Report:
ECONOMIC DEVELOPMENT PLAN FOR BROKEN ARROW

AngelouEconomics
technology-based economic development

Presented to:
BROKEN ARROW ECONOMIC DEVELOPMENT CORPORATION

MARCH 2007
FINAL

REPORT
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Over the past 30 years, Broken Arrow has rapidly grown from a suburban Tulsa community into the State of Oklahoma's fifth largest city. This tremendous growth has been the result of an expanding industrial base, excellent quality of life, and affordable housing opportunities.

Although Broken Arrow continues to grow, sustainable economies are not built solely on residential growth. Now **it is time to focus attention on diversifying the community's economic base and developing an economic development strategy that provides a long-term vision for high-impact, high-wage business growth and ensures exceptional employment opportunities for the region's residents.**

This long-term strategy is not about real estate development, nor is it about the recruitment of one or two businesses to fill empty space. The strategy is about creating a sustainable economy built on a 21st century paradigm - **that talented people and innovation drive successful communities.**

Experts point out that information and knowledge are replacing capital and energy as the primary wealth-creating assets in today's economy. Technology and knowledge are now primary production factors. Technological advances allow information to be instantly transmitted across the world, and the primary competitive advantage a company possesses is its process of innovation and its ability to derive value from information. This requires that employees contribute innovative ideas to increase productivity and quality, reduce costs, and develop solutions rather than merely point to problems. To succeed, workers need more education, advanced skills, and a culture that is adaptable to the rapidly changing world in which their employers operate.

A community's economic strength will depend heavily on its ability to attract, retain, and develop a human capital base that is skilled and flexible. This strategic plan is based upon those principles.

OLD ECONOMY V. NEW ECONOMY	
In the old economy, people believed that:	**In the new economy people believe that:**
Being a cheap place to do business was the key.	Being in a place rich in talent is key
Attracting companies was the key.	Attracting educated talent is key
A high-quality physical environment was a luxury stood in the way of attracting cost-conscious businesses.	Physical and cultural amenities are key to attracting knowledge workers
Regions won because they held a fixed competitive advantage in some resource or skill.	Regions prosper if organizations and individuals have the ability to learn and adapt
Economic development was government-led.	Only bold partnerships among business, government, and non-profit sector can bring about change

Source: "Metropolitan New Economy Index," Progressive Policy Institute

Over the course of the past few months, AngelouEconomics (AE) has evaluated Broken Arrow's capacity to succeed in this knowledge-based economy. This evaluation was outlined in detail in our first report, the *Broken Arrow Situational Analysis*.

Highlights from that report include:

- A comparison of Broken Arrow to benchmark communities of Round Rock, Texas; Olathe, Kansas; St. Charles, Missouri; and Sugar Land, Texas revealed that Broken Arrow has **advantages** in its **low cost of living and housing**, **highly educated populace**, **low commute times**, **and low cost of doing business**. However, it **didn't fare as well** in comparisons of **research capabilities and venture capital funding, tight workforce market, and loss of young professionals**. *(Demographic comparisons are included in the appendix.)*

- Broken Arrow has several **key assets** that, if utilized correctly, will allow the community to expand its economic capacity. These assets include the expanding campuses at Northeastern State University-Broken Arrow (**NSU-BA**) and the Tulsa Technology Center-Broken Arrow (**Tulsa Tech-BA**), **well-regarded public school systems**, **excellent supply of industrial parks**, **unique downtown**, **skilled manufacturing workforce**, and a commitment among leadership to focus economic development efforts through the newly formed Broken Arrow Economic Development Corporation (**BAEDC**).

- In spite of these assets, the community also faces significant **challenges** to economic prosperity. Key challenges include the **lack of support systems for entrepreneurship**; **erosion of the young professional (25-44) workforce (-3% growth since 2000)**; **strain on infrastructural capabilities, including roads, utilities, and schools**; **limited utilization of downtown Broken Arrow**; **visually unappealing corridors**; **and limited marketing of the community's assets**.

This process of evaluation was both critical and extremely valuable. Based on Broken Arrow's assets and challenges, this final report, the *Economic Development Plan for Broken Arrow*, **outlines target industries for future growth and a roadmap that will enable community leadership to build on Broken Arrow's assets and find solutions for the challenges it faces.**

This *Economic Development Plan for Broken Arrow* represents the culmination of a four-month planning process and the beginning of new strategic directions for Broken Arrow. The ideas within could not have been developed without input from hundreds of individuals and regional leaders.
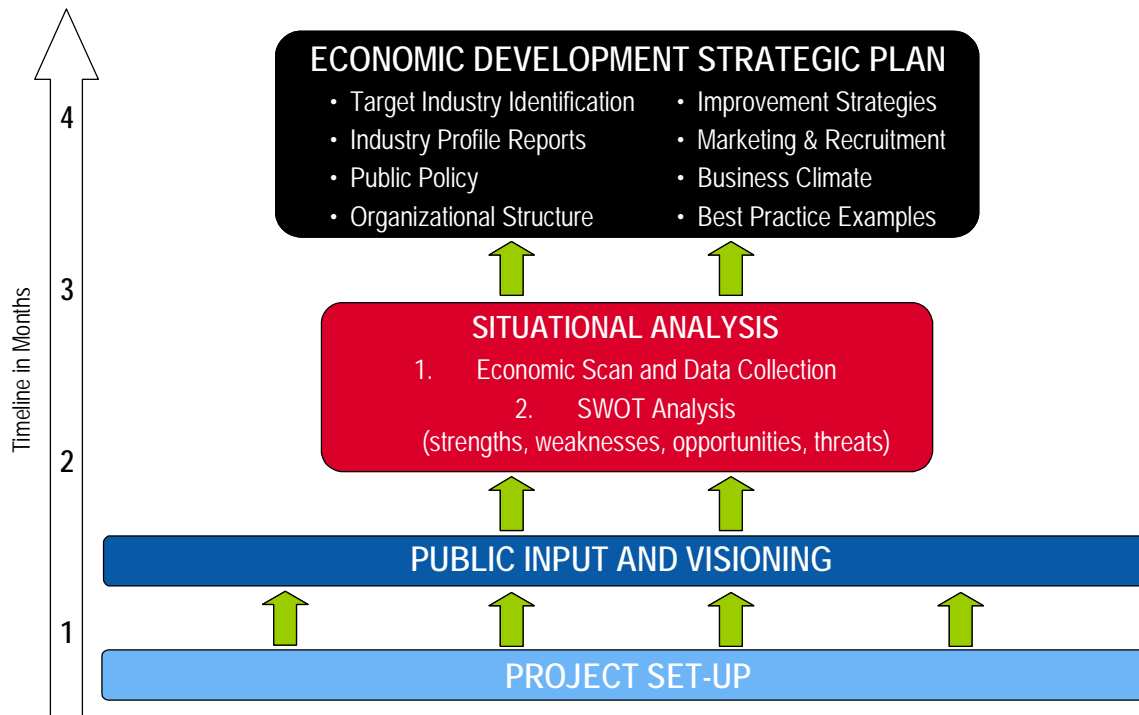
This report will serve as the roadmap for expanded economic development efforts in Broken Arrow. The recommendations contained within this report are designed to be organized and led by a variety of community organizations with primary support from the Broken Arrow Economic Development Corporation and the Broken Arrow Chamber of Commerce. None of the strategies contained within can be effectively implemented without regional cooperation, so it is vital that supporting organizations across the region buy-in to the presented strategies and offer backing where appropriate.

This final report is organized in three sections:

- <u>Chapter 1: Target Industry Report</u>. The Target Industry Report outlines AE's selection method for identifying Broken Arrow's target industries and culminates in the selection of five primary target industries and one secondary target industry. Target Industry Profiles are included in the appendix.

- <u>Chapter 2: Strategic Plan.</u> The Strategic Plan highlights five overarching goals, along with corresponding strategies and action items that, if implemented, will ensure sustainable economic prosperity in Broken Arrow, and more importantly, the entire Broken Arrow region.

- <u>Appendix.</u> The appendix includes Target Industry Profiles for each of the six selected target industries, with detailed information on industry growth trends, site selection requirements, Broken Arrow's key assets, and niche sectors. It also includes at-a-glance demographic charts that compare Broken Arrow to selected benchmark communities and other Tulsa area suburbs.

The chart on the following page illustrates the four-month planning process that was employed to culminate in the development of this *Economic Development Plan for Broken Arrow.*

BROKEN ARROW STRATEGIC PLANNING PROCESS

ECONOMIC DEVELOPMENT STRATEGIC PLAN
- Target Industry Identification
- Industry Profile Reports
- Public Policy
- Organizational Structure
- Improvement Strategies
- Marketing & Recruitment
- Business Climate
- Best Practice Examples

SITUATIONAL ANALYSIS
1. Economic Scan and Data Collection
2. SWOT Analysis
(strengths, weaknesses, opportunities, threats)

PUBLIC INPUT AND VISIONING

PROJECT SET-UP

Timeline in Months

4
3
2
1

AngelouEconomics would like to express our appreciation to the more than fifty individuals and organizations that were interviewed for their invaluable input on key issues identified in Broken Arrow.

We would like to give special thanks to the Broken Arrow Economic Development Corporation board and the following individuals for their time, resources, and coordination efforts:

Ted Allison, Former President, CEO, Broken Arrow Chamber of Commerce
Bruce Binkley, President, T.D. Williamson, Inc
Ed Huckeby, Chairman of the Board, Broken Arrow Chamber of Commerce; CAO, NSU-Broken Arrow
Rick Hudson, President, R.L. Hudson & Company
Keith Isbell, Chief Communications Officer, Broken Arrow Public Schools
Judi Myers, City Council Member, City of Broken Arrow
Russell Peterson, Former Chairman of the Board, Broken Arrow Chamber of Commerce
Joe Robson, President, The Robson Companies, Inc
Jack Ross, **Jr**, Ross and Eudey, PLLP
Narissa Rampey, Vice President, Air Assurance Company
Mickey Thompson, President, CEO, Broken Arrow Chamber of Commerce
Jim Twombly, City Manager, City of Broken Arrow
Dr. Jim Sisney, Superintendent, Broken Arrow Public Schools
Carol Yates, Assistant to the Superintendent, Broken Arrow Public Schools

We would also like to thank the more than 900 Broken Arrow residents that took part in the on-line surveys. Without your input, this process would not be successful.

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 in close proximity to take advantage of a region's inherent advantages. These businesses then become interdependent on each other, enhance their operating environments, and ultimately become more competitive on the global landscape. When this happens, these businesses become the experts in their field. They become more profitable, grow faster, and pay higher wages.

The target industry clusters identified by AE are based on a comprehensive review of Broken Arrow and the surrounding region. Initially, AE conducted an issues-based and demographic assessment of the community. The results of this analysis were presented to in the *Broken Arrow Situational Analysis Report.* This analysis provided a picture of the factors influencing Broken Arrow's strengths and weaknesses as a community as well as the key demographic issues the county faces for the future.

For this chapter, we conducted a cluster analysis of the region to determine what industries are dominant in the area. These clusters were analyzed to determine both national and regional growth trends and local assets that benefit the clusters that were identified.

In addition to the data analysis of current industries, we traveled to the region and talked to public and private sector leaders in interviews and focus groups. We also analyzed a significant volume of community input from recent projects. Through the public input process, we gained a clear picture of the community's vision for the types of businesses desired in the region as well as some of the strengths and challenges currently faced.

TARGET SELECTION PROCESS

AngelouEconomics employs a combination of quantitative and qualitative analysis in selecting the best target industries for a community. The process is guided by the following four questions:

1. **What clusters currently exist locally, and are they growing?** Immediate and obvious candidates for targets are those that are experiencing growth within the community or surrounding communities. Industries that have a large presence but lack growth suggest that the region is losing its competitiveness in this industry. While the industry may be a candidate to target for a retention effort, a long-term decline calls for a close look at transitional opportunities into new industries that create jobs (e.g. textile workers transitioning into food processing).

2. **Are current or emerging local clusters in industries that are growing nationally or undergoing geographic dislocation?** For those local clusters that have potential, are they growing nationally as well? While some industries are experiencing high growth rates, most U.S. industries are modest or stagnant in their growth. However, the dislocation of industries from one part of the country to another has been a long-standing opportunity for recruitment. Many industries undergo restructuring in order to be more competitive or simply suffer a high rate of startup and failure.

3. **Are there local assets that give specific industries a competitive edge?** Communities are as unique as people. Each one has strengths that companies can leverage to create competitive advantages. These strengths can include such things as workforce skills, tax structure, infrastructure, and market proximity. Likewise, many companies have specific infrastructure and workforce minimum requirements,

and understanding whether the region can meet those requirements is crucial. For example, if the region lacks water and wastewater capacity or has overly stringent environmental regulations, then the community could be ruled out for food processing and semiconductor manufacturing. Understanding the needs of target companies is essential to recruiting them.

4. **Does the industry match community goals?** The most important criterion is often whether or not the industry matches the stated economic goals of the community. Some communities may want to avoid manufacturing businesses or businesses that don't pay high enough wages. Sometimes lack of available land requires a more precise list of targets. Communities wanting to maintain a small-town appeal, for example, may target home-grown "soft" industries. Others wanting to transition into a more urban, metropolitan setting may focus more on larger office users. Industries that can survive locally will struggle to succeed without the backing of the populace and its elected officials. An aggressive marketing campaign and solid commitment by government to support a target can often overcome specific deficiencies or cost disadvantages.

In many ways, target industry selection is better described as **target industry "elimination"**. The following chart shows AngelouEconomics' systematic process by which an industry is selected as a target:
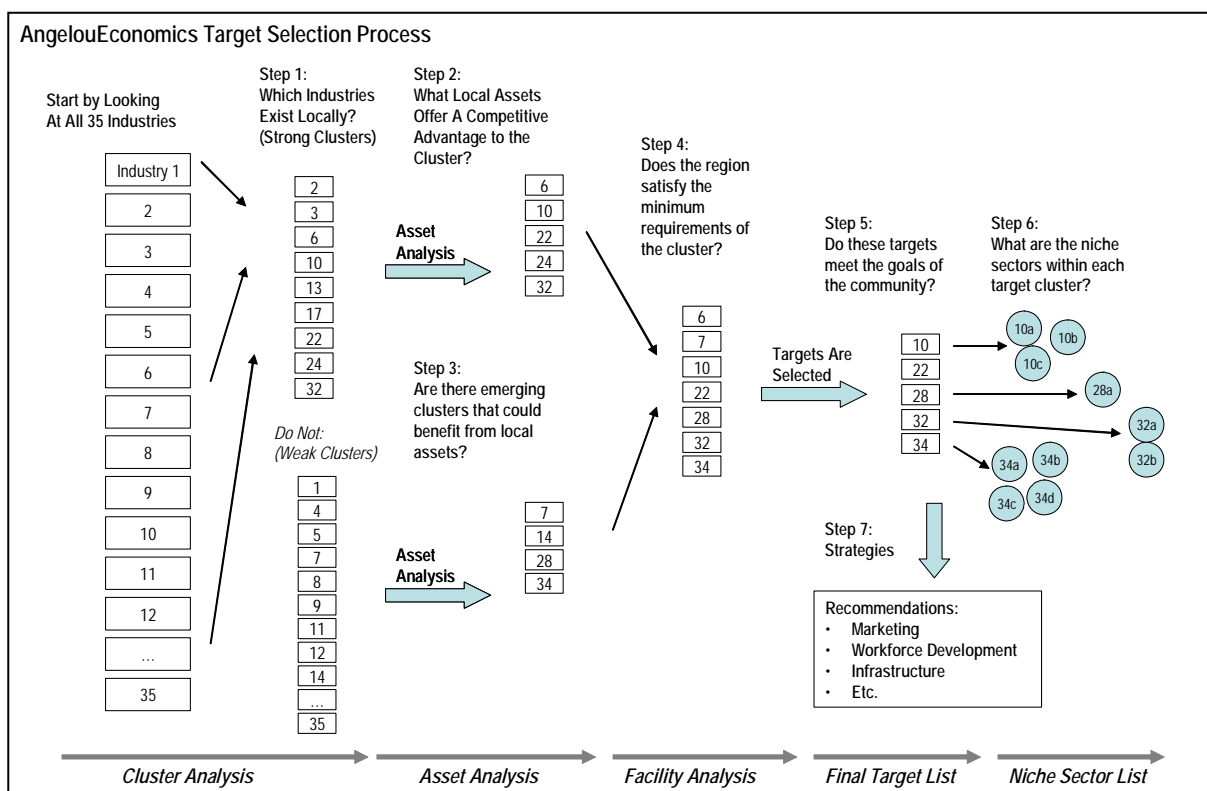
Finally, once targets are identified, we must ask what's to be done:

1. What are the best strategies to promote these targets?
   ✓ *Expansion, recruitment, startup promotion*

2. What marketing efforts will be most effective?
   ✓ *Collateral, web, conferences, etc.*

3. How should the economic development community organize to support these targets?
   ✓ *Chambers, cities, ports, educational institutions, state government*

4. What improvements to the community "product" will be required?
   ✓ *Infrastructure, roadways, ports, incentives, workforce development programs*

BACKGROUND ON INDUSTRY LOCATION ANALYSIS

Traditionally, the growth of economies has been described in terms of a region's "basic" or "primary" industries. These industries typically export their goods or services outside the region, thereby supporting local industries such as retail, housing construction, and personal services through its payroll and local purchases. Primary industries reflect an injection of outside money to the community and have a high economic impact as a typical primary business may create two additional jobs in the local economy for every one job at its facility.

For this reason, communities across the country compete to recruit or retain these high-impact, primary businesses. Manufacturing is a good example of a primary industry, as most customers would be found throughout the U.S. or internationally. With the manufacturing industry in decline and the increasingly global nature of business today, many more industries are increasingly "primary" in their make-up: distribution centers may serve a multi-state region; back office operations can serve a company's global network of employees; and custom software companies can build Internet applications that serve businesses anywhere in the world. Federal installations such as Army bases or federal research labs are clear examples of how government can be classified as a primary industry. High wage jobs are usually found at national or global companies that are enjoying growth.

While businesses are more global in nature today, rapid gains in technology, telecommunications, and markets continue to alter the location requirements of many companies. Often the speed of business drives corporate location decisions. The competition for top talent is now viewed to be the most important component of a successful company. Today's business environment requires that businesses continue to upgrade their technological capabilities while expanding the skills of the available workforce. Innovation and change is now a basic requirement for success.

"Site selection" is a broad term that describes a company's process of selecting a city for a new office or the relocation of existing divisions. This process involves executives from several divisions within the company (such as Executive, Human Resources, Facilities Planning, and sometimes Marketing) and often involves a consultant or real estate broker. Site selection is not a scientific process, but does involve a system of measurements and calculations.

We proceed through each of the "steps" outlined by the AngelouEconomics flowchart above, in order to arrive at a current, prioritized list of target industries for the region.

STEP 1: OVERVIEW OF BROKEN ARROW CLUSTERS

What Clusters Exist Locally? What is Their Condition?

Clusters are highly integrated groups of businesses with strong vertical and horizontal linkages. "Vertical" linkages include the suppliers and customers in a region that combine to create a competitive business model. The tight relationship between auto manufacturers and their suppliers is a good example of this vertical relationship. "Horizontal" linkages include the relationships that competing companies have and the public sector institutions that support them. Workforce is the primary asset that passes through these horizontal linkages as competing firms often hire away each other's workers (and learn from them) and also hire out of the same training programs or universities. The diagram to the right shows how these relationships exist within a cluster.
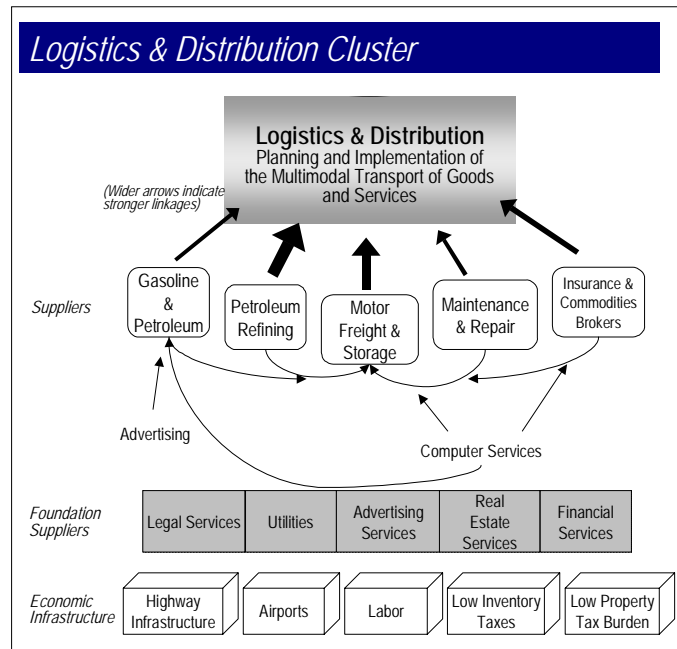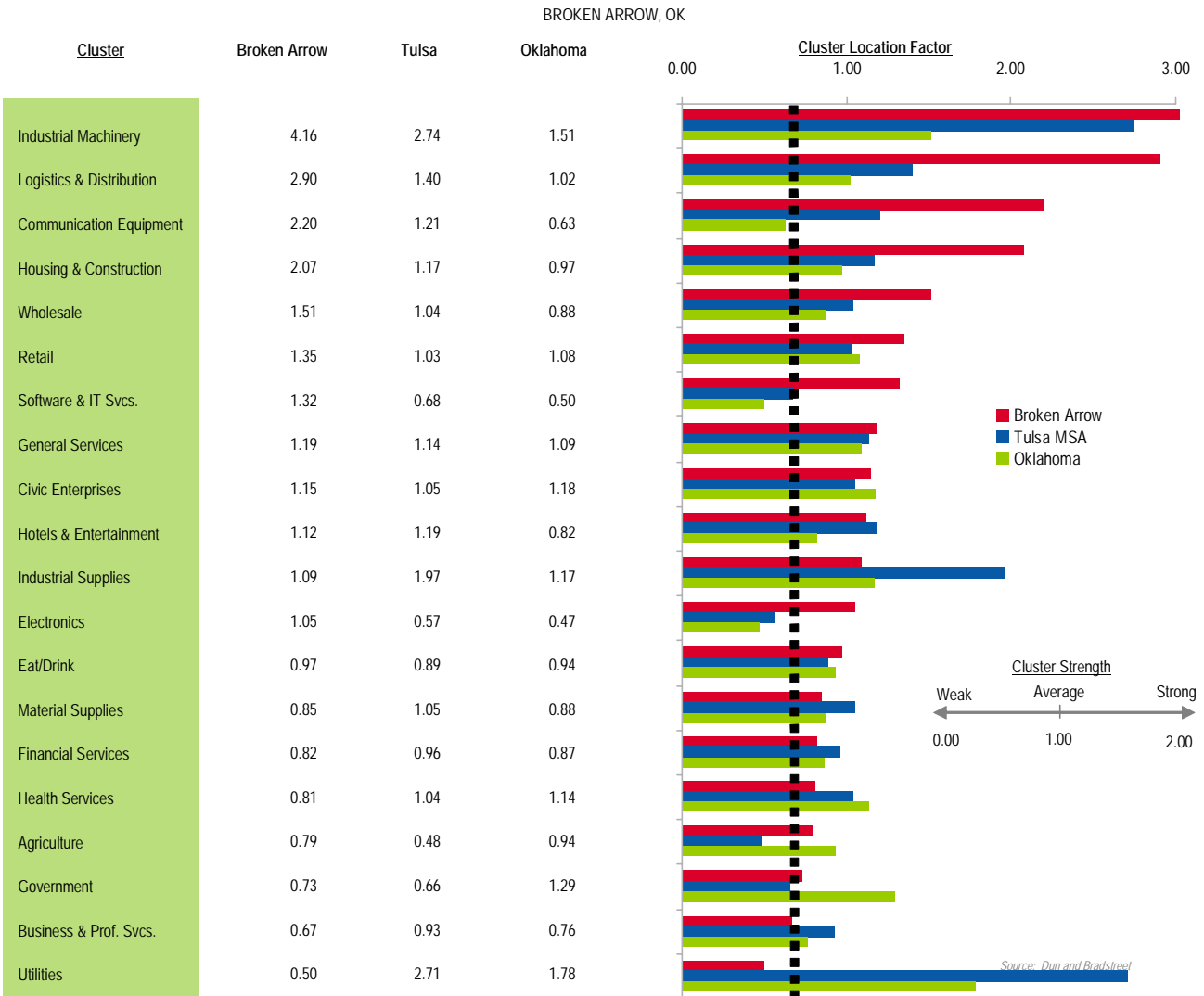

Historically, clusters gathered in specific regions of the U.S. due to natural advantages (e.g., natural resources and climate), cost factors (e.g., distance to market, labor costs), and existing transportation infrastructure. Today, companies are increasingly drawn to regions that can supply the unique workforce that they need. Universities and public sector institutions such as education and training facilities are now major drivers of regional economies. Clusters often mature when businesses expand their relationships with existing supplier firms in a region. As the clusters grow, additional supplier firms are attracted to the region, eventually creating a well-diversified "critical mass" of production, labor, and information.

AngelouEconomics has created 35 cluster definitions that achieve a much higher level of detail than the standard classification of the 10 major industries (manufacturing, services, etc.). This methodology categorizes businesses according to their final product and how these products are related to each other and integrated along the vertical supply chain. The results are a more accurate and detailed examination of industries than the broad method used currently by the Census. The new NAICS system is an improvement on how businesses are classified, but clusters will still be found across various NAICS codes and major industries.

To assess the strength of a cluster in a regional economy, AngelouEconomics has calculated location factors (or quotients) for each cluster. These factors are calculated by comparing the cluster's share of total local employment to the cluster's national share. This location quotient will yield a value generally between zero and two, where a result of "1" demonstrates that the cluster commands an average (expected) share of the local economy. Cluster location factors greater than two indicate a strong cluster agglomeration, while those less than .5 indicate extremely weak clusters.

The following table shows the cluster location factors for Broken Arrow, the Tulsa MSA, and Oklahoma:

TOP 20 BROKEN ARROW INDUSTRY CLUSTERS, 2006

BROKEN ARROW, OK

Cluster	Broken Arrow	Tulsa	Oklahoma
Industrial Machinery	4.16	2.74	1.51
Logistics & Distribution	2.90	1.40	1.02
Communication Equipment	2.20	1.21	0.63
Housing & Construction	2.07	1.17	0.97
Wholesale	1.51	1.04	0.88
Retail	1.35	1.03	1.08
Software & IT Svcs.	1.32	0.68	0.50
General Services	1.19	1.14	1.09
Civic Enterprises	1.15	1.05	1.18
Hotels & Entertainment	1.12	1.19	0.82
Industrial Supplies	1.09	1.97	1.17
Electronics	1.05	0.57	0.47
Eat/Drink	0.97	0.89	0.94
Material Supplies	0.85	1.05	0.88
Financial Services	0.82	0.96	0.87
Health Services	0.81	1.04	1.14
Agriculture	0.79	0.48	0.94
Government	0.73	0.66	1.29
Business & Prof. Svcs.	0.67	0.93	0.76
Utilities	0.50	2.71	1.78

Cluster Location Factor

0.00   1.00   2.00   3.00

Legend:
- Broken Arrow
- Tulsa MSA
- Oklahoma

Cluster Strength

Weak — Average — Strong

0.00   1.00   2.00

Source: Dun and Bradstreet

Broken Arrow enjoys key cluster strength in:

Industrial Machinery – One of Broken Arrow's strongest clusters, the industrial machinery cluster is dominated by advanced manufacturing operations and includes sub-industries such as farm and garden machinery, commercial machinery, and machine tools.

Logistics and Distribution – Broken Arrow has a strong logistics and distribution presence, consisting primarily of larger warehousing firms, and small, diverse distribution outfits. The cluster has grown substantially over the past decade, buoyed by Broken Arrow's central location and proximity to major markets.

Communication Equipment – The communication equipment industry includes telephone and telegraph apparatus, magnetic and optical recording media, radio and TV equipment, and switchgear. Broken Arrow has managed to maintain its communication equipment base despite declines in the industry nationally.

Software and IT Services – Broken Arrow enjoys a small yet concentrated and growing base in the information technology industry. Since 1998, employment in the sector has grown by over 200%, giving the city a significant cluster concentration. Primary areas include computer programming and integrated systems design, prepackaged software, and data processing services. The Broken Arrow industry is anchored by IT related companies such as MicahTek and Zeta Corp and bolstered by the presence of newer startups like Brushfire Technology Group

Housing and Construction – Not surprisingly, Broken Arrow's explosive residential growth has fueled a robust presence of operations providing housing and construction related products and services. Employment is clustered in subsectors such as construction machinery, roofing, plumbing and HVAC, and single-family housing. Suburban locations often count housing among their largest employment clusters.

Retail – Despite a relative lack of retail establishments for a market of its size, Broken Arrow possesses a high concentration in retail, based largely on the strong presence of Wal-Mart.

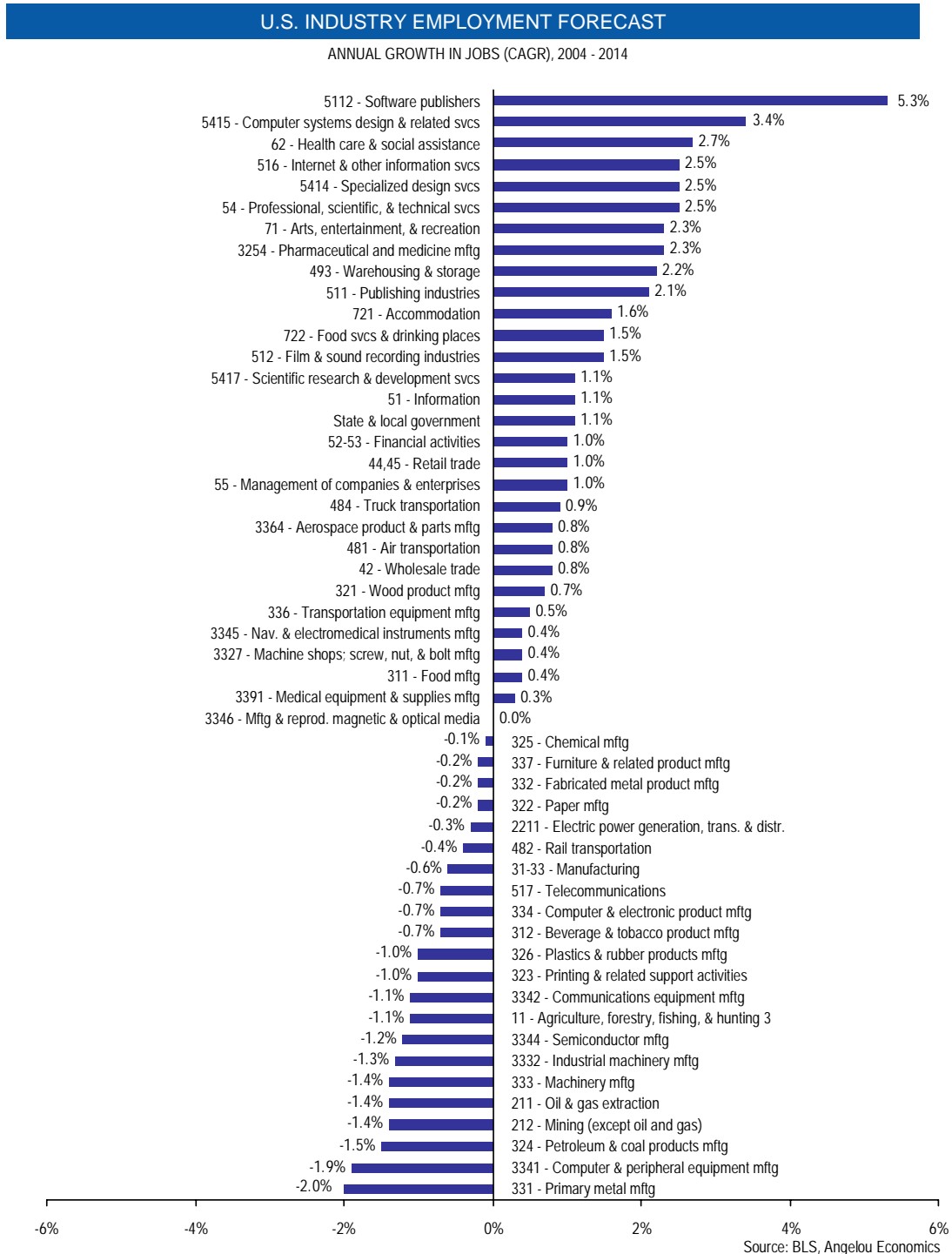As a whole, the Tulsa MSA has clusters in:

- Energy and Natural Resources
- Industrial Machinery
- Utilities
- Aerospace and Defense
- Industrial Supplies

As mentioned previously, local cluster strength alone does not automatically mean that a particular industry should be targeted for growth. National growth trends must be examined as well as the region's relative competitiveness in each cluster. We assess these factors on the following pages.

STEP 3: NATIONAL CLUSTER GROWTH

Which industries are growing nationally, or are relocating in the U.S.?

In general, communities should target industries that are growing, although targets can still include low growth or negative growth targets as well. The following chart shows the anticipated growth trends for specific industries and clusters:

U.S. INDUSTRY EMPLOYMENT FORECAST

ANNUAL GROWTH IN JOBS (CAGR), 2004 - 2014

Industry	Growth
5112 - Software publishers	5.3%
5415 - Computer systems design & related svcs	3.4%
62 - Health care & social assistance	2.7%
516 - Internet & other information svcs	2.5%
5414 - Specialized design svcs	2.5%
54 - Professional, scientific, & technical svcs	2.5%
71 - Arts, entertainment, & recreation	2.3%
3254 - Pharmaceutical and medicine mftg	2.3%
493 - Warehousing & storage	2.2%
511 - Publishing industries	2.1%
721 - Accommodation	1.6%
722 - Food svcs & drinking places	1.5%
512 - Film & sound recording industries	1.5%
5417 - Scientific research & development svcs	1.1%
51 - Information	1.1%
State & local government	1.1%
52-53 - Financial activities	1.0%
44,45 - Retail trade	1.0%
55 - Management of companies & enterprises	1.0%
484 - Truck transportation	0.9%
3364 - Aerospace product & parts mftg	0.8%
481 - Air transportation	0.8%
42 - Wholesale trade	0.8%
321 - Wood product mftg	0.7%
336 - Transportation equipment mftg	0.5%
3345 - Nav. & electromedical instruments mftg	0.4%
3327 - Machine shops; screw, nut, & bolt mftg	0.4%
311 - Food mftg	0.4%
3391 - Medical equipment & supplies mftg	0.3%
3346 - Mftg & reprod. magnetic & optical media	0.0%
325 - Chemical mftg	-0.1%
337 - Furniture & related product mftg	-0.2%
332 - Fabricated metal product mftg	-0.2%
322 - Paper mftg	-0.2%
2211 - Electric power generation, trans. & distr.	-0.3%
482 - Rail transportation	-0.4%
31-33 - Manufacturing	-0.6%
517 - Telecommunications	-0.7%
334 - Computer & electronic product mftg	-0.7%
312 - Beverage & tobacco product mftg	-0.7%
326 - Plastics & rubber products mftg	-1.0%
323 - Printing & related support activities	-1.0%
3342 - Communications equipment mftg	-1.1%
11 - Agriculture, forestry, fishing, & hunting 3	-1.1%
3344 - Semiconductor mftg	-1.2%
3332 - Industrial machinery mftg	-1.3%
333 - Machinery mftg	-1.4%
211 - Oil & gas extraction	-1.4%
212 - Mining (except oil and gas)	-1.4%
324 - Petroleum & coal products mftg	-1.5%
3341 - Computer & peripheral equipment mftg	-1.9%
331 - Primary metal mftg	-2.0%

Source: BLS, Angelou Economics

Technology sectors such as those relating to the use of computers and networks promise a high level of growth from 2004 to 2014. Productivity improvements continue to be felt in traditional companies that adopt new computer technologies. The highest rates of growth will be found in design and service sectors such as **Computer Systems Design** (3.4% per year), **Internet Services and Data Processing** (2.5%), and **Packaged Software Publishers, not custom** (5.3%). **Electronics**, **Semiconductor**, and **Computer Manufacturers** will shed jobs as more and more production is moved to low cost facilities overseas.

Health Care will be a high growth industry as the aging U.S. population becomes the dominant demographic story over the next 20 years. By 2010, nearly 15% of the population will be seniors 65+, a period in one's life where nearly half of health care expenditures occur. The senior population will be growing four times faster than the overall U.S. population by 2015. In 1950, there were 16 workers per retiree; today, the ratio is less than four to one, and by 2030, it will be two to one. With this massive demographic shift occurring, an estimated 4.3 million additional jobs will be created in the health care industry by 2014, with residential and elderly care receiving the highest rates of growth. **Medical Instruments** and **Scientific R&D** will experience modest growth. **Biotechnology** and **Pharmaceuticals** are expected to see strong employment in the near and long term.

The steady growth of the overall U.S. population will drive the growth of industries that supply, feed, house and entertain us. Distribution of consumer goods will experience high growth: **Warehousing and Storage** (2.2% per year), **Truck Transportation** (1.0%), and **Wholesalers** (0.8%). **Entertainment and tourism** industries will see high growth, and end-sales industries such as **Retail Trade** and **Restaurants** will see moderate growth. The **Construction** industry tracks well with overall economic growth and is expected to experience modest growth.

Local and State Government will see annual job growth of 1.1%, slightly lower than total employment growth (1.3%), as urbanization continues, and federal jobs are kept almost flat. Increasing wealth in the U.S. will require a larger **Financial Services** sector, which will also grow slightly faster than the population.

Manufacturing industries overall can expect continued job losses in the future due to continued technological improvements in the manufacturing process, large scale operations moving overseas, and for some, overall declines in final demand. Smaller, niche-manufacturing sectors will see modest growth: **Aerospace**, **Medical Equipment**, **Wood Products**, **Machine Shops**, and **Food Processing**. Other sectors that will see falling job levels are **Agriculture**, **Oil and Gas Extraction and Refining**, **Chemicals**, **Apparel Manufacturing**, and **Rail Transportation**.

As the U.S. economy moves away from manufacturing and into service related industries, the occupational profile of the country will change dramatically. Through a careful analysis of an area's established and emerging industries, community leaders will be able to anticipate occupational shifts at the local level and better prepare the labor force for the necessary skill sets.

Which clusters are gaining in strength nationally and locally?

Target selection must identify existing, strong clusters in the region, but also consider how clusters are gaining strength locally.

Clusters can gain strength in two ways:

1. **Above-average growth nationally.** This will result in a larger cluster employment concentration in Broken Arrow.

2. **An increasing cluster concentration ratio.** A growing cluster concentration in a region indicates that a cluster is capturing a larger share of new jobs in the U.S., suggesting an improvement in the region's attractiveness and competitiveness for the cluster.

A note on dislocating industries:
Some industries are declining or restructuring nationally, forcing communities dependent on those industries to make every effort to forestall job losses (e.g. communities in traditional manufacturing or facing base closures). We label these industries "Dislocating," as they are undergoing a basic restructuring in geography, technology, or markets.

At a national level, shrinking industries may still be an appropriate target for some communities if:

- **The industry is undergoing restructuring in order to be more competitive.**
  This often means that a company may relocate to another city or may spinout divisions to more competitive locations. For example, the automotive industry is expected to create few net new jobs and have moderate growth rates nationally but is migrating facilities from the Upper Midwest to the South.

- **The industry suffers a high rate of startup and failure.** While the U.S. South enjoyed many relocations from northern cities, most of the job growth occurred at companies that were founded in the South. As industries shrink in one region of the U.S., firms that are more competitive pop up and take market share. The success of financial services firms in the South and Midwest demonstrates the role that a competitive environment can play in an industry that suffers high churn.

- **Job loss is due primarily to technological investments, not declining revenue.** As some industries get more capital-intensive, they require fewer workers (such as the semiconductor industry), but their strategic value to a regional economy still grows (a higher economic job multiplier or higher local tax payments).

- **The region has a unique comparative advantage in a consolidating industry.** Due to declines in demand for their product, or other economic pressures, some industries may be forced to consolidate operations into very select areas of the country. Even though the overall industry may be in decline, a desirable region may be able to have an almost monopolistic hold on the cluster.

The following chart illustrates industry growth and dislocation trends at a local and national level:
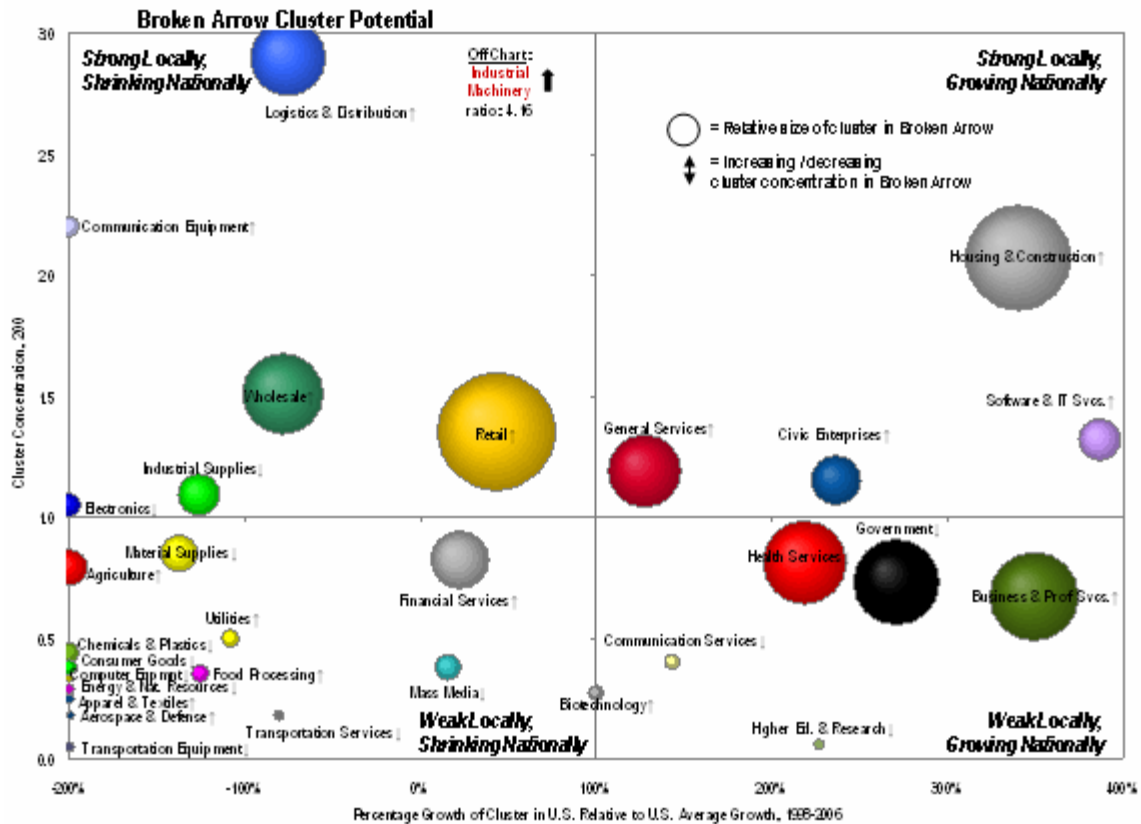
The chart above points to the following trends occurring in Broken Arrow:

- Many of Broken Arrow's strongest clusters, including Industrial Machinery, Logistics and Distribution, and Communication Equipment are considered "dislocating industries." These industries are shrinking at a national level and undergoing a basic restructuring in geography, technology, or markets. However, these industries can still be appropriate targets if a restructuring in geography is beneficial to the particular community.

- Locally clustered industries that are also gaining in strength nationally include Software and IT Services and Housing and Construction. These industries will continue to experience robust growth at a national level, creating the potential for a larger employment share and stronger cluster concentration in Broken Arrow.

- Though Broken Arrow possesses moderately strong clusters in Electronics and Industrial Supplies, the cluster strength in these industries has declined locally over the past eight years.

- Several industries that do not yet qualify as clusters in Broken Arrow have grown in their level of concentration since 1998, including financial services, business and professional services, food processing, utilities, and biotechnology. Of these, financial services and business services lie only slightly below threshold levels for "strong cluster" status.

STEP 3: COMPETITIVE ASSET INVENTORY

Are there local assets that give specific industries a competitive edge?

Another key determinant of appropriate target industries for Broken Arrow revolves around the area's key assets and limitations. We evaluate the region's core assets for industry recruitment and expansion by grouping assets into three categories: **core strengths**, **competitive assets**, and **barriers**:

Core Strengths

- **Market Growth –** Broken Arrow is a rapidly growing market offering substantial opportunities for businesses to thrive. Population has grown at nearly three times the rate of the nation and four times the rate of the state since 1990. Concomitant with this increase, the Broken Arrow labor force also continues to grow at a tremendous rate.

- **Location –** One of Broken Arrow's core strengths lies in its central location near the East-West midpoint of the U.S. Geographic centrality provides tremendous economic advantages including giving the region proximity to virtually every major market in the country – a vital characteristic for industries dependent on market access, such as distribution and logistics. Broken Arrow's locational advantages are augmented by its strong road transportation infrastructure.

- **Labor Costs –** The Tulsa region's labor cost structure is highly competitive with rage rates 13% below the national private sector average across many industries. For non-tech industries for which labor costs can be a critical consideration, Broken Arrow possesses a key advantage in this regard.

Competitive Assets

- **Quality of Life/Cost of Living –** Broken Arrow offers a lifestyle conducive to raising a family. The crime rate is remarkably low, the cost of living is low, schools are of high quality, and plenty of affordable housing is available. Fortunately, the low cost of housing for the region makes recruiting executives and workers relatively easy.

- **Income –** With a median household income of over $60,000 – nearly 50% higher than the Tulsa region and significantly above U.S. levels – Broken Arrow's income demographics are an important draw for industries seeking high disposable income trade areas. The retail, housing, and health care industries pay particular attention to income statistics, though they can also be important to other industries as indicators of the health and stability of an area.

- **Educational Attainment –** Broken Arrow possesses a highly educated workforce with over 34% of residents holding a bachelor's degree or higher. Educational attainment is bolstered by the expanding presence of Tulsa Tech and NSU-BA in the community. Many new economy industries value communities with the educated workforce demographics characteristic of Broken Arrow.

Barriers

- **Worker's Compensation Premiums –** A major obstacle for Broken Arrow and the entire state of Oklahoma is the presence of high worker's compensation rates relative to the rest of the country. Though reforms have been made, rates remain much higher than average. This serves as a significant deterrent to businesses and site selectors considering communities in Oklahoma.

- **Neutral or Negative Image of Oklahoma –** The image of Broken Arrow is inextricably tied to that of Tulsa and Oklahoma. Unfortunately, these places are viewed in the collective American consciousness as dusty, devoid of activity, and old-fashioned. Perception is often reality in economic development, and the image of a community may factor significantly into the decisions of executives and site selectors.

- **Skilled Labor Availability -** The unemployment rate in Broken Arrow for 2006 was only 2.8%, a very low rate indicative of the relative unavailability of labor. Workers in the skilled trades and technical vocations in particular are in high demand, as local industries struggle to find workers with adequate skills to fill positions. These conditions are exacerbated by the rapid aging and retirement of the local workforce.

- **Limited Venture Capital and R&D –** Broken Arrow and the Tulsa region have not attracted significant levels of venture capital, a situation that could change with significant investments being made in i2E, the Oklahoma Technology Commercialization Center, and the Innovation Institute. Access to high volume R&D institutions is also limited in Broken Arrow, with the largest regional research university – the University of Tulsa – ranking low in its allocation of research dollars. Research universities play a large role in the creation of start-up companies and the commercialization of technology.

- **Loss of Young Professionals –** Though the proportion of young people in the Broken Arrow workforce is currently fairly strong, rapid declines of late are cause for concern. Since 2000, this demographic has declined in Broken Arrow at approximately twice the rate of the state and the nation. If the decline continues at this pace, it could impact the community's capacity to recruit higher-tech industries.

STEP 4: DO THESE TARGETS MEET THE GOALS OF THE COMMUNITY?

Public opinion and community input is as critical to the industry cluster selection process as data and asset analysis. The growth of industry clusters requires a community effort. Local government officials, economic developers, business leaders, and the public must be united in their vision and enthusiastic in their support to grow regional representation in industry clusters that are unanimously viewed as desirable. This is particularly critical when a region lacks a strong local concentration in a targeted cluster. The lack of cluster concentration does not rule out an industry as a target, but it does indicate that community efforts have to be more focused and enhanced to successfully grow the desired industry locally.

During the course of our project, AE talked to many public and private sector leaders and community residents. Many of these represented key industries currently located in the region. Through this public input process, we received a great deal of information regarding the types of businesses that the residents of Broken Arrow desire for the future of their community. Two overarching community goals were the most prominent:

- Industries that are "Good Corporate Citizens"
- Industries that pay "Higher Wages" and employ "Higher Skilled Workers"

These three community goals all address the main challenges that Broken Arrow is currently facing. The community wants businesses that pay "Higher Wages" to begin to shift the imbalance that has existed in the prevalence of lower wage and income levels and a rising cost of living. Businesses that require higher skill levels will pay higher wages. Citizens and community leaders also desire "Good Corporate Citizens" that will support the local community. In surveys administered by AE during the public input phase of the process, several specific industries were selected as desirable by members of the community including Professional Services, Software, Health Care, and Biotech.

Combining the views and goals of the community with the foregoing analysis of Broken Arrow clusters, growth trends, and competitive assets, we arrive at the final list of target industry clusters. In our analysis, several industries of the below industry list are not considered primary targets; they are better classified as supporting industries for larger clusters. While these support clusters can grow large enough that they are largely export focused (e.g. Software in Silicon Valley), in Broken Arrow they should be viewed mainly as supporting assets to grow the final targets.

RECOMMENDED TARGET INDUSTRIES

The following diagram depicts the selection process and the resulting list of target industries for Broken Arrow.
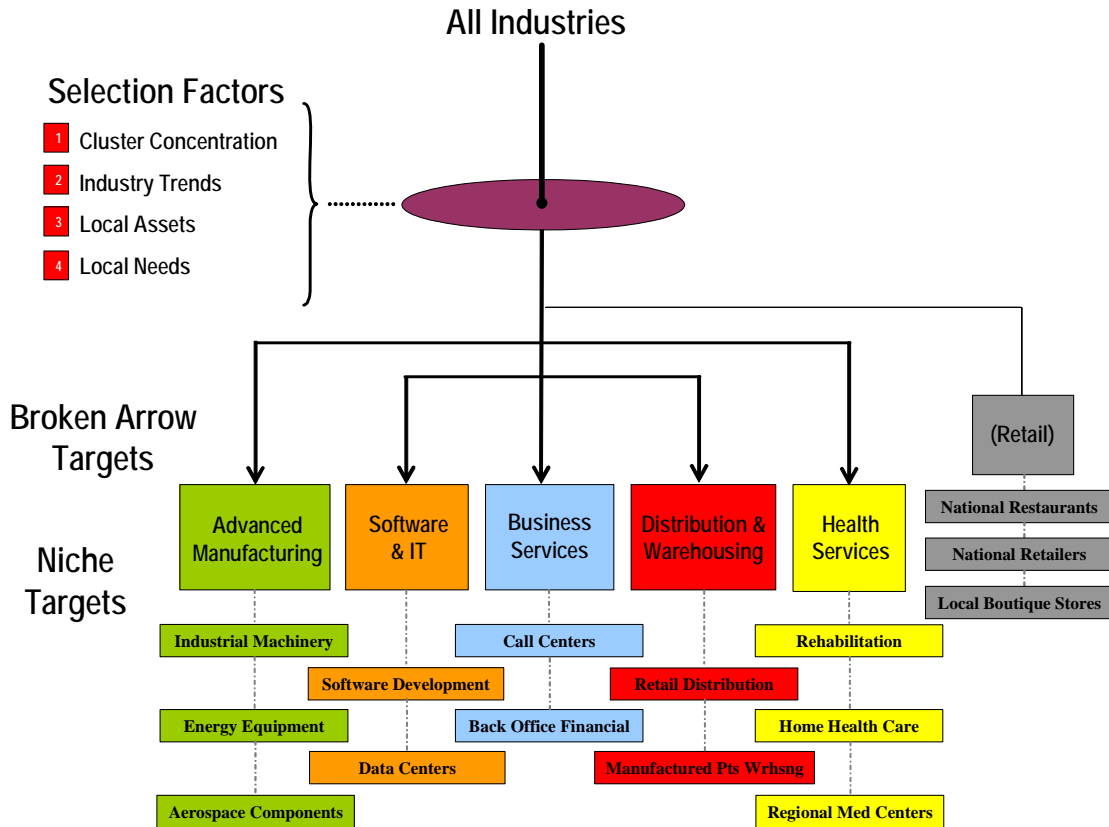
Detailed target industry profiles for each of these six selections are included in the appendix. These profiles include:

- Industry Overview and Growth Trends
- Industry Requirements and Wages
- Broken Arrow's Key Selling Points
- Niche Target Descriptions

Every plan must start with a vision. The goals, objectives, and actions in this report support the following vision statement for the region that was distilled from comments, opinions, and information from stakeholders.

> ### VISION:
> Broken Arrow will be a self-sustaining economic engine that provides exceptional opportunities for residents of all ages and backgrounds to live, work, and play within the community, while taking advantage of the amenities and resources available within the Tulsa metropolitan area.

What does this mean for Broken Arrow?

- ✓ It means that Broken Arrow's leadership must embark on a focused marketing and economic development effort to retain, attract, and grow high-impact industries and companies.

- ✓ It means that Broken Arrow must welcome and enhance its position as an integral part of the larger Tulsa economic region.

- ✓ It means that Broken Arrow must "think outside of the box" and embrace progressive and innovative ideas that make this vision a reality.

- ✓ It means that Broken Arrow must embrace all those that call Broken Arrow home.

- ✓ It means that there must be the will to finance and implement the strategies contained within the plan.

In harmony with this vision, this *Strategic Plan* contains strategies that will increase opportunities for Broken Arrow to grow its target industries and attract a talented workforce. **AE has identified five over-arching goals for the local economic development efforts.** Each goal relates to each section of the *Strategic Plan.* The goals are:

- GOAL 1: Develop a world-class economic development program and aggressively market Broken Arrow's strengths to potential business and residents.

- GOAL 2: Ensure an excellent business climate for business recruitment, retention, and entrepreneurial activity.

- GOAL 3: Develop robust, integrated workforce development and education programs that support area businesses.

- GOAL 4: Maintain and enhance infrastructural capabilities throughout Broken Arrow.

- GOAL 5: Enhance the livability and attractiveness of Broken Arrow.

In order to reach each goal, a variety of strategies and corresponding action items are contained within the following pages. However, we recognize the strategies contained within are extensive and may not be implemented given funding and time constraints. Given these constraints, AE has designated nine priority strategies for the BAEDC to focus on over the next year.

The nine priority strategies include:

ECONOMIC DEVELOPMENT AND MARKETING

1. Develop an organizational structure and funding structure for the BAEDC. *(page 22)*

2. Develop new BAEDC website with robust capabilities including community profile, target industry profiles, available real estate, key awards and rankings, and quality of life amenities. *(page 23)*

BUSINESS CLIMATE

3. Establish target industry working groups for each of the five primary target industries (Advanced Manufacturing, Distribution, Software and IT, Health Services, Business Services). *(page 28)*

4. Expand programs that support the expansion and retention of existing industries and create new ones where appropriate. *(page 29)*

LIVABILITY

5. Improve the visual image of Broken Arrow through signage beautification programs, public art programs along primary corridors and trails, and landscaping efforts. *(page 43)*

WORKFORCE DEVELOPMENT AND EDUCATION

6. Establish a Workforce Development and Education Council to form a strong linkage between workforce development providers and educational communities. *(page 35)*

7. Encourage workforce skill assessments for local companies, particularly those within the target industries. *(page 36)*

SITES AND INFRASTRUCTURE

8. Work with local developer to identify sites for class A office park and offer assistance as needed. *(page 40)*

9. Conduct a broadband capacity study of Broken Arrow. *(page 40)*

The following pages outline methods to accomplish each of these strategies and others related to each of Broken Arrow's five economic development goals. **Priority strategies are designated with a** ★ **in the margin**.

ECONOMIC DEVELOPMENT AND MARKETING

GOAL: Develop a world-class economic development program and aggressively market Broken Arrow's strengths to potential business and residents

The efforts of economic development organizations and initiatives, combined with effective marketing programs, position communities for economic success. Marketing improves awareness, creates demand, and drives growth. In this time of fierce global economic competition, coordinated, regional economic development and marketing efforts are of paramount importance.

The area of marketing and economic development efforts presents one of the greatest opportunities that Broken Arrow faces as the new Broken Arrow Economic Development Corporation (BAEDC) has recently been formed. In today's competitive economic environment, those communities with a collaborative approach to economic development succeed, and that is why BAEDC has such promise. As a joint initiative of the Chamber of Commerce, City of Broken Arrow, and school system, BAEDC is poised to drive results.

ECONOMIC DEVELOPMENT STRATEGY 1: Develop an organizational structure and funding structure for the BAEDC.

Primary Implementers: BAEDC, City of Broken Arrow, COC

Historically, the lead economic development organization in Broken Arrow has been the Chamber of Commerce. However, in 2005, city leaders proposed the idea of creating a separate Broken Arrow Economic Development Corporation (BAEDC) as a joint effort of the city, chamber, and public schools. An independent non-profit corporation, the BAEDC is currently being funded by $200,000 annually from the city of Broken Arrow. The independent board is working to develop a harmonious and comprehensive economic development vision for Broken Arrow, beginning with this planning process.

Action Items:
1. Meet with leaders in other communities that have organized successful economic development organizations to find out what organizational structures work for them.
2. Agree on a proposed structure. AE is proposing the following structure that begins with a singular president for both the Chamber and the BAEDC. This ensures that a single vision for economic development exists and will be efficiently implemented. However, given the president's myriad of duties, it is critical that other staff be in leadership positions to implement this plan on a day-to-day basis.
3. AngelouEconomics recommends a structure that allows the President of the Chamber to serve as President of the BAEDC. This improves efficiency by allowing for shared resources, including administrative resources, between the two organizations.
4. Annual budgets for the BAEDC should range from $400,000-$500,000 and should be split between public sector funding and private sector funding. This will require an effective fundraising campaign (see Strategy 3).

ECONOMIC DEVELOPMENT STRATEGY 2: Develop a new BAEDC website with robust capabilities including community profile, target industry profiles, available real estate, key awards and rankings, and quality of life amenities.

Primary Implementers: BAEDC, website designer

Web sites are one of the most effective communication tools. The more value a website provides a visitor, the more likely visitors will revisit the site and tell others about it. Expanding companies and site consultants begin researching communities through web sites. Sites that are data rich and contain information targeted to specific industries are true marketing tools.

A majority of economic development-related organizations have their own web sites. BAEDC web site should be the primary communication piece for promoting regional economic development.

Examples of effective economic development websites include:

- ✓ Round Rock, Texas
    http://www.roundrocktex.com
- ✓ Fort Bend County, Texas (Sugar Land)
    http://www.fortbendcounty.org

Action Items:
1. Hire an experienced website designer to design the website. The designer should have experience with economic development websites, in particular.
2. Best practices include:
    a. Consistently use the economic development positioning throughout the web site.
    b. Dedicate a section for news and accolades. Organize news by target industry and keep this fresh.
    c. Target the research you present. Have a page dedicated to each target industry. For example, present regional assets that a Software company would be most interested in, not everything provided to a business.
    d. Utilize PDFs to supply additional data, for instance a Target Industry Datasheet that states why the Broken Arrow region is attractive to Software companies.
    e. Allow users to download economic and demographic statistics into Excel spreadsheets. Users can incorporate benchmark comparative data when appropriate to highlight how the region compares to others.
    f. Make the site interactive by including GIS mapping, surveys, and forums.
    g. Add local business testimonials.
    h. Link to other economic development-related organizations and universities within the region.
    i. Include contact information.
    j. Allow web visitors to sign-up to receive e-newsletters.

ECONOMIC DEVELOPMENT STRATEGY 3: Develop a 5-year capital campaign with a goal of between $1.5-$3 million to implement strategies outlined within this plan.

Primary Implementers: BAEDC, Fundraising Consultant

The strategies contained within this plan are meaningless if there are no funds for implementation. Although the City of Broken Arrow is generously funding the organization at this time, public sector funds should not wholly subsidize these efforts.

The BAEDC should embark on its first (but not last) economic development capital campaign to raise private sector support for strategic initiatives. The campaign should be a multi-year campaign because an organization's ability to budget and forecast for several years demonstrates an ability to plan and manage that is attractive to the business community. A longer-term financial commitment will lead to longer-term interest and involvement from investors. A longer implementation period also increases your ability to show progress.

Action Items:
1. Develop RFP for fundraising consultants.
2. Consultants develop feasibility study to determine total campaign goal and level of private sector interest.
   a. Generally, annual goals should range from $250,000 to $400,000.
3. Using the initiatives contained within this plan, solicit funding support. Business and community leaders are more likely to put their funding behind projects in which they feel they have a stake.

ECONOMIC DEVELOPMENT STRATEGY 4: Develop and administer a database of prospects in target industries and design and distribute a monthly e-newsletter to those prospects.

Primary Implementers: BAEDC

The BAEDC should maintain a database to use for marketing. These contacts can be sent an e-newsletter highlighting the region's assets for each target industry, the successes of local businesses in target industries, and benefits of having a business in the region.

Action Items:
4. Create and distribute an e-newsletter to prospects. This should be the main vehicle pushing information out and pointing prospects to the web site. The BAEDC should design an HTML template, create the message for each e-newsletter, and send these out on a quarterly basis.
5. As an example, the Michigan Economic Development Corporation distributes a useful e-newsletter, called the Technology Tri-Corridor (http://medc.michigan.org/ttc/) to industry prospects highlighting assets and progress that make the area attractive to tech companies.

ECONOMIC DEVELOPMENT STRATEGY 5: Host a Familiarization Tour ("fam tour") for 5-10 national site selectors.

Primary Implementers: BAEDC

Instead of spending thousands of dollars on a large scale, site selector conference, host a fam tour inviting targeted individuals that have strong relationships with Software and IT, Business Services, Advanced Manufacturing, Health Services, and Distribution and Logistics.

Action Items:
1. Identify five to ten site selectors and invite them on a familiarization tour. These tours can host individual selectors or a small select group. Make this a very special occasion with a well-planned itinerary, high-quality accommodations, tours of industry-specific business locations, and activities that highlight the quality of life in the region. Each site selector should have a personal tour guide. Show them what you offer businesses, in terms of business services as well as recreation and entertainment. Get VIP seats at a concert or sporting event. Plan to spend $2,500-3,500 per site selector.
2. Hire one to three site selectors to complete an industry assessment. For example, ask a leading site selector for the Software industry to rate the region when it comes to the cost of doing business, workforce, and infrastructure. Once the region is a client of a site selector, you will be on their radar screen.
3. In order to save costs, the BAEDC can also team up with Tulsa's economic development efforts and host a joint fam tour.

ECONOMIC DEVELOPMENT STRATEGY 6: Enhance Broken Arrow's role as a regional economic development player.

Primary Implementers: BAEDC

Businesses and their site selectors do not choose one community in which to locate, but a region. Broken Arrow is a key player in the larger Tulsa region and benefits from Tulsa's market. The entire region needs to work to attract new businesses and retain existing businesses, with the knowledge that all will benefit from such efforts.

Action Items:
1. Heighten Broken Arrow's role in regional Tulsa collaborative efforts. Designate BAEDC board members to develop key relationships in the following organizations:
   a. Metro Tulsa Chamber of Commerce
   b. Tulsa Area Partnership
   c. Oklahoma Department of Commerce
   d. Step Up Tulsa
   e. Governors Council for Workforce and Economic Development
2. Develop a smaller Broken Arrow Regional Alliance. Invite smaller, surrounding communities into a regional Broken Arrow dialogue that may not already be included. These organizations should include Coweta and Wagoner County leadership.

ECONOMIC DEVELOPMENT STRATEGY 7: Communicate marketing and economic development results to constituents.

Primary Implementers: BAEDC, Broken Arrow COC

Internal marketing is just as important as external marketing. Successful economic development and marketing organizations should inform the public of the success of their efforts and report to their boards on what they have accomplished that is improving the economy.

Action Items:
1. Host an annual economic summit. This is a great venue to discuss top priority projects for the coming year and get buy-in. This activity will improve dialog between economic development-related organizations and those individuals that fund them. To make it more appealing for people to attend, a national speaker can be brought in to discuss the forecast of the economy.
2. Each economic development-related organization should create annual economic development reports for their respective boards. Annual reports provide economic developers an opportunity to highlight their results. For instance, the BAEDC can highlight lead generation and new companies, while the Chamber can highlight business expansion results.

ECONOMIC DEVELOPMENT STRATEGY 8: Continue to pursue the design of a new community brand and logo.

Primary Implementers: City of Broken Arrow, Broken Arrow COC, BAEDC

Successful communities across the country have a familiar identity established with their target audiences. This brand identity is a few words in the mind of the target audience that links with certain emotions and expectations. By having a primary message that conveys what makes the region unique and attractive to a business or professional, Broken Arrow can build positive awareness.

Action Items:
1. Continue to pursue design of community brand and logo.
2. Create an umbrella (primary) logo with the name and tagline. The logo should be able to be used by all economic development-related organizations (the City, BAEDC, and Chamber) when marketing Broken Arrow.
3. Although the logo should be consistent, taglines may vary as needed to highlight the particular goals of each organization.
4. Persuade local businesses to use the umbrella logo and positioning in their marketing. Local businesses should be allies in efforts to build awareness of the new brand.

BUSINESS CLIMATE

GOAL: Ensure an excellent business climate for business recruitment, retention, and entrepreneurial activity

Business climate can be defined as the capacity of the community to support business expansion and development opportunities. In today's competitive marketplace, providing a good business climate is key. Communities must promote business friendly regulations and be flexible and nimble in responding to business needs. In today's economy, more often than not, companies are driven by their bottom line, so costs are a significant consideration in any expansion or relocation decision, and globally competitive communities must provide a structure in which businesses can be profitable.

Additionally, since most jobs are created through small businesses, globally competitive communities must also provide excellent support mechanisms to grow small businesses from within the community.

In general, Broken Arrow's business climate is relatively positive. Broken Arrow's cost of living is competitive; it has an available, productive, and educated workforce; and it enjoys a positive state business climate with competitive incentives for companies. In relation to other benchmark communities, however, Broken Arrow was weakest in its support for entrepreneurial ventures and focused target industry initiatives.

BUSINESS CLIMATE STRATEGY 1: Establish target industry working groups for each of the five primary target industries (Advanced Manufacturing, Distribution and Warehousing, Software and IT, Health Services, Business Services).

Primary Implementers: BAEDC

As outlined within this report, AE has developed and outlined specific target industries for the region to focus upon to achieve the maximum results for economic development and the creation of high quality jobs. In order to become the most successful in attracting these targeted industries, AE recommends tapping into the vast knowledge and resources of other business leaders within these industries to further define specific messages and activities that could attract these industries.

Action Items:
1. <u>Develop Industry Champion Teams.</u> Industry Champion Teams are made up of local business and education leaders who serve in the industries that are being targeted for recruitment to the community. Developing and recruiting targeted, existing industry leaders from the community to conduct peer-to-peer selling on behalf of the community is a highly effective way to improve the overall job attraction success rate. These teams should give better insight into industry and support growth of existing companies.
2. <u>Role and Responsibilities of the ICT members should include:</u>
   a. Assist in the development of an industry specific marketing and expansion strategy.
   b. Assist with the crafting of an industry specific sales pitch to the targeted industry.
   c. Help identify prospects from within the industry, using personal contacts as a resource. This could be formalized into an "Executive Partnership" where each ICT member has a list of prospects that he/she remains in frequent contact with and regularly invites to Broken Arrow events.

d. Attend community sales trips to meet with peers in targeted industries to sell the Broken Arrow community as a place to locate their business.
3. <u>Roles and Responsibilities of the BAEDC should include:</u>
    a. Identify and recruit potential Industry Champions for the targeted industries of the region.
    b. Convene industry specific team meetings to develop industry specific marketing and expansion strategies.
    c. Identify prospects in the targeted industries, and consolidate them into common database with prospects identified by ICT members.
    d. Identify communities where effective sales trips can be conducted to reach targeted prospects.
    e. Coordinate prospect visits with ICT members and BAEDC staff.
    f. Develop an ICT training session to ensure that ICT members present an accurate, consistent sales message.

BUSINESS CLIMATE STRATEGY 2: Expand programs that support the expansion and retention of existing industries and create new ones where appropriate.

Primary Implementers: Broken Arrow COC

Although the Broken Arrow Chamber of Commerce has been supportive of the community's existing industry base, retention efforts can always be enhanced. The data varies, but it is widely reported that between 75-85 percent of all new jobs created are in existing industries. Broken Arrow should continue to ensure that its local businesses' needs are met through a regular dialogue.

Action Items:
1. Continue to enhance the business retention and expansion program through the regular on-site visits, mentoring programs, and workshops.
2. Evaluate software programs that might better capture and maintain information concerning businesses that could be updated throughout the year using on-line surveys and other tools.
3. The State of Oklahoma has a license for Synchronist software, and Broken Arrow should ask for a sublicense.

BUSINESS CLIMATE STRATEGY 3: Pursue the development of a high-tech incubator by conducting an incubator feasibility study.

Primary Implementers: COC Incubator Committee, BAEDC

The development of a business incubator to serve Broken Arrow, and possibly the entire Tulsa region, would be a strong asset for the acceleration of local entrepreneurship and small businesses. Incubators are important institutions for young start-up companies and can hasten the development of emerging technologies with strong market potential. This is also an ideal project for requesting EDA funding.

The Consortium for Entrepreneurship Education (http://www.entre-ed.org/) is a resource for economic development leaders for these types of programs. Additionally, time should be spent exploring programs available through The Kauffman Foundation (http://www.kauffman.org). Resources are also available through the National Business Incubator Association (http://www.nbia.org) for creating direction and organizing resources for the creation of incubators in the area.

Once an incubator is up and running, the Chamber and BAEDC should incorporate incubator information onto its website and contain an inventory of the region's entrepreneurship resources.

Action Items:
1. Research and visit best-in-class incubator facilities.
2. Work with these existing incubator programs for mentoring and/or "lessons".
3. Research and tap into federal funding opportunities available for starting up Incubators.
    a. The Economic Development Administration (EDA) currently has expressed interest in funding Incubator feasibility studies across the U.S.
    b. Other federal funding sources could be identified and secured to partially fund the creation of the Incubator.
4. Determine an appropriate location for the region's first Incubator.
5. Campaign to obtain private and public funding, and lobby the state for funding support. This could be the next major public / private funded project.
6. Set the incubator up as 501c3 non-profit organization with a dedicated board.
7. Hire an executive director to oversee operation of the facility.
8. Identify facility tools, support systems, and equipment needs to create desired activity.
9. Begin to build community support, and identify and attract local experts who would be willing to volunteer their expertise at the Incubator.
    a. These individuals should include local accounting and financial professionals, marketing, strategic management consultants, IP lawyers, seasoned scientists and technologists, retired executives, and entrepreneurs with successful records of accomplishment.
10. Have a grand opening launch and invite the community to join in the celebration.
11. Build and launch an incubator / entrepreneurial resources website.
12. Promote locally and throughout the region.
13. Create a position for a grant writer to continuously look for additional funding through state and federal sources (focus on the target industries when applicable).
14. Identify an individual or group to serve as a "fundraiser", working primarily with angel investors and venture capital firms to regularly update them as to findings, etc. to work for additional funding.

CASE STUDY: SANTA FE BUSINESS INCUBATOR
SANTA FE, NM

The Santa Fe Business Incubator (SFBI) is a 501c3 non-profit corporation funded by state, local, and federal government sources as well as private foundations. Housed in a 30,000 square foot facility, the program has assisted 35 companies since its inception in 1997. Client companies of the Santa Fe Business Incubator have created over 200 job opportunities.

The Santa Fe Business Incubator offers onsite business workshops and seminars, access to the skill and support of its professional staff, and experienced business advisors from the community. A business library and resource room is available, providing a wide range of reference materials, manuals, software, and office equipment.

The Incubator also has created a unique business assistance program for low-moderate income clients that provides them with subsidized rent, educational opportunities, and technical assistance. The Incubator receives CDBG funds from the City of Santa Fe for the administration of this program. In conjunction with the 30th anniversary celebration of the CDBG program, the US Department of Housing and Urban Development recently presented the Santa Fe Business Incubator with a Community Development Excellence Award for this unique program.

http://www.sfbi.net/

BUSINESS CLIMATE STRATEGY 4: Establish the Broken Arrow Entrepreneurs' Association (EA) to support entrepreneurial activity.

Primary Implementers: BAEDC

A critical aspect of building sustainable economic competitiveness is building a strong support network that will encourage entrepreneurs to create new businesses and help small businesses thrive. The stimulation of entrepreneurship through the formation and development of new commercial businesses and social enterprises can play a key role in employing underutilized resources in the region.

Entrepreneurs are economic engines of the community, as are small businesses in general. They are employers, people who mobilize economic resources and stimulate further economic activity because of their efforts, and serve as stabilizing factors in a community. They provide several major benefits:

- They create jobs at relatively low capital cost, especially in the fast growing service sector.
- They serve as a source of innovation in products, services, and techniques.
- They provide a productive outlet for the energies of enterprising and energetic people.
- They develop a pool of skilled workers who serve as the basis of industrial expansion.

Action Items:
1. The EA organizes and serves as a forum for entrepreneurs to share ideas on how to improve their businesses in regularly scheduled meetings.
2. The EA develops and maintains a website with resources on entrepreneurship, an electronic forum where entrepreneurs can discuss ideas, and a database of best practices that entrepreneurs can adapt for their own businesses.
3. Acts as the regional "voice" of entrepreneurship and works with: local units of government to promote a business climate that supports entrepreneurship, NSU-BA, Tulsa Tech-BA, and the K-12 systems to promote entrepreneurship training, and engage in discussions with private sector financing institutions and other potential influencers who could help support funding for small businesses and other entrepreneurial ventures.

BUSINESS CLIMATE STRATEGY 5: Customize incentive policies in Broken Arrow to attract targeted business growth.

Primary Implementers: City of Broken Arrow, BAEDC

Action Items:
1. The incentive policies should specifically mention the five primary target industries to demonstrate the community's eagerness to apply incentives to projects that further the development of those industries within the region.
2. These incentives should be selective and only offered to anchor projects that create a predetermined number of jobs.
3. These incentives may also be applicable to a project that does not meet the job number criteria as long as the jobs created meet a predetermined wage level.
4. Incentives could include regulatory fee discounts, enhanced fast track permitting, sales tax rebates, and/or property tax rebates.
5. The BAEDC could designate a portion of its fundraising goal to provide funds for incentives.

BUSINESS CLIMATE STRATEGY 6: Establish a Broken Arrow Angel Network.

Primary Implementers: BAEDC

Entrepreneurs seeking non-debt financing face a number of challenges. Many venture capital funds only seek deals in excess of $2 to 3 million, and business owners seeking equity funding in the range of $50,000 to $1 million often must look elsewhere. As a result, business creation and expansion efforts, especially those based in communities like Broken Arrow that lack large venture capital funds, may be underfinanced. Angel capital offers one means for filling this gap.

Angels are individuals, working either on their own or in networks, who invest (typically $50,000 to $1 million) in new and growing businesses. However, angel investing also has disadvantages. Angel investors can be difficult to locate. They also often invest in what is familiar, and they are less willing to invest in risky innovations or new ideas. Additionally, each individual angel controls limited amounts of capital. One way that Broken Arrow can enhance the impact of local investors is to organize networks of angels and establish an angel investor fund.

Action Items:
1. Identify potential angel investors through existing angel networks.
2. Engage prospective investors to discuss and agree to fund parameters:
   a. Annual fund goal amount
   b. Types of target businesses
   c. Management structure
   d. Business plan requirements
3. Investors make initial capital contributions.
4. Market financing opportunities.

CASE STUDY: CHIPPEWA VALLEY ANGELS
EAU CLAIRE, WI

In 2002, economic development leaders in the Chippewa Valley area of Wisconsin identified the need for early stage risk capital in order to support economic development and entrepreneurship in the region. Early talks led to an informational meeting, which in turn spawned the Chippewa Valley Angels, a group based out of Eau Claire with a mission to provide seed and pre-venture capital funding to startup companies in the Chippewa Valley and beyond. An investor owned and operated LLC, CV Angels is comprised of 17 members from the local area looking to allocate a portion of their investments in local companies. Once a month members view one presentation from a prospective venture chosen because of several criteria, including potential for economic impact, strength of the business plan, market opportunity, and size of equity investment. If the venture is compelling, those investors interested will set up a separate entity to use as the investment vehicle, and receipt of equity will commence in approximately 6 weeks to 3 months.

Though still very young, CV Angels has made some $2.8 million in equity investments thus far, including $2 million in four companies since 2004. This includes a local portfolio consisting of the Greater Chippewa Valley, as well as a regional portfolio, which includes Madison, Milwaukee, and the Twin Cities. Priority is given to local ventures, and strong local deal flow has led this component of the portfolio to comprise a very substantial portion of total investments. Funded ventures span a range of industries and technologies including the life sciences, software, wastewater treatment technology, and food science.

CV Angels works in concert with other local and regional entities to support economic development in the area and receives formal and informal support from these groups. For example, the Angels' website is hosted by Momentum Chippewa Valley, a multi-county ED organization.

http://www.chippewavalley.org/brdirectory/angelnetwork.htm

BUSINESS CLIMATE STRATEGY 7: Establish the Broken Arrow Technology Council (BATC), dedicated to addressing the needs of local technology companies and encouraging the adoption of high-tech initiatives throughout the community.

Primary Implementers: BAEDC, BATC

As the primary voice for technology companies in Broken Arrow, the BATC should develop relationships with i2E, the Oklahoma Technology Council, and the Oklahoma Technology Commercialization Center connecting Broken Arrow with opportunities for startup recruitment and venture capital funding.

Other communities with similar technology councils include:
- ✓ Charlottesville, VA www.vptc.org
- ✓ Nashville, TN   www.technologycouncil.com
- ✓ Chattanooga, TN www.chattanoogatechnologycouncil.org

Action Items:
1. Invite 10-15 leaders from the public sector, private sector, and educational institutions to serve as the Board of the BATC.
2. Develop a mission statement and action plan.
3. Focus efforts on developing relationships between local technology companies, funding organizations, and statewide technology groups.
4. Specific initiatives could include:
   a. Technology roundtable discussions
   b. Speaker's forums
   c. Funding workshops
   d. Networking events
   e. Lobbying efforts
5. Work with the local media to publicize the initiatives of the BATC.

BUSINESS CLIMATE STRATEGY 8: Along with the Tulsa Area Partnership and the Metro Tulsa Chamber of Commerce, lobby the State of Oklahoma to continue to lower worker's compensation rates.

Primary Implementers: Broken Arrow COC, BAEDC

Oklahoma is at a distinct disadvantage for large business development projects due to high workers' compensation rates. As two of the largest cities in the state, Tulsa and Broken Arrow will need to continue to lead legislative efforts to improve Oklahoma's business climate to alleviate this disadvantage.

Action Items:
1. Designate 3-4 community leaders and politicians to serve as primary lobbyists.
2. Organize meeting with other Tulsa area organizations to get support.
3. Prepare a white paper/economic impact report that details the effect that the workers' compensation rates have had on the Tulsa region.

BUSINESS CLIMATE STRATEGY 9: Develop and implement a specific strategy of business development and support aimed at women and minority owned businesses.

Primary Implementers: Broken Arrow COC

Reflecting demographic trends across the nation, the Broken Arrow community is rapidly diversifying. The number of women and minority owned businesses are increasing, but these groups often have less established networks within the community. The Chamber of Commerce should take the lead in facilitating the development of these networks.

Action Items:
1. Establish a Minority Outreach and Mentoring Program as part of the Broken Arrow Chamber of Commerce's business retention efforts that provides additional support to women and minority businesses.
2. Expand promotion efforts to spotlight women and minority owned business in Chamber newsletters and marketing materials.

WORKFORCE DEVELOPMENT AND EDUCATION

GOAL: Develop robust, integrated workforce development and education programs that support area businesses

Workforce development and education should be a primary cornerstone of any economic development initiative. The workforce (labor availability, costs, productivity) has become a much more critical factor in site selection decisions over the past few years as today's jobs demand more skills and education.

Since human capital and innovation are keys to success in the new economy, skilled, flexible workers are a company's primary assets. No community can be globally competitive without an educated workforce.

Without focus on a seamless system between workforce providers, educators, and business leaders, Broken Arrow could lose ground in its ability to attract quality companies, retain a strong existing industry base, and maintain a supply of available, quality workers.

WORKFORCE STRATEGY 1: Establish a Workforce Development and Education Council to form a strong linkage between workforce development providers and educational communities.

Primary Implementers: Broken Arrow COC

Workforce Tulsa, Tulsa Tech-BA, NSU-BA, Broken Arrow Public Schools, and Union Public Schools are key players in the workforce development system, but, together, they should play an even more central and highly visible role in both workforce and economic development. By creating a cross-disciplinary Council, the region can proactively create a strategy to combat these workforce challenges.

Action Items:
1. Form a Workforce Development and Education Council comprised of NSU-BA, Tulsa Tech-BA, the two public school systems, human resource directors of major employers, and Workforce Tulsa.
   a. Discuss and address workforce and economic development programs; changes that should be made in programs and the delivery of services relevant to target industries; issues related to attracting students to stay in the area after high school and college; issues related to increasing the 4-year degree presence in the region; and any other issues related to workforce preparedness and the role each can play in this effort.
   b. Evaluate the need for more vocational technical programs offered within the high school to prepare students for certain segments of the workforce.
   c. Develop an educational campaign to inform employers and potential workers of workforce development programs offered once the strategy is complete among stakeholders.
2. At least three Council members should be active participants on the board of Workforce Tulsa and the Governor's Council for Workforce and Economic Development to give Broken Arrow a robust voice in statewide workforce discussions.

WORKFORCE STRATEGY 2: Encourage workforce skill assessments for local companies and educational institutions.

Primary Implementers: Broken Arrow COC, Workforce Tulsa, ns

As part of a seamless workforce system, it is important to understand businesses' workforce needs. Through a continual workforce skill assessment, the community can be better prepared to assist, retain, and recruit new industries. Without a thorough evaluation of the type of workforce that existing businesses need to survive and thrive and an understanding of the necessary skills these companies need for their employees, communities could be in jeopardy of losing valuable jobs. Broken Arrow must proactively prepare for future workforce needs of its target industries in order to achieve success in job creation efforts.

WorkKeys is one workforce assessment tool that exists, is gaining national recognition, and could set Broken Arrow apart from competitors. The system is used by businesses, educational systems, and job training programs throughout North America. It offers a standardized assessment test and certifications so that companies can profile the skills needed by position, identify appropriate applicants with those skills, and re-train existing employees in areas of needed improvement.

Action Items:
1. Encourage NSU-BA, Tulsa Tech-BA, and Broken Arrow Public Schools to certify each student at graduation through WorkKeys.
2. Recruit businesses to profile the skills needed for each of its primary positions.
   a. Organize by target industry. For example, begin with the advanced manufacturing industry and develop a full-scale publicity tour to visit with each one and ask for participation.
   b. Move on to other target industries, including business services, health services, and software.
3. Create website to match up high school, technical school, and college graduates with jobs that match their certification levels.

CASE STUDY: OWENSBORO WORKKEYS PROGRAM
OWENSBORO, KY

WorkKeys is a national workforce development and training tool created by ACT, Inc, designed to fill the gap between worker skills and the needs and requirements of businesses. WorkKeys is a three-step process that includes 1) profiles of occupational skill requirements for different industries, 2) assessments of applicant skills and the gap between those skills and the particular occupational requirements, and 3) remedial training to bring worker skills to the necessary levels.

The community of Owensboro, Kentucky has implemented the WorkKeys program with impressive results. The program is administered through the Owensboro Community and Technical College and draws individuals from all over the surrounding area. Prospective workers take the assessment and upon completion of the program receive the Kentucky Employability Certificate, which communicates their particular skill levels to employers. Local businesses have taken to the program enthusiastically, with some of the area's largest employers requiring WorkKeys for new job applicants, as well as for advancement opportunities. The Owensboro Medical Health System (OMHS) has effectively used the WorkKeys program to increase worker skill levels and create opportunities to move up the ladder. Since its inception, some 650 employees have used the program. Many have been able to move to higher-paying jobs within the organization, and the enthusiasm generated by the program has led to a 32% reduction in turnover.

The WorkKeys initiative in Owensboro continues to evolve and grow; a database is currently under development containing over 4,000 worker profiles, with information on their respective WorkKeys scores, previous employment, salary requirements, etc. When complete, the database will allow employers to search and sort potential employees based on their particular requirements, making it easier to find the most qualified, appropriate workers to fill available positions.

http://www.act.org/workkeys/case/owensboro.html

WORKFORCE STRATEGY 3: Establish workforce training programs in each of the five target industries at either the Tulsa Technology Center-BA (Tulsa Tech-BA) or NSU-BA.

Primary Implementers: Tulsa Tech, NSU, BAEDC

Target Industry training programs are critically important to relocating and expanding businesses. Although both NSU-BA and Tulsa Tech-BA have robust workforce training programs, specific training facilities for each primary target industry should be enhanced and the Broken Arrow campuses should ensure training on-site.

The Florida Community College system is a leader in developing target industry programs as part of an overall economic development strategy. A description of the Jacksonville campus's Advanced Technology Institute can be found at http://fccj.edu/campuses/downtown/atc/index.html.

Action Items:
1. As part of Tulsa Tech-BA's new expansion, an "Advanced Technology" training institute could be developed that would combine training programs in information technology, health technologies, advanced manufacturing, and transportation technology.
    a. This institute would serve the advanced manufacturing, software and IT, distribution, and health services industries.
    b. The institute could also combine the medical technology program at NSU-BA.
2. Based on the workforce skill assessments, develop new programs or modify existing ones to meet the training needs of target industry employers.
3. Follow up annually with target industry employers to determine any changes to employee training needs due to changing industry requirements.

WORKFORCE STRATEGY 4: Seek to attract more young professionals between the ages of 25 and 44.

Primary Implementers: Broken Arrow COC, Broken Arrow Young Professionals Group

The loss of young professionals is significant in Broken Arrow and can pose a threat to economic development and workforce development efforts. In fact, many companies point to this 25-44 demographic as the primary determinant of a community's economic capacity. The efforts of the community to attract and retain this coveted demographic should be expanded. A younger, talented workforce will make the region more competitive for attracting, retaining, and growing target industry companies.

The Broken Arrow Young Professionals Group should be a key player in these efforts. While a Young Professionals Group has recently been formed, their involvement in community efforts is still minimal.

Action Items:
1. Conduct surveys to assess the needs and perceptions of young professionals.
    a. Conduct a needs assessment of existing young professionals in Broken Arrow to find out what they would like to have in Broken Arrow.
    b. Conduct a survey of Tulsa area young professionals to discern perceptions of Broken Arrow.
2. Ask local businesses to support young professional "interest" clubs such as an arts group, specialized outdoor recreation, wine tasting or making, or gourmet food clubs.
3. Sponsor an annual "Young Professional of the Year" Award.

4. Develop a robust Young Professionals Group.
   a. Lend considerable resources to the YPG to launch their efforts to attract and retain other young professionals including meeting space, website development expertise, marketing, and communications expertise.
   b. YPs in turn should understand the role and importance of the Chamber and BAEDC and should develop strong, positive relationships to achieve similar goals.
   c. Fund a fact finding trip for a Chamber representative and the President of the YPG to meet with other successful YP groups to determine how to develop best practices.
   d. Help host networking events and activities for the YPG.
   e. Engage the YP group in the overall retail, recreational, and housing strategies that need to be developed for the community.

CASE STUDY: OMAHA YOUNG PROFESSIONALS COUNCIL
OMAHA, NE

For years, the Greater Omaha Chamber of Commerce has struggled with retention of young professionals. They began a dialogue with many of them through focus groups and interviews. The establishment of the Chamber sponsored Young Professionals Council (YPC) emerged from these focus groups.

The primary goal of the YPC is to "make Omaha one of the top communities in the nation where young professionals want to live and work." The council wants to achieve this goal by creating excitement about living in Omaha. One of the best features of the YPC for young people is that it is a free organization.

Thirteen council members representing member organizations across the metropolitan area lead the YPC. The group has established committees designed to address the needs of its age demographic, including issues of economic development, diversity, research, and attraction/retention. Innovatively, the Chamber also recognizes the council chairman as a full voting member of the board of directors. Council members meet monthly, engage young professionals through monthly networking and social events, and lead committees that provide hands on opportunities to get involved. All Greater Omaha young professionals can participate in the council's activities by joining one of its committees. Most importantly, the Chamber believes that creating opportunities for young people to get involved in city affairs will inspire them to remain in the region when looking for employment.

http://www.omahachamber.org/ypc/

WORKFORCE STRATEGY 5: Continue to support the expansion of programs and degrees at Northeastern State University (NSU)-BA as it becomes a premiere, regional four-year university.

Primary Implementers: BAEDC, COC, City of Broken Arrow, NSU

Few institutions can have an effect on economic development efforts like universities.

- ✓ Universities educate and produce the labor force that fuels the economy.
- ✓ Universities are the primary driver in the advancement of scientific knowledge and applied research.
- ✓ Universities are key players in the development of entrepreneurs who form start-ups and expand businesses. Some have developed affiliated incubators, and many entrepreneurs will stay in the university town, knowing that they can find well-educated employees on a regular basis.

- ✓ Although community colleges and technical schools often take the primary roles as workforce development centers, popular university extension and continuing education programs can offer an accessible and outstanding way to upgrade skills and acquire industry-specific skills.
- ✓ Often, universities are a powerful marketing and branding tool, particularly through affiliated sports teams.

Northeastern State University (NSU) recently established a campus in Broken Arrow that continues to expand, and it is critical that the Broken Arrow community embraces and assists in the development of NSU-BA as a premiere regional university.

Action Items:
1. Lobby for additional degree programs at NSU-BA, including computer science, engineering, and an MBA program.
2. Strengthen and promote the health programs, including nursing and health sciences in order to meet demands for health workers.
3. Continue to develop the land surrounding NSU-BA in ways that are attractive to NSU's students.
   a. Explore retail options for a bookstore, coffee shop, and restaurants.
   b. Develop recreational amenities, possibly to include a Frisbee golf course, intramural fields, museum facilities, etc.

WORKFORCE STRATEGY 6: Ensure K-12 education has strong partnerships with the business community.

Primary Implementers: Broken Arrow Public Schools, COC

Action Items:
1. Develop "adopt-a-school" programs with local businesses.
   a. Participating business would sponsor various school programs, including theater performances, art displays, and/or academic competitions.
   b. Business staff serves as tutors, volunteering 1-2 hrs per month in selected subjects.
2. Continue to inform teachers, students, and parents of options other than four-year universities for students that would otherwise not go to college.
   a. Host a "trades day" in the Broken Arrow and Union Public School Systems in middle school and high school. Invite local manufacturing, plumbing, electrical, and construction companies.
   b. Develop a web site and printed information packages containing resources for non-university bound youths. The web site and package should contain information about non-college options, links with training organizations, apprenticeship programs, and the community college. The web site could also contain job postings.

SITES AND INFRASTRUCTURE

GOAL: Maintain and enhance infrastructural capabilities throughout Broken Arrow

Land, buildings, and infrastructure are the basic facilities needed to support any company and community and, therefore, are vital to economic growth. Communities that cannot provide available, ready sites with adequate infrastructure for business expansion or relocation will not be able to recruit and retain global companies.

More importantly, in today's marketplace, businesses want to know they can operate on Wall Street or Main Street, so good wireless communications strategies and infrastructure can be critical. With companies and consultants ramping up the location decision process from years to months, communities must have a vision for growth and must invest in the necessary infrastructure to attract new business locations as well as sustain and maintain the existing base. Without such vision or basic preparation, companies will eliminate communities without hesitation.

INFRASTRUCTURE STRATEGY 1: Work with local developer to identify sites for class A office park and offer assistance as needed.

Primary Implementers: BAEDC

While Broken Arrow boasts plentiful industrial and flex space in 14 industrial parks, there is very little office space within the community. It has been noted that the Chamber has to turn down prospects that are looking for significant amounts of office space. Given the target industry selections of business services and software and IT, it is critical that Broken Arrow address the limited availability of office space.

Action Items:
1. Develop an inventory of available parcels for Class A office park development. Ensure appropriate infrastructural capacity.
2. As part of a larger downtown development initiative, focus efforts on constructing office space along and/or adjacent to Main Street.
3. Develop incentives package for development.

INFRASTRUCTURE STRATEGY 2: Conduct a broadband capacity study of Broken Arrow.

Primary Implementers: BAEDC, consultant

The broadband capacity study should result in the establishment of necessary broadband infrastructure in every commercial corridor in Broken Arrow so that each can attract businesses in the software and IT, business services industry, and others that fall in one of the target industry categories that require high-level broadband capacity. Implementing this recommendation would be an important step in ensuring that Broken Arrow is wired to support the high-tech operations of new businesses.

Action Items:
1. Develop RFP with specific requirements for consultant and desired outcomes.

2. Issue RFP and receive responses.
3. Review responses and select most qualified consultant.
4. Consultant conducts study by reviewing current communication technology in Broken Arrow, identifying future improvements needed for broadband system to succeed, gathering public input on communication technology needs, and developing a plan for broadband capacity.

INFRASTRUCTURE STRATEGY 3: Develop master plan for vacant retail storefronts.

Primary Implementers: BAEDC

As Broken Arrow develops additional retail offerings, vacant retail plots left behind by relocating tenants should be addressed for re-use, either by other retailers or by alternative uses.

Action Items:
1. Inventory and prioritize vacant retail storefronts.
2. Identify appropriate uses for each site.
3. Aggressively market priority sites to appropriate targets and developers.
4. Think outside of box – often large, older retail boxes are appropriate buildings for call centers, recreational facilities like gyms, bowling alleys, or basketball courts, and health clinics.

INFRASTRUCTURE STRATEGY 4: Strengthen key parts of Broken Arrow's infrastructure to make the area more attractive to target industries.

Primary Implementers: AEP, PSO, City of Broken Arrow, BAEDC

Overall, infrastructure in Broken Arrow is sound, and community needs are being addressed through infrastructural upgrades. However, needs exist in several areas, particularly in regards to internal roads and electrical capacity. As the region continues to expand rapidly, Broken Arrow will need to pay significant attention to infrastructure needs in the next few years to ensure that the area is prepared to meet the needs of existing businesses as well as any new target industries it wishes to attract.

Action Items:
1. Strengthen electricity infrastructure to strengthen Broken Arrow's attractiveness to companies in the IT industry, particularly data centers. This includes working with AEP to identify causes of frequent electricity outages.
2. Continue to devote capital funds for road improvements along primary corridors including Elm, County Line, Main, and Olive Street.
3. Contact distribution center developers and inquire about specific site requirements and development opportunities, including firms most prominent in developing distribution assets in Oklahoma: Prologis, AMB Property Corporation, First Industrial Realty Trust, CenterPoint Properties, and Duke Realty.

INFRASTRUCTURE STRATEGY 5: Develop feasibility study for additional high schools in the city.

Primary Implementers: Broken Arrow Public Schools

One of the primary concerns expressed by Broken Arrow residents through this process surrounded the need for additional high schools in the area, given the rapid growth of the community.

Action Items:
1. Develop feasibility study for additional high schools.
2. Based on results, designate sources of funding through the Capital Improvement Program.

INFRASTRUCTURE STRATEGY 6: Explore the possibility of constructing a "Telework" Center in Broken Arrow.

Primary Implementers: BAEDC

Success in today's competitive marketplace depends on attracting and retaining skilled employees and keeping the cost of doing business to a minimum, while being available to provide immediate solutions to your clients. A "telework center" would allow Tulsa area offices to sub-lease space in Broken Arrow for employees, saving on lease costs and parking costs, while providing a closer location to employee homes.

Action Items:
1. Conduct an informal survey of Tulsa area financial service and IT companies that might be interested in the center to gauge level of interest.
2. If interest is shown, develop economic feasibility study for facility.
3. Identify appropriate sites and begin discussions with local developers.

CASE STUDY: WASHINGTON METROPOLITAN TELEWORK CENTERS
WASHINGTON, D.C.

In response to costly commute times and heavy traffic congestion, the Washington D.C. metro area has become the first region in the country to develop a network of telework centers that allow employees to work remotely. The General Services Administration (GSA) in partnership with the Office of Personnel Management as well as numerous state, local, university, and private sector partners, developed a system of 14 centers that take advantage of modern telecommunications technology to make working away from work a reality.

Located in smaller cities and suburbs of Northern Virginia, Southern Maryland, and West Virginia, these telework centers provide office space for federal employees and agencies as well as the private sector. Modern equipment and services are offered, such as modular workstations, computers with the latest office software, internet, digital phone and voicemail, fax and copy machines, and laser and color printers. Some centers offer kitchen amenities and personal storage as well. Studies of the D.C. area have shown that telecommuting can produce measurable results for businesses in the form of reduced real estate, office maintenance, and parking costs.

The system was implemented in order to capitalize upon numerous telecommuting advantages for businesses and workers alike, including better recruitment and retention, reduced absenteeism, increased productivity, lower overhead, reduced stress, and improved job satisfaction. Wider goals include increased economic output, reduced traffic, and lower pollution. In Northern Virginia, surveys at four centers indicate that the average teleworker uses the centers 1.6 days a week, and saves 4,281 miles and 173 hours per year through this usage. Workers report higher productivity, a quieter work environment, more family time, and a boost in morale as some of the primary benefits of telecommuting. According to one employee for the Department of Agriculture, the Fairfax Telework Center "has been a terrific benefit from both a personal standpoint as well as a work standpoint".

http://www.wmtc.org/telework_information.html

LIVABILITY

GOAL: Enhance the livability and attractiveness of Broken Arrow

Livability issues are those tangible and intangible features and characteristics that make people decide they want to live in a particular community and make them commit to staying. Traditionally, the location decisions of firms have been driven primarily by factors such as land costs, labor costs, and access to materials and markets. Today, however, location decisions are often driven by the need to succeed in this knowledge-based economy where people are the key to success.

Therefore, firms are seeking locations that will attract and retain a well–educated work force, and quality of life factors are increasingly important. Communities that offer cultural and recreational amenities have competitive advantages over those that do not.

In Broken Arrow, efforts can be made to develop the region in a way that is attractive to all citizens in the region, such as improving the aesthetic appeal of the city, creating a dynamic downtown center, supporting recreational options for all citizens, and promoting the vital importance of maintaining the region's high quality of life.

★ LIVABILITY STRATEGY 1: Improve the visual image of Broken Arrow

Primary Implementers: City of Broken Arrow, COC

A community's "beauty" is a critical component of its overall economic development strategy and success. "Curb appeal" is important in selling one's home, and it's important in selling one's community to both individuals and businesses.

While Broken Arrow has many quality of life attributes including good schools, low crime, and affordable housing, its curb appeal suffers. According to AE's survey, even existing residents are not pleased with community aesthetics. In working to attract business, particularly those that are more high-tech in nature and employing young professionals, a beautification program is highly recommended.

Action Items:
1. Create a "Beautification Committee", privately and publicly funded, with specific annual objectives/goals/criteria, as well as specific funding requirements and potential funding resources to accomplish its goals.
2. Develop consistent design standards for corridors in and out of Broken Arrow, particularly the Broken Arrow Expressway. These standards should apply to:
   a. Signs
   b. Landscaping
   c. Billboards
   d. Commercial developments
3. Hold a "Beautify Broken Arrow" contest encouraging residents and local businesses to spruce up their property.
4. Sponsor public art competitions for local artists and sculptors. These programs could include:
   a. Murals on sides of downtown buildings
   b. Sculptures along primary corridors
5. Develop signs that mark the entrance into Broken Arrow along primary thoroughfares.

LIVABILITY STRATEGY 2: Focus on enhancing and strengthening Broken Arrow's unique downtown and Main Street corridor

Primary Implementers: Downtown Committee, City of Broken Arrow, developers

Downtown Broken Arrow sets it apart from other suburban Tulsa communities. It offers Broken Arrow a real community heart and gives it a sense of place. However, currently, downtown is not a destination. Few signs offer any hint of its existence, and there is little reason to go out of your way to travel to Main Street. Downtown revitalization strategies must focus on providing reasons for citizens to come downtown and improving its overall appearance.

Action Items:
1. Support the implementation of the 2005 Downtown Master Plan.
2. Identify incentive options for downtown infill and rehabilitations
    a. Density bonuses for developers interested in developing mixed-use structures (residential and office space)
    b. Low interest loans for developers rehabbing historic buildings
    c. Low interest loans for investors rehabbing historic homes
3. Improve the cosmetic appearance of downtown Broken Arrow through the development of downtown design standards for lighting, landscaping, and signage.
4. Increase signage that points people to "Main Street Broken Arrow."
5. Explore additional downtown funding opportunities which might include:
    a. Public/Private partnerships

        b.   Selling sidewalk bricks to residents for streetscape improvements. Sold bricks would be engraved with the residents' names

        c.   Expanded use of CDBG grant awards

6.   Work with developers to create downtown "destinations" that appeal to the entire community. This could include:

        a.   Enhanced and enlarged public squares and parks for festivals, farmers markets, etc…

        b.   Downtown coffee shop/music venue

        c.   Downtown movie theater

CASE STUDY: GEORGETOWN DOWNTOWN REVITALIZATION
GEORGETOWN, TEXAS

Georgetown, Texas is a city of approximately 40,000 residents located outside of Austin. A city with a stock of historic Victorian architecture, Georgetown has demonstrated great success in revitalizing its downtown core in recent decades. In response to conditions of blight, boarded buildings, crumbling sidewalks, and a lack of thriving businesses, the City instituted a Main Street program in 1982 and has since made steady progress in attracting investment to its historic heart. With the help of façade improvement programs, low-interest revolving loans, and infrastructural improvements, in 1997Georgetown became the first city in Texas honored as a Great American Main Street City – the highest award given by the National Trust's Main Street Program.

Today Georgetown boasts more than 180 healthy historic homes and businesses and continues its efforts at creating an active "24-7" downtown via an impressive array of incentives. These include property tax abatements, historic property tax exemptions, tax increment financing, utility rate classes (separate utility rates for the downtown district), fee waivers, and sales tax refunds. Development is also facilitated through a downtown overlay district that promotes a mix of uses as well as infrastructural improvements for larger projects. The Main Street program – 25 years after it was instituted – continues to receive local funding for staffing and façade grants, which remain in very high demand. Public investment is paying off in the form of significant development activity, including residential, office, and retail projects, which in some instances span entire blocks. The City also recently received a grant from the Texas Historical Commission to restore the Beaux-Arts Williamson County Courthouse.

http://www.mainstreetgeorgetown.com/

LIVABILITY STRATEGY 3: Seek to attract high-end retail establishments

Primary Implementers: BAEDC

Among the chief issues the Broken Arrow area faces is the lack of adequate retail establishments and restaurants. While some progress has been made in this effort recently with the development surrounding Bass Pro, and interest is increasing, more will need to be done to build the quality of life infrastructure needed to appease current residents and appeal to new ones.

Action Items:

1.   Identify available parcels that would be ideal for retail development.

2.   Prepare a retail marketing package to include:

        a.   Available sites (maps, aerials, traffic counts)

        b.   Community demographics and projected demographics over the next 5 years

        c.   Current inventory of retailers

        d.   Calculation of retail leakage in Broken Arrow

3. Contact large mall and lifestyle developers, including Simon, Regency, Dixie, General Growth, and Taubman, for face-to-face discussions about potential sites. Invite them for site visits.
4. Send marketing packages to national retailers that have in-house site selection analysts.

LIVABILITY STRATEGY 4: Expand the diversity of entertainment and cultural offerings in the area.

Primary Implementers: COC, City of Broken Arrow

In almost every focus group or interview conducted in recent months, the lack of variety and diversity of entertainment and cultural options within the community was discussed. Although Rooster Days was highlighted, few other festivals could be named. More diverse offerings should be available that appeal to a variety of age groups and nationalities with a diverse menu of cultural options.

Action Items:
1. Develop a survey to determine what types of activities might most interest the community and prepare an annual plan to offer a variety of events.
2. Host events throughout the community that showcase the cultural aspects and influence of Native Americans, African Americans, and Hispanics. Organize festivals and events that showcase the diversity within the community.
3. Hold events at the Performing Arts Center that appeal to a wide group of ages including teens, young professionals, baby boomers, and seniors.
4. Provide the opportunity for a young professional or minority to join the new Performing Arts Center board or planning committee.
5. Explore ways to utilize the riverfront area in southern Broken Arrow to also host events and exhibitions.

LIVABILITY STRATEGY 5: Develop a downtown WiFi coverage area

Primary Implementers: City of Broken Arrow

WiFi or a Hotspot is defined as "a readily available wireless network connection where users with compatible wireless network devices such as PDAs, cell phones, notebook computers, or handheld games can connect to the Internet or private intranet, send and receive email, and download files all without being encumbered by Ethernet cables."

Downtown WiFi networks are quickly becoming attractive methods of accomplishing several purposes: 1) encouraging patronage of downtown establishments, 2) enhancing public safety operations, and 3) gaining a competitive economic development advantage. All three purposes will contribute to increasing the livability of Broken Arrow.

Examples of communities that have developed downtown WiFi networks include:

✓ **Medford, OR**
Phase One is funded through a $500,000 Homeland Security Grant. The primary purpose of the network is public safety and the City of Medford owns and operates the network. The City is in the process of applying for a phase 2 grant to expand the network and is seeking a private partner to provide public access to residents in the community.

✓ **Spokane, WA**
  The city has partnered with One-Eighty Networks for bandwidth and local ISPs to provide service to the private sector. The City of Spokane uses the network for public safety applications with the police and fire departments. The Internet service is free outside of buildings at outdoor cafes. It is fee based inside of buildings.

✓ **Houston, TX**
  A real estate developer is installing WiFi service in downtown office buildings as a way to market space to tenants.

Action Items:
1. Identify applications for the network.
2. Determine geographic area to be covered.
3. Estimate number of users on the network.
4. Identify partners for funding, network support, applications etc.
5. Determine who will provide technical support.
6. Develop a marketing and education plan to promote use of the network.

The implementation of this strategy will not occur without a team of leaders committed to overseeing the process. AE recommends the following to ensure the plan moves forward:

Adopt this plan as the community's primary guide to economic development activities for the next five years. The Broken Arrow COC and the BAEDC should ask its board members to pass a resolution that adopts this plan. The endorsement of this plan will encourage other organizations to participate in its implementation.

Establish the BAEDC board as the Implementation Committee. The Implementation Committee should set a schedule to meet one to two times per month for at least six months following the rollout of this plan. Meeting on a regular basis will maintain the momentum behind this plan and ensure some early successes. Once staff is assigned to the BAEDC, these staff members should become a part of the Implementation Committee.

As a group, the Implementation Committee should thoroughly review this strategy and the implementation suggestions. Confirm priorities and establish a target end date for each. Name the organization or individual responsible to taking the lead on each recommendation. Name the organization(s) and individual(s) that will act in a supporting role.

Identify and invite diverse community leaders to serve on one of five subcommittees - each one responsible for a different objective of this strategy: Economic development and marketing, business climate, workforce development and education, sites and infrastructure, and livability. Subcommittees should be comprised of the lead and supporting organization(s) and individual(s) for each recommendation within the assigned topic. If these organizations were not original participants in the strategic planning process, invite them to serve on the subcommittee.

The Implementation Committee should serve as the advisory group for the implementation of the strategy, while each subcommittee has day-to-day involvement acting on recommendations. Subcommittees should report progress to the Implementation Committee and BAEDC staff on a monthly basis. The Implementation Committee is responsible for evaluating the overall progress of the strategy.

Give the public a way to keep updated or volunteer to participate in action steps. Keep the project web page alive to give residents a place to go for economic development news or to volunteer their involvement. Maintain an online list of volunteer activities and build in the capability to register people for volunteer programs / events.

Remember that this strategy is designed to be fluid and flexible. It is unlikely that Broken Arrow is going to implement every action step offered in this strategy. Rather, it is the Implementation Committee's responsibility to identify the specific action steps that should be pursued. Once implementation is underway, use the measurements suggested in this plan to track the progress of each action step. If an action is not working, adjust it or take another approach.

Celebrate successes generated from the new economic development initiative. The often forgotten part of implementation is appreciating the success achieved. Members of the Implementation Committee and subcommittees should frequently communicate positive news about the strategy with contacts in the community. The BAEDC should host an economic development summit once a year to update the community on the strategy and announce positive news. The rollout event should serve as the first annual economic development summit.

AngelouEconomics has identified several data sets that we believe will be good measures of economic performance. These data are easily found at state and national sources, are available at the county level, and should be considered good indicators of the overall economic health of the community and its citizens. Performance metrics for each recommendation area of this plan are listed below:

ECONOMIC DEVELOPMENT & MARKETING
- Local, state, and national media mentions relating to economic development
- Prospect activity (info requests or visits)
- Tourism revenues
- Changes in web traffic

BUSINESS CLIMATE AND ENTREPRENEURSHIP
- Net firm creation
- Angel investor network funding
- Membership in entrepreneurs' associations
- Number of companies in the business mentoring program
- Job growth in target industries

WORKFORCE AND EDUCATION
- Average wage growth
- Percentage of college educated workers
- Changes in ACT/SAT scores and dropout rates
- Changes in educational attainment, including NSU-BA and Tulsa Tech-BA enrollment
- Use and quality of workforce development programs including WorkKeys

SITES & INFRASTRUCTURE
- Downtown investment
- Office space construction
- Available development acreage (with utility service)
- Transit usage rates
- Office and industrial vacancy rates

LIVABILITY
- Net migration of new people to the city
- Per capita income
- New retail establishments
- Percentage of population in the 25-44 year-old demographic
- Membership rates in the Young Professionals Group
- Property value increase in downtown Broken Arrow
- Usage of park and recreational facilities

The following pages contain Target Industry Profiles and demographic "At-A-Glance" charts that support the strategies highlighted within this plan.

- The Target Industry Profiles offer detailed information of each Broken Arrow's six target industries: Advanced Manufacturing, Software and IT, Business Services, Distribution and Warehousing, Health Services, and Retail.

- The demographics charts compare Broken Arrow's key metrics against benchmark communities and other Tulsa area suburbs.

INDUSTRY DEFINITION

Advanced manufacturing includes those industries within the manufacturing sector that use high levels of R&D inputs in manufacturing processes. Specifically, advanced manufacturing includes establishments with twice the ratio of R&D employees as the U.S. private sector average. Examples of advanced manufacturing products include pharmaceuticals, munitions and small arms, computers and electronics, aerospace products, motor vehicles, and medical devices. Fabricated metal products, textiles, paper, steel, and other more traditional and often heavy manufacturing operations do not fall within the advanced manufacturing sector.

Advanced Manufacturing

Definition	Key Stats	
The manufacture of products focusing on the use of innovation and high levels of R&D inputs	U.S. Employment:	5,135,214
	U.S. Establishments:	84,182
	U.S. Average Wage:	$64,875
	Location Factors:	Skilled Labor
		Labor Costs
		Transportation
		Electric Utilities

NATIONAL GROWTH TRENDS

Historically, manufacturing has been the primary driver of economic development in America. Propelled by high paying jobs and the subsequent spin-off of jobs to suppliers and services, cities across the country grew and flourished on the strength of the manufacturing industry.

In recent years, however, advances in technology have unleashed the twin forces of increased domestic productivity and foreign competition, and the number of manufacturing jobs has steadily declined. In the past five years, the U.S. has lost nearly three million manufacturing jobs, most of the job losses due to increased productivity from computers, automation, and the movement of manufacturers offshore to low-wage areas, such as China. In an effort to remain competitive, entire industries are moving their labor-intensive operations overseas, leaving traditional manufacturing communities with unemployed workers with few transferable skills. These communities cannot compete with the wage levels of off-shore locations, which often boast labor costs orders of magnitude lower..

Rising costs are another reason why many American manufacturers are shifting abroad. Healthcare costs have been rising rapidly due to increasing medical liability costs and excessive tort claims. Some companies have seen a rise of as much as 20%. Rising energy costs are another point of concern because the manufacturing industry uses more than one-third of all energy consumed in the U.S. All of these factors make it difficult for American manufacturers to compete in the global market, causing many to move operations overseas.

ADVANCED MANUFACTURING
EMPLOYMENT & AVERAGE WAGE, 2001-2005

Source: BLS
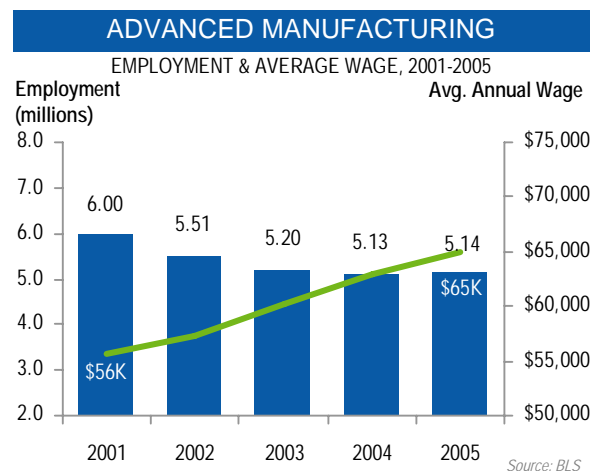
The current challenges facing the domestic industrial market do not signal the end of U.S. manufacturing. Instead, American manufacturing is undergoing a profound transformation as the industry adapts to the current realities of the global marketplace.

Despite significant declines in domestic employment, U.S. manufacturing output has consistently increased in value over the last half-century. Manufacturing still accounts for 14% of the U.S. GDP and 11% of U.S. employment and will continue to be a major source of wealth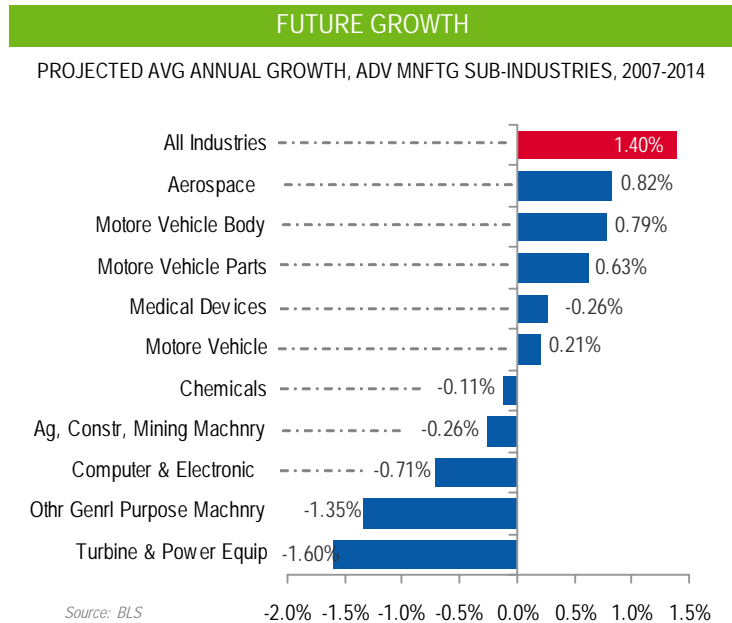 and provide exceptional salaries to skilled workers. This is particularly true for advanced manufacturing, which is less dependent on cost-factors than the manufacturing industry in general. Advanced manufacturing is a high-value added industry, focused on exceptional quality and productivity. As such, these firms are increasingly relying on massive investments in research and development to maintain their competitive advantage against foreign competitors. In fact, manufacturing firms fund 60% of the private sector's R&D investments each year.

Though the advanced manufacturing industry has suffered job losses consistent with trends in the wider industry, over the past five years employment declines have slowed markedly. While substantial job losses occurred during the first two years of the recession, since 2003 the industry has undergone an impressive stabilization, including a 0% decline in jobs between 2004 and 2005. In addition, increased productivity has helped fuel significant wage increases in the advanced manufacturing sector; since 2001, the average annual wage has increased by over 16% to $65,000.

The positioning of advanced manufacturing relative to general manufacturing is evidenced by employment projections for the respective industries. Between 2004 and 2014, manufacturing as a whole is projected to decrease at a rate of -5.42%, while advanced manufacturing is expected to experience a more modest decline of -2.67%. Despite this overall decline, several advanced manufacturing subsectors are projected to grow in employment, led by pharmaceutical and medicine manufacturing (26%), aerospace product and parts manufacturing (8.21%), motor vehicle manufacturing (7.9%), and medical device manufacturing (2.6%).

FUTURE GROWTH

PROJECTED AVG ANNUAL GROWTH, ADV MNFTG SUB-INDUSTRIES, 2007-2014

Industry	Growth
All Industries	1.40%
Aerospace	0.82%
Motore Vehicle Body	0.79%
Motore Vehicle Parts	0.63%
Medical Devices	-0.26%
Motore Vehicle	0.21%
Chemicals	-0.11%
Ag, Constr, Mining Machnry	-0.26%
Computer & Electronic	-0.71%
Othr Genrl Purpose Machnry	-1.35%
Turbine & Power Equip	-1.60%

Source: BLS

-2.0% -1.5% -1.0% -0.5% 0.0% 0.5% 1.0% 1.5%

INDUSTRY REQUIREMENTS

Structural Assets

Structural assets vital to advanced manufacturing firms include utilities, highways, airports, telecommunications, and site availability. Regions with low electricity costs can often lure power-hungry manufacturers such as automotive producers away from areas with high energy costs. Large tracts of available land, excellent transportation infrastructure, plentiful water, below-capacity wastewater systems, and reasonable environmental regulations are all potential requirements of advanced manufacturers. Large assemblers, such as auto plants, also require highway access and separate rail lines.

ADVANCED MANUFACTURING CRITERIA

INDUSTRY "MUST" CRITERIA, BROKEN ARROW SCORECARD

INDUSTRY "MUSTS" FILTER	BA PASS?	CRITICAL FACTORS
1	✓	1 Skilled Labor
2	✓	2 Labor Costs
3	☐	3 Transp. Infrastructure
4	✓	4 Electric Utility Rates

Source: AE

Costs of Doing Business

In addition to labor costs, manufacturers pay close attention to overall cost of doing business in a specific locale as tax environments and the cost of capital can significantly lower already thin profit margins. Although each industry has different cost structures and subsequent site selection priorities, taxes are an important factor in the site selection process for manufacturers. Manufacturers whose business requires massive capital investments and large tracts of land are primarily attracted to areas featuring low property taxes. Consumer electronics firms with high sales volume, however, prefer a combination of low property and local sales tax rates. In recent years, states without a sales tax have proven particularly successful in attracting high-profile consumer goods projects.

Research and Development

R&D is especially important for technology and advanced manufacturing industries, as seen by the location decisions of the semiconductor and biotechnology industry. While automotive manufacturers are dispersing around the country, Michigan remains competitive by investing heavily in manufacturing research and retaining research headquarters for major companies. The state ranks second nationally, after California, in total R&D spending and fourth, after California, Texas, and New York, in the number of high tech workers. The University of Michigan, which leads all other public schools in R&D spending, devotes twenty-five percent of federal grants towards manufacturing.

Economic Conditions

Economic requirements include the overall characteristics of regions that support the business model of an industry, including location, size, demographics, and lifestyle. Major relocations often occur so a company can be closer to customers or positioned in a high growth area with the right image and demographics for its business. For example, automotive suppliers locate near major automotive assembly plants to reduce transport time. Some manufacturers, such as Toyota, are making investments in states such as Texas where they desire greater market share.

Workforce

Workforce needs vary among industries and companies. Advanced manufacturers requiring large amounts of skilled workers often experience difficulty attracting and retaining qualified talent. Many of these jobs require formal education and specialized skills and experience. Companies have to compete for talent and are willing to pay higher wages for these workers. Local workforce development groups play an important role in helping

companies find and develop the skilled workers they require. Availability of a skilled workforce is often the number one site selection criterion for advanced manufacturing operations.

Key Occupations in the Advanced Manufacturing Industry					
Occupation	Employment	Median Wage		Occupational Information	
Title	10-year U.S. Growth Projection	US	Tulsa MSA	% with Bachelor's Degree+	Education
Electromechanical equipment assemblers	-13.9%	$28,520	$26,620	6%	Short-term on-the-job training
Engine and other machine assemblers	0.2%	$36,150	$29,900	1%	Short-term on-the-job training
Dental laboratory technicians	7.6%	$34,260	$33,800	15%	Long-term on-the-job training
Electrical and electronic equipment assemblers	-6.4%	$27,150	$25,540	6%	Short-term on-the-job training
Chemical equipment operators and tenders	-4.5%	$39,620	$36,100	16%	Moderate-term on-the-job training
Aerospace engineering and operations technicians	8.5%	$54,720	$47,290	18%	Associate degree
Electro-mechanical technicians	9.7%	$45,670	$46,500	18%	Associate degree
Biomedical engineers	30.7%	$75,380	$45,050	60%	Bachelor's degree
Weldng, soldering, and brazing machine operators	0.4%	$32,350	$28,710	2%	Moderate-term on-the-job training
Industrial engineers	16.0%	$68,500	$59,910	70%	Bachelor's degree
Mixing and blending machine operators	2.0%	$30,200	$27,950	4%	Moderate-term on-the-job training
Drillng & borng machine tool operators, metal and plastic	-8.4%	$30,610	$29,590	4%	Moderate-term on-the-job training
Computer-controlled machine tool operators, metal and plastic	-1.2%	$32,060	$30,750	6%	Moderate-term on-the-job training
Chemical technicians	4.4%	$40,120	$42,800	27%	Associate degree
Multiple machine tool operators, metal & plastic	0.3%	$31,550	$24,060	6%	Moderate-term on-the-job training
Lathe & turning machine tool operators metal & plastic	-9.0%	$32,750	$29,190	1%	Moderate-term on-the-job training
Chemical engineers	10.6%	$79,230	$77,730	92%	Bachelor's degree
Mechanical engineering technicians	12.3%	$46,520	$39,090	18%	Associate degree
Chemists	7.3%	$63,470	$52,190	94%	Bachelor's degree
Mechanical engineers	11.1%	$70,000	$63,170	80%	Bachelor's degree
Team assemblers	7.3%	$26,000	$23,520	6%	Moderate-term on-the-job training
Electrical engineers	11.8%	$76,060	$66,120	83%	Bachelor's degree
Materials engineers	12.2%	$71,390	$69,000	68%	Bachelor's degree
Industrial production managers	0.8%	$81,960	$67,980	45%	Work experience in a related occupation
Engineering managers	13.0%	$105,470	$88,230	84%	Bachelor's or higher degree, plus work experience

Source: BLS

KEY SELLING POINTS

Broken Arrow possesses the following key assets in satisfaction of the advanced manufacturing industry's site location requirements:

1 **Low Labor Costs** – Broken Arrow and the Tulsa region offer a low cost labor force that will be attractive to advanced manufacturing firms seeking to maintain competitiveness on U.S. soil. At approximately $50,000, the average annual wage in advanced manufacturing for the Tulsa MSA is more than 28% lower than industry wages for the U.S. as a whole ($65,000). By contrast, average wages regardless of industry are only 13% lower in Tulsa than the rest of the country.

2 **Reasonable Utility Rates** – For a cost sensitive, power hungry industry such as advanced manufacturing, relatively low electric utility rates can be a significant draw for a community. Broken Arrow's reasonable rate structure will present an important competitive advantage to manufacturers seeking to relocate from higher cost communities.

3 **Existing Cluster Strength** – As the third mostly highly concentrated manufacturing community in the state, Broken Arrow offers important synergies to advanced manufacturing firms looking

AngelouEconomics
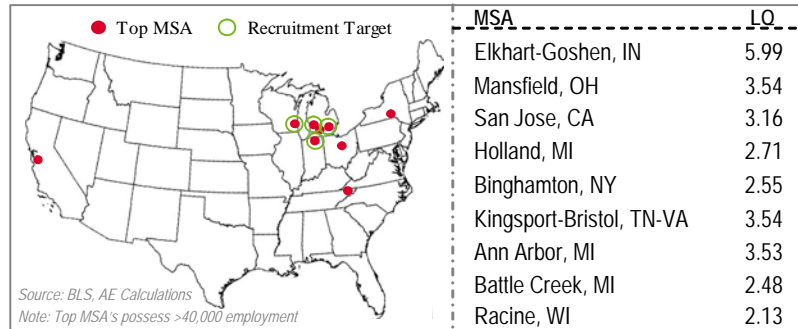technology-based economic development

to expand or relocate. These synergies include economies of scale and agglomeration effects that can substantially improve a company's costs and productivity.

INDUSTRY GEOGRAPHY AND RECRUITMENT

The advanced manufacturing industry remains clustered in traditional rustbelt regions in the Midwest. Six of the nine most highly concentrated advanced manufacturing regions are in Great Lakes states, with Michigan alone containing three of these areas. Also characteristic of the top manufacturing clusters is their relatively small size, with eight of the nine regions having a total employment under 200,000.

ADVANCED MANUFACTURING GEOGRAPHY

TOP ADVANCED MANUFACTURING MSA'S BY LOCATION QUOTIENT

● Top MSA   ○ Recruitment Target

Source: BLS, AE Calculations
Note: Top MSA's possess >40,000 employment

MSA	LQ
Elkhart-Goshen, IN	5.99
Mansfield, OH	3.54
San Jose, CA	3.16
Holland, MI	2.71
Binghamton, NY	2.55
Kingsport-Bristol, TN-VA	3.54
Ann Arbor, MI	3.53
Battle Creek, MI	2.48
Racine, WI	2.13

Structural changes in the manufacturing industry are leading to changes in its economic geography, as manufacturers continue to seek out lower cost regions in the South and West. Though detrimental to traditional manufacturing communities, this industry dislocation has brought significant economic development opportunities to other communities. Given its location in a relatively low-cost region of the U.S., Broken Arrow is poised to capture advanced manufacturing employment as it migrates southward.

FINAL NICHE TARGETS

Industrial Machinery

Industrial machinery is an industry that can be defined and categorized in various ways. For purposes of this report, industrial machinery is defined broadly to encompass firms that manufacture a diverse array of machinery and equipment for commercial and industrial operations. Industry products include tractors, elevators, conveyors, cranes, machine tools, textile and paper making machines, refrigeration equipment, and a variety of other machinery. The industrial machinery industry is dependent on orders from other industry sectors that make use these machines. Recent years have seen strong demand for construction related machinery due to the strength of the housing market, as well as demand for tractors, self-propelled combines, and other agricultural machinery.

Industrial machinery has not been immune to the restructuring characteristic of the manufacturing sector. Rising raw material and energy costs in particular forced cost-cutting measures in the post-2000 economic downturn. However, the industry has stabilized somewhat, and R&D investments are paying off in the form of increased sales and profits. Such innovation, along with cost-cutting measures and expansion into new markets, will determine the future prosperity of the industry.

Energy Equipment

The energy equipment industry includes manufacturers of mining, oil, and gas field machinery used in the extraction of natural resources that lead to the generation of energy. The industry produces such devices as coal

breakers, mining cars, core drills, mineral beneficiating machinery, oil drilling equipment, and oil derricks. Similar to industrial machinery, the fortunes of the industry are tied to orders from another industry sector – in this case energy. Global demand for energy equipment and services has grown steadily since 2003, driven largely by recent increases in commodity prices.

Aerospace Product and Parts Manufacturing

Aerospace product and parts manufacturing is an industry that consists of civilian and military aircraft, space vehicles, and missiles. Additionally, aircraft suppliers provide parts and machinery for aircraft assembly and maintenance. These parts include engines, interior components, avionics, and aircraft hardware such as landing gear. Suppliers are important for both the assembly and maintenance of aircraft. The industry's customers include the military, commercial airlines, and general aviation. The industry has suffered in recent years due to falling orders for new aircraft, but growth returned in 2005 and is expected to continue into 2006.
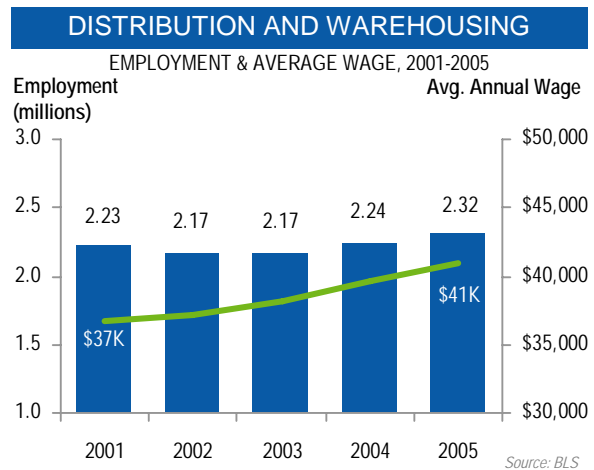
INDUSTRY OVERVIEW

The distribution and warehousing industry engages in facilitating the efficient flow of goods and services in the supply chain from producer to consumer. The industry includes freight carriers (air, water, rail, road, and intermodal), support industries for the respective carriers (loading and maintenance services), and warehousing operations. Speed, reliability, and the development of efficiencies that lead to cost reductions, such as advanced just-in-time delivery systems that reduce retail inventory costs, are critical to the distribution industry. Increasingly, the warehousing and coordination of flow materials is being outsourced by manufacturers and retailers to third party distributors with greater capacity for innovation in the efficient management of the supply chain.

Distribution & Warehousing	
Definition	**Key Stats**
The facilitation of the efficient flow of goods in the supply chain from producer to consumer	U.S. Employment: ➡ 2,315,214
	U.S. Establishments: ➡ 149,023
	U.S. Average Wage: ➡ $41,015
	Location Factors: ➡ Market Access
	Transportation
	Available Labor
	Affordable Land

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.

The maturation of the industry has produced two complementary fields. On the one hand, distribution will continue to be serviced by "low-tech" 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 electronic devices involved, 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.

DISTRIBUTION AND WAREHOUSING
EMPLOYMENT & AVERAGE WAGE, 2001-2005

Employment (millions): 2001: 2.23, 2002: 2.17, 2003: 2.17, 2004: 2.24, 2005: 2.32

Avg. Annual Wage: 2001: $37K, 2005: $41K

Source: BLS

NATIONAL GROWTH TRENDS

The national economic slowdown in 2001 resulted in fewer goods being shipped throughout the country and produced a decline in demand for distribution services. Although industry revenues and profits fell during this period, growth returned in 2004 and has continued ever since. National distribution and logistics employment declined by 60,000 from 2000 to 2003, but 2004 and 2005 saw an aggressive period of growth in which 150,000 jobs were added. As U.S. advanced manufacturers increase production, and consumer expenditures pick up, the distribution and warehousing industry is expected to experience modest growth.

Despite the industry's recent recovery, distribution and warehousing faces potential long-term hurdles. Specifically, traditional high-volume users of logistics and distribution are declining in importance relative to the

U.S. economy. Manufacturing, which uses almost a quarter of all transportation services, increased its valued output by a mere 8.8 percent between 1999 and 2004. During this same period, the national GDP increased by 26.4 percent. The decline of domestic manufacturing has coincided with the remarkable growth of the services sector, which uses relatively little transportation services. **As the U.S. becomes more service-oriented, these structural trends are expected to continue. Increasingly, most goods are warehoused and shipped from their point of production or near the final destination. Sustaining a successful local distribution sector will be highly dependent on the overall health of local manufacturing and the accessibility to nearby markets.**

FUTURE GROWTH

PROJECTED AVG ANNUAL GROWTH, DIST & WRHSNG SUB-INDUSTRIES, 2007-2014

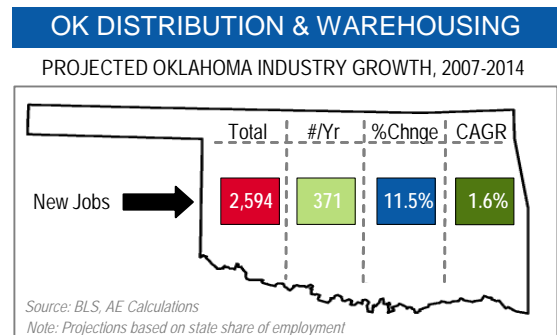| Industry	Growth
All Industries	1.40%
Warehousing and Storage	2.48%
Support for Water	1.22%
Freight Arrangement	1.20%
Other Support for Road	1.20%
General Freight Trucking	0.98%
Other Trucking, Long Dist.	0.89%
Other Trucking, Local	0.89%
Inland Water Freight	0.47%
Coastal Freight	0.12%
Deap Sea Freight	0.12%

Source: BLS

Employment in the distribution and warehousing industry is projected to grow at an overall rate of 13.5% between 2004 and 2014. Among industry subsectors, warehousing and storage is expected to lead the way during this period at 25% growth. Employment in support activities for transportation is expected to grow by 12 percent, as is employment in freight transportation arrangement. General freight trucking will grow at a rate of nearly 10%, while growth in deep sea freight (1.2%), coastal freight (1.2%), and inland water transportation (4.7%) is expected to be much more modest. Rail transportation and pipeline transportation (-4.1%, -4.7% respectively) are the only distribution sub-sectors that are expected to lose employment over the next ten years. Although rail service will probably increase during the next decade, increased automation will preclude the need for a larger workforce.

The growth of the national distribution and warehousing industry will lead to approximately 2,600 new jobs within the state of Oklahoma by 2014, or about 371 additional jobs per year. This represents growth of 11.5%. Those cities and regions best positioned to capitalize on this growth will capture the bulk of employment.

OK DISTRIBUTION & WAREHOUSING

PROJECTED OKLAHOMA INDUSTRY GROWTH, 2007-2014

	Total	#/Yr	%Chnge	CAGR
New Jobs	2,594	371	11.5%	1.6%

Source: BLS, AE Calculations
Note: Projections based on state share of employment

INDUSTRY REQUIREMENTS

Structural Assets

Highway infrastructure is extremely important to distribution firms. Distribution firms require well-maintained, un-congested roads, and often rail access. In addition, interstate proximity is frequently a major plus. Airport and port facilities further support this industry. Overnight carrier hub proximity is viewed favorably. There should also be ample transportation capacity, both short-term and long-term. Distribution centers will seek out areas with forward thinking transportation

DISTRIBUTION & WAREHOUSING CRITERIA

INDUSTRY "MUST" CRITERIA, BROKEN ARROW SCORECARD

INDUSTRY "MUSTS" FILTER	BA PASS?	CRITICAL FACTORS
1	✓	1 Market Access
4 2		2 Transp. Infrastructure
	✓	3 Labor Availability
3	✓	4 Affordable Land

Source: AE

planning. As industries increasingly shift to just-in-time manufacturing, more distribution operations will be required within close proximity to regional manufacturing operations and large metropolitan markets.

Advanced logistics companies also demand excellent highway access. Affordable land suitable for large warehouses, a large and accessible market, and the absence of inventory taxes are also important. Regional economic growth is important as well. Distributors' revenue comes largely from area firms and regional consumer needs. In either case, distributors desire a growing regional economy that expands their potential client base. Large distribution firms typically locate near mid-size to large metros with a strong airport.

Costs of Doing Business

Advanced logistics companies invest primarily in warehouses, trucks, equipment, and IT infrastructure. Inventory taxes are avoided at all costs, and many distributors look for special incentives such as reduced taxes on fuels. Those large operations require massive land tracts at low prices and generally make minimal building improvements. Recent expansions have received tax abatements, tax credits, infrastructure improvements, and industrial revenue bonds.

Research & Development

Local research institutions do not significantly affect the location of distribution firms. Although distribution firms utilize inventory tracking and logistics software, the development of these technologies are not location sensitive.

Market/Geography

Distributors demand central locations with access to multiple large end user markets or locations along major water arterials that facilitate the rapid flow of goods. Firms also desire to be close to clients to create transportation efficiencies.

Workforce

Distribution firms need a blue-collar workforce, and manufacturing workers have proved to be excellent fits for the industry. Relatively few occupations in this industry require a bachelor's degree. Recruitment for this industry should prove to be relatively easy as the highest growth occupations are labor-intensive.

Occupations in advanced logistics use varied skill sets. Entry-level positions are available as laborers and materials handlers. Truck drivers are also vital to the industry. For logistics management firms, IT professionals are needed to support supply chain companies as well. The industry has high turnover so areas need to have a

sizable available workforce. Many distribution facilities employ college students part-time, making a young population a key concern.

Key Occupations in the Distribution and Warehousing Industry					
Occupation	Employment	Median Wage		Occupational Information	
Title	10-year U.S. Growth Projection	US	Tulsa MSA	% with Bachelor's Degree+	Education
Truck drivers, heavy and tractor-trailer	13%	$35,460	$33,700	5%	Moderate-term on-the-job training
Dispatchers, except police, fire, and ambulance	7%	$33,590	$31,150	11%	Moderate-term on-the-job training
Transportation, storage, and distribution managers	6%	$75,130	$65,420	24%	Work experience in a related occupation
First-line supervisors of transp machine and vehicle operators	13%	$51,230	$43,250	15%	Work experience in a related occupation
Industrial truck and tractor operators	15%	$28,830	$25,570	3%	Short-term on-the-job training
Bus and truck mechanics and diesel engine specialists	8%	$37,360	$32,650	3%	Postsecondary vocational award
First-line supervisors of helpers, laborers, and material movers	14%	$41,210	$42,770	15%	Work experience in a related occupation
Material moving workers, all other	8%	$32,550	$37,290	4%	Moderate-term on-the-job training
Crane and tower operators	-5%	$40,860	$34,400	1%	Long-term on-the-job training
Petrleum pump systm operators, refinery operators, & gaugers	8%	$50,320	$57,180	8%	Long-term on-the-job training
Laborers and freight, stock, and material movers, hand	-9%	$22,460	$20,280	5%	Short-term on-the-job training
Shipping, receiving, and traffic clerks	10%	$26,620	$23,660	7%	Short-term on-the-job training
Truck drivers, light or delivery services	4%	$27,020	$23,770	5%	Short-term on-the-job training
Logisticians	16%	$63,010	$53,560	52%	Bachelor's degree
Pump operators, except wellhead pumpers	13%	$38,410	$40,850	4%	Moderate-term on-the-job training
Conveyor operators and tenders	-22%	$27,530	$23,360	0%	Short-term on-the-job training
Packers and packagers, hand	8%	$18,990	$17,640	4%	Short-term on-the-job training
Weighers, measurers, checkers, and samplers, recordkeeping	10%	$27,030	$28,070	12%	Short-term on-the-job training
Aircraft cargo handling supervisors	-11%	$41,030	$59,450	15%	Work experience in a related occupation
Motor vehicle operators, all other	17%	$25,570	$23,420	12%	Short-term on-the-job training
Sales representatives, services, all other	26%	$54,230	$42,400	48%	Moderate-term on-the-job training
Production, planning, and expediting clerks	19%	$38,920	$37,180	29%	Short-term on-the-job training
Order clerks	-7%	$27,410	$23,560	15%	Short-term on-the-job training
Billing and posting clerks and machine operators	-21%	$28,860	$26,720	15%	Moderate-term on-the-job training
Petroleum engineers	3%	$97,350	$86,810	82%	Bachelor's degree

Source: BLS

KEY SELLING POINTS

Broken Arrow possesses the following key assets that will support the recruitment of the distribution and warehousing industry:

1 **Location** – Broken Arrow is blessed with a natural geographic advantage – its central location relative to the rest of the U.S. With proximity to virtually anywhere in the country, Broken Arrow also lies within 500 miles of several major markets, including extremely close proximity to Tulsa and its suburbs. A central location is a critical requirement for distribution firms, and it will make Broken Arrow an appealing option in the early stages of the site selection process.

2 **Affordable Land** – Distribution firms typically require larger parcels of land and thus prefer land that can be acquired at reasonable prices. Broken Arrow's distance from the center city makes land prices competitive and attractive to distribution and warehousing prospects. The City's challenge will be assembling large enough tracts of land with highway access.

INDUSTRY GEOGRAPHY AND RECRUITMENT

The distribution and warehousing industry is congregated in two types of locales: port communities located near major waterways and central U.S. regions with tremendous market access. Stockton, CA, for example, has exploited its massive port to build a local distribution and logistics industry. In contrast, Laredo, TX is a major commercial hub for commerce between the United States and Mexico, while Joplin, MO has been dubbed the

DISTRIBUTION AND WAREHOUSING GEOGRAPHY

TOP DISTRIBUTION AND WAREHOUSING MSA'S BY LOCATION QUOTIENT

● Top MSA   ○ Recruitment Target

MSA	LQ
Laredo, TX	8.34
Houma, LA	4.14
Joplin, MO	3.89
Iowa City, IA	3.10
Lakeland, FL	2.89
Stockton, CA	2.60
Memphis, TN	2.48
Omaha, NE	2.31
Savannah, GA	2.03

Source: BLS, AE Calculations
Note: Top MSA's possess >40,000 employment

"crossroads of America" and boasts a robust trucking industry. Due to its central location and low land costs, Broken Arrow has potential to recruit distribution companies from this latter category of communities.

FINAL NICHE TARGETS

Manufactured Parts Warehousing

Like retail, the manufacturing industry is served with regional parts warehousing and distribution in order to maximize just in time efficiencies. These facilities are typically larger than retail centers and require more land to allow easy access for trucks and rail lines. Manufactured parts warehousing has important synergies with manufacturing firms, which Broken Arrow's manufacturing base will allow it to take advantage of.

Retail Distribution

Retail distribution centers utilize advanced technology to manage the flow of materials in the retail supply chain. Using high-speed conveyors, laser scanners, computerized databases and other technologies, the industry seeks to create efficiencies via just-in-time inventories and "shelf-ready" goods. The retail industry is increasingly shifting toward the use of such centers and away from traditional warehousing inventories. Distribution centers are relatively large facilities and tend to locate either on the fringes of major MSAs or outside of these areas.

INDUSTRY DEFINITION

The software and information technology services industry is comprised of computer programming services, prepackaged software, data processing, information retrieval services, website hosting, internet search, computer systems design, and telecommunications. Information technology firms now have worldwide revenues in excess of $200 billion. Approximately half of these sales come from software applications. Development tools, infrastructure software, and computer systems components represent the remaining market.

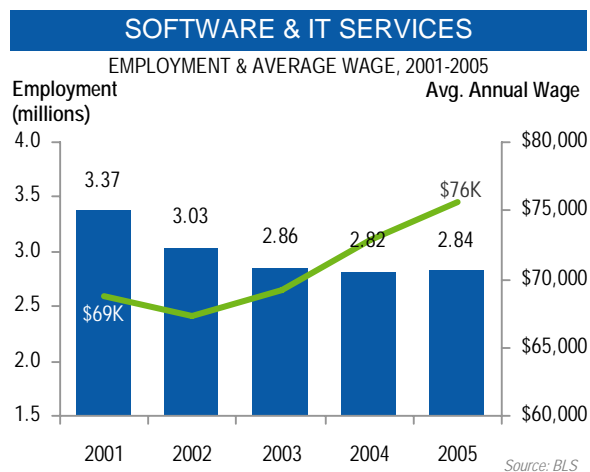| Software & IT Services	
Definition	Key Stats
The creation of technologically driven products and services to enhance the processing and distribution of information	U.S. Employment: ➡ 2,837,997
	U.S. Establishments: ➡ 227,340
	U.S. Average Wage: ➡ $75,571
	Location Factors: ➡ Young Talent
	IT Infrastructure
	R&D Output
	Capital Access

Major areas of growth are in data security and business intelligence software. Due to the low start-up costs associated with software firms, many small software companies exist. However, the industry is quickly maturing, and many analysts forecast an era of consolidation ahead. Large software companies such as Microsoft, IBM, and Oracle have already undertaken significant consolidation actions.

Other major trends in the information technology industry include outsourcing programming duties to low-cost regions and the "open source" movement. China, India, and Russia have low-cost computer scientists, ensuring further investment in these regions. The "open source" movement has gained momentum via the Linux operating system. "Open source" refers to the practice of allowing free access to the building blocks of a computer program, which in turn multiplies the number of programmers who can work on building solutions around that program.

NATIONAL GROWTH TRENDS

The software and IT services industry was hardest hit among target industries by the post-2000 recession. Employment in the industry dropped by over half a million between 2001 and 2003 in the wake of the tech bust, with the largest declines occurring in the telecommunications and computer systems design subsectors. Since 2003 the information technology industry has stabilized and experienced positive employment growth of 20,000 jobs between 2004 and 2005.

The software and IT services industry boasts some of the highest wages among U.S. industries and is thus highly recruited by communities across the country for its high impact and large multipliers. Wages currently stand at $76,000, a 10% increase since 2001.

SOFTWARE & IT SERVICES
EMPLOYMENT & AVERAGE WAGE, 2001-2005

Employment (millions): 3.37, 3.03, 2.86, 2.82, 2.84

Avg. Annual Wage: $69K ... $76K

2001 2002 2003 2004 2005

Source: BLS

AngelouEconomics
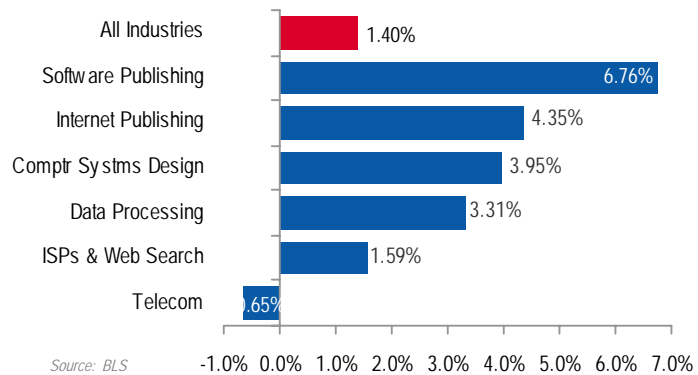technology-based economic development

Employment for the software and IT services industry is projected to increase substantially by 2014, driven by advances in computer technology and applications and business demand for these high-tech products and services. Jobs will grow at an annual rate of 2.4% during this time, versus 1.4% for the U.S. private sector overall. This strong growth will be led by the software publishing market, which is expected to increase 6.8% annually, representing more than 145,000 new jobs over the next seven years. The computer systems design market will also see significant growth of nearly 4.0% annually, with more than 400,000 jobs created over the next 10 years. Telecommunications employment is projected to drop 0.7% per year until 2014.

Oklahoma will benefit from this growth in the form of more than 5,000 new jobs over the next seven years. This represents approximately 700 new jobs per year, a compound annual growth rate of 2.7%.
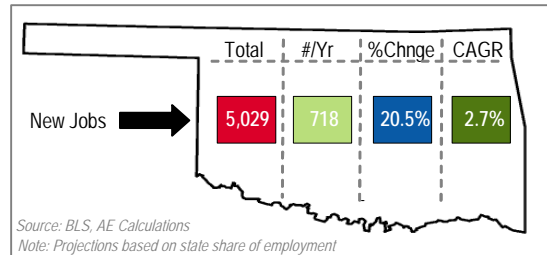
FUTURE GROWTH

PROJECTED AVG ANNUAL GROWTH, SOFTWARE & IT SUB-INDUSTRIES, 2007-2014

Industry	Growth
All Industries	1.40%
Software Publishing	6.76%
Internet Publishing	4.35%
Comptr Systms Design	3.95%
Data Processing	3.31%
ISPs & Web Search	1.59%
Telecom	0.65%

Source: BLS

OK SOFTWARE AND IT SERVICES

PROJECTED OKLAHOMA INDUSTRY GROWTH, 2007-2014

	Total	#/Yr	%Chnge	CAGR
New Jobs	5,029	718	20.5%	2.7%

Source: BLS, AE Calculations
Note: Projections based on state share of employment

INDUSTRY REQUIREMENTS

Structural Assets
Software firms require reliable utility service at affordable rates. Many industry firms will require access to a SONNET ring and numerous T-1 lines. Software companies also require high-end office space. Transportation infrastructure is not especially important to most software firms, as distribution is more likely to occur digitally.

Cost of Doing Business
Because they are high value-added, high margin industries, software and information technology companies do not address cost-structure as their primary concern.

SOFTWARE & IT SERVICES CRITERIA

INDUSTRY "MUST" CRITERIA, BROKEN ARROW SCORECARD

INDUSTRY "MUSTS" FILTER	BA PASS?	CRITICAL FACTORS
	✓	1 Young Talent*
	✓	2 IT Infrastructure
		3 Research Output
		4 Access to Capital

Source: AE

* Depending on particular sub-industry requirements, talent levels may or may not be sufficient

Software and Internet companies' primary costs are computer and networking equipment and employee salaries Electricity and rental space are primary concerns of datacenters. The Internet makes software distribution very cheap and efficient, so transportation costs are not an issue.

Research & Development

Due to the relatively low cost of computers, computer science development can occur nearly anywhere. Many significant developments are produced by hobbyists and entrepreneurs as well as by universities and corporations. Due to the large amount of proprietary information involved, software firms keep all R&D in house. Microsoft, for example, has never revealed the source code for its Windows operating system, effectively suppressing any outside research.

Economic Conditions

Though economic conditions are not a primary concern, software and IT firms prefer to locate in large metropolitan areas with strong employment and population growth.

Workforce

Software and IT companies require computer scientists, computer engineers, and technicians and thus seek communities with a well-educated and creative workforce. The importance of well-trained workers is paramount in the software industry. Competitive companies locate in areas where they can readily meet recruitment needs. Software employees are highly mobile, and quality of life is especially important to attracting and retaining experienced technical workers especially during periods of growth.

Key Occupations in the Software and IT Services Industry					
Occupation	Employment	Median Wage		Occupational Information	
Title	10-year U.S. Growth Projection	US	Tulsa MSA	% with Bachelor's Degree+	Education
Telecom equipment installers and repairers, except line installers	13%	$49,330	$44,460	13%	Long-term on-the-job training
Computer software engineers, systems software	11%	$84,310	$64,230	83%	Bachelor's degree
Computer programmers	43%	$67,400	$63,900	72%	Bachelor's degree
Network systems and data communications analysts	2%	$64,970	$57,950	60%	Bachelor's degree
Technical writers	55%	$57,720	$39,380	73%	Bachelor's degree
Computer support specialists	23%	$43,380	$32,980	41%	Associate degree
Network and computer systems administrators	23%	$63,210	$58,450	51%	Bachelor's degree
Computer systems analysts	38%	$70,430	$62,890	66%	Bachelor's degree
Computer and information systems managers	31%	$102,360	$81,180	70%	Bachelor's or higher degree, plus work experience
Database administrators	26%	$65,590	$59,600	72%	Bachelor's degree
Sales representatives, services, all other	38%	$54,230	$42,400	48%	Moderate-term on-the-job training
Electronics engineers, except computer	19%	$79,990	$61,240	83%	Bachelor's degree
Multi-media artists and animators	10%	$57,270	$39,180	55%	Bachelor's degree
Computer specialists, all other	14%	$63,190	$61,950	66%	Associate degree
Sales engineers	-1%	$79,370	$60,430	86%	Bachelor's degree
Computer operators	14%	$33,580	$31,480	24%	Moderate-term on-the-job training
Sales reps, wholesale & manuftg, technical and scientific prdcts	-33%	$68,940	$58,540	50%	Moderate-term on-the-job training
Market research analysts	14%	$64,370	$45,760	79%	Bachelor's degree
Marketing managers	20%	$101,990	$78,920	66%	Bachelor's or higher degree, plus work experience
Electrical and electronic engineering technicians	21%	$48,710	$37,180	18%	Associate degree
Management analysts	10%	$75,000	$64,840	76%	Bachelor's or higher degree, plus work experience
Data entry keyers	15%	$24,910	$22,230	16%	Moderate-term on-the-job training
Customer service representatives	-1%	$29,680	$26,770	22%	Moderate-term on-the-job training
Office machine operators, except computer	23%	$25,460	$25,050	12%	Short-term on-the-job training
Electrical power-line installers and repairers	-22%	$49,200	$34,810	5%	Long-term on-the-job training

Source: BLS

KEY SELLING POINTS

Broken Arrow possesses the following key assets that will support the recruitment of the distribution and warehousing industry:

1 **Quality of Life** – Broken Arrow possesses safe streets, high achieving schools, small town charm in the midst of a city, and other quality of life amenities that fuel strong population growth year after year. The city is particularly attractive to families with young children looking to relocate to a safe suburban environment with strong education. This factor will be a draw for IT companies looking to provide a high quality of life for their employees.

2 **Education** – Broken Arrow has a highly educated population relative to the region, the state, and the nation as a whole, with a strong proportion of bachelor's degrees and higher. Such secondary data will be looked favorably upon by information technology companies, though the city could suffer in comparison to other more established high-tech regions.

INDUSTRY GEOGRAPHY AND RECRUITMENT

Software and IT services companies are concentrated in large MSAs in the South and West. Seven of the top nine employment centers have total employment greater than 200,000, and many are reputable high-tech communities known for their tech-driven economies. On the other hand, communities such as Kansas City and Huntsville have been able to develop substantial IT clusters despite not being

SOFTWARE AND IT SERVICES GEOGRAPHY

TOP SOFTWARE AND IT SERVICES MSA'S BY LOCATION QUOTIENT

● Top MSA   ○ Recruitment Target

Source: BLS, AE Calculations
Note: Top MSA's possess >40,000 employment

MSA	LQ
Boulder, CO	3.79
San Jose, CA	3.04
Seattle, WA	2.19
Denver, CO	2.12
Kansas City, MO	2.12
San Francisco, CA	1.95
Huntsville, AL	1.92
Atlanta, GA	1.92
Little Rock, AR	1.68

recognized as traditional high-tech powerhouses. Though recruitment from the top IT MSAs will not be easy, Broken Arrow is part of a large metropolitan market (Tulsa) and boasts cost of living advantages that could lure young professionals.

FINAL NICHE TARGETS

Data Centers - Suburban Location

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. These facilities are increasing in importance, and many are co-developed with small software development operations. Excess capacity exists from the the late 1990s build out, but many of these facilities can no longer accommodate the changing technological needs of companies. This is leading to substantial development of new facilities, usually within a 200 mile radius of company operations. Demand is also driven by strong growth in server and storage requirements, as well as increased digital media and transactions processing via the internet. Data centers are high value operations, pay excellent wages, and are very low impact.

Software Development

Although the U.S. software industry greatly suffered in the wake of "dot com" bust, the market has recently rebounded. Employment increased in 2005 to 237,000 after declining since 2001, while wages grew to $100,454 – among the highest of all U.S. industries. Approximately half of revenue in the industry comes from software applications and development tools, with infrastructure software splitting the remaining market. Potential areas of growth are in compliance software, open source software, security software, virus protection software, anti-spam software, and business intelligence software. There are several factors driving this growth. The recent corporate scandals and terrorist attacks, which had devastating effects on the financial markets, are forcing companies to adhere to stricter government regulations. These regulations require companies to implement software that provides immediate disclosure of events relevant to financial performance, maintain accurate records of electronic communication, and effectively detect any illegal activity.
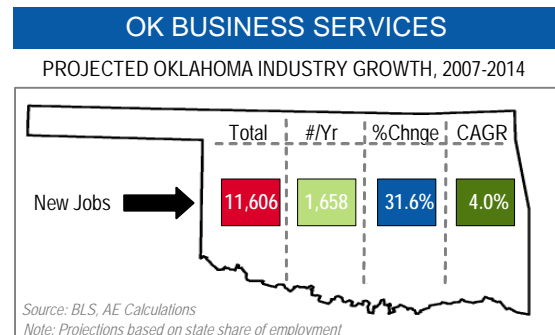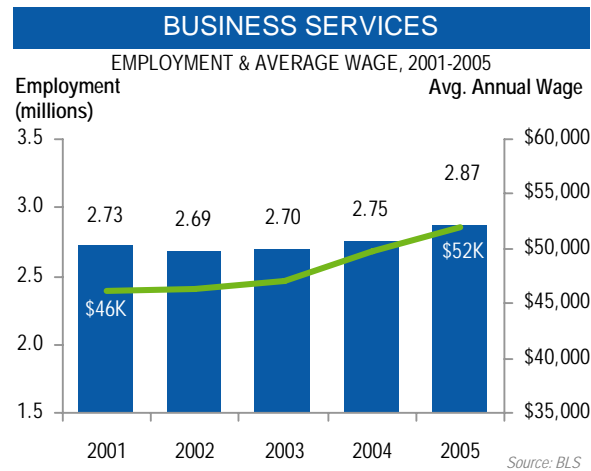
INDUSTRY OVERVIEW

The business and professional services industry is comprised of back- office support operations including customer support and telemarketing call centers, accounting and payroll services, processing facilities, and administrative support. These operations provide services to handle the routine, day-to-day activities of other companies and exist both as subsidiary operations for parent firms, as well as outsourced third-party service providers. Back-office operations, which interact primarily via electronic communication, often integrate a variety of functions under one roof, including customer relations, centralized accounting, and administrative services.

Business Services

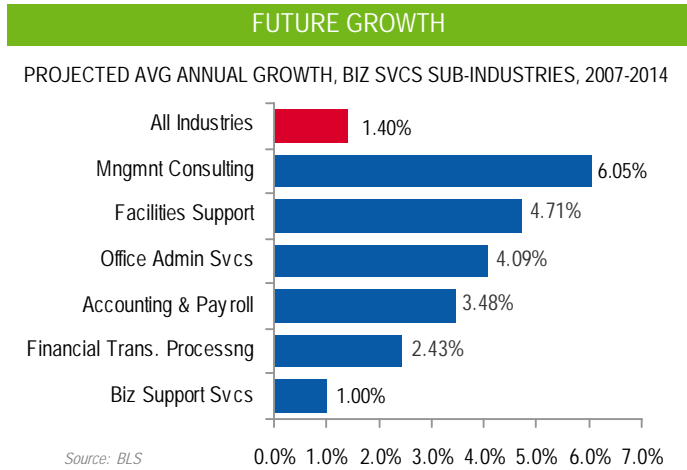| Definition	Key Stats	
The provision of services to handle the routine, back-office functions of other businesses	U.S. Employment:	2,874,507
	U.S. Establishments:	337,336
	U.S. Average Wage:	$52,010
	Location Factors:	Education Levels
		Facilities
		Utility Rates
		IT Infrastructure

NATIONAL GROWTH TRENDS

Because of its strong ties to health care and relative independence from the movement in the tech economy, the business services industry was resistant to many of the effects of the dot-com bust. Though industry employment dipped slightly, it rebounded beginning in 2003, adding 170,000 jobs over the next two years. In the coming years, demand for business services is anticipated to remain strong, as the growing financial services and health care industries will require increasing levels of back office support. Both industries will continue to move these support functions off site or even outsource the operations to third party vendors.

Although the domestic call center industry continues to struggle today, financial services call centers have been a bright spot. Many call centers have closed as companies outsource or merge their call center services. Companies increasingly are outsourcing their call center services to offshore entities in countries with large English-speaking populations. India is the most popular destination for call center outsourcing. Strong competition for call centers also comes from Canada, South Africa, Costa Rica, and the Philippines. The recent creation of the National Do Not Call List is a clear threat to the outbound call center industry, as fewer sales calls can be placed from within the United States. Financial service call centers have been less affected by these changes than the overall call center industry. They offer higher value-added services and have moved operations overseas with more caution.

BUSINESS SERVICES
EMPLOYMENT & AVERAGE WAGE, 2001-2005

Source: BLS

OK BUSINESS SERVICES
PROJECTED OKLAHOMA INDUSTRY GROWTH, 2007-2014

	Total	#/Yr	%Chnge	CAGR
New Jobs	11,606	1,658	31.6%	4.0%

Source: BLS, AE Calculations
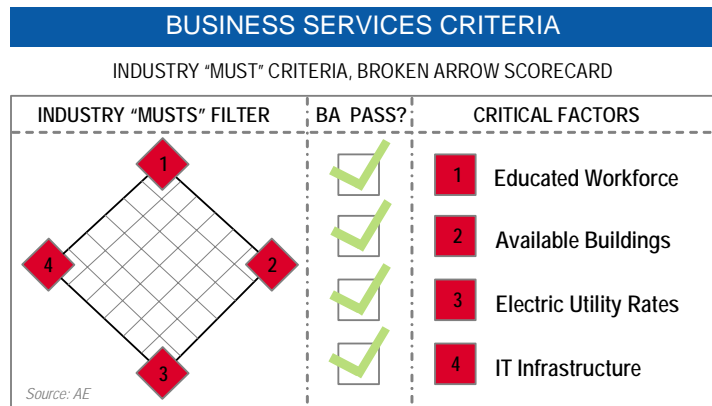Note: Projections based on state share of employment

Employment in business services is projected to grow by 870,000 jobs over the next seven years, an annual rate of 3.5%. Oklahoma is poised to capture 11,600 of these jobs, or 1,658 per year – representing 32% growth in state employment. Among industry subsectors, all are projected to experience positive national growth, with management consulting (6.05%), facilities support (4.71%), office administrative services (4.09%), and accounting and payroll services (3.48%) representing the highest industry gainers.

PROJECTED AVG ANNUAL GROWTH, BIZ SVCS SUB-INDUSTRIES, 2007-2014

Industry	Growth
All Industries	1.40%
Mngmnt Consulting	6.05%
Facilities Support	4.71%
Office Admin Svcs	4.09%
Accounting & Payroll	3.48%
Financial Trans. Processng	2.43%
Biz Support Svcs	1.00%

Source: BLS

0.0% 1.0% 2.0% 3.0% 4.0% 5.0% 6.0% 7.0%

INDUSTRY REQUIREMENTS

Economic Conditions
Industry firms desire locations where competition for labor is low, and large campus tracts are available. Stability is a key goal throughout relocation decisions. Major expenses for the industry include employee training and establishing communications infrastructure. Turnover is common among industry support staff. Because the cost of telecom is high, it is also important that real estate costs are competitive.

BUSINESS SERVICES CRITERIA

INDUSTRY "MUST" CRITERIA, BROKEN ARROW SCORECARD

INDUSTRY "MUSTS" FILTER	BA PASS?	CRITICAL FACTORS
1	✓	1 Educated Workforce
4 2	✓	2 Available Buildings
	✓	3 Electric Utility Rates
3	✓	4 IT Infrastructure

Source: AE

Market/Geography
Business support organizations often look to non-metro and suburban communities when relocating. Although not necessary, a central time zone location will allow inbound service from both coasts and short flights to the entire U.S.

Structural Assets
Business services and back office operations serve as hubs for many other vital functions. Therefore, it is essential that power, telecom, and other ISP services be reliable and affordable. These operations are light users of utilities, with the exception of power. Airport access is also vital for managers and executives in back office operations.

Research and Development
Universities serve the industry by providing a trained workforce. Some local software research can help firms stay competitive.

Workforce

Business services requires a wide range of worker demographics. Financial service support centers require workers with high school diplomas and employees with some specialized accounting knowledge, while other occupations require higher educational attainment. Many mutual funds and brokerage call centers require college degrees and specific industry certifications. Many companies seeking to lower their costs through back office services and business support services look to areas with high underemployment rates among younger demographics. Competitive wage rates are also very important.

Key Occupations in the Business Services Industry					
Occupation	Employment	Median Wage		Occupational Information	
Title	10-year U.S. Growth Projection	US	Tulsa MSA	% with Bachelor's Degree+	Education
Tax preparers	11%	$31,000	$33,930	50%	Moderate-term on-the-job training
Telemarketers	-10%	$23,500	$19,790	16%	Short-term on-the-job training
Court reporters	15%	$45,420	$40,460	37%	Postsecondary vocational award
Bill and account collectors	21%	$29,860	$23,800	15%	Short-term on-the-job training
Office machine operators, except computer	-22%	$25,460	$25,050	12%	Short-term on-the-job training
Accountants and auditors	22%	$58,020	$47,750	75%	Bachelor's degree
Mail clerks and mail machine operators, except postal service	-37%	$24,120	$20,020	9%	Short-term on-the-job training
Switchboard operators, including answering service	-9%	$23,020	$21,090	10%	Short-term on-the-job training
Medical transcriptionists	23%	$29,880	$26,090	11%	Postsecondary vocational award
Data entry keyers	-1%	$24,910	$22,230	16%	Moderate-term on-the-job training
Billing and posting clerks and machine operators	3%	$28,860	$26,720	15%	Moderate-term on-the-job training
Customer service representatives	23%	$29,680	$26,770	22%	Moderate-term on-the-job training
Payroll and timekeeping clerks	17%	$32,120	$28,330	18%	Moderate-term on-the-job training
Word processors and typists	-15%	$30,140	$24,440	15%	Moderate-term on-the-job training
Computer operators	-33%	$33,580	$31,480	24%	Moderate-term on-the-job training
Bookkeeping, accounting, and auditing clerks	6%	$30,700	$27,870	17%	Moderate-term on-the-job training
File clerks	-36%	$22,840	$20,270	17%	Short-term on-the-job training
Training and development managers	26%	$80,180	$59,110	61%	Bachelor's or higher degree, plus work experience
Financial analysts	17%	$73,130	$69,950	85%	Bachelor's degree
Sales representatives, services, all other	19%	$54,230	$42,400	48%	Moderate-term on-the-job training
Management analysts	20%	$75,000	$64,840	76%	Bachelor's or higher degree, plus work experience
Financial managers	15%	$96,620	$73,810	59%	Bachelor's or higher degree, plus work experience
Private detectives and investigators	18%	$36,980	$42,210	47%	Work experience in a related occupation
Credit authorizers, checkers, and clerks	-41%	$30,990	$34,330	20%	Short-term on-the-job training
Database administrators	38%	$65,590	$59,600	72%	Bachelor's degree

Source: BLS

KEY SELLING POINTS

Broken Arrow possesses the following key selling points that significantly increase the odds of attracting business services industries:

**1** **Back Office Facilities** – Broken Arrow has a substantial inventory of facilities – many of them second generation – that could potentially accommodate back office functions. Due to the city's location outside of the core metro area, these facilities will be relatively affordable for Business services firms.

2   **Proximity to Tulsa** – Broken Arrow offers Business Services firms a significant market advantage in terms of its position on the fringes of a major MSA, which puts them in close proximity to larger client companies. Business services operations often prefer suburban locations.

INDUSTRY GEOGRAPHY AND RECRUITMENT

The business services industry is dispersed throughout the U.S., with particularly strong concentrations in the Southwest. The industry tends to prefer lower cost locations in proximity to major MSAs, such as Palm Bay, FL (Orlando) and Pueblo, CO (Denver), and is seeing significant movement in recent years toward these lower-cost locales. For example, Citicorp recently announced the relocation of its core back-office

BUSINESS SERVICES GEOGRAPHY

TOP BUSINESS SERVICES MSA'S BY LOCATION QUOTIENT

● Top MSA   ○ Recruitment Target

MSA	LQ
Palm Bay, FL	3.56
Coeur d'Alene, ID	1.87
St. Joseph, MO-KS	1.64
Pueblo, CO	1.63
Lewiston, ME	1.62
El Paso, TX	1.58
Huntington, WV	1.56
Tuscon, AZ	1.51
Phoenix, AZ	1.51

Source: BLS, AE Calculations
Note: Top MSA's possess >40,000 employment

support operations from Lower Manhattan to New Jersey. The fact that some back-office operations still exist in the high cost areas such as New York and Phoenix illustrates the potential for lower-cost communities to recruit these facilities.
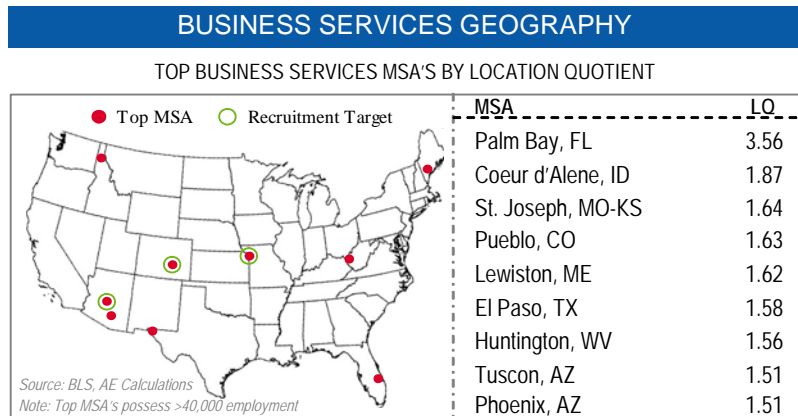
FINAL NICHE SECTORS

Call Centers

Strong competition for call centers is coming from offshore locales and is stunting domestic growth in the overall industry. However, call centers focused on customer relationship management (CRM), advanced technical support, or high dollar value sales are less affected by these changes and continue to locate new facilities in the U.S. These facilities are not subject to the same level of competitive pressure as low value-added call center operations. CRM is considered vital for high margin clients, and companies are concerned about potentially upsetting profitable relationships to save money. These operations are typically staffed by college-educated staff, many with further levels of certification. Cost savings realized from off shoring are inadequate given potential risks involved.

As with high tech firms, facilities are typically white-collar operations with above average wages. This segment of the business services sector also has low barriers to entry, and employment growth is beginning to rebound.

Back Office Financial

Support staff for back office financial services performs a variety of record-keeping duties. They track revenues coming into and leaving organizations as well as provide customer support. They provide payroll, procurement, and auditing services for their clients. The growing financial services industry will require increasing levels of back-office support and will continue to move these support functions off-site or even outsource the operations to third party vendors.

INDUSTRY OVERVIEW

The health services industry engages in the treatment and prevention of disease and the enhancement of human physical and mental well-being. These establishments integrate advances in medical technology into the provision of medical, nursing, allied, health, and social assistance services.

The health services industry consists of the following nine segments:

- Hospitals
- Nursing and residential care facilities
- Physicians' offices
- Dentists' offices
- Home healthcare services
- Other health practitioners' offices
- Outpatient care centers
- Other ambulatory healthcare service, including blood and organ banks and ambulance services
- Medical and diagnostic laboratories

Health Services		
Definition	Key Stats	
The provision of services for the treatment and prevention of disease and the promotion of human physical and mental well-being	U.S. Employment:	14,335,141
	U.S. Establishments:	689,010
	U.S. Average Wage:	$37,834
	Location Factors:	Demographics
		Trained Labor
		Transportation
		Telecom

NATIONAL GROWTH TRENDS

Health Services has been one of the fastest growing industries in the United States for many years. The U.S. healthcare market is estimated to be worth $1.3 trillion annually and employs 14.34 million. Due to the nature of its business, the health services industry is relatively immune to market fluctuations. The industry has grown consistently since 2001, adding more than 1.37 million jobs since that time. The industry's employment is expected to grow by over 30% between 2004 and 2014, creating an additional 3.7 million jobs over the next seven years. Specific sectors will see even higher growth; the home-based health care sub-market is forecasted to grow by almost 70% in the ten year period from 2004-

HEALTH SERVICES
EMPLOYMENT & AVERAGE WAGE, 2001-2005

Source: BLS

2014. The growth in outpatient care centers and residential care will be only slightly less robust at 44% and 48% respectively.. These strong health care fundamentals are driven by the increasing health care demands of the country's large aging population, and rising standards of living will boost demand by the general population even further. The elderly population, a group with greater than average healthcare needs, will grow faster than the total population through 2008, increasing demand, especially for home health care, private practice, and personal care.
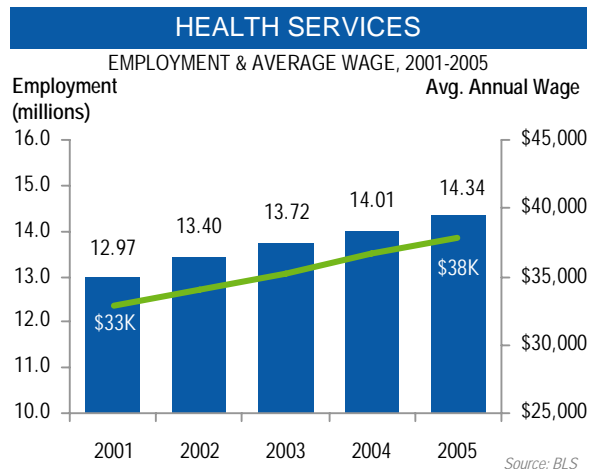
The state of Oklahoma will see 41,725 new jobs created in health care between now and 2014. This is equal to over 5,900 jobs annually, a compound annual growth rate of 3.4%.

PROJECTED OKLAHOMA INDUSTRY GROWTH, 2007-2014

	Total	#/Yr	%Chnge	CAGR
New Jobs	41,725	5,960	26.3%	3.4%

Source: BLS, AE Calculations
Note: Projections based on state share of employment

INDUSTRY REQUIREMENTS

Market
Health service companies are necessary in most communities. However, markets with a rapidly aging population or other special needs are most attractive for recruiting specialized health care services. It is also important for hospitals, hospices, and home care programs to locate in markets that have ready access to capital funds from a variety of sources, including governments, capital markets, and private equity investments.

Structural Assets
Adequate infrastructure is one of the most critical requirements for health service firms. Traffic congestion should not impede emergency service personnel, a major airport should be nearby for reduced transport time, and telecommunications and energy infrastructure must be adequate.

FUTURE GROWTH

PROJECTED AVG ANNUAL GROWTH, HEALTH SVCS SUB-INDUSTRIES, 2007-2014

| Sub-Industry	Growth
All Industries	1.40%
Ambulatory	4.22%
Social Assistance	3.47%
Nursing	2.78%
Hospitals	1.60%

Source: BLS

Workforce
Health services companies rely on a variety of trained employees. Medical schools supply doctors, therapists, and pharmacists. Local workforce training programs through community colleges can train skilled nurses and technicians. However, the industry also provides many job opportunities for people without specialized training. In fact, according to the BLS, more than half of workers in nursing and residential care facilities have a high school diploma or less.

Cost of Doing Business
Although health care services will locate in every major market, affordable office space and utilities are desired.

Research and Development
High levels of research and development activity and well-funded local research institutions support healthcare companies.
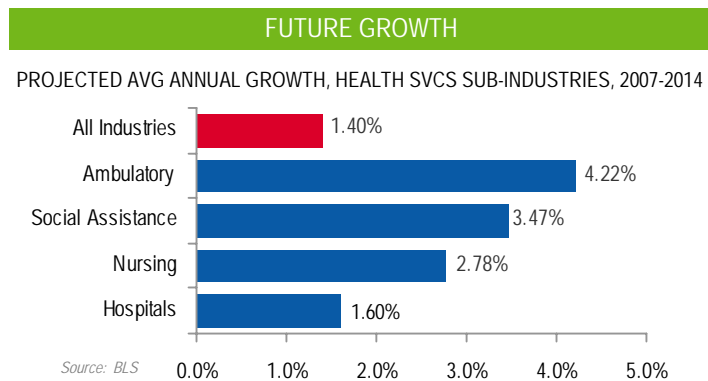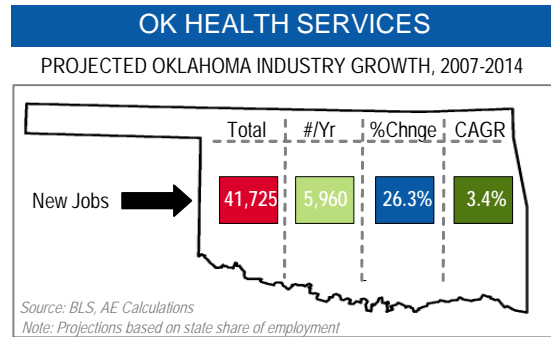
Key Occupations in the Health Services Industry					
Occupation	Employment	Median Wage		Occupational Information	
Title	10-year U.S. Growth Projection	US	Tulsa MSA	% with Bachelor's Degree+	Education
Chiropractors	13%	$82,060	$118,760	99%	First professional degree
Diagnostic medical sonographers	43%	$55,430	$54,000	23%	Associate degree
Dental assistants	35%	$29,970	$22,880	10%	Moderate-term on-the-job training
Physical therapist aides	43%	$22,900	$20,630	30%	Short-term on-the-job training
Dentists, general	34%	$133,680	$182,570	98%	First professional degree
Medical secretaries	14%	$28,390	$22,760	18%	Postsecondary vocational award
Respiratory therapy technicians	17%	$38,620	$32,800	15%	Associate degree
Medical assistants	3%	$26,160	$23,930	11%	Moderate-term on-the-job training
Radiologic technologists and technicians	52%	$47,010	$39,600	23%	Associate degree
Nuclear medicine technologists	23%	$60,530	$54,010	23%	Associate degree
Physical therapist assistants	21%	$39,490	$37,410	30%	Associate degree
Cardiovascular technologists and technicians	44%	$41,580	$30,330	23%	Associate degree
Respiratory therapists	33%	$46,270	$43,020	28%	Associate degree
Home health aides	28%	$19,420	$20,060	7%	Short-term on-the-job training
Physical therapists	56%	$65,350	$58,580	90%	Master's degree
Personal and home care aides	37%	$17,710	$14,950	10%	Short-term on-the-job training
Physician assistants	20%	$71,070	$69,180	69%	Bachelor's degree
Nursing aides, orderlies, and attendants	50%	$22,200	$19,540	7%	Postsecondary vocational award
Medical and clinical laboratory technologists	22%	$48,600	$39,390	48%	Bachelor's degree
Medical records and health information technicians	21%	$28,720	$24,870	12%	Associate degree
Medical transcriptionists	29%	$29,880	$26,090	11%	Postsecondary vocational award
Occupational therapist assistants	19%	$39,800	$34,170	12%	Associate degree
Registered nurses	34%	$56,880	$45,700	58%	Associate degree
Medical and clinical laboratory technicians	29%	$33,170	$28,050	48%	Associate degree
Licensed practical and licensed vocational nurses	25%	$36,210	$31,240	6%	Postsecondary vocational award

Source: BLS

KEY SELLING POINTS

Broken Arrow possesses the following key selling points that significantly increase the odds of attracting health services companies.

1 **Wealth and Age Demographics** – Though detrimental to its efforts at growing a young workforce, Broken Arrow has an aging population that proves advantageous in the recruitment of the health services industry, whose primary market is the elderly. Broken Arrow's high household incomes are also appealing to site location decision makers in health care.

2 **Regional Hub** – As Broken Arrow continues to grow, and development expands farther east, away from Tulsa, the city will become a key regional hub for the eastern side of Tulsa. Convenient health care is important for those residents on the fringes of the metropolitan area.

FINAL NICHE TARGETS

Home Health Care

The BLS estimates that home health care employment will jump by 69% between 2004 and 2014. Home health programs help elderly, convalescent, or disabled persons live in their own homes instead of in a health facility. Under the direction of nursing or medical staff, home health aides provide health-related services, such as administering oral medications. They may check patients' pulse rates, temperatures, and respiration rates; help with simple prescribed exercises; keep patients' rooms neat; and help patients move from bed, bathe, dress, and groom. Experienced aides also may assist with medical equipment such as ventilators, which help patients breathe.

Regional Medical Centers

Regional medical centers provide inpatient and outpatient hospital services for multi-county areas extending beyond the bounds of their particular community. A subset of hospitals, these facilities offer comprehensive medical care including diagnostics, surgery, and ongoing nursing care, and typically have a presence in virtually every type of medicine. In addition, regional medical centers often have specializations in multiple areas, from cancer care to women's health to cardiovascular to pediatrics to neuroscience. Because of their acute care focus, medical centers utilize the most advanced technologies in treatment and diagnostics in their service provision. Though hospitals represent only 2% of total health care establishments, they account for approximately 40% of total health care employment and will continue to create jobs consistent with the wider health services industry. Much of this growth will occur in outpatient services as centers seek to contain costs and diversify their operations.

Rehabilitation

Rehabilitation centers cater to the health and recovery of individuals whose functioning has been impaired through injury, congenital illness, drug and alcohol use, or other conditions. The industry includes both medical rehabilitation services and services for the treatment of drug and alcohol addiction. Rehabilitation centers utilize physical, occupational, and speech therapy to return patients to productive activity at home or work. Services are offered in both inpatient and outpatient environments including hospital settings, divisions of hospitals, nursing facilities, ambulatory centers, and others. Medical rehab programs address such conditions as stroke, surgical recovery, orthopedic care, sleep disorders, spinal cord injury, and numerous other ailments. The rehabilitation industry promises to experience continued growth with the aging of the population and nearing retirement of the baby-boomers.

INDUSTRY OVERVIEW

The retail industry is broadly categorized as the sale of merchandise or related services to the public for personal or household consumption including anything from food service to gasoline sales. The retail industry includes sellers of clothing and accessories, home furnishings, motor vehicles, and other consumer goods, as well as both full and limited-service restaurants.

Retail is not typically a target for economic developers. It is generally seen as a locally serving industry that lacks a large economic impact. However, the retail industry provides an inverse, indirect advantage by enhancing the economic development infrastructure of communities.

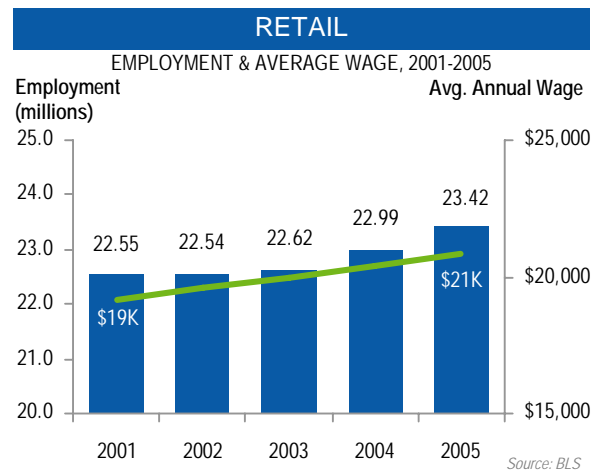| Retail	
Definition	Key Stats
The sale of merchandise and food items for personal or household consumption	U.S. Employment: ➡ 23,421,123
	U.S. Establishments: ➡ 1,472,585
	U.S. Average Wage: ➡ $20,855
	Location Factors: ➡ Area Growth Area Income Saturation Sites

The goal of developing this target in the Broken Arrow region is to provide the quality of life amenities that are important to attract the necessary workforce required by the other target industries.

In addition, establishing a strong retail industry will have positive impact on the region's tax base and ability to support its ongoing operations.

NATIONAL GROWTH TRENDS

Low savings rates, inflation rates, widely available credit, and the increasing number of six-figure incomes have stimulated significant growth in the retail industry. The industry now employs more than 23 million people nationwide, comprising approximately 18% of total U.S. employment. Since 2001, the industry has added an additional 870,000 jobs, a growth rate of 3.8%.

Competition between retailers has been increasingly tough as shoppers are lured away by convenience, value, and depth of selection. The retail industry continues to transform itself as tenants seek greater visibility and brand awareness in a heavily saturated retail market. Real estate development and mixed-use construction are becoming an integral part of many retailers' growth plans.

RETAIL
EMPLOYMENT & AVERAGE WAGE, 2001-2005

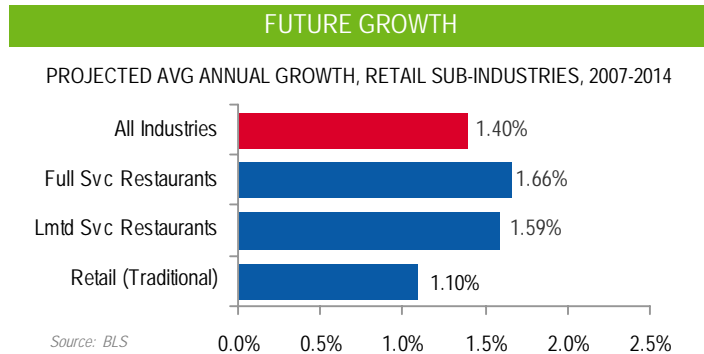|	Employment (millions)	Avg. Annual Wage
2001	22.55	$19K
2002	22.54	
2003	22.62	
2004	22.99	
2005	23.42	$21K

Source: BLS

The market is becoming more segmented and highly sophisticated by the variety of retail outlets. Shopping can now be done at discount stores, showcase stores, large retailers, direct marketers, and online merchandisers. Retailers that can't offer customers a significant competitive advantage are quickly losing market share.

The high growth in the retail industry is evidenced by the recent explosion of destination shopping centers. "Power towns" or "lifestyles centers" offer shoppers much more than the merchandise on their shelves. They have

been replacing traditional malls and usually consist of two or three large anchor stores and many smaller, specialty stores in a visually appealing outdoor setting. Entertainment options also draw customers in to linger and browse the shops. New shopping centers, especially those in urban areas, are devoting up to 40% of gross leasable area (GLA) to entertainment, restaurants and movie theaters. Close to residential areas and office buildings, these retail centers often have post offices, day care facilities, and galleries to create a unique kind of community center. Builders have spent 25-30% more on these areas than comparable shopping centers to make them attractive and pleasant. Many of these centers bring in shoppers from over a 15-mile radius.

Restaurant dining has become both a large part of the American way of life and a large part of the American economy. According to the National Restaurant Association, the restaurant industry is the nation's largest employer outside of government. The industry provides work for about 9 percent of the workforce, and one-third of all adults have worked in the industry at some time. Studies show that the average American spends 43 percent of his/her food budget in restaurants, eating out an average of 4.2 times per week, and half of the population visits a restaurant on their birthdays. The restaurant industry has consistently grown faster than the U.S. economy.

Retail employment is projected to continue to grow at a rate of approximately 1.3% annually over the next seven years. Over this period, the industry will create an additional 2.46 million jobs. Restaurants and food-service establishments will grow at a slightly faster rate of 1.66% annually, while traditional retail stores will account for the bulk of new employment opportunities in absolute terms.

FUTURE GROWTH

PROJECTED AVG ANNUAL GROWTH, RETAIL SUB-INDUSTRIES, 2007-2014

All Industries	1.40%
Full Svc Restaurants	1.66%
Lmtd Svc Restaurants	1.59%
Retail (Traditional)	1.10%

Source: BLS   0.0% 0.5% 1.0% 1.5% 2.0% 2.5%

INDUSTRY REQUIREMENTS

Economic Conditions
Retail and restaurants are high margin industries that perform exceptionally well in a vibrant economy. Low interest rates coupled with increasing wage rates fuel consumer spending, which translates into higher sales and more housing starts, which helps spur local population growth.

Market/Geography
Most new mall and retail construction takes place in the fastest-growing communities in the nation. Malls are also built in alternative locations: downtown, near entertainment or sports complexes, or near convention centers. Redevelopment of existing urban retail areas has also been occurring at a rapid pace, as changing consumer preferences have moved toward a smaller store shopping experience.

Structural Assets
Location is extremely important for the retail industry. Retail centers require high visibility locations with easy road access to the storefront. Big box retailers require affordable land, as they have traditionally located outside of the central business district, drawing a lot of shopper traffic away from downtown.

Developers typically look for growing communities, with reliable road and utility infrastructure to accommodate the additional capacity. Ease of acquiring building permits is also a priority for new retail construction. Thorough

planning and cooperation between city officials and housing developers is required to coordinate the growth of retail with residential development.

Research and Development
Local research and development capabilities do not affect the retail industry.

Workforce
Aside from management positions, the retail and restaurant industries do not require many employees with a college degree. The majority of retail employees is in sales and related service occupations and require little to no job training skills.

> *A Note on Site Selection Requirements for RETAIL and RESTAURANTS:*
> Franchise retail and restaurant operators are looking for a very specific set of figures to maximize profitability. Population figures and growth rates, spending patterns, income levels, and traffic counts are all analyzed to determine if an area is ready for retail development. These criteria are not always written in stone, but a community must be close in order to attract the attention of franchisees and site selectors.

KEY SELLING POINTS

Broken Arrow possesses the following key selling points relative to attracting greater numbers of retail establishments:

1   **Strong Population Growth** – Broken Arrow has demonstrated consistently robust population growth, including over 50% growth since 1990. This key stat will greatly enhance the City's prospects for landing retail establishments.

2   **High Income Levels** – Consistent with many growing suburban communities, residents of Broken Arrow on average have high incomes – approximately 50% higher than the state and the Tulsa region. Broken Arrow is thus a favorable community in terms of community spending power thresholds examined by retailers and site selectors.

FINAL NICHE SECTORS

Locally Owned Boutiques
Boutique stores and specialty shops are smaller retail establishments that typically specialize in providing a certain product line of goods for a particular category of customers. These shops sell unique clothing, collectibles, and gifts. Many boutiques sell hand-crafted clothing and help to define fashion trends on a regional basis. Locally crafted gifts, collectibles, and clothing stores provide opportunities for creative individuals to earn high wages and build small businesses.

By specializing in fewer product lines, these boutiques often provide a larger selection and more expertise in the product categories they represent compared to general merchandisers that carry a very broad selection of product categories but do not have the depth of selection in any single product type. Boutiques and specialty stores have become increasingly popular, particularly among consumers with higher disposable incomes that value quality products and excellent sales service.

These specialty stores and boutiques tend to locate in unique and distinctive areas such as quaint downtowns or high density mixed use developments.

National Restaurants

National restaurants include established chains such as Chile's, Cheesecake Factory, Steak 'N Shake, T.G.I. Friday's and others. These establishments provide high value food services in a standardized environment with mass consumer appeal. They often locate in high growth suburban areas that protect investors by mitigating risk. Despite concerns over energy prices and a slowdown in the U.S. housing market, the growth of the restaurant industry remains strong, with total industry revenues projected at $537 billion for 2007.

National Retailers

National retailers encompass a broad range of stores selling merchandise in categories such as home furnishings and supplies, apparel and accessories, groceries, consumer electronics, office products, discount items, and drug stores. Notable national chains include Best Buy, Circuit City, Target, Gap, Wal-Mart, Banana Republic, Pier One Imports, and Home Depot. The top 500 chains generate annual sales of approximately $1.7 trillion, and like restaurants prefer less risky, high growth suburban locations. The predominant industry trends among chain retailers are consolidation, new formats and concepts, channel blurring, and emerging technologies. The lifestyle center is a particularly salient formatting trend, as national retailers look to provide consumers with more of a holistic indoor/outdoor experience.

BENCHMARK COMMUNITIES

St. Charles, MO
The second oldest city west of the Mississippi and the original capitol of Missouri, St. Charles is a community of 69,000 residents located approximately 25 miles northwest of St. Louis. Known for its historic architecture and craft fairs, St. Charles boasts a quaint atmosphere and affordable quality of life that recently led the wider St. Charles area to be named one of the nation's "25 Best Affordable Suburbs". St. Charles is home to employers such as Boeing and anchors one of the fastest growing counties in the state and nation.

Olathe, KS
Located 20 miles southwest of Kansas City, Olathe is the 19th fastest growing city in the nation with nearly 115,000 residents. Known for its hot air ballooning, sail boarding, and public lakes, Olathe's recognized high quality of life has led it to be ranked the 2nd most desirable place to live among cities of 100,000 or more residents and the 13th best place to live among all locations. Olathe has a strong and growing economy, with Honeywell and GPS manufacturer Garmin leading a diversified industry base that includes clusters in electronics, logistics and distribution, and insurance.

Round Rock, TX
Round Rock is a thriving suburb of 83,000 that has benefited tremendously from its close proximity (17 miles) to downtown Austin. Regional prosperity has made Round Rock the benefactor of a robust high-tech industry base, anchored by Dell's headquarters and their nearly 10,000 employees. The Austin-Round Rock MSA has been rated a Five Star Knowledge Worker metro area and one of the five most innovative entrepreneurial regions in the country. Located a short drive away from a variety of outdoor activities and live music opportunities, and with a school district rated in the top 16% in the nation, Round Rock is also known for its very high quality of life.

Sugar Land, TX
Located 20 miles outside of Houston, the city of Sugar Land was built on the strength of the Imperial Sugar Company, and today has grown to a population of 82,000. Sugar Land exhibits a strong corporate presence and a diversified economic base rooted in the energy industry but also buoyed by the presence of software, semiconductors, and electronics companies. The strength of the city's economy is evidenced by its 31% job growth over the past 5 years and its highly diverse workforce, nearly 25% of which is Asian. Sugar Land has been rated the #3 best place to live among small cities, and the #8 best place to raise a family.

| AT A GLANCE | | | | | |
2006	Broken Arrow OK	St. Charles MO	Olathe KS	Round Rock TX	Sugar Land TX
Population	94,000	68,611	114,453	83,268	81,776
Population Growth '00-'06	25.5%	23.7%	23.1%	36.2%	29.4%
Unemployment Rate	2.8%	4.8%	4.6%	3.6%	4.1%
Labor Force Growth '99-'05	19.8%	-8.8%	28.4%	36.4%	86.3%
Median HH Income	$61,570	$52,305	$71,601	$70,696	$95,226
% Bachelor's Degree +	34.2%	33.5%	46.3%	40.1%	58.0%
% in 25-44 Age Group	29.5%	26.1%	32.8%	34.5%	25.7%

TULSA SUBURBS

Closer to home, Broken Arrow is also compared to three other large Tulsa suburbs: Bixby, Jenks, and Owasso, as well as the entire Tulsa MSA.
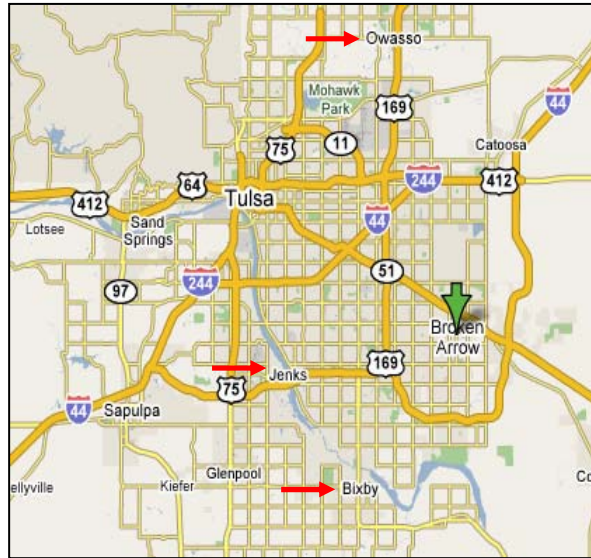
Bixby
Historically a farming community, Bixby is quickly becoming a desired residential community approximately 23 miles southeast of Tulsa.

Jenks
Directly south of downtown Tulsa, Jenks is well-regarded for its school district and upscale housing options. It is also a popular tourist draw – home to the Oklahoma Aquarium and Riverwalk Crossing shopping district on the Arkansas River.

Owasso
Owasso is a northern suburb of Tulsa, in close proximity to the Tulsa International Airport. It is also one of the fastest growing suburban retail destinations in Tulsa.

AT A GLANCE					
2006	Broken Arrow OK	Tulsa MSA	Jenks OK	Owasso OK	Bixby OK
Population	94,000	890,926	11,371	20,822	15,250
Population Growth '00-'06	25.5%	3.7%	19.0%	12.8%	14.3%
Median HH Income	$61,570	$42,660	$66,963	$55,954	$61,642
% Bachelor's Degree +	34.2%	25.8%	36.5%	28.5%	32.7%
% in 25-44 Age Group	29.5%	26.9%	28.1%	30.4%	27.5%

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