller IT and life science firms in the region (e.g. GeneSeek) are engaged in various research, design, and new product testing – generally to meet more local demand for specific industry needs.

# OVERALL FINDINGS

## Research & Development



### Research & Development

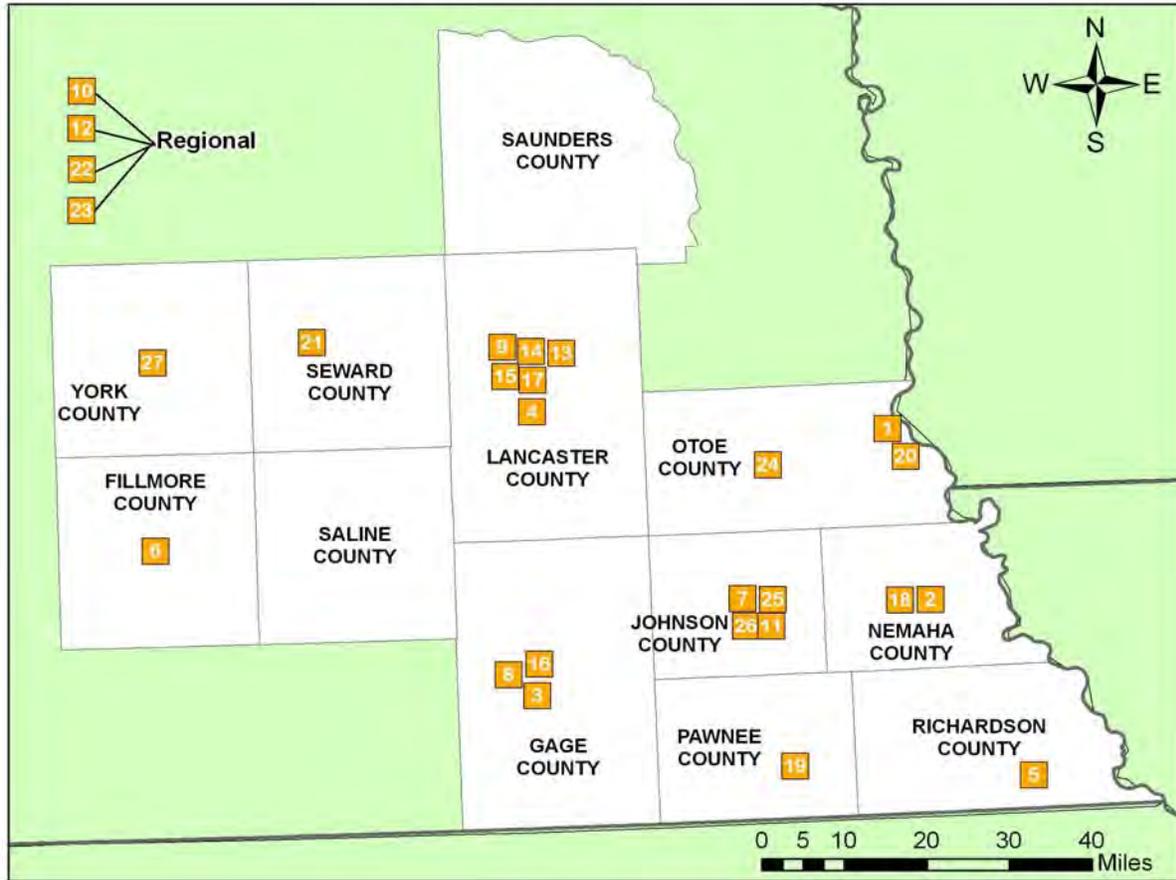
- |  |  |
|--|--|
| <b>1</b> Abengoa Bio Energy Corp                           | <b>16</b> Novartis Consumer Health                                   |
| <b>2</b> Benchmark Biolabs                                 | <b>17</b> Pfizer Global Manufacturing                                |
| <b>3</b> Digitec   | <b>18</b> Pharma Chemie  |
| <b>4</b> Elster American Meter                             | <b>19</b> Pioneer Hi-Bred International                              |
| <b>5</b> Gallup Research Center                            | <b>20</b> Rieke Materials  |
| <b>6</b> Gene Seek   | <b>21</b> Southeast Community College – Beatrice Campus (Ag Program) |
| <b>7</b> JA Woollam, Inc.                                  | <b>22</b> Teledyne ISCO  |
| <b>8</b> Kawasaki Motors Manufacturing Corp.               | <b>23</b> UN-L Agricultural Research Division                        |
| <b>9</b> Kimmel Education Research Center (UN-L Extension) | <b>24</b> UN-L Mid-American Transportation Center                    |
| <b>10</b> Li-Cor Biosciences                               | <b>25</b> UN-L: ARS  |
| <b>11</b> MDS Pharma Sciences                              | <b>26</b> UN-L: CALMIT   |
| <b>12</b> MegaBase Research                                | <b>27</b> UN-L: Center for Communication & Information Science       |
| <b>13</b> Merial   | <b>28</b> UN-L: Innovation Campus                                    |
| <b>14</b> Molex, Inc.                                      | <b>29</b> UN-L: Technology Park                                      |
| <b>15</b> Nature Technology                                | <b>30</b> UNL: Center for ElectroOptics                              |
|  | <b>31</b> USDA National AgroForestry Center                          |

# OVERALL FINDINGS

## LEADERSHIP GROUPS

The Greater Lincoln Region features a number of regional and county economic development organizations, workforce groups, and business coalitions, all of which are actively promoting economic objectives – and doing so collaboratively in some cases. See Report #1 for additional description of these organizations.

### Leadership Organizations

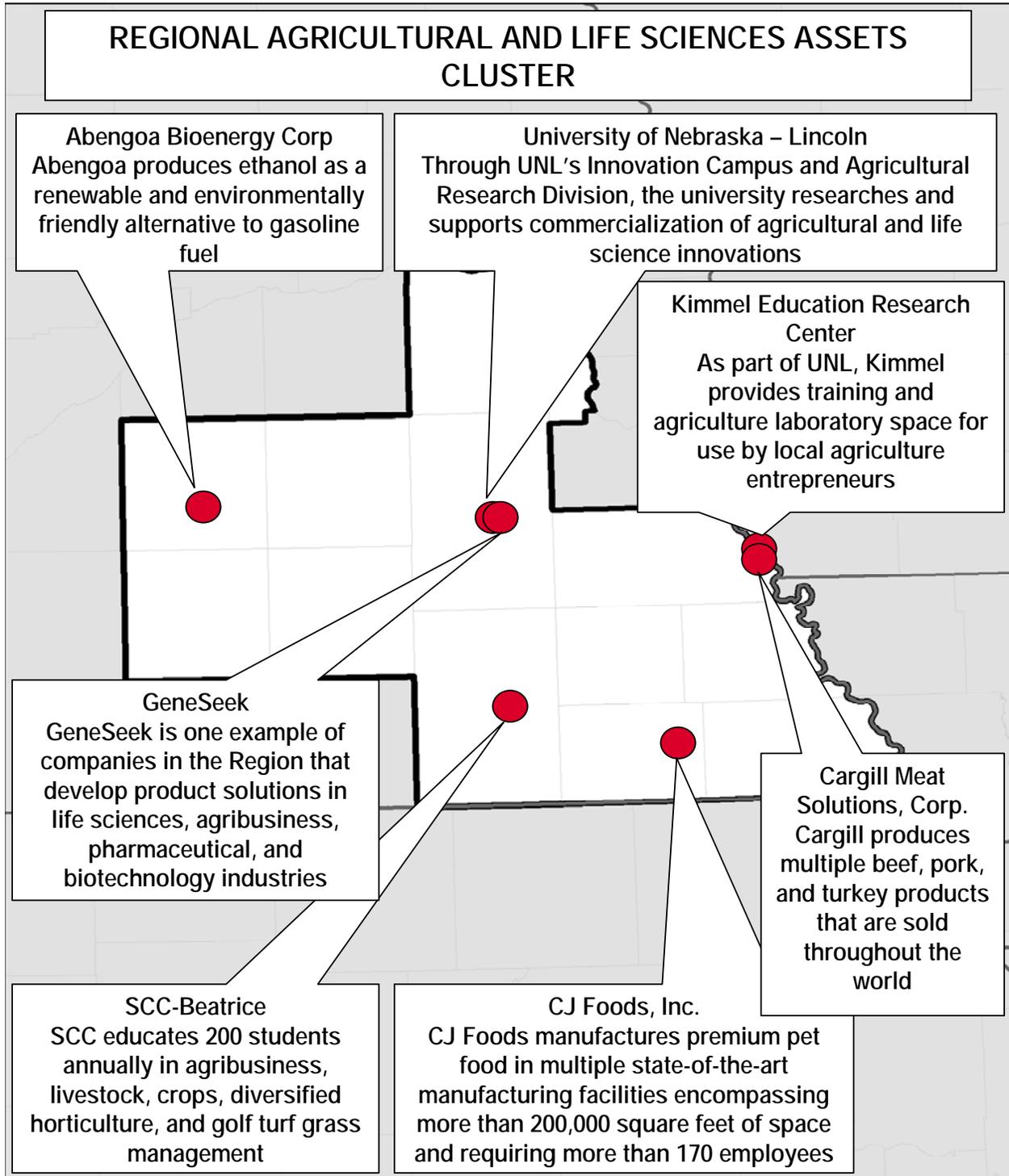


- |           |  |           |   |
|-----------|--|-----------|---|
| <b>1</b>  | Auburn Chamber of Commerce                                 | <b>15</b> | Lincoln Partnership for Economic Development                            |
| <b>2</b>  | Auburn Development Council                                 | <b>16</b> | Main Street Beatrice  |
| <b>3</b>  | Beatrice Area Chamber of Commerce                          | <b>17</b> | Nebraska Public Power District-Economic Dev Division                    |
| <b>4</b>  | Black Hills Energy   | <b>18</b> | Nemaha County Development Alliance                                      |
| <b>5</b>  | Falls City EDGE  | <b>19</b> | Pawnee City Development Corporation & Pawnee County Promotional Network |
| <b>6</b>  | Fillmore County Dev Corporation                            | <b>20</b> | River County EDC  |
| <b>7</b>  | Five Rivers Conservation & Development                     | <b>21</b> | Seward County Economic Development                                      |
| <b>8</b>  | Gage County Economic Development, Inc.                     | <b>22</b> | Southeast Nebraska Development District (regional)                      |
| <b>9</b>  | Greater Lincoln Workforce Investment Board/City of Lincoln | <b>23</b> | Southeast Partners for Progress (across 5 counties)                     |
| <b>10</b> | Greater Nebraska Workforce Investment Board                | <b>24</b> | Syracuse Area Economic Development Corp                                 |
| <b>11</b> | Johnson County E.D.  | <b>25</b> | Tecumseh Chamber  |
| <b>12</b> | Lincoln Area Development Partnership (LAD)                 | <b>26</b> | Tecumseh Economic Development   |
| <b>13</b> | Lincoln Chamber of Commerce                                | <b>27</b> | York County Development Corp  |
| <b>14</b> | Lincoln Electric System                                    |           |   |

## OVERALL FINDINGS

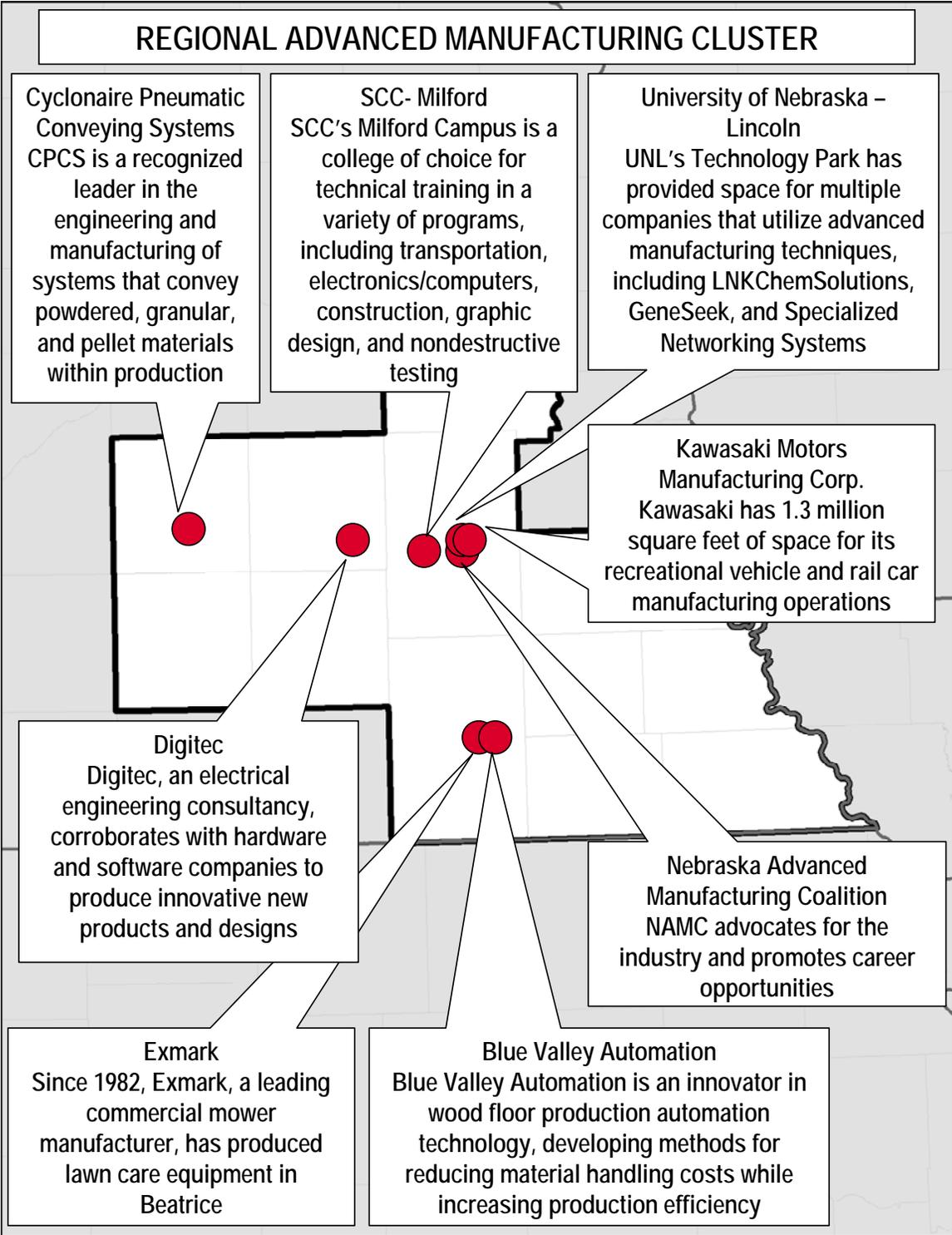
### SECTOR-SPECIFIC MAPS

For two industries, AE has provided maps that identify assets supporting the development of a specific industry cluster. These maps were prepared for Agricultural and Life Science and Information Technology/Advanced Manufacturing because as growing sectors, their specific RIG Region assets have not been as clearly defined. Although not exhaustive, this information is intended to highlight the regional nature of these industries – and thus provide additional justification for cross-regional collaboration.



# OVERALL FINDINGS

Across the region a number of advanced innovative manufacturing firms exist that are supported by key higher education and training programs. Opportunities may exist for better connecting these firms and initiatives.



# OVERALL FINDINGS

## OVERALL FINDINGS

Revisiting the underlying issues identified in the first report (e.g. flattening wages, slow educational attainment growth, and weak innovation indicators), *The Greater Lincoln Region Economic Scan*, and the specific workforce issues presented in this report, we have identified series of critical issues that will serve as the basis for the strategic plan. These are a summary of issues identified in the first report, the occupational findings here, and review of assets and potential gaps.

### EDUCATION/WORKFORCE DEVELOPMENT

#### **K-12 not an active component of regional economic development**

The slow growth of an educated workforce is a concern for the region. This indicates a trend of high school graduates directly entering the workforce (likely through lower-wage manufacturing, agriculture, or service jobs) and/or college graduates relocating to other regions they perceive to have additional amenities and higher wage job opportunities. As this report highlights, engineering talent (mechanical, software) is underrepresented in the region but greatly in demand across target industries. This base of highly skilled students is critical to positioning the region to ultimately “move up the value chain” into higher-growth, more technology-based, and higher wage industry opportunities – and it starts with a strong K-12 system.

While research shows strong K-12 systems across the region, early education must do more than simply turn out smart students – they must make students aware of career opportunities that are specific to the region. SCC (often through “Focus” career academy programs) is actively engaged in regional K-12 skill development initiatives across a number of different industry sectors. Ensuring these initiatives are more widespread, tied to emerging regional target industry areas, and connected to other planned efforts (e.g. career academies being planned currently in Nebraska City) will maximize resources. In addition, economic developers and school systems (K-12) in the region can do more to integrate science and math disciplines into curriculum to further build a “home grown” technically-skilled pipeline of talent.

#### **The workforce system can be more unified and further aligned to target industries and emerging occupations**

While the region benefits from a strong network of two- and four-year higher education institutions with a mix of program offerings, there may be an opportunity to leverage these assets to develop a more unified ‘system’ that anticipates and effectively responds to existing and future industry needs across the region. While articulation agreements between some of these schools exist more enhanced integration may be appropriate especially as emerging target industry clusters (with new occupational requirements) are identified.

- SE NE In-Demand Occupations  
& Difficult to Fill**

  - Software engineers, systems analysts
  - Computer programmers
    - Systems analysts
  - First-line supervisors
    - RNs/LPNs
  - Health care support
  - Mechanical engineers

AngelouEconomics survey

In addition, while higher education institutions in the region appear to have a mix of program offerings that indicates a responsive system to the target industries, the challenge will remain in ensuring there are enough graduates of these important programs to meet anticipated demand in growing (health care) and emerging (biotechnology, IT/creative industries, renewable energy) industries. In addition to the importance of educated workers, workers with at least some industry experience will continue to be demanded across the region and across industries.

#### **Responsive community college system but limited capacity for meeting customized training demand**

The Southeast Community College system has an exceptional reputation for meeting academic needs in the region but may need to do more to reach directly to the regional business community to understand customized training needs and to articulate SCC existing training capabilities. SCC customized training programs appear well linked to dominant and/or growing industries regionally (e.g. health care, financial services, component manufacturing).

## OVERALL FINDINGS

However, SCC does not currently have the resources to conduct additional and targeted outreach necessary to enhance enrollment and ultimately serve more employers, especially those that have accessed state incumbent worker training dollars.

### Improving regional hiring efforts through cross-institutions collaboration

In addition to coordinated academic programming and job training, the region's institutions can do more to connect to employers for their *hiring* needs. Across industries, employers mentioned their reliance on UN-L and SCC for finding qualified workers. However, a majority believe a much stronger connection and more seamless path can be developed between institution career service offices and employers. In addition, while Peru State, Concordia, and other institutions throughout the region appear to offer a strong set of applicable academic programs, many of the larger higher-growth employers within the Lincoln MSA admitted a limited awareness of these schools' potential for providing highly skilled talent specific to these industry needs.

## ENTREPRENEURSHIP/INNOVATION

### Entrepreneurship support needs to be targeted and strengthened

Relative to the rest of the nation, the Greater Lincoln Region faces significant challenges in commercializing innovation that occurs within the area. With limited funding and patenting activity, there is little innovation being captured by the region, impacting regional economic development efforts (Nebraska ranks 49<sup>th</sup> in a recent Kauffman Foundation study of national venture capital funding availability and). This is a critical challenge for the region as emerging technology start-ups are increasingly capital-intensive relying heavily upon VC firms, angel networks, or foundations to bridge the gap between an idea and traditional financing.

AngelouEconomics sees issues in three broad "Innovation" areas:

- **Support for "High tech" entrepreneurs** (limited early-stage and later-stage capital, networking opportunities, lab space, and investor "expertise" of the specific technology innovations in the area)
- **Support for "Lifestyle" entrepreneurs** (an existing difficult maze of resources to navigate and limited mentoring opportunities)
- **Tech Transfer/Commercialization** (companies, especially those in more rural areas of region are not aware of innovations that are occurring through the University's research programs that have potential applications for their own product lines.

### "High Technology" entrepreneurs

There is sentiment in the region that leadership around these issues is gaining momentum. However, the funding has just not been generated (an issue that has been accentuated during this recent recessionary period). Several specific challenges were identified as causes for why there has been limited commercialization of new products and why high-tech entrepreneurs often leave the region:

- Angel networks, like Nebraska Angels, that typically provide early-stage equity are newly formed and it will take several more years for investments to show returns.
- Venture capital – critical to take companies to mid and later stages – is invested sporadically and in limited amounts. Anecdotal evidence shows that when companies within the region reach a certain growth stage they tend to move elsewhere where VC funding is more abundant and accessible.
- There is limited regional and statewide support for small business and entrepreneurship programs (504 loan programs, SBIR) that provide businesses with research and development support and long-term financing for fixed assets.

## OVERALL FINDINGS

- Very few opportunities exist for regional innovators to network with potential investors within the region increasing exposure of new ideas.
- Regional investors/VC/Angel networks do not have a full understanding of the scientific fields that are emerging in the Greater Lincoln region. Thus a majority of funded projects are more retail-based.
- No formal investment fund exists with experienced early-stage fund manager. This is in order to have the predictability of dedicated funds and the decision making of an expert who can more accurately assess risk and potential for success in more technical areas such as software or biotechnology.

### Lifestyle entrepreneurs

There is no lack of individual entrepreneurial and small business support programs throughout southeast Nebraska. However, stakeholders overwhelmingly agree that more can be done to connect these initiatives and provide aspiring entrepreneurs (especially in the rural areas) an easier way to navigate through regional and statewide support resources to successfully develop and launch businesses. Specific issues include:

- Need for a single-source contact and/or portal that serves entrepreneurs regionally in their efforts to navigate through regional and statewide programs.
- Greater connectivity between SBDCs, I2E Clubs, and EDGE programs.
- Outside of the SCC incubator space in Lincoln (which currently has a waiting list), there is limited space (with the appropriate services) for lifestyle entrepreneurs to establish and grow a business. Any additional incubation or acceleration efforts must also be tied directly to emerging high-growth industry sectors (e.g. food, agriculture, life sciences, etc).
- SCC has done an excellent job of integrating entrepreneurial applications into its core curriculum efforts as a means to provide all students with an entrepreneurial background. Many stakeholders identified a need for the UN-L to expand in this direction as well (moving beyond a silo-ed Center for Entrepreneurship, and making it an essential element of all students' education.

## TECHNOLOGY TRANSFER/COMMERCIALIZATION

### **Innovation Campus research targets must be aligned to economic development industry targets**

The UN-L Innovation Campus presents a great opportunity to encourage private entrepreneurs to work with research faculty and expand economic development throughout the region. While planning for this campus is still underway, that effort should inform and be informed by this RIG workforce development plan. It appears core UN-L research competencies will be focused upon food, animal health, and water resources. These are closely tied to regional economic development industry targets identified in this report.

It also appears that Innovation Campus, in part because of its planned proximity, will become an integral part of university "campus life." Efforts to generate awareness of the Innovation Campus core research competencies and to connect researchers to economic development support resources (e.g. financing, technical assistance, etc.) will be critical. In a 2006 report, AngelouEconomics identified under-funding and awareness were two critical issues faced by the university's existing Technology Park.

### **UN-L research "outcomes" must be directly tied to regional economic development**

As Innovation Campus and other UN-L research facilities develop, there may be an opportunity to more robustly tie to job and business development in counties outside of Lancaster. During interviews, outlying counties expressed a disconnect with UN-L from an economic development perspective. This was most often characterized as a lack of awareness of innovations emerging from the university that may have applications for regional firms (i.e. encouraging higher value-add production). As R&D and technology transfer becomes more of a focal point for the university,

## OVERALL FINDINGS

outlying counties may benefit from gaining a more clear understanding of the match between regional business' core competencies and innovations that are available for licensing.

### REGIONALISM/ECONOMIC DEVELOPMENT

**Region is at a disadvantage in attracting new corporate locates because "regionalism" thinking only at nascent stages**

As identified in the first report, by and large, stakeholders across the region recognized that while "regionalism" is endorsed as a concept, public officials still need convincing that, in operation, it can generate an actual return on investment.

While individual county economic development initiatives will continue to be important, the current county-by-county business attraction efforts (i.e. responding separately to NDED leads and RFPs) present a major challenge to potential new businesses seeking regionally consistent information and a single-point-of contact.

Many of the EDOs throughout the region are engaged in very similar core functions ('place' marketing, business retention, and facilitating local action around entrepreneurship, physical infrastructure improvements, and workforce development issues). While LAD is serving some of this role, it is, at his point, an informal collaboration of interested parties engaged in joint marketing efforts. There is no accountable coordinating regional entity serving all 12-counties. Thus, the region still suffers from a limited understanding of region-wide data, sites, or assets; uncoordinated business attraction efforts (which still largely occur on a county-by-county basis); and unnecessary and even inadvertent in-region competition.

# GREATER LINCOLN RIG STRATEGIC ACTION PLAN

### GOAL 1: ENHANCE THE PIPELINE OF SKILLED WORKERS AND BECOME A TALENT MAGNET

While the region, as a whole, benefits from a young and educated workforce today, the slow growth of those with college degrees (especially in rural areas) indicates a trend of high school graduates directly entering the workforce (likely through farming or manufacturing jobs) and/or college graduates relocating to other areas they perceive to have additional amenities and higher wage job opportunities. As the region grows and pursues target industries that require a workforce with high-value science and technology-based skills, it must cultivate this talent from within, from an early age. K-12 systems across the region play a critical part in economic development – not only ensuring that students achieve academically at the highest levels but that students of all levels are aware of career opportunities that are specific to this region.

One overarching recommendation for the region is to formally support the Nebraska P-16 Initiative that is dedicated to enhancing K-12 initiatives statewide (and that touches on a number of these issues).

#### **Recommendation 1.1: Increase the number of students who pursue science, technology, engineering and math studies through the expansion of Project Lead the Way and formation of other STEM programs**

Integrating science, technology, engineering, and math (STEM) fields into early education will be critical for ultimately strengthening the region's workforce into a greater asset. The region should work with K-12 systems to expand the use of Project Lead the Way programs (into school districts outside of Lincoln) and conduct STEM outreach efforts, including promotional events for middle/high school students (as a way to make science, technology engineering and math exciting for young students). In competitor communities, EDOs and chambers of commerce are facilitating these types of events, while local/regional WIBs and higher education institutions are active partners in planning these efforts and promoting area education and training programs that align to STEM principles. See <http://www.edvention.org/> for an example of a Dayton, OH transformative regional STEM initiative.

#### **Action Items:**

- LPED/LAD/WIBs should bring Project Lead the Way (with UN-L advisors) for an information session presentation to better understand the project and see where benefits can be reached.
- Work with individual K-12 systems to promote the Project Lead the Way program.
- Consider convening government, school district, postsecondary, workforce system, and industry representatives to develop a Communications Campaign to raise awareness of STEM programs and degrees
- Communicate STEM careers to teachers, students, parents, through written materials
- Map STEM program funding flows (federal agencies, foundations, etc) and engage national associations like ASME, IEE, ASCE, Sloan Foundation, etc. to identify engineering entrepreneurial grant funding opportunities.
- Host periodic "STEM Summits" of businesses and regional middle/high school students highlighting regional careers that involve STEM skills. Summit should include hands-on, interactive exhibits by businesses promoting these careers.

## GREATER LINCOLN RIG ACTION PLAN

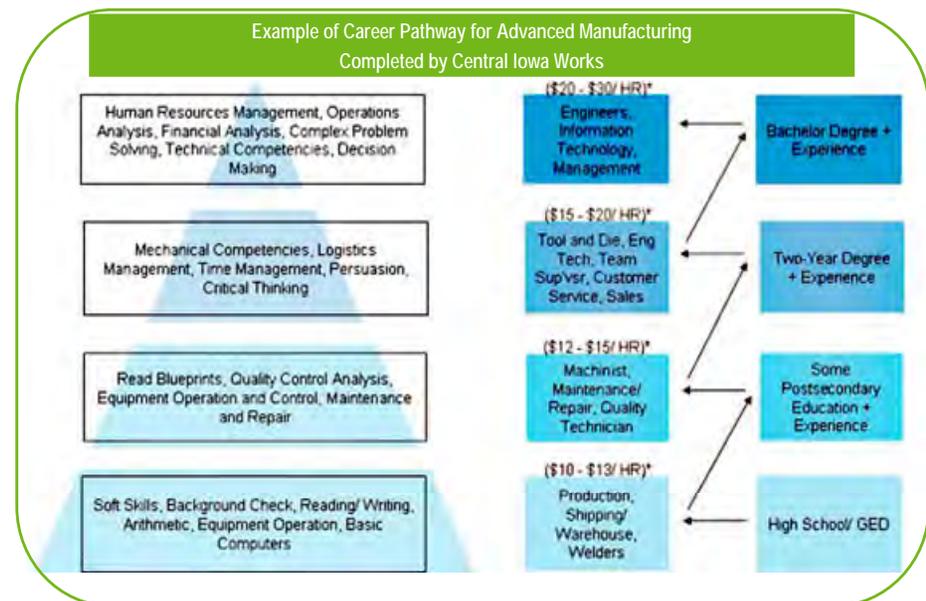
- Consider developing improved professional development programs to help teachers already in the field develop new skills and depth of understanding in science and math.
- Consider the development of scholarship opportunities for students who pursue STEM degrees regionally.

### Recommendation 1.2: Develop career pathways and align them with region's target industry sectors

A career pathway is a series of connected education and training programs and student support services that enable individuals to secure a job or advance in a demand industry or occupation. They focus on easing and facilitating student transition from high school to community college; from pre-college courses to credit postsecondary programs; and from community college to university or employment. The region has not utilized these tools to date, but should design clear pathways (with accompanying promotional material) for the emerging and growing biotechnology (bio-ag), health services, and information technology sectors that the region will pursue in the coming years. These pathways should then be articulated to regional high schools to generate interest in existing 2- and 4-year higher education programs in these areas.

#### Action Items:

- Using occupations identified in the Asset Map report, validate amongst coalition of SCC, WIBs, education, economic development, employer, and labor groups in the region.
- Form an industry-workforce development coalition to map the requirements of entry and advancement at successive levels in fields in select target industry sectors.
- See <http://www.centraliowaworks.org/> and <http://www.workforcestrategy.org/toolkit/bysection/27/> for examples of career pathways initiative and end products.



### Recommendation 1.3: Expand Southeast Community College career academy programs (Focus Programs) to increase career awareness opportunities in target industry areas

Within the RIG region, SCC has developed important Focus Programs in health care, business services, and manufacturing. These programs prepare students to successfully advance from high school through post-secondary education into high-tech, high-wage careers, by providing hands-on learning opportunities while students receive academic credit. These are effective programs that need to be expanded regionally with additional articulation agreements and a greater connection to regional target industries. Potential Focus Program impact areas could be: transportation/advanced logistics, food

## GREATER LINCOLN RIG ACTION PLAN

science, and “creative” industries (i.e. design, media, arts). These programs (existing and new) also need to be better promoted within middle and high schools.

### Action Items:

- Inventory existing career academy programs throughout the region and identify potential target industry gaps.
- Explore the formation of a SCC-led career academy “working group” to develop a regional action plan (include outlying RIG counties as some are already attempting to develop their own academies).
- Identify sequential courses of study and design skill standards specific to the target industries.
- Delineate skill standards specific to the industry.
- Consider focusing on a transportation/advanced logistics academy where it appears a regional need has not been met.
- WIBs and Chambers/EDOs should promote these programs in middle schools.

### **Recommendation 1.4: Create more career awareness of target industry occupations through internship; externship; and other event programs**

One of the biggest concerns identified by higher-tech and advanced manufacturing firms in the region is a lack of awareness of existing firms and specific job opening and career opportunities within the region (on the part of K-16 students as well as educators). The region must do a better job in profiling these companies and employment opportunities matching them with students and graduates.

In addition, career service offices at both 2- and 4-year institutions in the region should create stronger internship/externship programmatic ties to existing businesses within the area. This includes more aggressive outreach from non-metro schools (e.g. Concordia, Peru State, etc.) to the Lincoln Chamber of Commerce/LPED and other industry groups about their existing student capabilities and skill sets.

### Action Items:

- Educate career service advisors throughout the region on target industries and specific career opportunities to help steer student focus to target industry areas
- Expand career events on campuses
- Ensure all EDOs, chambers, and industry groups throughout the region are connected to [www.Lincolnjobs.com](http://www.Lincolnjobs.com).

## ***LONGER-TERM***

### **Recommendation 1.5: Develop a Talent Attraction/Retention campaign**

Communities including Austin and Boise have successfully recruited young professionals, entrepreneurs, and high impact start-ups from higher cost locations, particularly those on the West Coast. The Greater Lincoln region has the opportunity to do the same and recruit individual entrepreneurs and recent college graduates that will bring an infusion of capital, talent, and higher wages to the region. While the region needs to continue to focus on

## GREATER LINCOLN RIG ACTION PLAN

enhancing certain quality of life amenities (i.e. downtown revitalization, additional urban housing options), the area's lower cost of living and steady performance in the midst of the current national recession should be attractive to workers in higher cost locations and those in communities with unemployment rates above 10 percent. With the appropriate resources, a campaign would include regional promotional material and a recruiting presence at statewide, mega-regional and national events, including college/job fairs and young professionals forums; and an online presence with SCC, UN-L, and other institutions' alumni networks.

### Action Items:

- Develop collateral and coordinated outreach campaigns (at targeted job/career events) designed to attract professionals in priority skill categories to the region.
- Utilize regional business leaders' and postsecondary alumni's social and professional networks in the recruitment process.
- Host events in out-of-market priority areas promoting the advantages of living in the region.
- Use the Lincoln and other regional Young Professionals groups to host and recruit priority prospects for regional employers.
- Create a regional economic development Facebook page designed to highlight key cultural events and new firm expansions and openings.

### GOAL 2: BETTER INTEGRATE ECONOMIC AND WORKFORCE DEVELOPMENT

The asset mapping exercise identified a number of occupational competency shortages in targeted industry sectors within the region (nurses, engineers, computer programmers, sales agents, etc.). The region must ensure that current firms have the qualified and skilled people they need to grow *now*. First and foremost this means a stronger and more “demand-driven” workforce system where the region’s post-secondary institutions and job training programs are more closely aligned with employer needs.

#### **Recommendation 2.1: Align workforce “system” and job training areas with target industries**

Currently, SCC academic/training programs and WIB-directed training opportunities are loosely based on industry clusters. These entities (and other regional schools) should review industries and occupations identified in the AngelouEconomics Report #2 and prioritize around these areas. Associates and Bachelors and non-credit programs in nursing, engineering technician, and specialized offerings in bioinformatics, and plant science are areas that regional economic developers and employers identified as growing areas that they will be pursuing. In addition, the report also identified an opportunity, across industries, to better integrate technology and management applications into science curriculum (and vice versa) to ensure that technical workers are trained to perform effectively (an increasingly common regional concern).

More can be done to meet immediate occupational demand within the target industries and even small programmatic changes may help better align to the target industry areas. Given the largely unknown (i.e. renewable energy) and constantly evolving (i.e. biotechnology, agribusiness, logistics, IT) industries, the workforce system’s value is its ability to ascertain the specific future hiring expectations (demand) regionally in these sectors, help to identify post-secondary program gaps, and then leverage best practices from across the country to build specific short-term certification and longer-term programming. The region should build off of the AngelouEconomics report to further inventory a list of regional job training programs and resources and identify specific programmatic gaps to be addressed.

Successfully building target clusters for the region will also mean more than the silo-ed development of a short-term training program or two but a collaborative review of an array of core curricular competencies that could apply across the spectrum of target industry jobs.

#### **Action Items:**

- Ensure target industries are officially adopted by the two regional WIBs as drivers of future job training programs.
- WIBs should consider “revamping” board membership to reflect new target industry opportunities.
- SCC should review the documented “in-demand” occupations and competencies (as identified through this project) and share with existing business curriculum advisory committees.
- Post-secondary institutions should consider adding a broader range of degree/certificate options for Logistics (AA with certificate up to Ph. D programs).

## GREATER LINCOLN RIG ACTION PLAN

- Institutions should also consider adding new renewable energy degree/certificate options specific to this region (e.g. wind or biofuel technician programming) in preparation for anticipated demand and in connection with new Innovation Campus focus areas.
- Post specific target industry information on workforce system websites.

### **Recommendation 2.2: Enhance community college outreach to employers through enhanced single-point-of-contact efforts for customized training services**

SCC has an exceptional reputation for meeting academic needs in the region but may need to do more to reach directly to the regional business community to respond to workforce training needs and to articulate SCC existing training capabilities. SCC should increase efforts to create a centralized "command system" for employers seeking customized training support where employers have one central place/person to access information. In conjunction, SCC should focus resources on conducting more aggressive marketing of SCC programs to employers (through LCOC/LPED/LAD if appropriate) and available state incumbent worker training dollars through the employment of trained sales representatives.

#### **Action Items:**

- Create a direct "Employer" or "Training Development" link on the SCC homepage highlighting business services and directing them to specific contacts.
- Highlight employer customized training "success stories" on the SCC webpage.
- SCC should work with LPED and other regional EDOs to identify a list of priority firms (by target sector, growth trajectory, information gleaned from EDO business visits, etc.) to follow up with with regard to job training needs.
- SCC should expand staff/resources where necessary to conduct appropriate industry outreach.

### **Recommendation 2.3: Expand distance education opportunities including mobile training labs**

The region's higher education institutions (Peru State, SCC, among others) are increasingly placing focus on distance education opportunities (particularly important for engaging the rural workforce). They are now viewed as significant best practices in part because of the highly technical programs (e.g. nursing) that they effectively offer in this capacity. The region needs to aggressively promote these programs while expanding offerings into other target industry areas.

The region, through SCC, may also explore the re-generation of its mobile training lab program. SCC has previously provided on-site nursing training in different rural communities throughout southeast NE. Similar programs in manufacturing or health services may be appropriate if communities/firms within the region can articulate a specific need.

#### **Action Items:**

## GREATER LINCOLN RIG ACTION PLAN

- SCC and a coalition of regional higher education institutions should inventory distance education programs and identify potential gap areas (using target industries and aligned occupations as a guide).
- The region should consider a prospective student survey to identify potential demand for future distance education programs.
- Develop mix of fully online, hybrid, or telecourses.
- Work with EDOs and WIBs to promote these programs in high schools and through other avenues.
- Individual EDOs, through their current business retention programs, should identify potential incumbent worker training needs – and, through LAD, communicate regional “clusters” of training needs (i.e. specific manufacturing, nursing, etc) to SCC.

### **Recommendation 2.4: Expand regional labor market data and analyses**

For higher education and job training programs in the region to effectively respond to target industry workforce needs the assessment must be driven by comprehensive labor market data. A clear picture of the current workforce, labor supply and quality and unmet training needs will help the region articulate employer needs, resulting in programs that align to those jobs most in demand.

#### **Action Items:**

- Working with Nebraska Workforce Development or UN-L’s Bureau of Business Research, the region should perform annual labor market data collection to understand key industry, occupation, and skill trends on a region-wide basis.
- Similarly, to best help those regional workers who have been impacted by recent layoffs or closures, the region should perform an in-depth study of existing and transferable skill opportunities. In Report #2, AngelouEconomics initiated this process identifying skill similarities in manufacturing and emerging logistics and renewable energy industry sectors. If the region is going to be successful in securing current federal grant dollars for retraining opportunities it will need to make a clear connection between skill/competency needs and supply.

### **Recommendation 2.5: Host periodic Regional State of the Workforce event**

Building on the success of LCOC’s/LPED’s 2009 regional workforce forum, the region should conduct a periodic regional State of the Workforce (not necessarily lead by LPED) event to unveil key labor market trends, discuss critical issues, share best practices, and update stakeholders on ongoing regional efforts and accomplishments.

#### **Action Items:**

- Each event may focus on a specific issue, either by sector (i.e. health services and occupational needs) or issue area (i.e. engaging K-12 systems in economic development, entrepreneurship, etc.).
- The event can also serve as a critical strategic planning forum for regional leaders where economic developers across counties highlight new and emerging industry opportunities to be explored in the coming year, while workforce developers showcase new training programs and opportunities.
- In addition to sessions, consider incorporating an awards program and an end-of event planning session with key stakeholders regarding new programs to be developed/refined in the upcoming year.

### **Recommendation 2.6: Develop regional industry roundtables to better understand employer workforce needs**

The success of all of the strategies above depends significantly on robust employer input and engagement. The region should develop a network of regional business roundtables and/or industry sector groups that help to improve the business climate in the region and serve as forums for business and economic leaders to impact issues affecting business and job growth. For a region this size, it has very few organized industry groups discussing these issues. The value of creating these organized consortium is threefold: 1) for the region to better understand employer needs so that when new job training dollars come available (e.g. ARRA funding), regional service providers can develop pilot programs and grant proposals quickly and with strong employer buy-in; 2) to customize training programs for new workers and seek to solve incumbent worker training needs; and 3) the region needs a private-sector-driven group that can monitor state and regional educational policy issues and galvanize support when needed (e.g. ensuring sound fiscal support for Nebraska post-secondary institutions, state job training funds, etc).

Strengthened regional Workforce Investment Boards (See Strategy 6.2) could play this role through sector subcommittees where private sector board members identify key managerial and HR representatives to participate in periodic organized roundtable discussions.

#### **Action Items:**

- Identify groups of interested private sector HR professionals or executives (begin with WIB members, SCC industry advisory councils, and respondents of RIG project surveys – many of whom self-identified themselves).
- Create roundtables by target industry sector and articulate a “value proposition” for members, developing a set of roundtable objectives.
- These groups can be “ad-hoc” groups (vs. standing committees) coming together when needed and can work in conjunction with SCC existing industry advisory councils, WIBs, etc.
- Use Lincoln-based health care group (pulled together in winter of 2009 to develop U.S. Department of Labor job training grant) as a pilot roundtable.

### ***LONGER-TERM***

#### **Recommendation 2.7: Develop an Advanced Manufacturing Center of Excellence**

The Nebraska Center for Excellence in Electronics (NCEE) has been an important program for the region meeting an industry need for training, product development, and prototype testing. While the downturn in the technology sector has impacted this facility, it remains profitable and has no doubt positioned the region as a significant hub for the industry. Building on the public-private partnership success behind the NCEE, a similar “Center of Excellence” should be explored as a means to recruit companies and talent to the region, and provide support for entrepreneurship and innovation. A center of excellence in advanced manufacturing would be an ideal starting point as it capitalizes on the region’s existing strengths. Health services is also a sector that could be subsequently served once the model is assessed and refined.

### GOAL 3: EXPAND RESOURCES TO FOSTER ENTREPRENEURSHIP

A critical aspect of sustainable economic competitiveness for the RIG region is building a strong support network that [provides aspiring entrepreneurs with the appropriate resources. This will help not only](#) attract and retain young educated workers but assist older dislocated workers – an increasingly critical target population.

With a number of promising small business development and entrepreneurial support initiatives already in place, the RIG region has a real opportunity to build on this foundation by connecting existing assets, taking them to scale, and ensuring they align to target industry opportunities. The following strategies describe a broad entrepreneurial initiative with three supporting pillars: 1) **information/technical assistance and training**; 2) **access to financial capital**; and 3) **access to social networks**. These components are essential for supporting the entrepreneurial cycle especially in a large and rural region where resources and connections are limited and a maze of service providers exists.

#### *INFORMATION/TECHNICAL ASSISTANCE AND TRAINING*

#### **Recommendation 3.1: Develop a regional entrepreneurship resource portal/clearinghouse**

As identified in earlier reports, there is not a shortage of entrepreneurial and small business services in the region, but rather no one recognizable ‘location’ to learn about upcoming events or access critical technical assistance or resources. The region should develop a clearinghouse for this information to help communities better connect to entrepreneurs and entrepreneurs to services. This can be especially useful as a tool to expose dislocated and rural workforce to new opportunities, train them in understanding the process, and, once an idea is formulated, position them to connect to capital and social networks.

A user-friendly web portal should be developed that includes an inventory of all regional entrepreneurial assets (venture capital firms, SBDCs, technology alliances, training programs, loan programs, funding sources, etc.) within the region. It can build off of some existing newer sites (developed through Nebraska EDGE, for example). The portal should be a virtual gateway (not a static inventory) that provides information and links aspiring entrepreneurs to service providers including coaches, mentors and partners based on need. The portal should serve as an online one-stop shop providing direct access to service providers that can help navigate local, state, and national systems. This initiative can also be expanded for more advanced entrepreneurs and small businesses to match them with larger corporations within the region who agree to become early trial adopters of the start-up company’s technology, product or service.

#### **Action Items:**

- Designate a lead regional entity to coordinate Greater Lincoln Region’s entrepreneurship activities.

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- Form regional work group of technical assistance experts (SBDCs, SCORE, I2E Clubs), chambers of commerce, banks, entrepreneurs, and other stakeholders to identify specific barriers to entrepreneurs and processes to resolve.
- Building off the RIG asset map, map specific entrepreneurial resources and funds-flow in the region (including states and federal sources). Identify grants (USDA Rural Business Opportunity or Rural Business Enterprise grants), sponsorships, in-kind donations, etc to initiate effort.
- Design a framework for the initiative and a funding strategy and short and long-term work plan for primary and supporting stakeholders.
- Build inventory/database and network of service providers (build off of existing LPED report).
- Identify information needs and requirements and develop an outline for the portal.
- Build capacity at SCC and other service providers to provide support, technical assistance, and training to aspiring entrepreneurs.
- Market the initiative region-wide.

### Recommendation 3.2: Better integrate entrepreneurship training into K-16 for students and teachers

SCC has done an excellent job of integrating entrepreneurial applications into its core curriculum efforts as a means of providing all students entrepreneurial fundamentals. Many stakeholders identified a need for UN-L and other regional institutions to expand in this direction as well (e.g. moving beyond a silo-ed UN-L Center for Entrepreneurship, and integrating these principles into wider curriculum). The region should also expand entrepreneurial programs at middle and high schools.

#### Action Items (programs to be initiated or expanded):

- **Regional business plan competitions** building off of existing county by county events and tying to the development of technologies that grow the region's target industry clusters of life sciences/food, logistics, and high tech manufacturing.
- **Expand the offering of entrepreneurial project initiatives** at middle and high schools, including training curriculum initiatives (see Jumpstart or FastTrac) that can be used to attain academic credit at one or more of the regional institutions. Once training is received, entrepreneurs can get referred to SCC Entrepreneurship Service Center or other SBDC for additional assistance.
- **Increase the number of students from around the region participating in the Entrepreneurship Focus Program.** The region should also expand elements from the Lincoln Public Schools/SCC E-Ship program throughout the region, including hosting summer entrepreneurial training programs for teachers, regionally, providing them with tools they can use in their own classrooms to encourage students with entrepreneurship interest.

**BEST PRACTICE: MyBiz: Entrepreneur SourceLink for Alabama and Mississippi**



MyBIZ is a comprehensive approach to connecting entrepreneurs and service providers in Alabama and Mississippi. Designed by eight community and junior colleges in East Mississippi and West Alabama (across 37 counties) and associated WIBs, the initiative includes:

- A resource partner database of entrepreneurial and small business development professionals who are to assist aspiring entrepreneurs through the process of developing ideas and accessing funding.
- A website that provides information about all regional enterprise development resources, training programs, and networking opportunities

Trained staff (which include staff from the junior and community colleges) are available to work on individual "cases" at no cost and provide a customized approach depending upon on the level of advancement of the entrepreneur or small business. The initiative features a standard set of processes, including intake, referral, and evaluation and is widely marketed externally so that entrepreneurs recognize a "single regional voice." The MyBiz model is based on KCSourceLink ([www.kcsourcelink.com](http://www.kcsourcelink.com)), an on-line one-stop shop for small businesses across an 18-county region that has been adopted in 12 regions and states across the country.

The next phase for the MyBiz initiative in Mississippi and Alabama includes a comprehensive training component where entrepreneurs will receive academic credit through the community college system for a series of business and specialized training courses. MyBiz partners are seeking current state stimulus funding (ITAs) to support this component

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### *ACCESS TO FINANCIAL CAPITAL AND PHYSICAL SPACE*

#### **Recommendation 3.3: Start an Entrepreneurial Capital Access Committee and establish a regional venture fund**

LPED has already developed a preliminary review of entrepreneurial capital access gaps in the Lincoln metro area. Using that information as a foundation, the region should develop a regional committee including local bankers, service providers, higher education leaders, and entrepreneurs, to explore gaps in financing for local entrepreneurs and frame recommendations on the best type of fund to build and in attracting capital. The region would be well served by a regional equity capital fund connected to the target industries; but it may also explore developing a revolving loan fund and an SBIR-matching program to provide small businesses (including those backed by VC firms) with research and development support and long-term financing for fixed assets - and attract and retain serial entrepreneurs.

This group should be informed by the statewide working group meeting now to address this issue (including UN-L, Nebraska Department of Economic Development, and the Omaha, Lincoln and state chambers).

#### **Action Items:**

- Building off of the existing statewide working group, develop a regional entrepreneurship committee and hold quarterly meetings about capital opportunities and educating community members about the venture funded startup cycle.
- Construct list of angel networks and VC firms that have funded projects within the Great Plains broken down by types of projects funded and dollar ranges.
- Inventory and create stronger linkage to federal grant opportunities that focus on the following targeted technologies (which include ties to “new” UN-L focus areas):
  - Advances in nanotechnology and information technology
  - Water resources and conservation
  - Biofuels
  - Plant science (e.g. genomics, nutraceuticals, etc.)
- Improve access to early-stage venture capital and other funding resources by promoting the existing angel investor network in the region, working with the region’s banks to market existing regional loan programs, providing banks with resources that educate them on the best way to support small/start up companies, and working to mobilize the state to expand early-stage venture capital funds and high-growth “gazelle firm” funding.

#### **Recommendation 3.4: Expand upon existing VC and angel network and ensure investors understand target industry innovation potential**

The region should expand its risk capital network strengthening linkages between Lincoln and Omaha. Omaha-based investors need to know more about the innovative research and product ideas emerging in southeast Nebraska and vice versa.

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In addition, because regional VCs and angel investors often do not have technical backgrounds, they can not always accurately assess risk and potential for success in more technical areas emerging in the Greater Lincoln region (e.g. software, bio-agriculture, renewable energy). As a result, a majority of currently-funded projects in the region are more retail-based.

### Action Items:

- Expand upon existing VC/angel investor network strengthening linkages between Lincoln and Omaha. Invite outside VCs into Lincoln for formalized meetings and tours.
- Host a regional venture capital forum to introduce angel networks and VC firms from throughout the region to local businesses and entrepreneurs.
- Tie existing angel networks into target industry areas.
- Ensure all EDOs are sharing information on national SBIR/STTR funding available to local small businesses and aspiring entrepreneurs.

### ACCESS TO SOCIAL NETWORKS

#### Recommendation 3.5: Enhance networking opportunities and regionalize existing initiatives

The region should host a series of networking and technical assistance events for regional entrepreneurs and new business start-ups. In addition to networking with potential investors and/or panel discussions, effective entrepreneurial events such as these also include brief specialized one-on-one business counseling to determine “common needs” to be communicated to local service providers in an effort to provide customized assistance.

As part of this effort, the region should document all existing entrepreneurial and small business programs (i.e. SBDCs, I2E Clubs, EDGE programs, business plan competitions, etc.), develop a master entrepreneurship calendar and identify ways to better connect these networking groups by identifying synergies and business opportunities. In addition, these grassroots clubs should be educated about the new target industry opportunities and potential entrepreneurship opportunities.

### Action Items:

- Inventory existing small business and entrepreneurial networking programs throughout the region.
- Develop master regional entrepreneurship calendar of events and promote on regional websites.
- Hold periodic regional entrepreneurial networking events, connecting these groups together periodically to identify synergies and business opportunities.
- Create a social network of I2E club members using Facebook or other service.
- Disseminate target industry information (e.g. niche sectors and their workforce and technology requirements, etc.) to I2E club members.

#### Best Practice: Iowa's Entre-Bashes

Across Iowa, economic development corporations have teamed up with the University of Northern Iowa to host “EntreBashes” networking events. These are more than just meet and greets but organized opportunities for small-business owners and aspiring entrepreneurs to showcase their business/propositions and speak directly with trained business advisors. Advisors will provide referrals to individuals and organizations for assistance with obtaining financing, increasing sales, doing business on the Web, market research, finding new markets and other business services. The events are organized in a way to serve both ‘interested entrepreneurs’ who have an idea but no business plan and ‘later-stage entrepreneurs’ who need financing and critical exposure.

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- Use groups as venues to unveil entrepreneurial portal (see Strategy 3.1)
- Explore state (NDED) cost-sharing partnership for I2E club operational costs. Other states are beginning to financially support these types of networking clubs.

### **Recommendation 3.6: Promote start-up successes and create image as regional entrepreneurial & innovation hub**

Before start-up businesses can flourish in the region, the community must embrace entrepreneurship's essential role in economic development. Creating an innovation culture requires that innovation be a shared value of the region.

#### **Action Items:**

- The region should strengthen the regional entrepreneurship brand by communicating, via the LAD website and other avenues, important assets in place in the region (high education attainment rates, proximity to research and lab space at UN-L, UN-L's Raikes School, existing VC firms and angel network, SCC incubator space, etc).
- The region should frequently communicate/profile entrepreneurship success stories within the region.
- Develop region-wide "awards" program to recognize notable small business and entrepreneurial achievements.
- Local chambers, EDOs should consider an internal marketing effort aimed at educating the community about entrepreneurship, encouraging members to participate in I2E Clubs, regional business plan competitions, etc.

### ***LONGER-TERM***

#### **Recommendation 3.7: Expand existing incubation efforts into bio-ag-based ventures**

Incubator space that provides collaborative and synergistic environments for emerging growth companies is critical for economic growth and innovation. Outside of the SCC incubator space in Lincoln (which currently has a waiting list), there is limited space with the appropriate services for entrepreneurs to establish and grow a business. The region should consider an additional incubator space possibly tied to food processing and science – leveraging existing regional industry strengths.

In addition, as UN-L and community stakeholders consider developing an incubator facility within Innovation Campus, they must leverage incubation efforts occurring at the University Tech Park, which is likely to be significantly scaling back operations shortly. The region should incorporate lessons learned from previous UN-L Tech Park studies (lack of facilities promotion, limited financial support) into new Campus plans.

### GOAL 4: INTEGRATE ECONOMIC DEVELOPMENT AND TECHNOLOGY TRANSFER

With the prospect of Innovation Campus and a strengthened university technology transfer office (NuTech Ventures), the Greater Lincoln RIG Region has a real opportunity to create collaboration between entrepreneurs and life science and information technology researchers to spur new technologies – and establish the region as a hub for innovation. Importantly, it appears core UN-L research competencies at Innovation Campus will be focused upon food, animal health, and water resources – closely tied to regional economic development industry targets identified through this project. As the region moves to target higher-tech and R&D-based firms to locate to the area, collaboration between UN-L and LPED (and other EDOs) will be crucial to ensure that university contributions in terms of talent, research, and spending are coordinated with larger regional efforts.

#### **Recommendation 4.1: Strengthen UN-L/LPED/LAD/Industry partnerships**

At the broadest level, a strong university/economic development group partnership should be formed. UN-L must keep LPED/LAD aware of critical research projects; and LPED/LAD need to ensure that up-to-date knowledge of research focus areas and development projects are integrated into regional Business Retention/Expansion and recruitment efforts. LPED/LAD and UN-L (and SCC and other area postsecondary institutions) should convene periodically to discuss ways in which public/private partnerships can be developed to:

- Increase research commercialization
- Support entrepreneurship
- Enhance industry-specific degree and training programs
- Support supplier development
- Enrich and better communicate the quality of life benefits these institutions offer the community
- Support appropriate resources for local universities and community colleges

In addition, as Innovation Campus develops, statewide industry associations like Bio-Nebraska Life Sciences Association can be a critical supporting forum, providing technical expertise and promoting the industry nationally. Interviewees described the group as becoming dormant over the years. A strengthened UN-L/LPED/LAD partnership can help to reinvigorate this coordinating entity and form other similar industry groups as necessary.

#### **Recommendation 4.2: Position LAD to play a critical role in ensuring Innovation Campus technology transfer efforts are generating economic activity regionally**

More specific to the above, LPED/LAD should be tapped to help market UN-L research resources including Innovation Campus and other university assets such as the Raikes School, University Tech Park, and Center for Entrepreneurship as a means for generating interest in UN-L and Innovation Campus specifically. LPED already has a foothold in important national economic development and real estate events/organizations such as CoreNet, BIO, Renewable Energy World Conference & Expo, and Industrial Asset Management Council that will be critical in garnering development support. In addition, once the Campus is operational, LPED will need to play a strong role in connecting Campus researchers to employers and economic development support

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services (e.g. financing, technical assistance, etc.) for commercialization purposes. The university, meanwhile, can be an active stakeholder in regional business attraction efforts (with prospect visits) and include LPED and regional economic developers as participants at UN-L technical/industry conferences.

Assuming the university is creating an Innovation Campus development task force, LPED/LAD and SCC should actively participate.

### Action Items:

- UN-L should articulate a clear role for LPED/LAD with regard to Innovation Campus and coordinated marketing efforts.
- LPED/LAD should communicate target industries and regularly update UN-L on key marketing events pertaining to research focus areas.
- Once Innovation Campus plans are in later stages, create a caucus of greater Region's top researchers, facilitated in part by LPED/LAD to determine their potential assistance needs and identify new business opportunities. Structure meetings around priority issues (talent gaps, commercialization and infrastructure needs)
- Determine role of UN-L Tech Park in Innovation Campus plans (as a post-incubation stage site?)
- Support UN-L in resolving intellectual property disputes and smoothing the tech-commercialization path for university researchers
- Identify and invite peers at top research universities to provide optimal commercialization processes.
- LPED/LAD should invite leaders from SCC, UN-L and other institutions to the table for key business expansion and recruitment meetings/visits.
- If additional funding can be secured in the future, LPED/LAD should consider designating a university liaison responsible for better integrating regional economic development activities with UN-L innovation, technology transfer, and general higher education initiatives.

### BEST PRACTICE: GEORGIA TECH AND ECONOMIC DEVELOPMENT

Economic Development has been part of Georgia Tech's mission since its inception in 1885. While focused on agriculture and basic industry at its founding, today this mission is carried on throughout Georgia in the form of support for emerging technology companies, research commercialization and tech transfer, technical and managerial assistance for business and industry, support for communities and economic developers, and collaborative partnerships.



Georgia Tech's economic development work for Georgia is commonly considered the most engaged and comprehensive of any American university. Four organizations comprise the bulk of their economic development work: Enterprise Innovation Institute, Georgia Tech Research Institute, Office of Technology Licensing, and Professional Education.

The Enterprise Innovation Institute applies knowledge gained through Georgia Tech's science, technology, and innovation research. The Institute works with Georgian companies, entrepreneurs, economic developers, and communities through a number of programs. These include a science and technology incubator (Advanced Technology Development Center ATDC), Commercialization Services, Community Policy and Research Services, Industry Services, and a Strategic Partners Office. The Georgia Tech Research Institute supports governmental technology initiatives and helps companies bring new products to market. The Office of Technology Licensing provides patenting and licensing support for Georgia Tech innovations, facilitating commercialization. Professional Education provides training to update professionals' knowledge.

Since 1999, Georgia Tech helped to secure over \$1.3 billion in venture capital funding. The State of Georgia captures nearly 30 percent of all venture capital in the entire seven-state southeast area (includes Alabama, Florida, Georgia, Mississippi, Tennessee, South Carolina, and North Carolina.)

### Recommendation 4.3: Enhance regional private sector awareness of UN-L innovation

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An LPED/LAD/University partnership should also be leveraged for the potential of improving product lines of existing regional companies (a particular concern in the manufacturing and food processing industries in more rural areas of the region). As R&D and technology transfer becomes more of a focal point for the university, outlying counties within the region will benefit from gaining a more clear understanding of the match between regional business' core competencies and innovations that are available for licensing.

The region should develop a database that matches regional business' core competencies with innovations that are available for licensing. Companies can search the database for technologies that could replace or supplement their own existing products and services. UN-L could utilize the program to serve as a critical feedback loop where businesses communicate technological gaps or innovative ideas back to the university for further exploration.

Simultaneously, UN-L should continue to educate regional businesses about research capabilities and share with regional EDOs, UN-L technologies that could potentially replace or supplement existing business products and services.

### Action Item:

- Convene UN-L research and technology transfer office to discuss opportunity and frame concept.
- Utilizing regional EDOs (through their existing business retention and expansion programs), identify sets of existing firm "core competencies" and develop a region-wide database. Region may want to focus upon one industry to start (e.g. high-tech engine manufacturing).
- Explore the development of a notification system for university technologies that are available for licensing. The program can be a stand-alone web-based data system (the software exists and can be adapted to the region). See [www.innovationslink.com](http://www.innovationslink.com) for information about a similar tool developed by Purdue University in partnership with area economic development organizations.
- Market program regionally.

### GOAL 5: ENHANCE BUSINESS ATTRACTION/RETENTION EFFORTS

Underlying all of these goals is the region's top priority – creating quality jobs. Across the region, business attraction efforts can be enhanced by more closely unifying certain marketing and operational processes. The current county-by-county business attraction efforts (i.e. responding separately to NDED leads and RFPs) present a major challenge to potential new businesses out of state seeking regionally consistent information and a single-point-of contact. There is critical value in emphasizing strong regional collaborative public-private efforts externally. Greater Lincoln's competitors across the country continue to regionalize and southeast Nebraska risks falling behind.

Many of the EDOs throughout the region are engaged in very similar core functions ('place' marketing, business retention, and facilitating local action around entrepreneurship, physical infrastructure improvements, and workforce development issues). The region can benefit from a greater understanding of region-wide data, sites, and assets – and a refined process for better coordinating business attraction efforts regionally.

#### **Recommendation 5.1: Unify the RFP process for new business development projects**

Once a formalized regional group is developed (see Strategy 6.1), the group should develop a unified RFP process wherein the regional umbrella organization acts as the primary (but not only) marketing entity and shares leads with individual city/county economic organizations. The individual city/county organizations, serving more of a site- and incentive-specific role, then compile information and send it through the regional group which responds as one unified effort. *See Strategy 6.1 for more information.*

#### **Recommendation 5.2: Continue/refine joint marketing around targets – but split out based on niche specializations**

Joint regional marketing efforts (developed initially through LAD) should continue. However, these efforts can be further refined/focused by ensuring each individual city/county is engaged in events that are specific to their own industry specializations. See Report #2 page 11 which includes a breakout of target industry niche sector opportunities by urban and rural areas within the region.

#### **Action Items:**

- Delineate counties and their specific industry niches and develop master calendar of call trips and events.
- Individual county economic development leads need to become experts in their niche sectors and understand specific land use, workforce development, site-specific requirements.
- Individual counties should refine messages around these areas.

#### **Recommendation 5.3: Develop annual regional "Market Analysis" report**

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In conjunction with the labor market data collection efforts, the region should develop a regional database of economic trends and assets (e.g. available space, existing buildings, infrastructure, etc) and develop a brief annual report that identifies key resources and potential gap areas (e.g. specific infrastructure needs). Trend information from individual city/county business retention survey information can be assessed and shared in this report as well. Business “success stories” and annual ROI information should also be captured and shared as well (as a means of continuing to articulate to political leaders the value of regional collaboration).

### Action Items:

- Collect and analyze individual county Business Retention/Expansion business interview data.
- Identify specific trends across the region and discuss as a group.
- Develop regional report that highlights data/trends, success stories, and “red flag” areas.
- Include inventory, write up (where needed) and pictures of specific key assets.

### Recommendation 5.4: Develop brand and adopt new target-specific marketing strategies

A critical element to an overall marketing strategy, the region should develop a regional business brand that creatively and succinctly captures the essence of southeast Nebraska, and its strategy for business and talent attraction. A regional brand that reflects a consistent theme is important for communicating with external audiences and portraying a single message and image globally. The execution of the branding campaign should still allow flexibility for the counties, cities, and towns to maintain their individual identities. The region should also develop a more comprehensive and user-friendly website (using the existing LAD site as a foundation).

### Action Items

- Identify a name and adopt a brand (consider utilizing a public relations firm to undergo a branding campaign)
- Revamp the LAD website to include:
  - Up-to-date research (target industries, existing facilities, incentives, taxes, advantages, etc.)
  - Maps placing individual communities within the larger region and relative to key regional transportation and other economic and workforce development assets
  - Employer testimonials
  - Cluster-specific information
  - Regional real estate sites/buildings database
  - Social media for external and internal communication
- See <http://www.iowacityareadevelopment.com/> and <http://www.floridasgreatnorthwest.com/> for examples of powerful regional economic development websites.

### Recommendation 5.5: Increase the entertainment and recreational opportunities throughout the region

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Well-developed, lively, interconnected “downtowns” throughout the Greater Lincoln region will help to attract visitors, young professionals, and high-growth firms – critical for economic development of the region. Lincoln continues to undergo some important downtown revitalization efforts while many communities (Nebraska City, Beatrice, and others) are actively pursuing funding to support “Main Street” initiatives. Promoting existing “destination opportunities” and creating additional cultural amenities will be important.

### Action Items:

- Communities should continue to share, through the LAD group, ongoing key regional “quality of life improvement” initiatives and developments.
- Where appropriate, coordinate Main St and other quality of life and small business efforts to capitalize on potential additional grant opportunities.
- Explore innovative economic development techniques, including public/private partnerships, double bottom-line funds, and other financing techniques, to fund additional downtown amenities, small business opportunities, and infrastructure.
- Region should support and cross promote existing events and amenities (Lied Conference Center, Lewis & Clark Center, Lincoln’s proposed arena, etc.)
- Local governments across the region must continue to support “quality of life” initiatives as an important driver of job growth.

### **Recommendation 5.6: Enhance business retention efforts through greater information sharing and regionalization**

It is particularly important during this challenging economic time that the reach of each individual community’s and region’s business contact and support programs be elevated. The region should take advantage of the state’s new push for utilizing the Synchronist business surveying tool and secure a license for the entire region. Business outreach will still be performed locally – but trend information gleaned from these visits should be shared regionally and analyzed to identify potential red flags (i.e. potential layoffs, closures, or other).

### Action Items:

- Secure regional license for Synchronist.
- Begin to align/prioritize Business Retention/Expansion efforts along target industry areas.
- Ensure that local information gleaned from conversations with representatives of incumbent companies are analyzed and shared (to be included in report – see Recommendation 5.3)
- In cases where red flags are raised (i.e. company hints at relocation, closure, etc) engage regional group lead to help address.

### *LONGER-TERM*

### **Recommendation 5.7: Understand regional supply chain connections and host events to connect existing businesses**

Local EDOs should utilize their retention and expansion programs to help identify suppliers and related companies for possible recruitment (by asking survey/interview questions that identify employer supplier needs).

## GREATER LINCOLN RIG ACTION PLAN

These needs should be documented and shared across the region. The region should then begin to develop an in-depth mapping of existing tier 1 and tier 2 supplier companies within the region, their competencies, and their capacities to expand into different growing markets. This can culminate in a series of supplier forums to validate key issues and provide opportunities for companies to network and visit different production facilities.

### Action Items:

- Working closely with the metro economic development entities, generate list of life science and other advanced manufacturers.
- Conduct survey of existing life science companies (most EDOS should have some of this information) to determine industry needs and supplier capabilities.
- Host regional forum/conference to identify overall supply chain value, sub-assembly processes, critical analysis of supply chain management problems, and best practices, etc.
- Use forum to identify workforce training issues, interest in career readiness certification initiatives, etc.
- Forum can also serve as a "reverse trade show" where regional buyers are showcasing procurement needs to interested suppliers.
- Develop materials and create tools for regular communication between industry participants.

### Best Practice: California Aerospace Smart Supplier Initiative



Designed to stimulate manufacturing sector competitiveness, the "Smart Supplier" initiative mapped regional suppliers and through a survey developed by area technical colleges, identified firm capabilities and workforce requirements. A subsequent series of information and networking forums educated companies about regional product development resources and linked suppliers to other regional firms.

#### Forums included:

- Overview of supply chain management concepts, analysis of supply chain management problems, best practices, etc.
- Production facility tours and networking with Original Equipment Manufacturer supplier management and engineering management

One of the key outcomes of initiative was identifying future skill needs and development of Career Readiness Certificate Program

### GOAL 6: ENSURE REGIONAL COLLABORATION THROUGH REDESIGN OF ORGANIZATIONAL STRUCTURES

This plan, in general, calls for a major transformation in the way economic and workforce development is performed across 12 counties. To ensure that better alignment between these efforts occurs – and that it be done at a regional level, we recommend two important organizational structure changes to existing entities:

#### **Recommendation 6.1: Establish a formal regional economic development entity (building upon the LPED/Lincoln Chamber model)**

As a “grassroots” effort, LAD has laid an important foundation for regionalism throughout southeast Nebraska. The region must now move toward a more formal collaboration of business development efforts creating a coordinating regional entity serving and accountable to all or some of the 12 counties.

Our recommended model includes the Greater Lincoln Chamber/LPED expanding its geographic focus to become a true regional group. This organization would become the primary external marketing agency engaging all regional assets and coordinating business attraction and potentially even entrepreneurship activities. Each individual community/county economic development organization, meanwhile, would remain the local economic development contact, engaging in more site- and incentive-specific duties, operating under the larger regional umbrella group. Individual EDOs can still engage in generating leads and prospects for their own community (based on their own specific target industry niches). However, the overall marketing program should be coordinated by this “new” regional entity. *See Recommendation 5.1 for a suggested new regional business development approach.*

A model such as this would require a financial and organizational plan re-assessment. The current LAD contribution scale would likely need to be expanded (from current city/county assessment rates of \$0.25 per capita); and the region would need to ultimately engage in a fundraising effort to support the additional operations. In addition, the model would likely require a refined regional advisory board structure to provide oversight and guidance. We recommend that the advisory board for this entity represent a cross section of the region with some board seats reserved for smaller communities to fill on a rotating basis.

*See Appendix A for additional information on the structure and function of regional best practice models*

#### **Recommendation 6.2: Explore a new Greater Lincoln Workforce Investment Board operating model, including creating a 501 (c) 3 non-profit organization that services the entire Southeast Nebraska region.**

Accomplishing many of the workforce development initiatives outlined in this plan will require a workforce board(s) that has the resources and infrastructure to support operations and expand project work that directly helps workers and businesses within the region. A 501 (c) 3 organizational model should be explored as the platform for the Greater Lincoln Workforce Investment Board to operate under the Workforce Investment Act. This could expand the current

## GREATER LINCOLN RIG ACTION PLAN

Board's work into more regional strategic planning, stakeholder mobilization, and local service improvement efforts (in addition to legislative compliance issues). It can also be a forum to ultimately push for potential legislative changes where appropriate.

A strong workforce investment board can be the catalyst to developing a more unified 'system' that anticipates and effectively responds to existing and future industry needs across the region. In addition, as federal (e.g. U.S. Department of Labor) and state higher education and job training grant funding sources increasingly require communities to demonstrate regional collaboratives, a strong WIB can become an important asset to implementing pieces of this plan.

The Greater Lincoln WIB should also work with the state to explore expanding its service area to include more of the southeast Nebraska region. There would be great benefit to aligning the WIB service region with SCC's service area (which generally serves as the foundation for this RIG region).

*Together these two organizations (above) must work closely together on a strategic and programmatic level, including board sharing (ensuring EDOs are represented on WIBs and vice versa), information sharing (ensuring workforce development challenges identified in local business, retention and expansion programs are communicated to WIB members), etc.*

### **Recommendation 6.3 Incorporate a set of "regionalism" performance metrics**

As key organizations within this region begin to work more closely together through this planning framework, a well-developed and communicated set of organizational performance metrics will be critical to ensuring that collaboration becomes more entrenched in the day-to-day operations of each. LPED, UN-L, SCC, and other key organizations in this plan should consider supplementing their existing organizational performance objectives with those measuring how well they are collaborating and impacting economic growth regionally. *Examples* of supplemental measures include:

- For UN-L (*in addition to existing "academic achievement," "graduation rates," etc.*):
  - Number of academic-industry partnerships
  - Number of students hired into local industries and entrepreneurial firms
  - Number of faculty serving as science and/or technical advisors to growth companies
  - Amount of chairs, fellowships, and internships invested in the university by regional and national industry and entrepreneurial companies
  - Patents, licenses, and other intellectual property absorbed by regional partners
- For SCC (*in addition to existing "academic achievement," "graduation rates," etc.*):
  - Number of academic-industry partnerships
  - Number of students hired into local and entrepreneurial firms
  - Number of students enrolled/graduating from "Target Industry" occupation areas
  - Number of continuing ed/non-credit courses tied to Target Industry areas
  - Number of employers assisted through customized training services and amount of contracts
  - Students reached across the Greater Lincoln Region, through distance education or other opportunities

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- LPED/LAD (*in addition to existing "new prospects," "conversion rates," "new jobs created," etc*):
  - Number of academic-industry partnerships
  - Number of researchers supported through small business service delivery
  - Number of communities (within region) with new economic development projects
  - Increase in percentage of workforce employed within the region
  - Retail sales captured

## GREATER LINCOLN RIG ACTION PLAN

### IMPLEMENTATION: ESTABLISH AN IMPLEMENTATION COMMITTEE AND FUNDRAISING PLAN

The Greater Lincoln RIG project has further cemented existing relationships between the Greater Lincoln WIB, EDOs, and the higher education institution stakeholders. Sustainability for this RIG network, and this action plan specifically, however, lies in the ability of the partners to establish a governance body (can be informal) that oversees, coordinates, facilitates – and is ultimately accountable for – the plan's execution.

Much of this plan can be accomplished by existing groups, including individual EDOs, LPED/LCOC, the Greater Lincoln WIB, Greater Nebraska WIB, SCC and UN-L. However, utilizing the existing Greater Lincoln RIG executive committee, the region should designate a body – formed with a Memorandum of Understanding – to oversee the implementation of the RIG action plan and position the region for additional funding opportunities to support execution. This committee should meet to identify plan priority areas, create working teams, and frame a fund raising plan.

Looking across existing RIG and WIRED projects throughout the country several governance “best practices” emerge that should affect the Greater Lincoln RIG's next steps:

- Create a board with representatives from all or most of the region
- Create a board with at least these three stakeholder groups represented: 1) Higher Education (post-secondary institution leaders); 2) Economic Developers; and 3) Workforce (WIB Chairs and/or Executives)
- Other stakeholders, from state leaders to industry leaders to K-12 educators to entrepreneurs may also be included
- Board/initiative is eventually staffed/coordinated by at least ½ time individual
- Implementation “Teams” are developed (by “Goal” area or otherwise)
- A fundraising plan is developed immediately

## GREATER LINCOLN RIG ACTION PLAN

### GREATER LINCOLN RIG IMPLEMENTATION PLAN

The implementation of the Greater Lincoln RIG Action Plan will not occur without a team of leaders committed to overseeing the process. The following implementation matrix offers a detailed look at how the region should implement this plan. It is organized by the six strategies and action items from the Action Plan and includes a general time frame and stakeholder groups (i.e. "Partners") to be involved in implementation. This is a *first step* implementation plan. Once a leadership team for the initiative is formed, it can use this roadmap as a starting point for more refined steps.

*Note: Partners identified as "LPED/LAD" include a newly formed and funded regional economic development group (as outlined in the Action Plan)*

# GREATER LINCOLN RIG ACTION PLAN

## GREATER LINCOLN RIG IMPLEMENTATION PLAN

GOAL 1: ENHANCE THE PIPELINE OF SKILLED WORKERS AND BECOME A TALENT MAGNET			
Recommended Strategy	Action Steps	Timeframe (from adoption of plan)	Partners
1.1: Increase the number of students who pursue science, technology, engineering and math studies through the expansion of Project Lead the Way and formation of other STEM programs	<ul style="list-style-type: none"> <li>Bring Project Lead the Way for an information session presentation to better understand the project and see where benefits can be reached.</li> </ul>	<ul style="list-style-type: none"> <li>0-6 months</li> </ul>	<ul style="list-style-type: none"> <li>LPED/LAD (co-leads)</li> <li>WIBs (co-leads)</li> <li>UN/UN-L (co-leads)</li> <li>SCC</li> <li>Regional post-secondary institutions</li> </ul>
	<ul style="list-style-type: none"> <li>Work with individual K-12 systems to promote the Project Lead the Way program.</li> </ul>	<ul style="list-style-type: none"> <li>0-1 year</li> </ul>	
	<ul style="list-style-type: none"> <li>Consider convening government, school district, postsecondary, workforce system, and industry representatives to develop a Communications Campaign</li> </ul>	<ul style="list-style-type: none"> <li>0-1 year</li> </ul>	
	<ul style="list-style-type: none"> <li>Map STEM program funding flows to identify engineering entrepreneurial grant funding opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>0-6 months</li> </ul>	
	<ul style="list-style-type: none"> <li>Host periodic "STEM Summits" of businesses and regional middle/high school students highlighting regional careers that involve STEM skills.</li> </ul>	<ul style="list-style-type: none"> <li>0-1 year (planning)</li> </ul>	
	<ul style="list-style-type: none"> <li>Consider developing improved professional development programs</li> </ul>	<ul style="list-style-type: none"> <li>1-3 years</li> </ul>	
	<ul style="list-style-type: none"> <li>Consider the development of scholarship opportunities for students who pursue STEM degrees regionally.</li> </ul>	<ul style="list-style-type: none"> <li>2-4 years</li> </ul>	
1.2 Develop career pathways and align them with region's target industry sectors	<ul style="list-style-type: none"> <li>Using occupations identified in the Asset Map report, validate amongst coalition of SCC, WIBs, education, economic development, employer, and labor groups in the region.</li> </ul>	<ul style="list-style-type: none"> <li>0-1 years</li> </ul>	<ul style="list-style-type: none"> <li>WIBs (co-leads)</li> <li>SCC (co-leads)</li> <li>K-12 representatives</li> <li>Regional post-secondary institutions</li> <li>LPED/LAD</li> <li>Industry representatives</li> </ul>
	<ul style="list-style-type: none"> <li>Form an industry-workforce development coalition to map the requirements of entry and advancement at successive levels in fields in select target industry sectors.</li> </ul>	<ul style="list-style-type: none"> <li>1-2 years</li> </ul>	
	<ul style="list-style-type: none"> <li>Evaluate career pathways initiative best practices.</li> </ul>	<ul style="list-style-type: none"> <li>0-2 years</li> </ul>	

## GREATER LINCOLN RIG ACTION PLAN

GOAL 1: ENHANCE THE PIPELINE OF SKILLED WORKERS AND BECOME A TALENT MAGNET			
Recommended Strategy	Action Steps	Timeframe (from adoption of plan)	Partners
1.3: Expand Southeast Community College career academy programs (Focus Programs) to increase career awareness opportunities in target industry areas	<ul style="list-style-type: none"> <li>▪ Inventory existing career academy programs throughout the region and identify potential target industry gaps.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-6 months</li> </ul>	<ul style="list-style-type: none"> <li>▪ SCC (Lead)</li> <li>▪ WIBs</li> <li>▪ LPED/LAD</li> <li>▪ Regional post-secondary institutions</li> <li>▪ K-12 representatives</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Explore the formation of a SCC-led career academy “working group” to develop a regional action plan</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-1 year</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Identify sequential courses of study and design skill standards specific to the target industries.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 6 months-1 year</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Delineate skill standards specific to the industry.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 6 months-2 years</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ WIBs and Chambers/EDOs should promote these programs in middle schools.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-2 years</li> </ul>	
1.4: Create more career awareness of target industry occupations through internship; externship; and other event programs	<ul style="list-style-type: none"> <li>▪ Educate career service advisors throughout the region on target industries and specific career opportunities</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-1 year</li> </ul>	<ul style="list-style-type: none"> <li>▪ WIBs (co-leads)</li> <li>▪ Regional post-secondary institutions</li> <li>▪ K-12 representatives</li> <li>▪ LPED/LAD</li> <li>▪ Industry representatives</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Expand career events on campus</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-2 years</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Steer student focus to target industry areas</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-3 years</li> </ul>	
1.5: Develop a Talent Attraction/Retention campaign	<ul style="list-style-type: none"> <li>▪ Develop coordinated outreach campaigns designed to attract professionals in priority skill categories to the region.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-2 years</li> </ul>	<ul style="list-style-type: none"> <li>▪ LPED/LAD (Lead)</li> <li>▪ Regional Post-secondary institutions (Co-leads)</li> <li>▪ Young professionals network</li> <li>▪ WIBs (Co-leads)</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Utilize regional business leaders’ and postsecondary alumni’s social and professional networks in the recruitment process.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 6 months – 3 years</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Host events in out-of-market priority areas promoting the advantages of living in the region.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 1-3 years</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Use the Lincoln and other regional Young Professionals groups to host and recruit priority prospects for regional employers.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-2 years</li> </ul>	

GOAL 2: BETTER INTEGRATE ECONOMIC AND WORKFORCE DEVELOPMENT			
Recommended Strategy	Action Steps	Timeframe (from adoption of plan)	Partners

## GREATER LINCOLN RIG ACTION PLAN

		plan)	
2.1: Align workforce “system” and job training areas with target industries	<ul style="list-style-type: none"> <li>▪ Ensure target industries are officially adopted by the two regional WIBs as drivers of future job training programs.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-6 months</li> </ul>	<ul style="list-style-type: none"> <li>▪ SCC (Lead)</li> <li>▪ WIBs (Co-lead)</li> <li>▪ LPED/LAD</li> <li>▪ Regional post-secondary institutions</li> <li>▪ Industry representatives</li> </ul>
	<ul style="list-style-type: none"> <li>▪ WIBs should consider “revamping” board membership to reflect new target industry opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 1-2 years</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ SCC should review the documented “in-demand” occupations and competencies and share with existing business curriculum advisory committees.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-1 years</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Post-secondary institutions should consider adding a broader range of degree/certificate options for Logistics (AA with certificate up to Ph. D programs).</li> </ul>	<ul style="list-style-type: none"> <li>▪ 2-5 years</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Institutions should also consider adding new renewable energy degree/certificate options specific to this region in preparation for anticipated demand and in connection with new Innovation Campus focus areas.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 2-4 years</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Post specific target industry information on workforce system websites.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-6 months</li> </ul>	
2.2 Enhance community college outreach to employers through an enhanced single-point-of-contact system for customized training services	<ul style="list-style-type: none"> <li>▪ Create a direct “Employer” or “Training Development” link on the SCC homepage highlighting business services and directing them to specific contacts.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-6 months</li> </ul>	<ul style="list-style-type: none"> <li>▪ SCC (lead)</li> <li>▪ Individual EDOs</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Highlight employer customized training “success stories” on the SCC webpage.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-1 year</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ SCC should work with LPED and other regional EDOs to identify a list of priority firms to follow up with with regard to job training needs.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-1 year</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ SCC should expand staff/resources where necessary to conduct appropriate industry outreach.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-2 years</li> </ul>	

## GREATER LINCOLN RIG ACTION PLAN

GOAL 2: BETTER INTEGRATE ECONOMIC AND WORKFORCE DEVELOPMENT			
Recommended Strategy	Action Steps	Timeframe (from adoption of plan)	Partners
2.3: Expand distance education opportunities including mobile training labs	<ul style="list-style-type: none"> <li>▪ SCC and a coalition of regional higher education institutions should inventory distance education programs and identify potential gap areas (using target industries and aligned occupations as a guide).</li> </ul>	<ul style="list-style-type: none"> <li>▪ 6 months – 2 years</li> </ul>	<ul style="list-style-type: none"> <li>▪ SCC (Lead)</li> <li>▪ Other postsecondary institutions (Co-leads)</li> <li>▪ WIBs</li> <li>▪ EDOs/LPED</li> </ul>
	<ul style="list-style-type: none"> <li>▪ The region should consider a prospective student survey to identify potential demand for future distance education programs.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 1-2 years</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Develop mix of fully online, hybrid, or telecourses.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 2-4 years</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Work with EDOs and WIBs to promote the programs</li> </ul>	<ul style="list-style-type: none"> <li>▪ 1-2 years; ongoing</li> </ul>	
2.4 Expand regional labor market data and analyses	<ul style="list-style-type: none"> <li>▪ Perform annual labor market data collection to understand key industry, occupation, and skill trends on a region-wide basis.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ongoing</li> </ul>	<ul style="list-style-type: none"> <li>▪ WIBs (Lead)</li> <li>▪ LPED/LAD</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Perform an in in-depth study of existing and transferable skill opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 6months – 1 year</li> </ul>	
2.5 Host Regional State of the Workforce events		<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪ WIBs (Lead)</li> <li>▪ LPED/LAD (Co-lead)</li> </ul>
2.6 Develop regional industry roundtables to better understand employer workforce needs	<ul style="list-style-type: none"> <li>▪ Identify group of interested private sector HR professionals or executives</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-1 year</li> </ul>	<ul style="list-style-type: none"> <li>▪ WIBs (Lead)</li> <li>▪ SCC</li> <li>▪ LPED/EDOs/Chambers of Commerce</li> <li>▪ Industry representatives</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Create the roundtables by target industry sector and articulate a “value proposition” for members</li> </ul>	<ul style="list-style-type: none"> <li>▪ 6 months – 2 years</li> </ul>	

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GOAL 3: EXPAND RESOURCES TO FOSTER ENTREPRENEURSHIP			
Recommended Strategy	Action Steps	Timeframe (from adoption of plan)	Partners
3.1: Develop a regional entrepreneurship resource portal/clearinghouse	▪ Designate a lead regional entity to coordinate Region's entrepreneurship activities.	▪ 0-2 years	<ul style="list-style-type: none"> <li>▪ LPED/LAD (lead)</li> <li>▪ Individual EDOs</li> <li>▪ SCC</li> <li>▪ Other postsecondary institutions</li> </ul>
	▪ Form regional work group of technical assistance experts	▪ 0-1 year	
	▪ Building off the RIG asset map, map specific entrepreneurial resources and funds-flow in the region	▪ 0-1 year	
	▪ Design a framework for the initiative and a funding strategy	▪ 1-2 years	
	▪ Build inventory/database and network of service providers (build off of existing LPED report).	▪ 0-1 year	
	▪ Identify information needs and requirements and develop an outline for the portal.	▪ 0-1 year	
	▪ Build capacity at regional community colleges to provide support, technical assistance, training to entrepreneurs.	▪ 0-1 year	
	▪ Market the initiative region-wide.	▪ 1 year; ongoing	
3.2: Better integrate entrepreneurship training into K-16 for students and teachers	▪ Design regional business plan competitions	▪ 0-2 years	<ul style="list-style-type: none"> <li>▪ LPED/LAD (Lead)</li> <li>▪ SCC (Co-Lead)</li> <li>▪ K—12 systems (Co-Lead)</li> </ul>
	▪ Expand the offering of entrepreneurial project initiatives	▪ 0-3 years	
	▪ Increase the number of students from around the region participating in the Entrepreneurship Focus Program	▪ 0-3 years	
3.3: Start an Entrepreneurial Capital Access committee and establish a regional venture fund	▪ Construct list of VC firms that have funded projects within the Great Plains	▪ 0-1 years	<ul style="list-style-type: none"> <li>▪ LPED/LAD (Lead)</li> <li>▪ UN/UN-L (Co-Lead)</li> <li>▪ Other postsecondary institutions</li> <li>▪ Invest Nebraska</li> <li>▪ Nebraska Angels</li> <li>▪ NDED</li> <li>▪ Others as appropriate</li> </ul>
	▪ Inventory and create stronger linkage to federal grant opportunities that focus on targeted technologies	▪ 0-1 years	
	▪ Building off of the existing statewide working group, develop a regional entrepreneurship council and hold quarterly meetings about capital opportunities	▪ 0-1 years; ongoing	
	▪ Improve access to early-stage venture capital and other funding resources by promoting the existing angel investor network in the region, working with the region's banks to market existing regional loan programs.	▪ 0-3 years; ongoing	

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GOAL 3: EXPAND RESOURCES TO FOSTER ENTREPRENEURSHIP			
Recommended Strategy	Action Steps	Timeframe (from adoption of plan)	Partners
<b>3.4: Expand upon existing angel network and ensure investors understand target industry innovation potential</b>	▪ Expand upon existing VC/angel investor network strengthening linkages between Lincoln and Omaha.	▪ 0-2 years	<ul style="list-style-type: none"> <li>▪ LPED/LAD (Lead)</li> <li>▪ UN/UN-L (Co-Lead)</li> <li>▪ Invest Nebraska (Co-lead)</li> <li>▪ Nebraska Angels (Co-Lead)</li> <li>▪ Other postsecondary institutions</li> <li>▪ NDED</li> <li>▪ Others as appropriate</li> </ul>
	▪ Host a regional venture capital forum to introduce angel networks and VC firms from throughout the region to local businesses and entrepreneurs.	▪ 0-2 years; ongoing	
	▪ Tie existing angel networks in target industry areas.	▪ 6 months- 1 year	
	▪ Ensure all EDOs are sharing information on national SBIR/STTR funding available to local small businesses and aspiring entrepreneurs.	▪ 0-1.5 years	
<b>3.5: Enhance networking opportunities and regionalize existing initiatives</b>	▪ Inventory existing small business and entrepreneurial networking programs throughout the region	▪ 0-1 years	<ul style="list-style-type: none"> <li>▪ LPED/individual EDOs (Lead)</li> <li>▪ Chambers of Commerce (co-leads)</li> </ul>
	▪ Develop master regional entrepreneurship calendar of events and promote on regional websites.	▪ 0-1 years; ongoing	
	▪ Hold periodic regional entrepreneurial networking events, connecting these groups together periodically to identify synergies and business opportunities.	▪ 0-1 years; ongoing	
	▪ Create a social network of I2E club members using Facebook or other service.	▪ 0-6 months	
	▪ Disseminate target industry information (e.g. niche sectors and their workforce and technology requirements, etc.) to I2E club members.	▪ 0-1 years; ongoing	
	▪ Use groups as venues to unveil entrepreneurial portal (see Strategy 3.1)	▪ 0-1 years	
<b>3.6: Promote start-up successes and create image as regional entrepreneurial &amp; innovation hub</b>	▪ Communicating, via the LAD website and other avenues, important assets in place in the region	▪ 6 months – 2 years	<ul style="list-style-type: none"> <li>▪ LPED/LAD</li> </ul>
	▪ Frequently communicate/profile entrepreneurship success stories within the region	▪ 0 - 6 months; ongoing	
	▪ Develop region-wide “awards” program to recognize notable small business and entrepreneurial achievements.	▪ 1-3 years; ongoing	
	▪ Consider an internal marketing effort aimed at educating the community about entrepreneurship	▪ 0-2 years; ongoing	
<b>3.7: Expand existing</b>	▪	▪	<ul style="list-style-type: none"> <li>▪ LPED (Lead)</li> </ul>

## GREATER LINCOLN RIG ACTION PLAN

incubation efforts into bio-ag-based ventures			
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GOAL 4: INTEGRATE ECONOMIC DEVELOPMENT AND TECH TRANSFER			
Recommended Strategy	Action Steps	Timeframe (from adoption of plan)	Partners
<b>4.2: Position LAD to play a critical role in ensuring Innovation Campus technology transfer efforts are generating economic activity regionally</b>	<ul style="list-style-type: none"> <li>▪ UN-L should articulate clear role for LPED/LAD with regard to Innovation Campus and coordinated marketing efforts.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-1 year</li> </ul>	<ul style="list-style-type: none"> <li>▪ UN/UN-L (Lead)</li> <li>▪ LPED/LAD (Co-lead)</li> <li>▪ UN/UN-L -Tech Park</li> <li>▪ Other postsecondary institutions</li> </ul>
	<ul style="list-style-type: none"> <li>▪ LPED/LAD should communicate target industries and regularly update UN-L on key marketing events pertaining to research focus areas.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-2 years; ongoing</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Once Innovation Campus plans are in later stages, create a caucus of greater Region's top researchers</li> </ul>	<ul style="list-style-type: none"> <li>▪ 2-5 years; ongoing</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Determine role of UN-L Tech Park in Innovation Campus plans (as a post-incubation stage site?)</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-2 years</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Support UN-L in resolving intellectual property disputes and smoothing the tech-commercialization path for university researchers</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-3 years; ongoing</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Identify and invite peers at top research universities to provide optimal commercialization processes.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-3 years</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ LPED/LAD should invite leaders from SCC, UN-L and other institutions to the table for key business expansion and recruitment meetings/visits.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-1 year; ongoing</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ LPED/LAD should consider designating a university liaison</li> </ul>	<ul style="list-style-type: none"> <li>▪ 1-5 years</li> </ul>	
<b>4.3: Enhance regional private sector awareness of UN-L innovation</b>	<ul style="list-style-type: none"> <li>▪ Convene UN-L research and technology transfer office to discuss opportunity and frame concept.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-1 year</li> </ul>	<ul style="list-style-type: none"> <li>▪ UN/UN-L (Lead)</li> <li>▪ LPED/LAD (Co-lead)</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Utilizing regional EDOs (through their existing business retention and expansion programs), identify set of existing firm "core competencies" and develop a region-wide database.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-2 years</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Explore the development of a notification system for university technologies that are available for licensing.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0-2 years</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Market program regionally</li> </ul>	<ul style="list-style-type: none"> <li>▪ 2-4 years</li> </ul>	

## GREATER LINCOLN RIG ACTION PLAN

GOAL 5: ENHANCE BUSINESS ATTRACTION/RETENTION EFFORTS			
Recommended Strategy	Action Steps	Timeframe (from adoption of plan)	Partners
5.1 Unify the RFP process for new business development projects		▪	▪ LPED/LAD
5.2 Continue/refine joint marketing around targets – but split out based on niche specializations	▪ Delineate counties and their specific industry niches and develop master calendar of call trips and events.	▪ 0-6 months	▪ LAD
	▪ Individual county economic development leads need to become experts in their niche sectors and understand specific land use, workforce development, site-specific requirements.	▪ 0-1 year	
	▪ Individual counties should refine messages around these areas.	▪ 0-1 year	
5.3: Develop annual regional “Market Analysis” report	▪ Collect and analyze individual county Business Retention/Expansion business interview data	▪ Ongoing	▪ LAD
	▪ Identify specific trends across the region	▪ 0-1 year; ongoing	
	▪ Develop regional report that highlights data/trends and “red flag” areas gathered through	▪ 0-1 year	
	▪ Include inventory, write up and pictures of specific key assets.	▪ 0-1.5 years	

## GREATER LINCOLN RIG ACTION PLAN

GOAL 5: ENHANCE BUSINESS ATTRACTION/RETENTION EFFORTS			
Recommended Strategy	Action Steps	Timeframe (from adoption of plan)	Partners
5.4: Develop brand and adopt new target-specific marketing strategies	▪ Identify a name and adopt a brand (consider utilizing a public relations firm to undergo a branding campaign)	▪ 0-2 years	<ul style="list-style-type: none"> <li>▪ LPED/LAD (Lead)</li> <li>▪ Others as appropriate</li> </ul>
	▪ Revamp the LAD website	▪ 0-2 years	
	▪ Review regional economic development website examples and best practices.	▪ 0-6 months	
5.5 Increase the entertainment and recreational opportunities throughout the region	▪ Communities should continue to share, through the LAD group, ongoing key regional “quality of life improvement” initiatives and developments	▪ 0-1 year; ongoing	<ul style="list-style-type: none"> <li>▪ Individual EDOs, Chambers, etc. (Lead)</li> <li>▪ LAD (Co-lead)</li> </ul>
	▪ Coordinate Main St and other quality of life/small business efforts to capitalize on potential additional grant opportunities	▪ Ongoing	
	▪ Explore innovative downtown/economic development techniques	▪ 0-1 years	
	▪ Support and cross promote existing events and amenities	▪ Ongoing	
	▪ Continue to support “quality of life” initiatives as an important driver of job growth.	▪ Ongoing	
5.6 Enhance business retention efforts through greater information sharing and regionalization	▪ Secure regional license for Synchronist	▪ 0-1 year	<ul style="list-style-type: none"> <li>▪ LPED/LAD</li> <li>▪ Individual EDOs</li> </ul>
	▪ Begin to align BRE efforts along target industry areas	▪ 0-1.5 years	
	▪ Ensure that local information gleaned from conversations with representatives of incumbent companies are analyzed and shared	▪ 6 months – 1 year; ongoing	
	▪ In cases where red flags are raised engage regional group lead to help address.	▪ 1-3 years	
5.7 Understand regional supply chain connections and host events to connect existing businesses	▪ Generate list of life science and other applicable manufacturers.	▪ 0-2 years	<ul style="list-style-type: none"> <li>▪ LPED/LAD (Lead)</li> <li>▪ Others as appropriate</li> </ul>
	▪ Conduct survey of existing life science to determine industry needs and supplier capabilities.	▪ 1-2 years	
	▪ Host regional forum/conference	▪ 2-4 years	
	▪ Develop ongoing communication tools for participants.	▪ 2-4 years	

## GREATER LINCOLN RIG ACTION PLAN

GOAL 6: ENSURE REGIONAL COLLABORATION THROUGH REDESIGN OF ORGANIZATIONAL STRUCTURES			
Recommended Strategy	Action Steps	Timeframe (from adoption of plan)	Partners
6.1: Establish a formal regional economic development entity (building upon the LPED/Lincoln Chamber model)	▪	▪	▪ LPED/LAD
	▪	▪	
	▪	▪	
6.2: Explore a new Greater Lincoln Workforce Investment Board operating model, including creating a 501 (c) 3 non-profit organization that services the entire Southeast Nebraska region.	▪	▪	▪ WIBs ▪ SCC ▪ NDOL
	▪	▪	
	▪	▪	
	▪	▪	
	▪	▪	
6.3 Incorporate a set of "regionalism" performance metrics	▪	▪	▪ UN/UN-L ▪ SCC ▪ LPED/LAD ▪ Others as appropriate
	▪	▪	
	▪	▪	
	▪	▪	
	▪	▪	

## APPENDIX A

### DATA SOURCES

AngelouEconomics used a variety of sources to collect the quantitative and qualitative information used in our analysis. To begin, the consulting team collected numerous studies and plans developed by/for the Greater Lincoln Region's various economic and workforce development organizations. Quantitative data was collected from national and state sources, including the U.S. Bureau of Labor Statistics, the U.S. Census Bureau, Decision Data Resources (Demographics Now), the National Science Foundation, Nebraska Workforce Development, and numerous private sector sources.

Throughout the Economic Scan, demographic data was retrieved at the county level and aggregated by region using the US Census. Importantly, 2008 data may sometimes represent population projections based on decennial Census trends. Most economic data—including employment, unemployment, business establishments, and wages—was retrieved from the Bureau of Labor Statistics. Economic data typically represents un-weighted averages of county-level data.

AngelouEconomics also gathered qualitative data through one-on-one interviews with key stakeholder groups as well as a series of regional roundtables conducted in Beatrice, Lincoln, Nebraska City, and Seward, which involved more than 100 individual regional leaders and workforce and economic developers.

## APPENDIX B

### GREATER LINCOLN REGION EMPLOYER SURVEY RESULTS

To better prepare the regional workforce development system for meeting employer needs, AngelouEconomics conducted an employer survey. The survey was designed to understand employers' perceptions of hiring and training services in the region, as well as which specific occupations are the most important to companies today and anticipated in the near future. The survey results provide a valuable snapshot of employer occupational demand – which should help to inform a coordinated regional workforce development strategy that ensures the right mix of short- and long-term job training/certification programs and a more efficient use of financial & educational resources; and

The targeted survey was web-based and administered to employers that cross multiple industry sectors important to the region. The sample included those companies that fall within the following broad sectors:

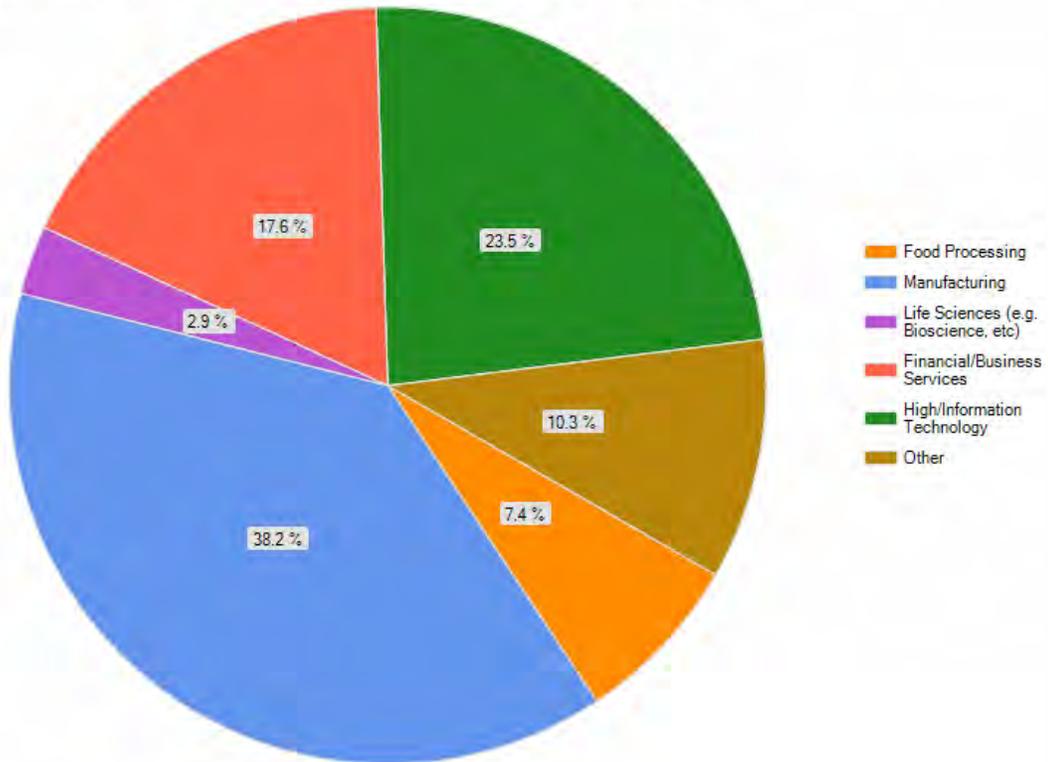
- Advanced Manufacturing
- Information Technology
- Food Processing and Life Sciences/Biotechnology

For the analyses within this report, AngelouEconomics also relied upon data gathered through a similar regional employer survey conducted in the summer of 2009 for the health care industry.

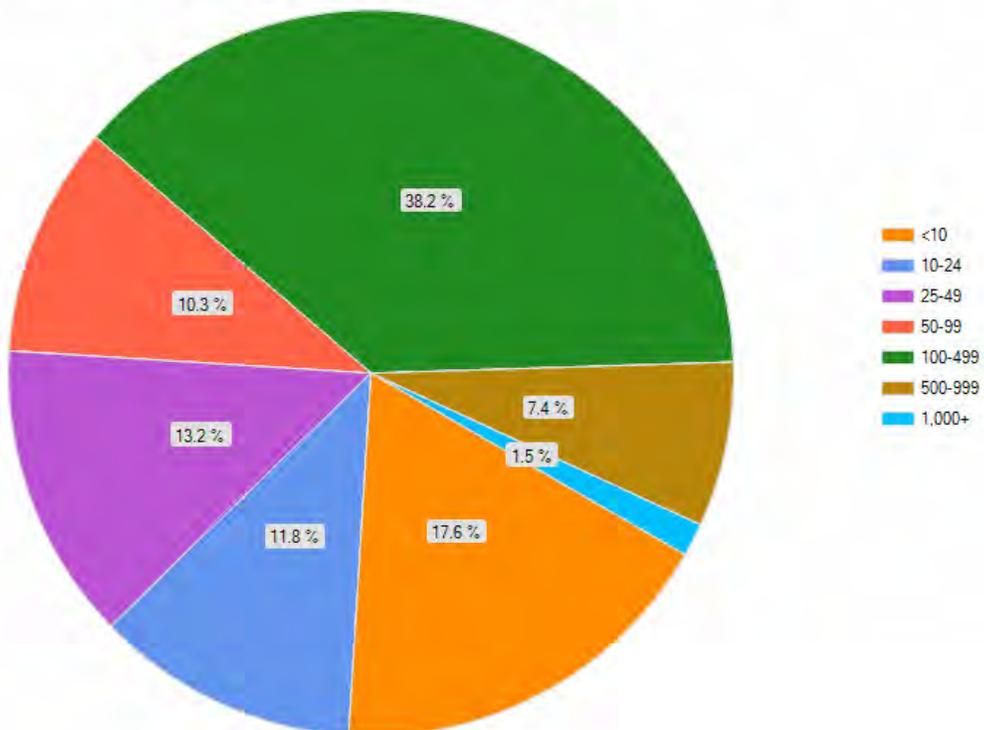
The survey included 69 employer responses. Findings from the survey are presented here.

## APPENDIX B

Which best describes the primary industry focus of your company?

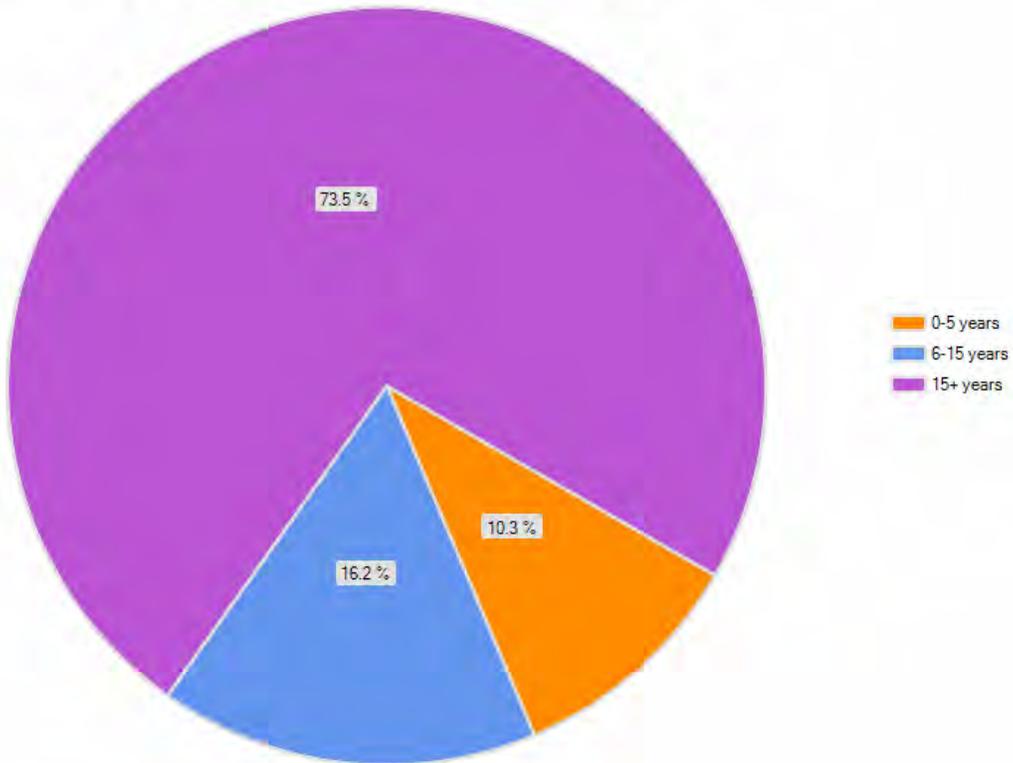


What is the approximate number of people employed by your business in the region (Lincoln and 60-mile radius)?

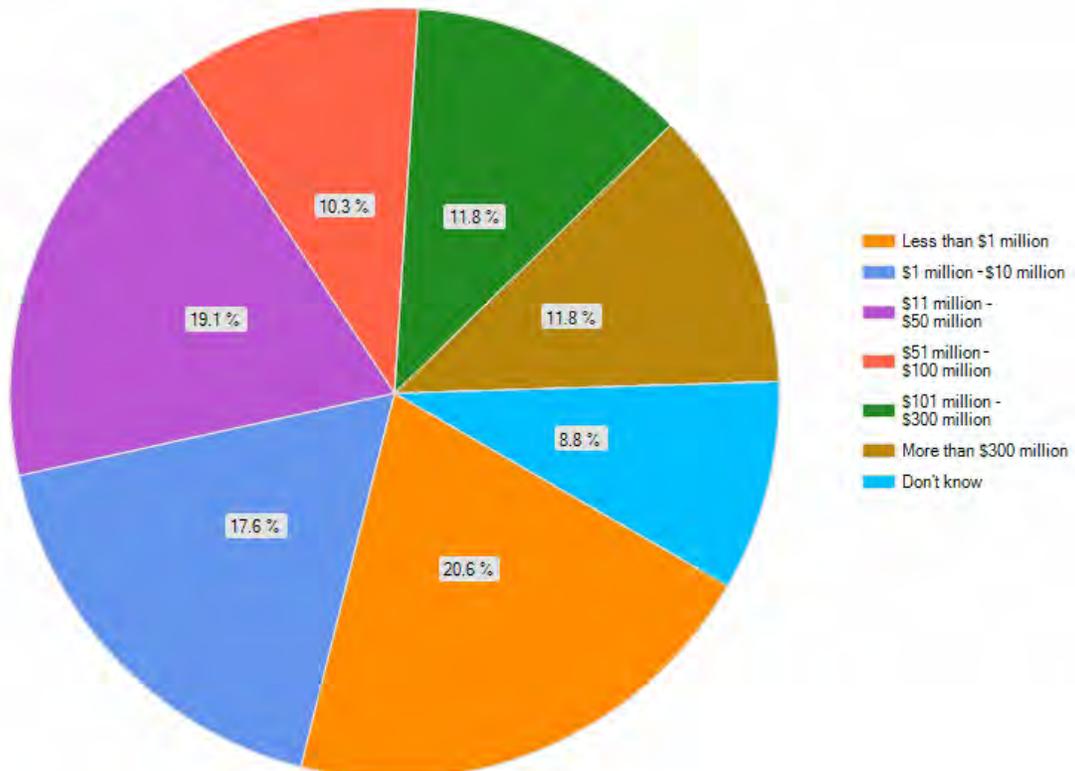


## APPENDIX B

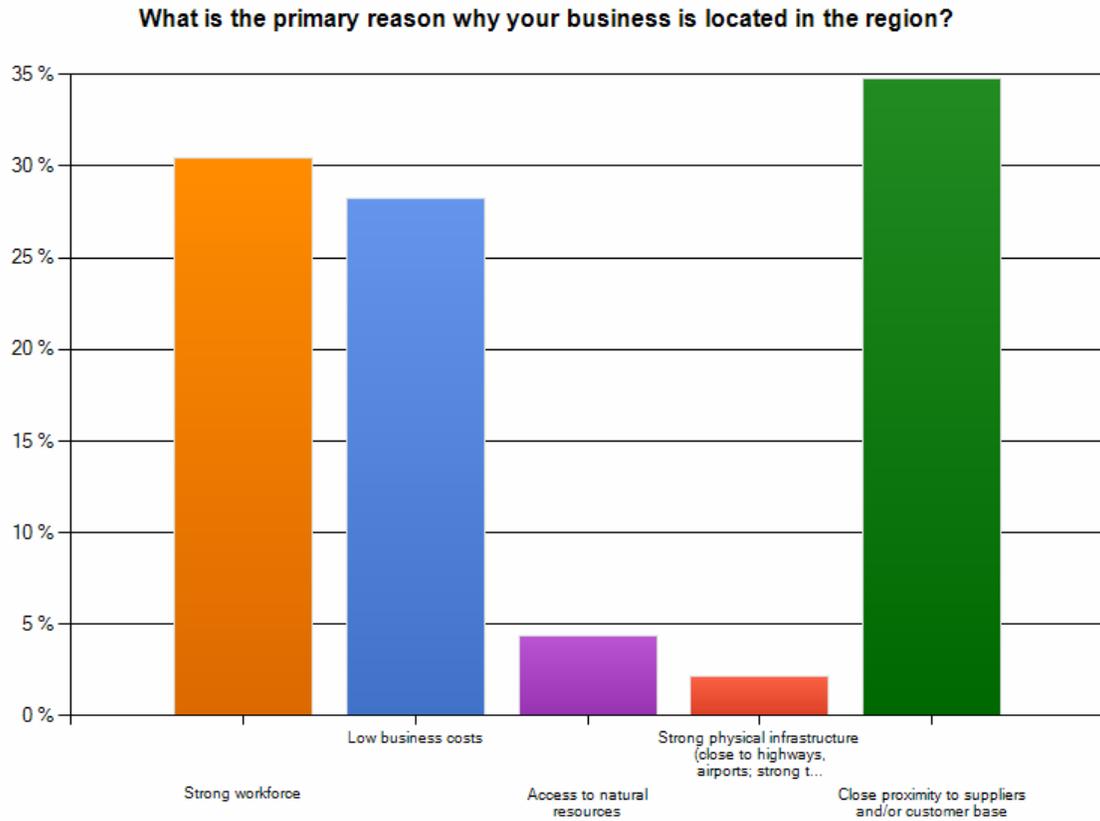
How long has your business been located in the region?



Previous year's gross revenues (approximate):

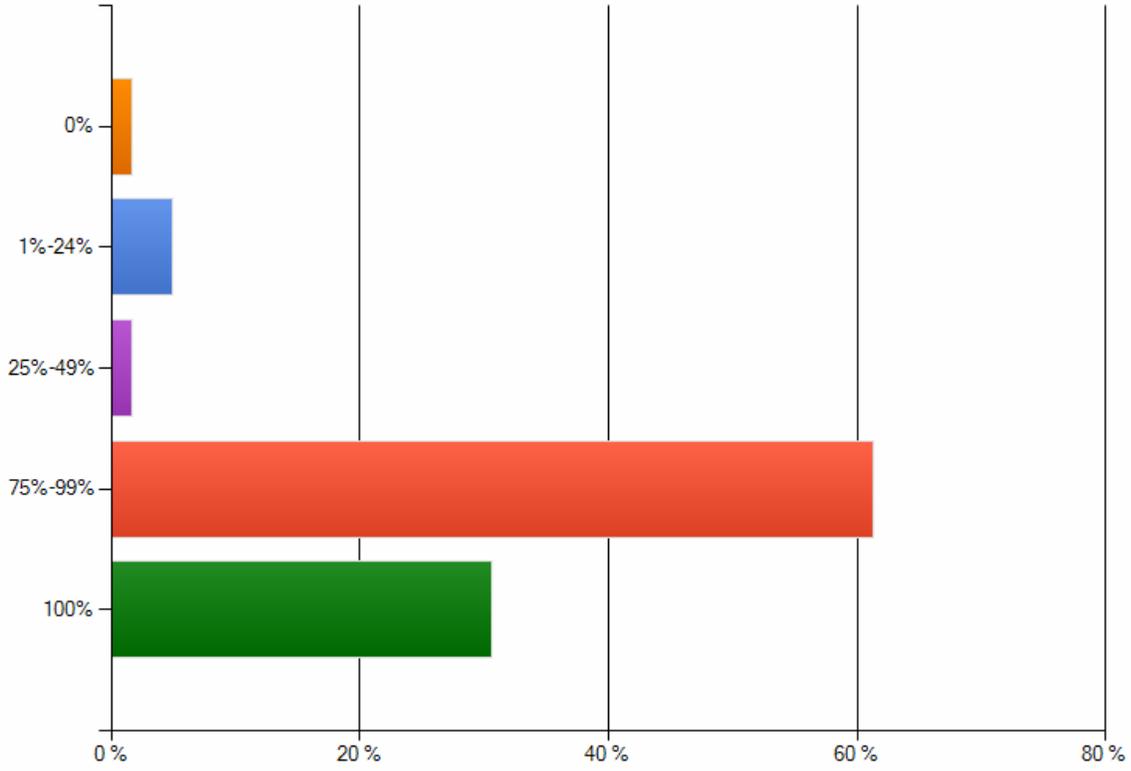


## APPENDIX B



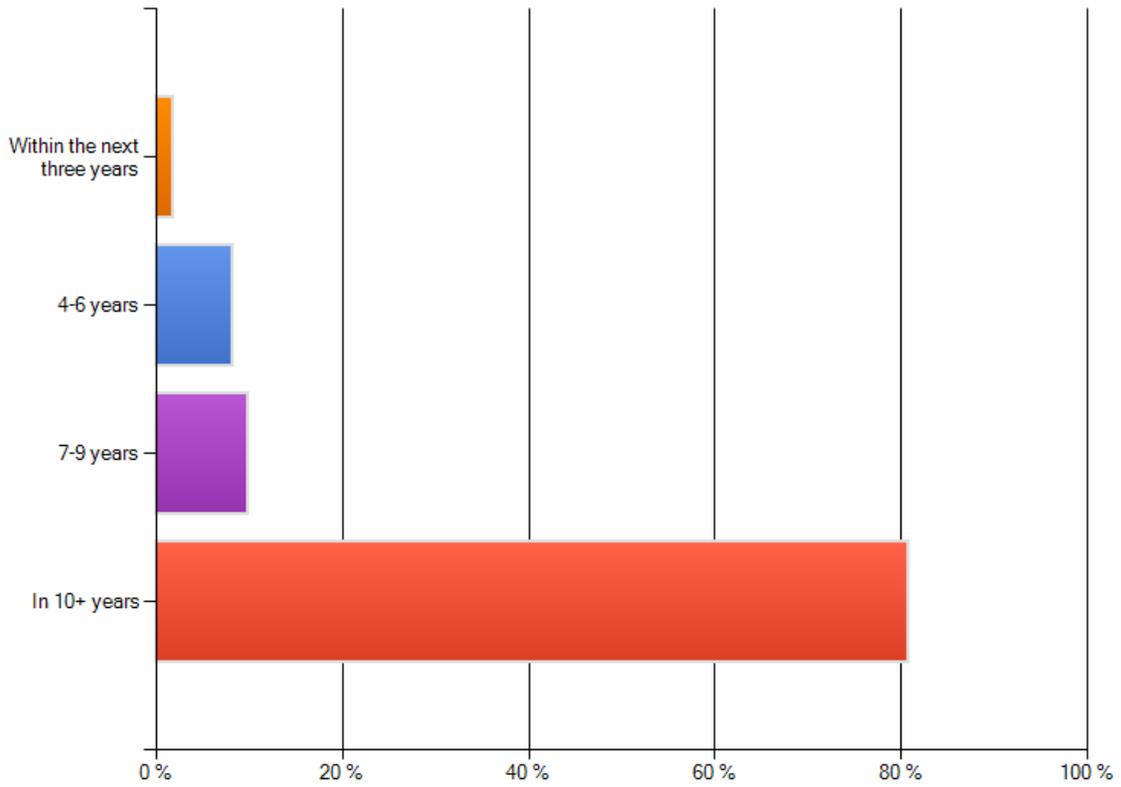
## APPENDIX B

What percentage of your workforce is hired within the region (i.e. Lincoln and 60-mile radius)?



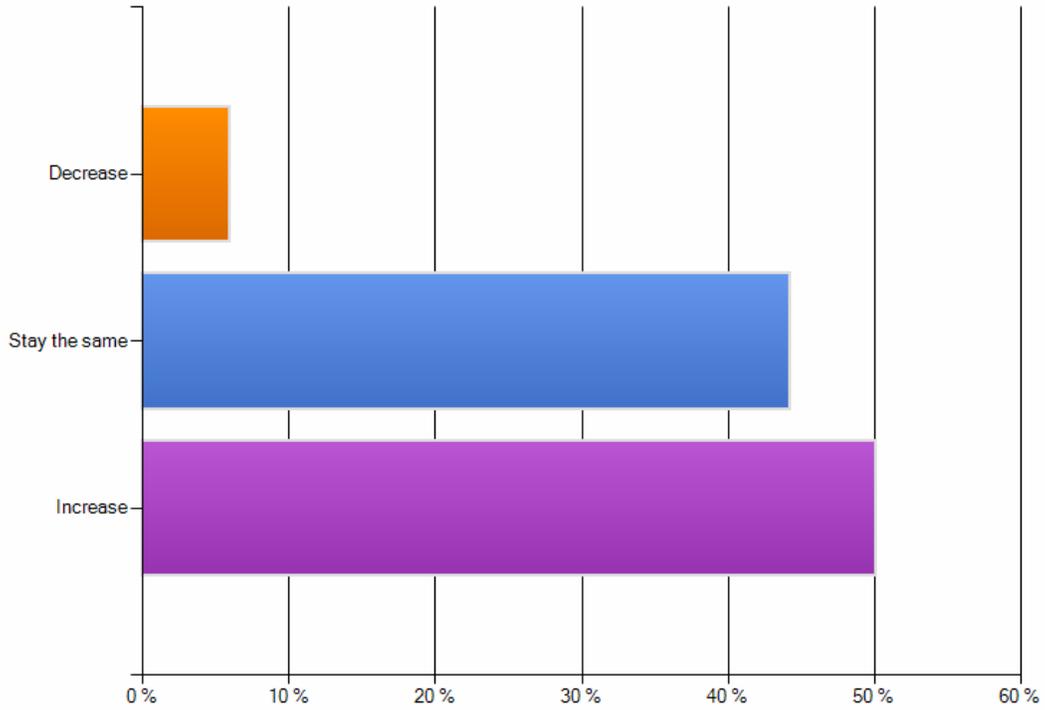
## APPENDIX B

When do you expect to see the largest portion of your current staff retiring?

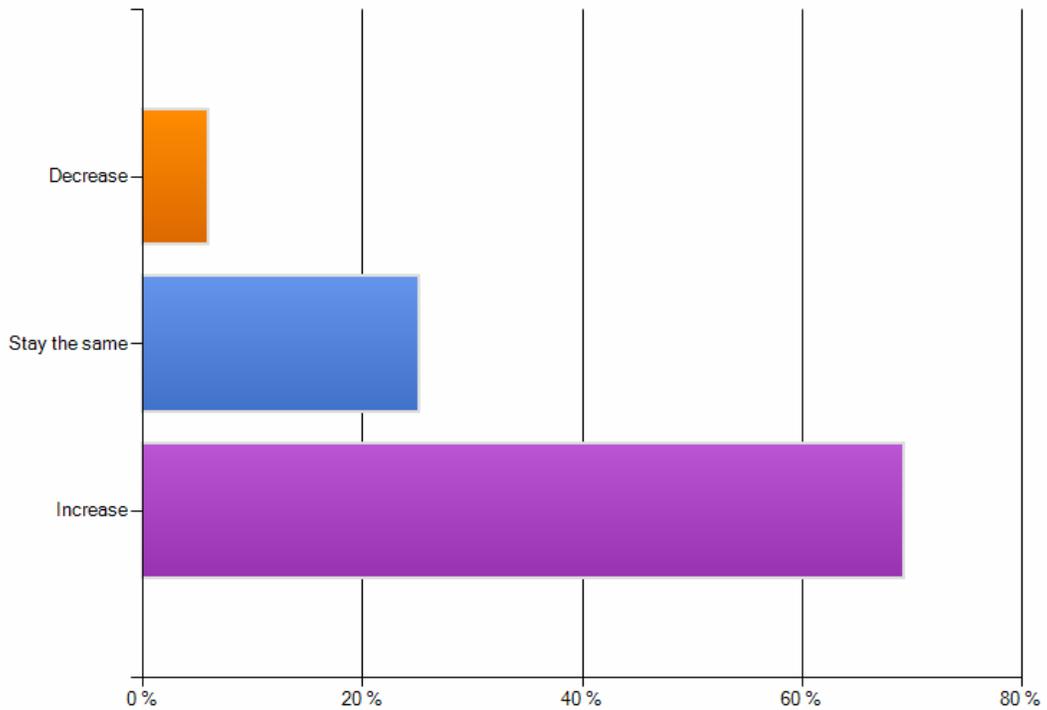


## APPENDIX B

Over the next 2 years, do you expect the number of employees of your business in the region to:



Over the next 5-7 years do you expect the number of employees of your business in the region to:



## APPENDIX B

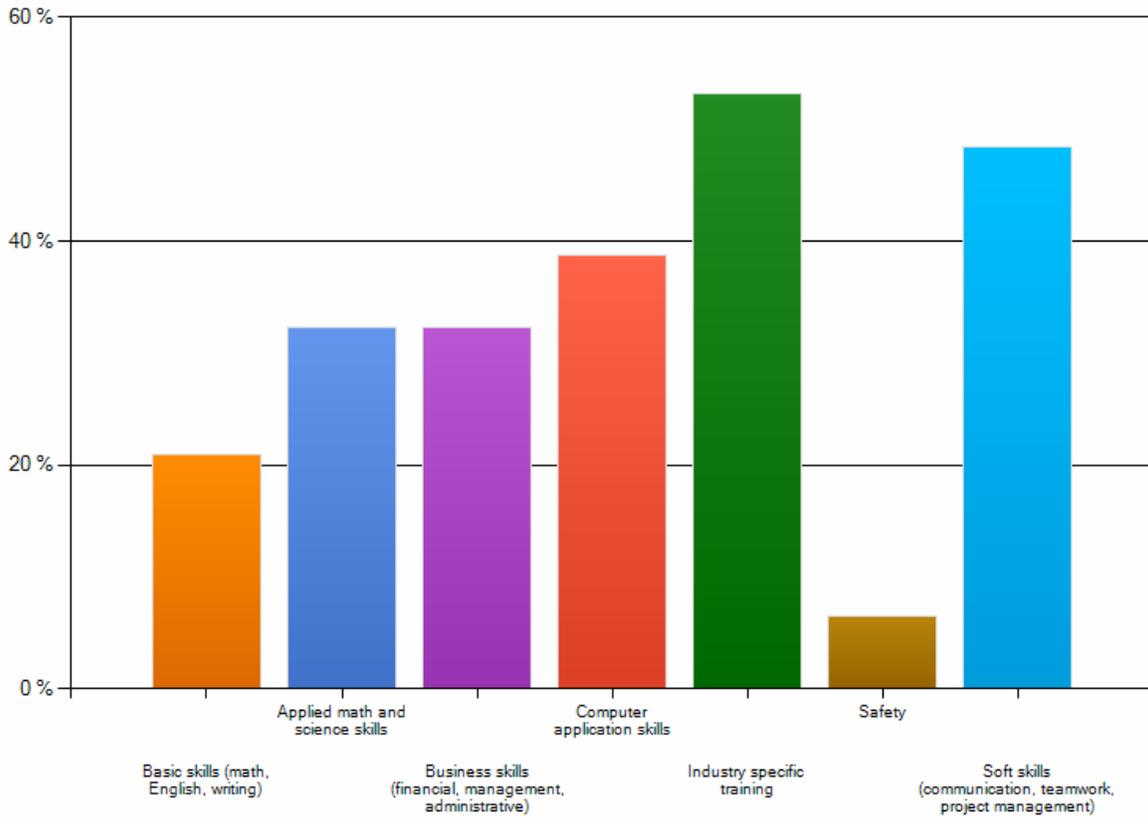
Which occupations do you expect to hire the most of over the next three years? Which occupations are the most difficult to fill?

RIG Region Employer Top Occupational Needs			
RIG Target Industries →	Business Services and Information Technology	Agriculture / Food & Life Sciences	Advanced Manufacturing
<i>Most Hiring Expected in Near Term</i>	<ol style="list-style-type: none"> <li>1. Programmers</li> <li>2. Sales Agents</li> <li>3. Computer Specialists</li> </ol>	<ol style="list-style-type: none"> <li>1. Maintenance &amp; Repair Workers</li> <li>2. Supervisors/Managers of Production Workers</li> <li>3. Computer Operator Specialists</li> </ol>	<ol style="list-style-type: none"> <li>1. Assemblers and Fabricators</li> <li>2. Machine Operators</li> <li>3. Engineers (industrial, mechanical)</li> </ol>
<i>Hardest-to-Fill</i>	<ol style="list-style-type: none"> <li>1. Programmers</li> <li>2. Sales Agents</li> <li>3. Computer Specialists</li> </ol>	<ol style="list-style-type: none"> <li>1. Computer Operator Specialists</li> <li>2. Supervisors/Managers of Production Workers</li> <li>3. Maintenance &amp; Repair Workers</li> <li>3. Managers (tie)</li> </ol>	<ol style="list-style-type: none"> <li>1. Engineers</li> <li>2. Supervisors/Managers of Production Workers</li> <li>3. Maintenance and Repair</li> <li>3. Sales Representatives (tie)</li> </ol>

*AngelouEconomics survey*

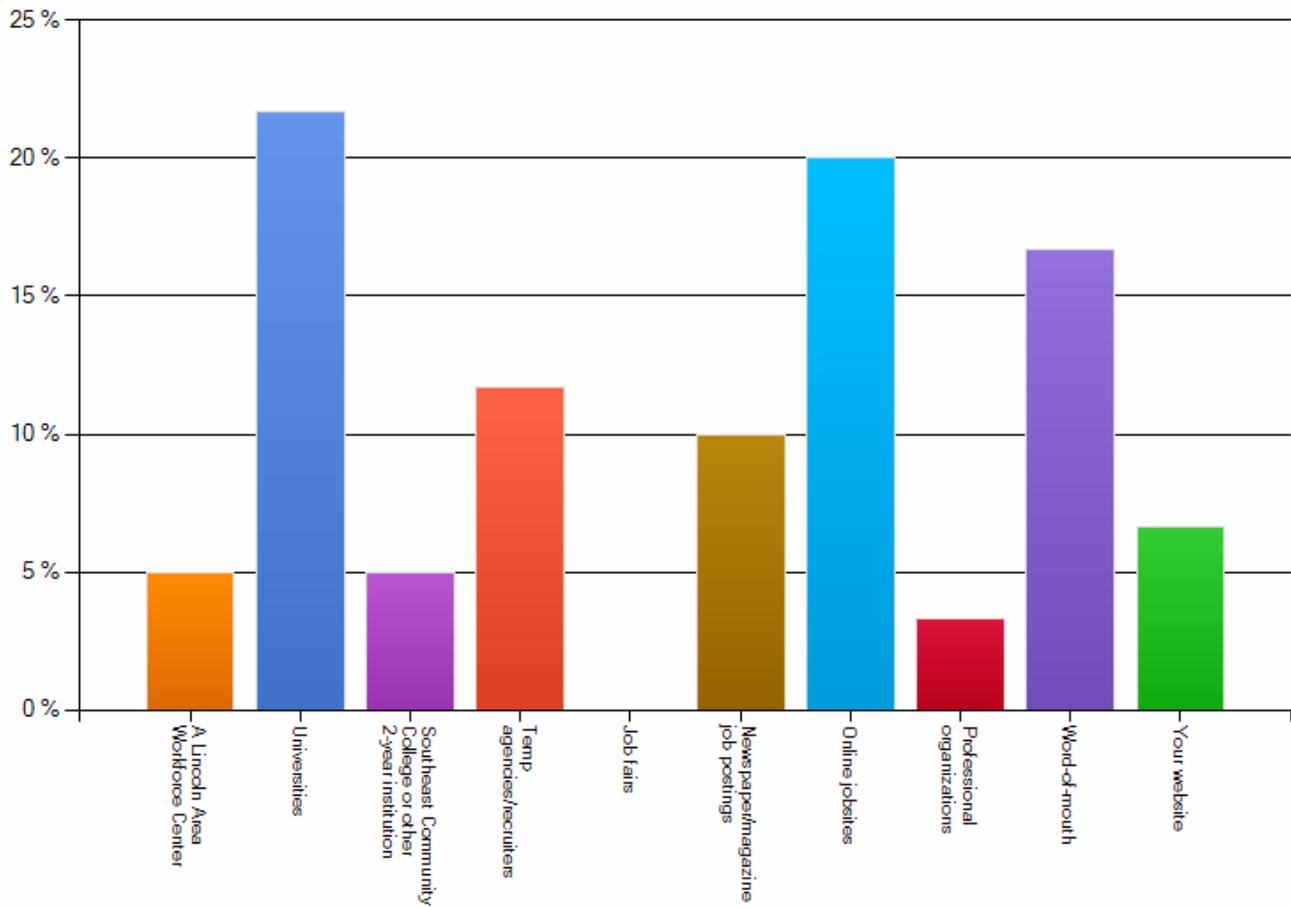
## APPENDIX B

What are the essential general skills needed of those hardest-to-fill jobs?



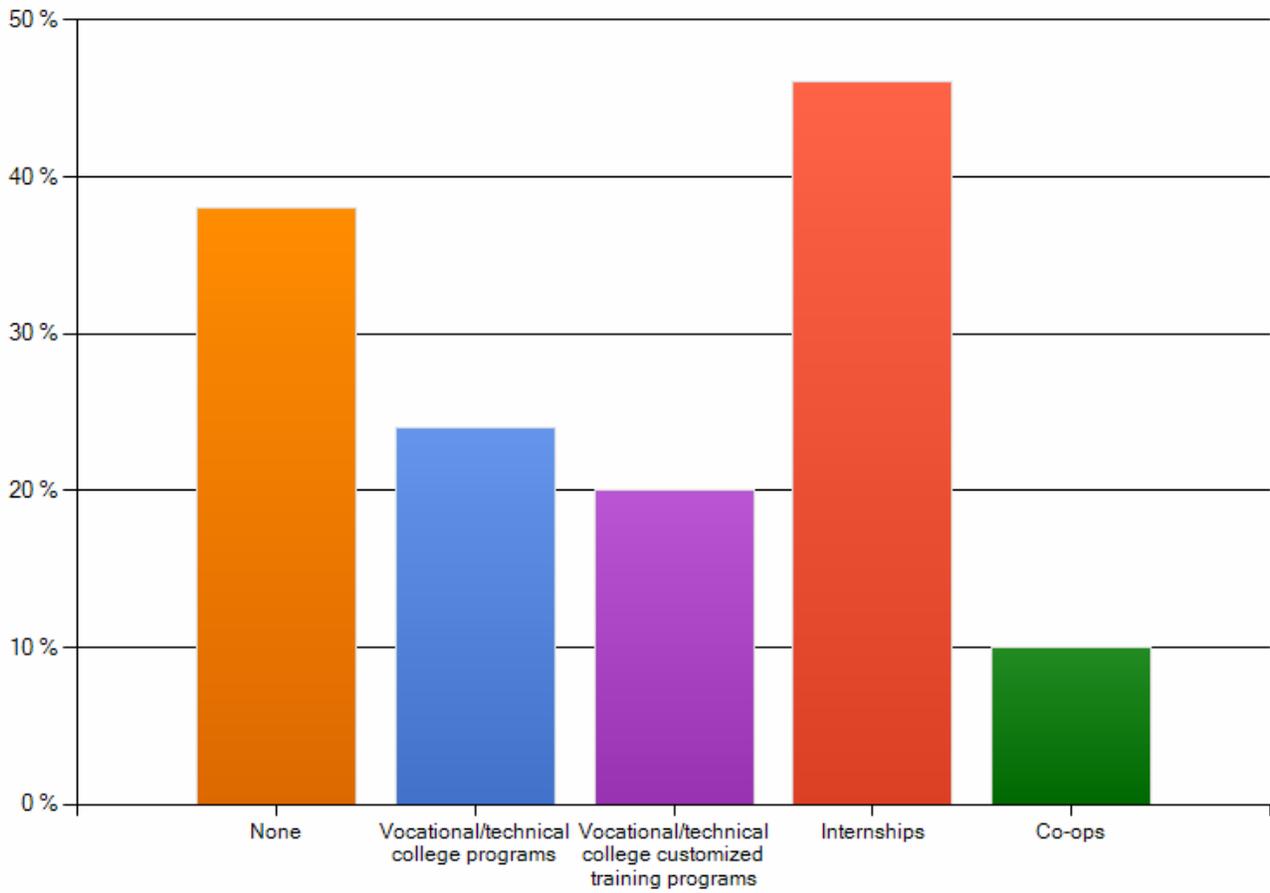
## APPENDIX B

Which one method for finding new employees do you use most often?



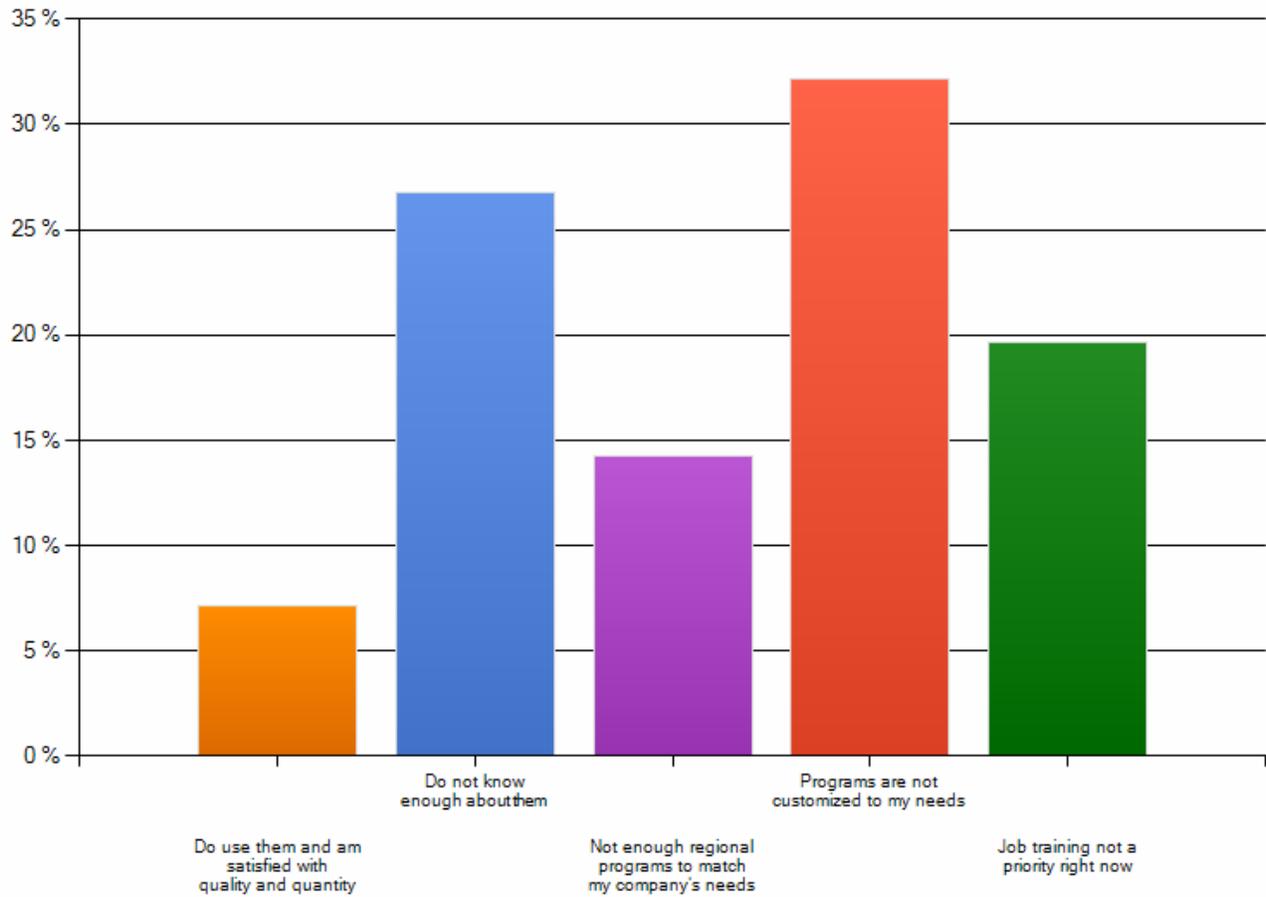
## APPENDIX B

In the past year, which job training programs have you used to train your employees?



## APPENDIX B

### Which best describes the reason that you may not utilize regional job training programs



## APPENDIX C

### EMERGING OCCUPATIONS

The following occupations are considered “emerging” by the U.S. Department of Labor, as they are “becoming numerically important or emerging due to technological change and are specific to the new or emerging industries they are born to.” The occupations listed here are organized by RIG target industry.

EMERGING OCCUPATIONS IN THE ADVANCED MANUFACTURING INDUSTRY	
EMERGING OCCUPATION	OCCUPATIONAL DEFINITION AND JOB RESPONSIBILITIES
Electrical Engineering Technologists	Apply engineering theory and technical skills to support electrical engineering activities such as process control, electrical power
Electro-Mechanical Engineering Technologists	Apply engineering theory and technical skills to support electro-mechanical engineering activities such as computer-based process control, instrumentation, and machine design. Prepare layouts of machinery and equipment, plan the flow of work, conduct statistical studies and analyze production costs.
Electronics Engineering Technologists	Apply engineering theory and technical skills to support electronics engineering activities such as electronics systems and instrumentation design and digital signal processing. Prepare layouts of machinery and equipment, plan the flow of work, conduct statistical studies and analyze production costs.
Industrial Engineering Technologists	Apply engineering theory and technical skills to support industrial engineering activities such as quality control, inventory control and material flow methods. May conduct statistical studies and analyze production costs.
Manufacturing Engineering Technologists	Apply engineering theory and technical skills to support manufacturing engineering activities. Prepare layouts of machinery and equipment and plan the flow of work, using computer integrated manufacturing (CIM) technology.
Manufacturing Engineers	Apply knowledge of materials and engineering theory and methods to design manufacturing or related processes in industrial plants.
Manufacturing Production Technicians	Apply knowledge of electrical, mechanical, and electronic systems principles and methods to set up, operate, and maintain manufacturing equipment.
Mechanical Engineering Technologists	Apply engineering theory and technical skills to support mechanical engineering activities such as generation, transmission and use of mechanical and fluid energy. Prepare layouts of machinery and equipment and plan the flow of work. May conduct statistical studies and analyze production costs.
Mechatronics Engineers	Apply knowledge of mechanical, electrical, and computer engineering theory and methods to the design of intelligent systems or industrial control.
Microsystems Engineers	Apply knowledge of electronic and mechanical engineering theory and methods to design and develop microelectromechanical systems (MEMS) devices.
Photonics Engineers	Apply knowledge of engineering and mathematical theory and methods to design technologies specializing in light information and light energy.
Photonics Technicians	Build, install, test, and maintain optical and fiber optic equipment such as lasers, lenses and mirrors using spectrometers, interferometers, or related equipment.
Robotics Engineers	Research, design, develop, and test robotic applications.
Robotics Technicians	Build, install, test, and maintain robotic equipment or related automated production systems.

*Source: AngelouEconomics, O\*Net New and Emerging Occupations*

## APPENDIX C

EMERGING OCCUPATIONS IN THE HEALTH CARE INDUSTRY	
EMERGING OCCUPATION	OCCUPATIONAL DEFINITION AND JOB RESPONSIBILITIES
Acupuncturists	Provide treatment of symptoms and disorders using needles and small electrical currents. May provide massage treatment. May also provide preventive treatments.
Acute Care Nurses	Provide advanced nursing care for patients with acute conditions such as heart-attacks, respiratory distress syndrome, or shock. May care for pre- and post-operative patients; or perform advanced, invasive diagnostic or therapeutic procedures.
Advanced Practice Psychiatric Nurses	Provide advanced nursing care for patients with psychiatric disorders. May provide psychotherapy under the direction of a psychiatrist.
Allergists and Immunologists	Diagnose, treat, and help prevent allergic diseases and disease processes affecting the immune system.
Anesthesiologist Assistants	Assist anesthesiologists in the administration of anesthesia for surgical and non-surgical procedures. Monitor patient status and provide patient care during surgical treatment.
Clinical Nurse Specialists	Plan, direct, or coordinate the daily patient care activities in a clinical practice. Ensure adherence to established clinical policies, protocols, regulations, and standards.
Critical Care Nurses	Provide advanced nursing care for patients in critical or coronary care units.
Cytogenetic Technologists	Analyze chromosomes found in biological specimens such as amniotic fluids, bone marrow, and blood to aid in the study, diagnosis, or treatment of genetic diseases.
Cytotechnologists	Stain, mount, and study cells to detect evidence of cancer, hormonal abnormalities, and other pathological conditions following established standards and practices.
Dermatologists	Diagnose, treat, and help prevent diseases or other conditions of the skin.
Electroneurodiagnostic Technologists	Conduct electroneurodiagnostic (END) tests such as electroencephalograms, evoked potentials, polysomnograms, or electronystagmograms. May perform nerve conduction studies.
Endoscopy Technicians	Maintain a sterile field to provide support for physicians and nurses during endoscopy procedures. Prepare and maintain instruments and equipment. May obtain specimens.
Genetic Counselors	Counsel and advise individuals concerning the risk for a variety of inherited conditions, such as genetic disorders and birth defects. Provide support to families who have members with birth defects or genetic disorders.
Hearing Instrument Specialists	Interpret and evaluate auditory test results. Provide consultation to individuals with hearing impairments to demonstrate, select, fit, adapt, or modify hearing amplification systems.
Histotechnologists and Histologic Technicians	Prepare histologic slides from tissue sections for microscopic examination and diagnosis by pathologists. May assist in research studies.
Hospitalists	Provide primary health care services to emergency, ward and short-stay hospital inpatients.
Informatics Nurse Specialists	Apply knowledge of nursing to assist in the design, development, and ongoing modification of computerized health care systems. May educate staff and assist in problem-solving to promote the implementation of the health care system.
Low Vision Therapists, Orientation and Mobility Specialists, and Vision Rehabilitation Therapists	Provide therapy to patients with visual impairments to improve their functioning in daily life activities. May train patients in activities such as computer use, communication skills, or home management skills.

*Source: AngelouEconomics, O'Net New and Emerging Occupations*

## APPENDIX C

EMERGING OCCUPATIONS IN THE BUSINESS SERVICES & INFORMATION TECHNOLOGY INDUSTRY	
EMERGING OCCUPATION	OCCUPATIONAL DEFINITION AND JOB RESPONSIBILITIES
Business Intelligence Analysts	Produce financial and market intelligence by querying data repositories and generating periodic reports.
Computer Systems Engineers and Architects	Design and develop solutions to complex applications problems, system administration issues, or network concerns. Perform systems management and integration functions.
Data Warehousing Specialists	Design, model, or implement corporate data warehousing activities. Program and configure warehouses of database information and provide support to warehouse users.
Database Architects	Implement and administer enterprise-wide document management procedures for the capture, storage, retrieval, sharing, and destruction of electronic records and documents.
Electronic Commerce Specialists	Market products on proprietary websites. Produce online advertising. Determine website content and design. Analyze customer preferences and online sales.
Financial Quantitative Analysts	Develop financial products used to inform individuals and financial institutions engaged in saving, lending, investing, borrowing, or managing risk. Investigate methods for financial analysis to create mathematical models used to develop improved analytical tools and advanced financial investment instruments.
Information Technology Project Managers	Plan, initiate, and manage IT projects. Lead and guide the work of technical staff. Serve as liaison between business and technical aspects of projects.
Investment Fund Managers	Plan, direct, or coordinate investment strategy and operations for a large volume of liquid assets supplied by institutional investors or a pool of individual investors.
Network Designers	Determine user requirements and design specifications for computer networks. Plan and implement network upgrades.
Risk Management Specialists	Analyze company balance sheets and apply mathematical models to calculate risk associated with trading or credit transactions.
Securities and Commodities Traders	Buy and sell securities and commodities to transfer debt, capital, or risk. Establish and negotiate unit prices and terms of sale.
Software Quality Assurance Engineers	Develop and execute software test plans in order to identify software problems and their causes.
Web Administrators	Manage web environment design, deployment, development and maintenance activities. Perform testing and quality assurance of web sites and web applications.
Web Developers	Develop and design web applications and web sites. Create and specify architectural and technical parameters. Direct web site content creation, enhancement and maintenance.

*Source: AngelouEconomics, O\*Net New and Emerging Occupations*

## APPENDIX C

EMERGING OCCUPATIONS IN THE TRANSPORTATION AND LOGISTICS INDUSTRY	
EMERGING OCCUPATION	OCCUPATIONAL DEFINITION AND JOB RESPONSIBILITIES
Customs Brokers	Prepare customs documentation and ensure that shipments meet all applicable laws to facilitate the import and export of goods. Determine and track duties and taxes payable and process payments on behalf of client. Sign documents under a power of attorney. Represent clients in meetings with customs officials and apply for duty refunds and tariff reclassifications. Coordinate transportation and storage of imported goods
Freight Forwarders	Research rates, routings, or modes of transport for shipment of products. Maintain awareness of regulations affecting the international movement of cargo. Make arrangements for additional services such as storage and inland transportation.
Logistics Analysts	Analyze product delivery or supply chain processes to identify or recommend changes. May manage route activity including invoicing, electronic bills, and shipment tracing.
Logistics Engineers	Design and analyze operational solutions for projects such as transportation optimization, network modeling, process and methods analysis, cost containment, capacity enhancement, routing and shipment optimization, and information management
Logistics Managers	Plan, direct, or coordinate purchasing, warehousing, distribution, forecasting, customer service, or planning services. Manage logistics personnel and logistics systems and direct daily operations.
Radio Frequency Identification Device Specialists	Design and implement radio frequency identification device (RFID) systems used to track shipments or goods.
Supply Chain Managers	Direct, or coordinate production, purchasing, warehousing, distribution, or financial forecasting services and activities to limit costs and improve accuracy, customer service and safety. Examine existing procedures and opportunities for streamlining activities to meet product distribution needs. Direct the movement, storage, and processing of inventory.

*Source: AngelouEconomics, O\*Net New and Emerging Occupations*

## APPENDIX C

EMERGING OCCUPATIONS IN THE AGRICULTURE AND LIFE SCIENCES INDUSTRY	
EMERGING OCCUPATION	OCCUPATIONAL DEFINITION AND JOB RESPONSIBILITIES
Biochemical Engineers	Apply knowledge of engineering science principles to biological materials, processes, and systems to create new products such as vaccines and foods.
Bioinformatics Scientists	Conduct research using bioinformatics theory and methods in areas such as pharmaceuticals, medical technology, biotechnology, computational biology, proteomics, computer information science, biology and medical informatics. May design databases and develop algorithms for processing and analyzing genomic information, or other biological information.
Bioinformatics Technicians	Apply principles and methods of bioinformatics to assist scientists in areas such as pharmaceuticals, medical technology, biotechnology, computational biology, proteomics, computer information science, biology and medical informatics. Apply bioinformatics tools to visualize, analyze, manipulate or interpret molecular data. May build and maintain databases for processing and analyzing genomic or other biological information.
Biostatisticians	Develop and apply biostatistical theory and methods to the study of life sciences.
Clinical Data Specialists	Apply knowledge of health care and database management to analyze clinical data, and to identify and report trends.
Clinical Research Coordinators	Plan, direct, or coordinate clinical research projects. Direct the activities of workers engaged in clinical research projects to ensure compliance with protocols and overall clinical objectives. May evaluate and analyze clinical data.
Geneticists	Research and study the inheritance of traits at the molecular, organism or population level.
Geospatial Information Scientists and Technologists	Research and develop geospatial technologies. May produce databases, perform applications programming or coordinate projects. May specialize in areas such as agriculture, mining, health care, retail trade, urban planning or military intelligence.
Managers of Quality Control Systems	Plan, direct, or coordinate quality assurance programs. Formulate quality control policies and control quality of laboratory and production efforts.
Managers of Regulatory Affairs	Plan, direct, or coordinate production activities of an organization to ensure compliance with regulations and standard operating procedures.
Molecular and Cellular Biologists	Research and study cellular molecules and organelles to understand cell function and organization.
Precision Agriculture Technicians	Apply geographic information systems (GIS) and global positioning systems (GPS) technologies to agricultural production and related agribusiness management. May apply geospatial technologies to activities such as pest scouting or pesticide application. <del>May conduct computer mapping, geographic mapping and computer analysis of soil, fertilizer, pest or weather-related activity.</del>
Quality Control Analysts	Conduct tests to determine quality of raw materials, bulk intermediate and finished products. May conduct stability sample tests.
Regulatory Affairs Specialists	Coordinate and document internal regulatory processes, such as internal audits, inspections, license renewals or registrations. May compile and prepare materials for submission to regulatory agencies.
Validation Engineers	Design and plan protocols for equipment and processes to produce products meeting internal and external purity, safety, and quality requirements.

*Source: AngelouEconomics, O\*Net New and Emerging Occupations*

## APPENDIX C

### REGIONAL ACADEMIC PROGRAMS AND COMPLETIONS

The tables below highlight regional higher education institution academic program offerings aimed at the target industry clusters. The tables include specific programs and approximate numbers of graduates within these programs in 2007-2008. All data is gathered through the *National Center for Education Statistics*.

#### TRANSPORTATION & LOGISTICS

School	Relevant Programs of Study	Degree type	# Completion	Degree type	# Completion
University of Nebraska - Lincoln	Architecture	Bachelors	41	Masters	31
	City/Urban, Community and Regional Planning			Masters	5
	Interior Architecture	Bachelors	27		
	Architectural Engineering Technology/Technician				
	Civil Engineering Technology/Technician	Bachelors	32		
	Construction Engineering Technology/Technician	Bachelors	56		
	Architectural Engineering	Bachelors	32	Masters	25
	International Business/Trade/Commerce	Bachelors	28		
	Civil Engineering, General	Bachelors	79	Masters	14
	Computer Engineering, General	Bachelors	36		
	Construction Engineering	Bachelors	1		
	Architectural Drafting and Architectural CAD/CADD	Associate	22		
	Civil Engineering Technology/Technician	Associate	4		
	Drafting and Design Technology/Technician, General	Associate	21		
Southeast Community College	Auto Collision Repair Technology	Associate	30		
	Automotive Technology	Associate	55		
	Chrysler CAP	Associate	7		
	Deere Construction & Forestry Equipment Tech	Associate	12		
	Diesel Technology Farm	Associate	19		
	Diesel Technology Truck	Associate	15		
	Ford ASSET	Associate	5		
	General Motors ASEP	Associate	13		
	John Deere Ag Parts	Associate	8		
	John Deere Tech	Associate	19		
	Motorcycle, ATV, & Personal Watercraft Technology	Associate	25		
	Parts Marketing & Management	Associate	6		
	Professional Truck Driver Training	Associate	61		
	Architectural-Engineering Technology	Associate	31		
	Land Surveying/Civil Engineering	Associate	4		
Peru State College	Computer and Information Sciences, General	Bachelors	1		
	Applied Science	Bachelors	72		
Nebraska Wesleyan University	International Business/Trade/Commerce	Bachelors	5		
	Computer Science	Bachelors			
	Information Science/Studies	Bachelors			
	Business/Commerce, General	Bachelors	93		
Doane College	Computer Science	Bachelors	5		
	Information Science/Studies	Bachelors	1		
Concordia University	Computer Science	Bachelors	2		
	Business/Commerce, General	Bachelors	20		
Union College	International Business/Trade/Commerce	Bachelors	1		
Nebraska Institute for Technology	Computer Science	Associates	<i>Completions Not Available</i>		
	Electronic Technology	Associates			
	Industrial Technology	Associates			
	Electronics technician	Certificate			
	Microcomputer Applications	Certificate			
	Computer Service Technician	Diploma			
	Electronics Service Technician	Diploma			
	Industrial Service Technician	Diploma			
	Information Management Systems	Diploma			
	Information Systems Technology	Diploma			
	Internet System Management	Diploma			
	Microcomputer Applications	Diploma			
	Microcomputer Programming	Diploma			

*Source: National Center for Education Statistics  
And institution websites/materials*

# APPENDIX C

## AGRICULTURE & LIFE SCIENCES

School	Relevant Programs of Study	Degree Type	# Completion	Degree Type	# Completion	Degree Type	# Completion
University of Nebraska - Lincoln	Agricultural Business and Management, General	Bachelor	31	Masters			
	Agricultural Communication/Journalism	Bachelor	3				
	Agricultural Economics	Bachelor	25	Masters	2	Doctoral	1
	Agricultural Mechanization, General	Bachelor	17				
	Agriculture, Agriculture Operations, and Related Sciences, Other						
	Agriculture, General	Bachelor	10				
	Agronomy and Crop Science	Bachelor	18	Masters	8	Doctoral	6
	Animal Health						
	Animal Sciences, General	Bachelor	41	Masters	14	Doctoral	9
	Applied Horticulture/Horticultural Business Services, Other						
	Floriculture/Floristry Operations and Management						
	Food Science	Bachelor	10	Masters	8	Doctoral	2
	Horticultural Science	Bachelor	27	Masters	5		
	Landscaping and Groundskeeping	Bachelor	5				
	Plant Protection and Integrated Pest Management						
	Range Science and Management	Bachelor	7				
	Soil Science and Agronomy, General	Bachelor	2				
	Soil Sciences, Other						
	Biochemistry	Bachelor	55	Masters	11	Doctoral	5
	Biology/Biological Sciences, General	Bachelor	108	Masters	11	Doctoral	9
	Biometry/Biometrics						
	Entomology	Bachelor	2	Masters	22	Doctoral	2
	Toxicology	Bachelor		Masters	1		
	Agricultural/Biological Engineering and Bioengineering	Bachelor	4	Masters	2		
	Biomedical/Medical Engineering	Bachelor	11				
	Chemistry, General	Bachelor	12	Masters	7	Doctoral	8
	Chemical Engineering	Bachelor	22	Masters	2		
Environmental/Environmental Health Engineering	Masters	9					
Southeast Community College	Agricultural Business and Management Technology	Associate	53				
	Laboratory Science	Associate	12				
Peru State College	Biological Sciences	Bachelor	10				
Nebraska Wesleyam University	Biochemistry	Bachelor	12				
	Biology/Biological Sciences, General	Bachelor	25				
	Biological and Physical Sciences	Bachelor	2				
	Chemistry, General	Bachelor	6				
	Forensic Science and Technology	Masters	30				
Doane College	Biology/Biological Sciences, General	Bachelor	25				
	Chemistry, General	Bachelor	1				
Concordia University	Biology/Biological Sciences, General	Bachelor	9				
	Chemistry, General	Bachelor	1				
Union College	Biology/Biological Sciences, General	Bachelor	7				
	Biophysics	Bachelor	0				
	Chemistry, General	Bachelor	4				
York College	Biology/Biological Sciences, General	Bachelor	5				

Source: National Center for Education Statistics  
And institution websites/materials

# APPENDIX C

## ADVANCED MANUFACTURING

School	Relevant Programs of Study	Degree Type	# Completion	Degree Type	# Completion
University of Nebraska - Lincoln	Electrical/Electronic/Communications Engr Technology/Technician	N/A			
	Industrial Production Technologies/Technicians, Other	Bachelors	2		
	Industrial Technology/Technician	Bachelors		Masters	9
	Telecommunications Technology/Technician	Bachelors			
	Electrical, Electronics and Communications Engineering	Bachelors	53	Masters	8
	Engineering Mechanics	Bachelors		Masters	2
	Engineering, Other	Bachelors	1	Masters	9
	Industrial Engineering	Bachelors	19	Masters	18
	Manufacturing Engineering	Bachelors			
	Mechanical Engineering	Bachelors	79	Masters	11
Southeast Community College	Manufacturing Engineering Technology	Associate	22		
	Computer Aided Design Drafting	Associate	16		
	Electrical Technology	Associate	32		
	Electromechanical Technology	Associate	27		
	Electronic Systems Technology	Associate	22		
	Machine Tool Technology	Associate	30		
	Welding Technology	Associate	20		
	Nondestructive Testing Technology	Associate	29		
Nebraska Wesleyam University	Mathematics, General	Bachelors	3		
Doane College	Mathematics, General	Bachelors	6		
Concordia University	Mathematics, General	Bachelors	3		
Union College	Engineering, General	Associate			
York College	Mathematics, General	Bachelors			

Source: National Center for Education Statistics  
And institution websites/materials

# APPENDIX C

## BUSINESS SERVICES AND INFORMATION TECHNOLOGY

School	Relevant Programs of Study	Degree Type	# Completion	Degree Type	# Completion	Degree Type	# Completion
University of Nebraska - Lincoln	Accounting	Bachelors	80	Masters	29		
	Actuarial Science	Bachelors	25	Masters	12		
	Business Administration and Management, General	Bachelors	173	Masters	98		
	Business, Management, Marketing & Related Support Services, Other			Masters	5	Doctoral	5
	Business/Managerial Economics	Bachelors	15				
	Finance, General	Bachelors	128				
	International Business/Trade/Commerce	Bachelors	28				
	Management Science, General	Bachelors	99				
	Management Sciences and Quantitative Methods, Other						
	Marketing Research			Masters	3		
	Marketing/Marketing Management, General	Bachelors	116				
	Office Management and Supervision						
	Computer and Information Sciences, General	Bachelors	32	Masters	19	Doctoral	5
	Telecommunications Technology/Technician			Masters	9		
Industrial Technology/Technician							
Southeast Community College	Business Administration and Management, General	Cert./Assoc	178				
	Business Information Technology	Cert./Assoc	41				
	Computer Programming Technology	Associate	10				
	Electrical Technology	Associate	32				
	Electromechanical Technology	Associate	27				
	Electronic Systems Technology	Associate	22				
	Microcomputer Technology	Associate	55				
Peru State College	Business Administration and Management, General	Bachelor	41				
	Business Administration, Management and Operations, Other	Bachelor	67				
	Business Administration, Accounting	Bachelor	8				
	Computer and Information Sciences, General	Bachelor	1				
Nebraska Wesleyan University	Accounting	Bachelor	9				
	Business Administration, Management and Operations, Other	Bachelor					
	Business, Management, Marketing & Related Support Services, Other	Bachelor	2				
	Business/Commerce, General	Bachelor	93				
	International Business/Trade/Commerce	Bachelor	5				
	Computer Science	Bachelor					
	Information Science/Studies	Bachelor					
Economics, General	Bachelor	2					
Doane College	Accounting	Bachelor	20				
	Business Administration and Management, General	Bachelor	26				
	Human Resources Management/Personnel Administration, General	Bachelor	58				
	Human Resources Management/Personnel Administration, General	Bachelor	36				
	Management Information Systems, General	Bachelor	8				
	Management Science, General	Masters	68				
Concordia University	Accounting	Bachelor	4				
	Business Administration and Management, General	Bachelor	22				
	Business/Commerce, General	Bachelor	20				
	Business/Corporate Communications	Bachelor					
	Computer Science	Bachelor	2				
Union College	Accounting	Associate					
	Business Administration and Management, General	Associate	1	Bachelor	29		
	International Business/Trade/Commerce	Bachelor	1				
	Organizational Behavior Studies	Bachelor	1				
	Computer and Information Sciences, General	Bachelor	2				
York College	Accounting	Bachelor	3				
	Business Administration and Management, General	Bachelor	17				
	Business/Corporate Communications	Bachelor					
	Human Resources Management/Personnel Administration, General	Bachelor	1				

Source: National Center for Education Statistics  
And institution websites/materials

# APPENDIX C

## HEALTH CARE

School	Relevant Programs of Study	Degree type	# Completion	Degree type	# Completion
University of Nebraska - Lincoln	Athletic Training/Trainer	Bachelors	8		
	Audiology/Audiologist and Hearing Sciences	Doctoral	4		
	Audiology/Audiologist and Speech-Language Pathology/Pathologist	Masters	26		
	Community Health Services/Liaison/Counseling	Bachelors	1		
	Pre-Dentistry Studies	Bachelors	1		
	Pre-Pharmacy Studies	Bachelors	1		
	Pre-Veterinary Studies	Bachelors	13		
	Speech-Language Pathology/Pathologist	Bachelors	26		
	Veterinary/Animal Health Technology/Technician/Veterinary Assistant	Bachelors	2		
Southeast Community College	Associate Degree Nursing	Associate	45		
	Dental Assisting/Assistant	Certification	34		
	Emergency Medical Services/Paramedic	Associate	1	N/A	
	Health Information Management Systems	Associate			
	Human Services	Associate	45		
	Medical Assisting	Associate	24		
	Medical Laboratory Technology	Associate	16		
	Pharmacy Technician/Assistant	Associate	11		
	Practical Nursing	Certification	85		
	Radiologic Technology	Associate	34		
	Respiratory Care	Associate	25		
Surgical Technology	Associate	20			
Nebraska Wesleyam University	Athletic Training/Trainer	Bachelors	5		
	Nursing Administration (MSN, MS, PhD)	Bachelors	37 Masters		24
Doane College	Health Professions and Related Clinical Sciences, Other	Bachelors	3		
	Health and Physical Education/Fitness, Other	Bachelors	1		
Concordia University	Behavioral Sciences	Bachelors	5		
	Kinesiology and Exercise Science	Bachelors	6		
	Sport and Fitness Administration/Management	Bachelors	1		
Union College	Clinical Laboratory Science/Medical Technology/Technologist	Bachelors	1		
	Health Services/Allied Health/Health Sciences, General	Associate	7 Bachelors		4
	International Public Health/International Health	Bachelors	10		
	Nursing/Registered Nurse (RN, ASN, BSN, MSN)	Bachelors	27		
	Physician Assistant	Masters	27		
	Health and Physical Education, General	Bachelors	3		
BryanLGH College of Health Sciences	Kinesiology and Exercise Science	Bachelors	1		
	Cardiovascular Technology/Technologist	Associate	5		
	Diagnostic Medical Sonography/Sonographer & Ultrasound Technician	Associate	10		
	Nurse Anesthetist	Masters			
	Nursing/Registered Nurse (RN, ASN, BSN, MSN)	Bachelor	23		

Source: National Center for Education Statistics  
And institution websites/materials

## APPENDIX D

### APPENDIX

As a means for designing a potentially new regional economic development entity in the Southeast Lincoln region, AngelouEconomics examined four effective regional organizations around the Midwest. Two profiles are provided below and a comparison matrix of all four follows.

#### GREATER DES MOINES PARTNERSHIP



- **Organization Type:** Public/Private Partnership (501 (c) (6))
- **Region:** 4 Counties in Central Iowa
- **Core Competency:** Business attraction and expansion
- **Annual Budget Estimate:** \$7.5 million total (2008); \$2.5 for Economic Development (75% private sector)
- **Board:** 59 members; Executive Committee: 24
- **Staff:** 40

#### •History

Partnership was officially formed in 1999. Business leaders decided to merge multiple organizations into one "umbrella" corporation to provide better efficiencies in serving the needs of Greater Des Moines. The merged groups included Greater Des Moines Chamber of Commerce Federation, Choose Des Moines Communities (economic development), and the Downtown Development Corporation (now called the Downtown Community Alliance). The impetus was to finally have a true regional group providing one consistent message while marketing Central Iowa to the country and the world. Currently, it is a 4 county regional group with over 4,000 "chamber" members and over 100 "investors".

#### Results

Organization started as a 3 county (Polk, Warren, & Dallas) effort and has grown to 4 counties (recently adding Madison). Additionally, GDMP works with Ames, Iowa on joint marketing efforts mostly related to Biotechnology. E.D. group targets 20 expansion projects, 10 new locations, and at least \$150,000,000 in new capital investment each year. "We've hit our goals over 90% of the time. And we've consistently received national recognition for our economy and our efforts to keep Central Iowa strong and growing." In the near future, the group plans to expand its geographic reach.

#### THRIVE® – MADISON REGION ECONOMIC DEVELOPMENT ENTERPRISE



- **Organization Type:** Public-private partnership
- **Region:** 8-county Madison region
- **Annual budget estimate:** \$1,210,000
- **Board:** 21 members, 3 executive members
- **Staff:** 10

#### •History

The early Collaboration Council was staffed by the Greater Madison Chamber of Commerce. A number of workteams were formed around such topics as assets and opportunities, intergovernmental cooperation, business retention, workforce development, and communications. In 2006, the group developed a business plan for a regional economic development entity, and a fundraising plan for a 3-year period. With a goal of \$2.4 million, \$2.6 million of investment was raised to support a new entity focused on regional economic development – and quality of life. The Regional Economic Development Entity (REDE), was formed in February of 2007. Between February 2007 and January 2008, REDE inaugurated its first Board of Directors, created a three-year strategic plan, staffed the organization, and began work on key collaborative projects. In December of 2007, REDE launched its new name, the regional brand, and a regional website to become Thrive, the Madison Region's Economic Development Enterprise. Thrive continues to convene the Collaboration Council, a separate and non-legal entity, around regional issues. Key focus areas for Thrive are: 1) capital growth, 2) sector development, 3) policy & research, and 4) promotion & collaboration.

#### • Results

[From interview] "One thing that's more subtle that has changed is the culture here. "Regional" is on everyone's mind that we work with – it's a new perspective, a new approach." Specific Thrive accomplishments in 2009:

- Brought regional healthcare leaders together to decrease costs, improve access, and improve quality through initiatives like Working for Health (workforce wellness initiative)
- Created a regional presence for the first time for the past three years at the international BIO conference
- Been a voice for the region through policy positions on farmland preservation, regional transit, high-speed rail, and capital access
- Fostered collaboration through economic development professionals network, a regional leads-sharing system
- Promoted the region through our website, social media outlets, and national forums
- Created an annual regional benchmarking metrics report
- Grew access to capital through expansion of an investor tax credit
- Attracted talent through a partnership with the Wisconsin Alumni Association

## APPENDIX D

For each organization, AngelouEconomics examined four critical areas: 1) funding; 2) 'member' contributions; 3) board makeup; and 4) core competencies (beyond regional business attraction, marketing, and retention). This data should be used to inform the design of the regional Lincoln area economic development entity.

Regional Group	Annual Budget (2009) for E.D.	Contributions	Board Makeup	Core Group Competencies (outside of business attraction & retention)
<b>THRIVE (Madison, WI Region)</b>  • Public/private • 8 counties • Staff: 10	~\$1.2 million	<ul style="list-style-type: none"> <li>▪85% privately-funded</li> <li>▪Remainder comes from state/local governments</li> <li>▪Not "pay to play" necessarily/ on a case-by-case basis</li> <li>▪Majority of contributions come from central and most urban county</li> <li>▪Investors contribute for 3-year period at amount of their choosing and then renegotiate</li> </ul>	<ul style="list-style-type: none"> <li>▪ Board members serve three-year terms and are re-elected by the Board at that time.</li> <li>▪Rolling term – not all terms expire in the same year.</li> <li>▪Board is kept diverse in terms of industry sectors represented, counties represented, etc. Not each county is represented in this model.</li> <li>▪Each county is represented on Regional Economic Development Professionals Network (working group under Board)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Talent attraction</li> <li>▪ Entrepreneurship</li> <li>▪ Workforce development</li> <li>▪"Quality of Life"</li> </ul>
<b>Oklahoma City Regional Chamber of Commerce</b>  • Public/private • 10 counties • Staff: 15 (for E.D.)	~ \$250,000	<ul style="list-style-type: none"> <li>▪Charge \$.25 per capita</li> <li>▪Match all of the funds raised 1-1 with Chamber ED funds</li> <li>▪Do not charge the Partnership any overhead or fee</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pay to play. If you pay you are on the board.</li> <li>▪ Chair is chosen from the group</li> </ul>	<ul style="list-style-type: none"> <li>▪Entrepreneurship</li> <li>▪Workforce development</li> </ul>
<b>Greater Des Moines Partnership</b>  • Public/private • 5 counties • Staff: 40	~\$1.5 million	<ul style="list-style-type: none"> <li>▪Public/private</li> <li>▪Cities/counties contribute at amount of their choosing (<i>see column to the right</i>)</li> </ul>	<ul style="list-style-type: none"> <li>▪ 30 member board</li> <li>▪ Board seats are given to cities investing at least \$25K/year and companies investing \$10K/year</li> </ul>	<ul style="list-style-type: none"> <li>▪Entrepreneurship</li> <li>▪Education/Workforce development</li> <li>▪Talent attraction</li> <li>▪Downtown development</li> </ul>
<b>Get Midwest (Dayton, OH) Region</b>  •Public/private • 12 counties • Staff: 22	~3.5 million	<ul style="list-style-type: none"> <li>▪ Companies pay in on a per employee (although very flexible)</li> <li>▪Counties contribute on a population basis (although three counties still do not)</li> <li>▪City of Dayton also contributes individually</li> <li>▪"No pay to play"; "this won't work in a true regional organization"; need to represent the whole region equally</li> </ul>	<ul style="list-style-type: none"> <li>▪All private sector, plus 3 college educators and Wright Patterson AFB ex-officio</li> </ul>	<ul style="list-style-type: none"> <li>▪Entrepreneurship</li> <li>▪Air Force Base issues</li> <li>▪Workforce development</li> </ul>

## APPENDIX D

As LPED/LAD initiate discussions about a transformed regional entity it should consider the following “best practices” – central to each of the models examined (gathered through interviews):

- Trust that the regional concept will lead to successful economic development and sell it. *What is good for one community is also good for the entire region.*
- Strive for a public/private partnership that has dedicated funding; better to have a higher private sector percentage.
- Seek inclusion of all key counties and cities in the greater region, especially larger cities and university/college towns.
- Actively involve the community, educational and business leadership of members on the Board and/or Committees. Offer those that buy-in a leadership role.
- Continuously involve smaller communities in the process through workshops, training, business retention, recruitment, etc. so that they better understand the regional benefits.
- Seek the best and brightest economic development professionals for your team; pay well in order to eliminate turnover and disruption.
- Actively involve the real estate brokerage community and assure them that all members will have access to potential deals if they play by the rules.