7. Economic Base

In order to create a strategy that achieves the objectives of this comprehensive plan and bolsters the existing Polk County economy, it is important to understand the current environment, the context for economic development in Polk County.

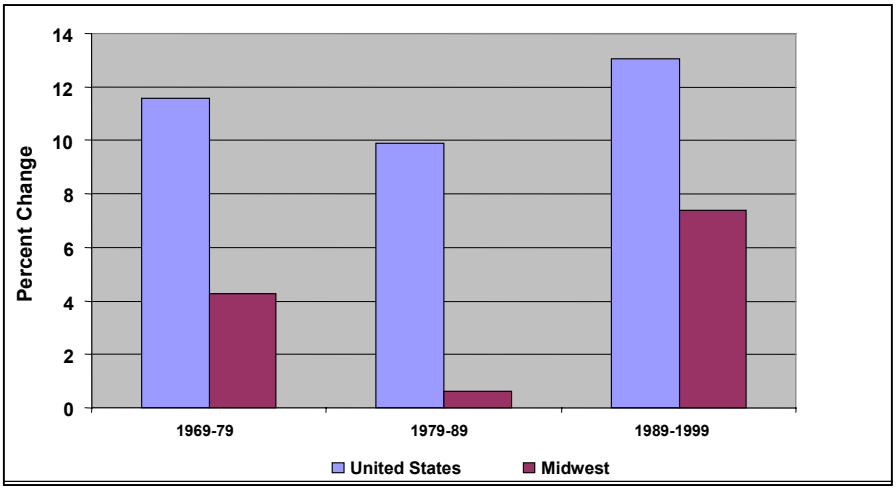
7.1 Midwest Trends

The economy of Polk County, Iowa is intertwined with the trends of the State and the Midwest regional economies. The consultant team examined the status of the Midwest economy and asked "Where is Polk County in the Midwest Economy and Where is it Going?" To answer this question, we reviewed existing market conditions, interviewed planning and business professionals, and profiled Midwest growth trends.

Population

The U.S. Federal Reserve defines the Midwest region as including Illinois, Indiana, Iowa, Ohio, Michigan, Minnesota, and Wisconsin. Overall population for the region has grown by approximately 7% in the decade between 1989 and 1999. Although this is a significant increase over population growth levels for the previous decades, relative population growth for the region still lags behind national rates. Figure 1 illustrates these population trends.

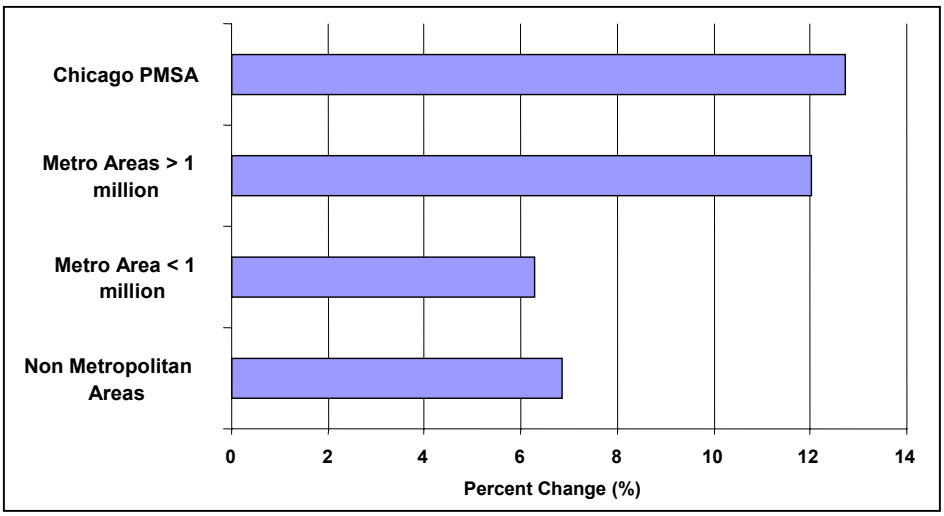
Figure 7-1: Population Growth, Midwest vs. United States



Within the Midwest, the rate of population growth has varied between urban and non-urban areas between 1990 and 2001; this variation is shown in Figure 2. Regional

growth was led by the Chicago PMSA. The Chicago region and other metropolitan areas with population greater than 1 million experienced rates of population growth consistent with the national average. Small cities (metropolitan areas with population less than 1 million) and non-urban areas experienced much lower rates of population growth, with small cities experiencing the lowest rate of growth in the region.

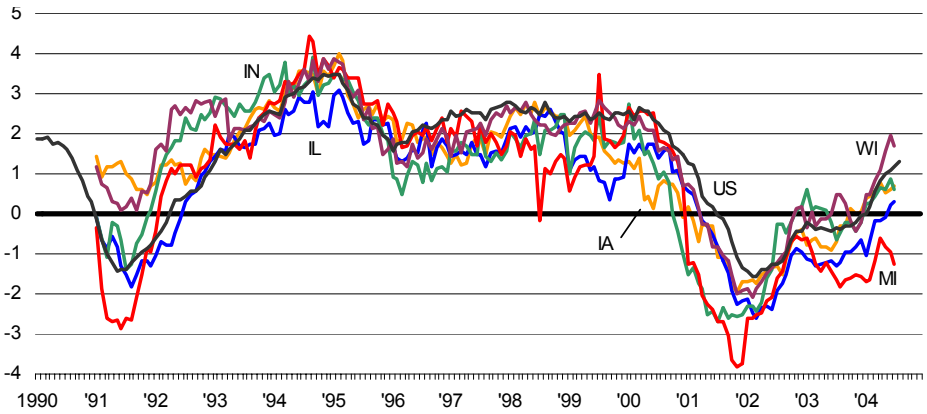
Figure 7-2: Midwest Growth in Population, 1990-2001



Employment

Overall employment levels in the Midwest region are relatively aligned with national trends. Annual changes in overall employment are traced by the dark green line in Figure 3. Overall employment has been increasing in the region, as well as nationally, since 2002, but variations emerge: Wisconsin leads the Midwest recovery and exceeds the national growth average, while all the other Midwestern states lag the U.S., although Iowa and Indiana are lagging the least. Michigan and Illinois, being the most manufacturing-oriented of all the Midwestern states, lag the most behind the rest of the region in terms of total employment recovery.

Figure 7-3: Total Employment, percent annual change



Changes in Economic Sectors

The Midwest region became high-income during the late 19th and early 20th century through agriculture, manufacturing and urbanization. Over the course of the 20th century, agriculture has declined as a percentage of the national economy. Manufacturing, another mainstay of the Midwest economy has also steadily decreased in relative importance.

Figure 7-4: Manufacturing and Agriculture as Percentage of Overall Economy

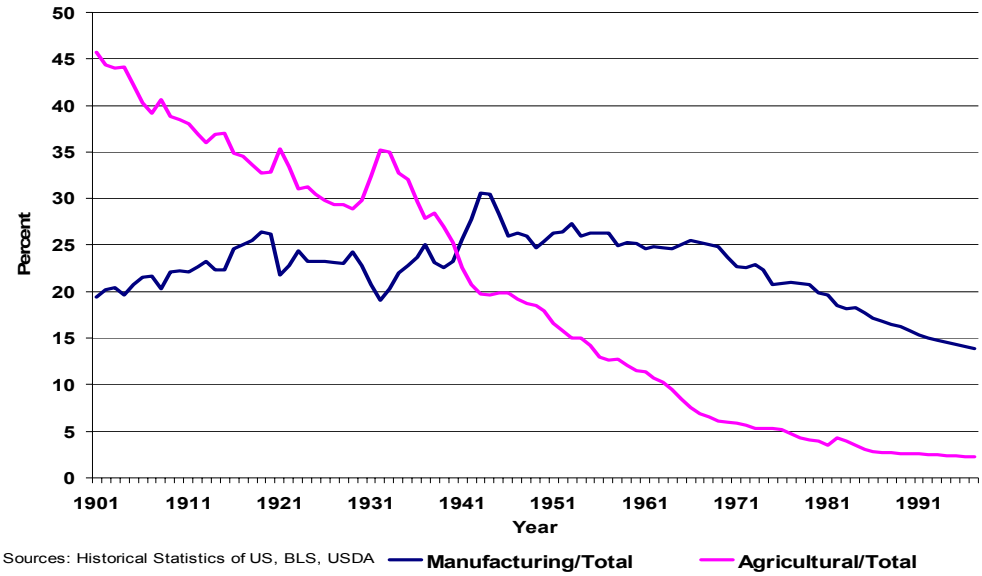
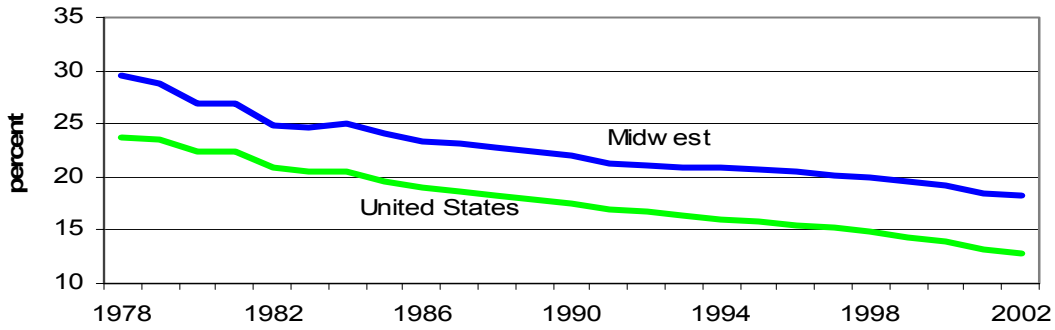


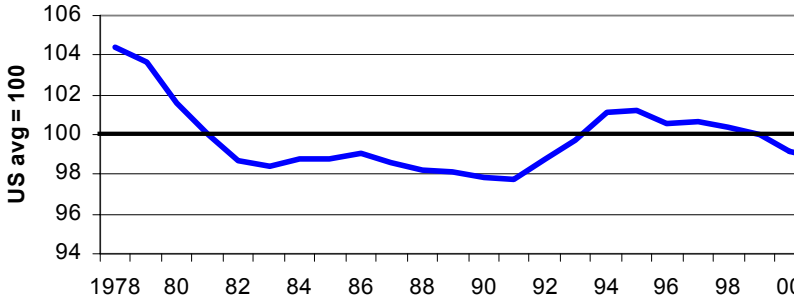
Figure 5 illustrates that manufacturing continues to play a larger role in the Midwest economy than in the national economy. However, manufacturing is declining in relative importance regionally at the same pace. This reflects the fact that manufacturing was historically focused in the Midwest and the industry's decline is primarily impacting that region. Analysts forecast that these trends will continue for both the manufacturing and agricultural industries in the 21st century, forcing Midwestern states to readjust their economic focus.

Figure 7-5: Manufacturing Share of Total Employment



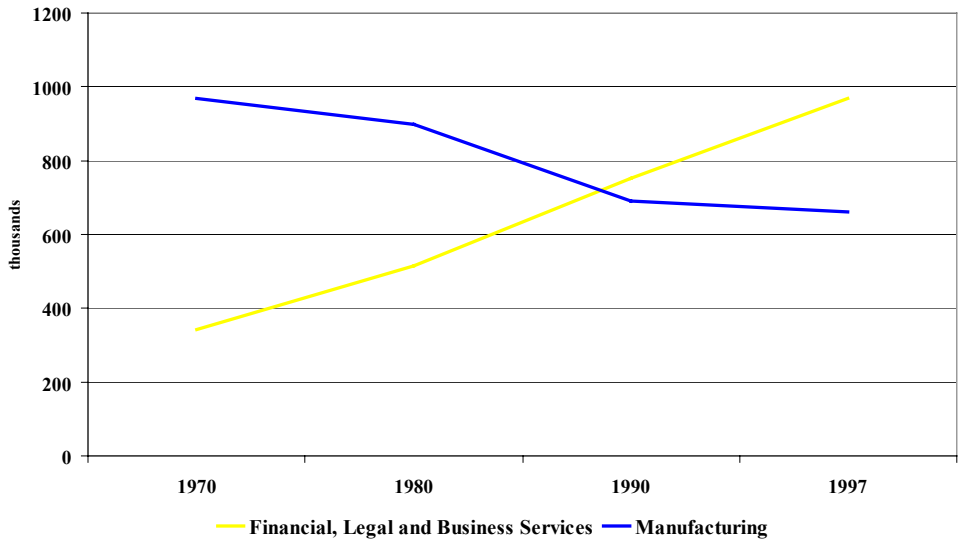
The Midwest has also experienced a decline in per capita personal income relative to the national average. After a brief rise above the national average in the second half of the 1990s, per capita incomes in the Midwest have fallen below the national average and appear to be continuing to trend downward relative to the national standard, as shown in Figure 6.

Figure 7-6: Per capita Personal Income, Midwest vs. U.S.



As discussed earlier, the Chicago PMSA has led the Midwest region in population growth. The Chicago region has also experienced a shift in employment away from manufacturing to services, particularly financial, legal and business services. Figure 7 shows Chicago MSA employment in both the manufacturing sector and financial, legal and business services sector since 1970. This shift has helped cushion the impact of declining manufacturing in the Chicago region and supported the region's population growth over the same time period. It remains to be seen if other, smaller metropolitan areas in the Midwest can accomplish the same shift towards services as Chicago.

Figure 7-7: Chicago MSA Employment by Sector, 1970-1997



Source: U.S. Department of Commerce, *County Business Patterns,* author's calculations

Education & Research

Iowa's workforce is highly educated and productive. Iowa ranks among the top five states nationally with a high school graduation rate of 82.5 percent. By comparison, 88.3 percent of Polk County residents have a high school degree or higher. Iowa student scores on the ACT and SAT college entrance exams rank first in the nation. Combined with training incentives and educational institutions, Iowa's workforce provides a profitable advantage for an Iowa business location.

The percentage of Iowa residents with a high school degree or some college education exceeds the national average, but the percentage of state residents with a college degree or advanced degree falls slightly below the national average.

Figure 8 shows educational attainment levels for Iowa relative to the national average and other Midwestern states.

Table 7-1: Educational Attainment, Midwestern States, 2000

	Education Attainment, 2000				
	< H.S.	H.S. Grad	Some College	College	Advanced Degree
Illinois	18.6	27.7	27.7	15.5	9.5
Chicago PMSA	17.0	26.0	26.0	16.5	11.0
Indiana	17.9	37.2	25.5	19.0	7.2
Iowa	**13.9**	**36.1**	**28.8**	**12.2**	**6.5**
Michigan	16.6	31.3	30.3	14.7	8.1
Wisconsin	15.0	34.6	28.1	13.7	7.2
Minnesota	12.0	28.8	31.7	19.1	8.3
U.S.	19.6	28.6	27.3	15.5	8.9

Iowa's university system is frequently cited as an asset to the state and the institutions located in Polk County are also identified as assets. These institutions provide education services to Iowa workers, but also serve as centers for research and development, which may evolve into new technology industries. In addition, Iowa has a historic presence in agricultural seed and related bio-tech firms.

Research & Development: Emerging Industries

As Midwest cities search for new industries to replace traditional manufacturing, two sectors that are often cited are biotechnology and nanotechnology. Both are recognized as emerging sectors with potential for growth. New technology sectors can be attractive targets for economic development because they are not highly tied to a particular geographic location or inputs the way traditional manufacturing often required a location close to specific natural resources or already existing suppliers or customers. Commercial activity related to biotechnology and nanotechnology are often linked to existing academic research institutions, an asset that Midwestern cities like Des Moines possess.

Biotech

The pool of new Ph.D. researchers, NIH and other grants funneled to university-affiliated research labs, and patents granted for innovations at university research centers, have proven to form one of the necessary pillars for a biotech industry to develop within a region.

However, biotech as an industrial sector also requires a second pillar of support from capital investment in research and development, public-private research and development partnerships, and a mix of small, start-up firms and established firms participating in developing the industry. These elements help convert biotechnology from a research or academic activity to a viable commercial activity.

Although the Midwest is often identified with biotech research, it lacks the related commercial activity, which tends to be focused on the coasts. Table 7-2 shows the nine markets, or "Biotech Centers", where biotechnology industry is concentrated in the U.S.; these markets are located on both the east and west coast, but none are located in the Midwest. Four additional markets, including Chicago, St. Louis and Detroit, are recognized as research centers, but have not developed related industry. In each of these three Midwest cities, less than 1% of biotechnology research is funded by venture capital, compared to 50% in Boston or San Francisco.

Nanotechnology

Nanotechnology is a newer industry even than biotechnology. It is described as engineering or manufacturing products or machinery on a molecular level; a nanotech is equal to one billionth of a meter or the width of approximately three to six atoms. While nanotechnology is still largely a research activity, it has potential applications in nearly every aspect of modern life.

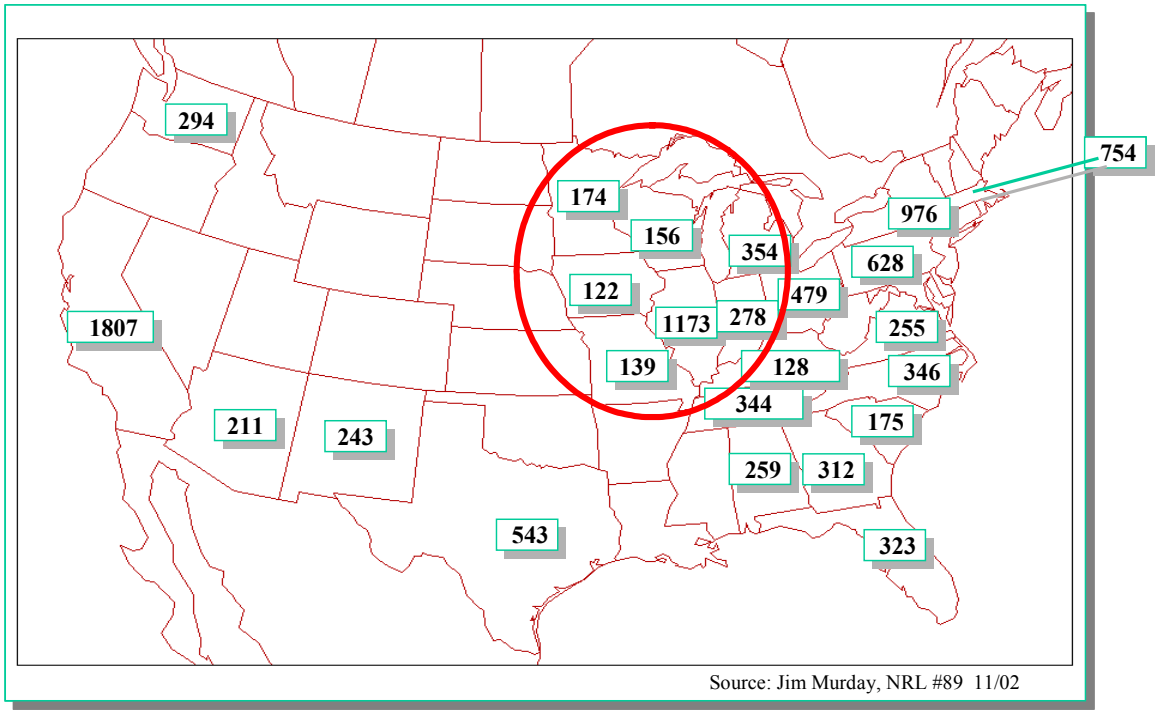
Nanotechnology research, like biotechnology research, is strong in the Midwest. The map below shows that the Midwest produces the highest percentage of research papers on nanotechnology. However, without the accompanying business partners and capital investment within the region, the Midwest may not capture the economic benefits that will hopefully come with this emerging industry.

Table 7-2: Biotech Center Locations and Resources

Biotech Centers			
	NIH funds ($M)	bio Ph.Ds	bio patents
Boston	1,433	355	3,007
S.F. Bay area	704	215	3,991
San Diego	681	82	1,632
Raleigh-Durham	469	166	796
Seattle	504	68	770
New York	1,383	519	6,806
Philadelphia	596	139	3,214
Los Angeles	594	218	1,399
Wash.-Balt.	952	241	2,162
Research Centers			
Chicago	417	177	1,444
Detroit	349	105	655
Houston	420	135	634
St. Louis	324	73	780

A look at nanotechnology research and commercial applications tells a similar story about the strength of research in the Midwest. The map below shows that the Midwest produces the majority of research papers on nanotechnology. However, without the accompanying business partners and capital investment within the region, the Midwest is not capturing the economic benefits that will hopefully come with this emerging industry.

Figure 7-8: Nanotechnology Research Paper Sources

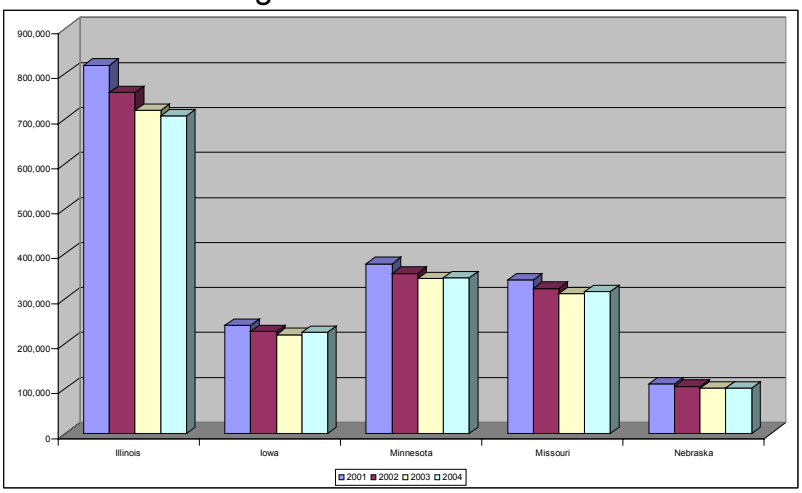


Employment Base – State of Iowa

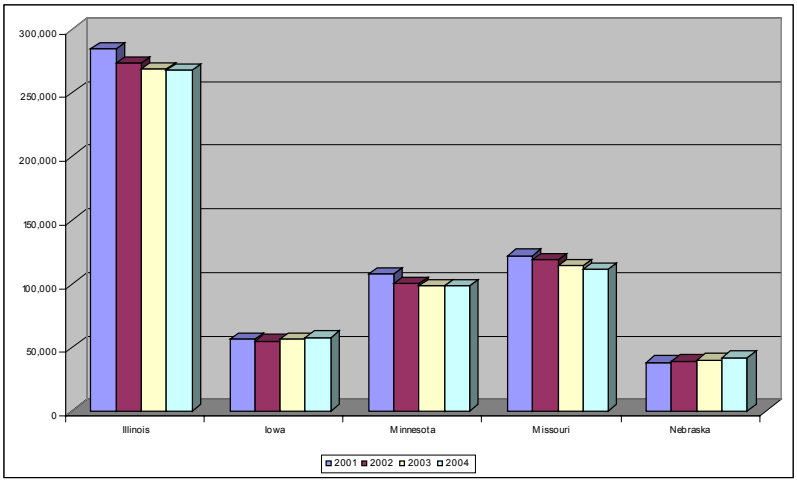
The following series of figures compares Iowa with neighboring states of Illinois, Nebraska, Minnesota and Missouri for the key employment categories of manufacturing, transportation and warehousing, finance and insurance, and public administration.

Figures 7-9 – 7-12: Comparison of Iowa and Neighboring States for Key Employment Categories, 2001-2003

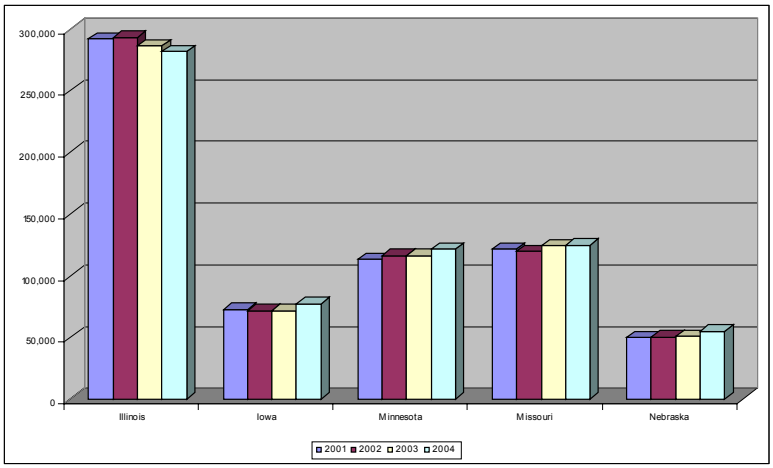
- Manufacturing



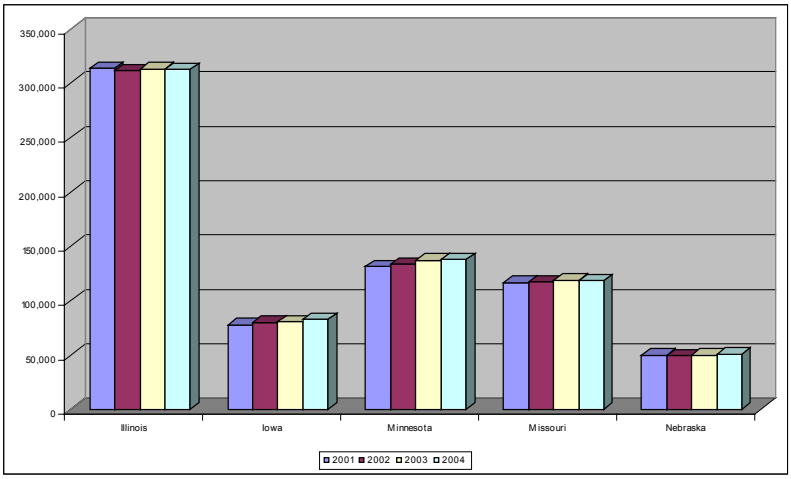
- Transportation and warehousing



- Public Administration



- Finance and Insurance

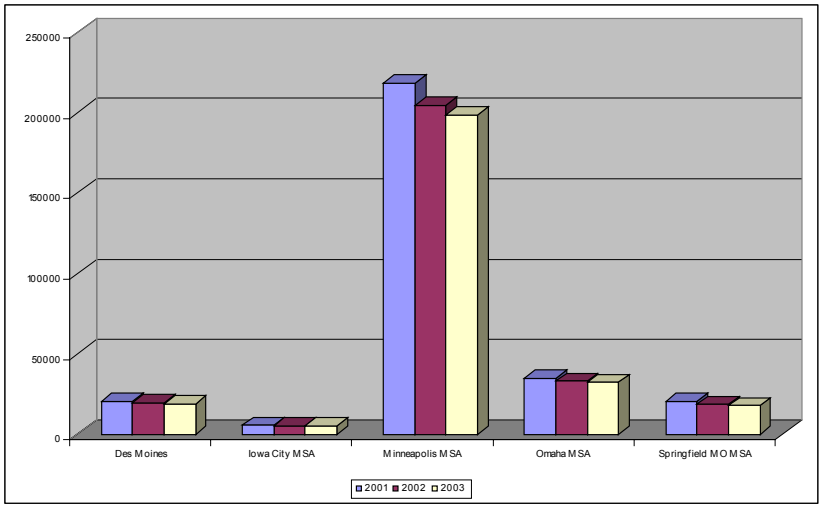


Employment Base – Des Moines MSA

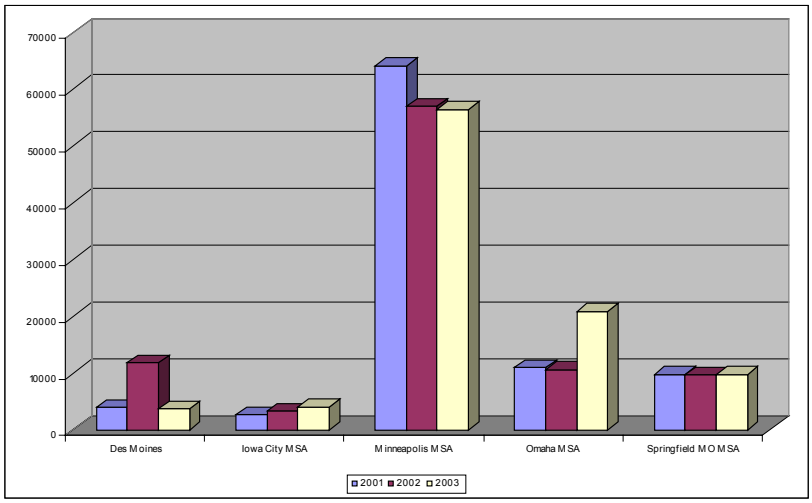
The following series of figures provides a similar comparison of employment within the Des Moines MSA with employment in comparable regional MSAs of Minneapolis, Omaha, Springfield MO, and Iowa City. In public administration and finance, the Des Moines MSA has actually expanded its leadership during the recession and early recovery.

Figures 7-13 – 7-16:
Comparison of Des Moines MSA with Comparable MSAs, 2001-2003

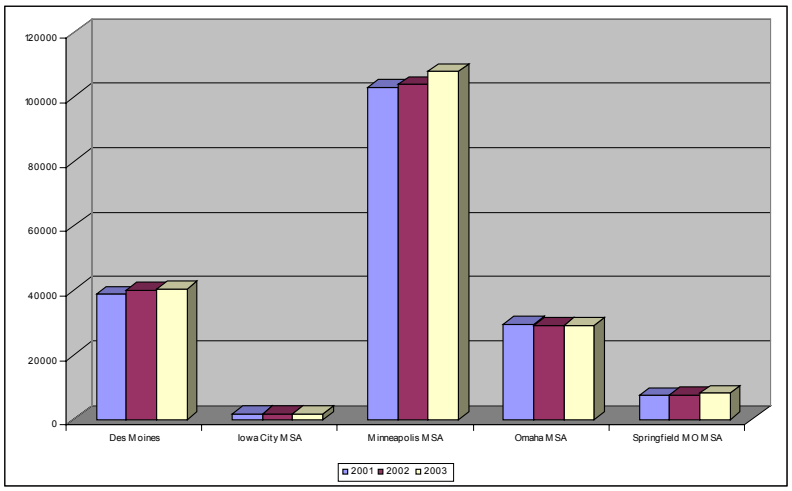
- Manufacturing



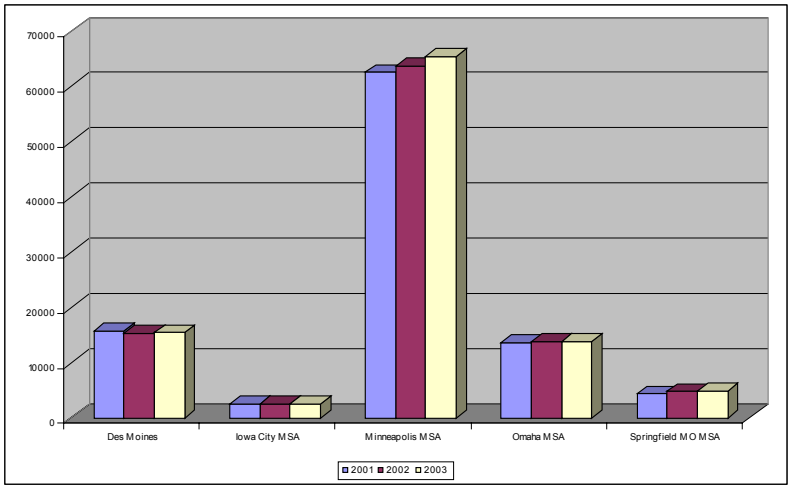
- Transportation and warehousing



- Finance and Insurance



- Public Administration

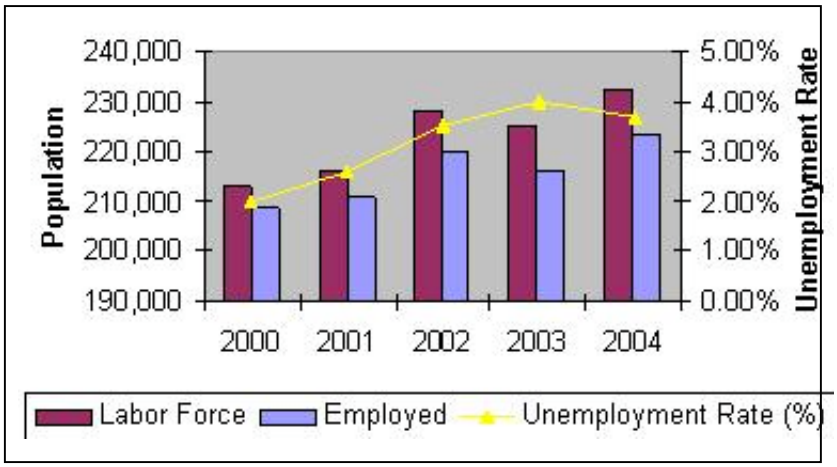


7.2 The Polk County Economy

Employment

As shown on the graph below, the employment rate within Polk County is currently improving as compared to previous years. During the past five years, 2000 through October 2004, the civilian labor force has grown 9.06%, from 213,000 to 232,300. The labor force is a combination of individuals actively engaged in the work force or actively looking for employment. Those individuals who are no longer an active part of the workforce (retired, stay-at-home parents, or those unable or unwilling to work) are removed.

Figure 7-17 Polk County Employment Rate, 2000-2004



The unemployment rate among County residents steadily rose from 2% in 2000 to a high of 4% in 2003. As the nation and Polk County recover from the recent economic recession, the current unemployment rate is 3.7%.

While the unemployment rate remains higher today than it was in 2000, 14,900 more County residents are currently employed, an increase of 7.14% and a total of 223,600 employed persons.

Wages

The following table displays the 2003 mean wages for people employed within Polk County. The approximately 260,000 employees are broken into 21 categories and include production occupations, service occupations and managers. The employment classification categories are a compilation of 436 individual classifications of employee types. These classifications of employees are blended across the previously mentioned nine industrial classifications. The wages are separated into three categories, mean wage,

mean entry level wage and mean wage for experienced professionals.

Table 7-3, Mean Wage by Employment Category

	Employees		Wage		
	Number	Percentage	Mean	Entry	Experienced
Management	15,670	6%	$80,683	$39,437	$101,296
Legal	2,610	1%	$77,210	$33,446	$99,112
Computer and Mathematical	8,610	3%	$57,699	$37,606	$67,746
Architecture and Engineering	3,450	1%	$56,098	$36,462	$65,915
Healthcare Practitioners and Technical	11,620	4%	$55,661	$28,621	$69,181
Life, Physical, and Social Science	2,290	1%	$52,374	$30,306	$63,398
Business and Financial Operations	19,050	7%	$48,984	$31,200	$57,886
Construction and Extraction	10,380	4%	$37,856	$23,608	$44,990
Installation, Maintenance, and Repair	10,880	4%	$37,315	$23,795	$44,054
Arts, Design, Entertainment, Sports and Media	3,930	2%	$36,858	$18,574	$45,989
Education, Training, and Library	10,770	4%	$34,923	$16,619	$44,075
Protective Service	4,930	2%	$34,362	$17,181	$42,994
Community and Social Services	3,810	1%	$34,299	$21,944	$40,477
Sales and Related	29,990	12%	$33,862	$15,226	$43,181
Production	13,190	5%	$29,474	$19,053	$34,694
Office and Administrative Support	55,630	21%	$28,954	$19,698	$33,592
Transportation and Material Moving	16,890	7%	$28,808	$18,179	$34,112
Healthcare Support	4,830	2%	$23,941	$19,178	$26,333
Building and Grounds Cleaning and Maintenance	7,710	3%	$21,424	$15,475	$24,398
Personal Care and Service	4,820	2%	$20,467	$13,125	$24,128
Food Preparation and Serving-Related	18,290	7%	$17,243	$12,792	$19,469

Wages in Polk County are consistently higher than the state average. For most categories of occupation, average wages are also higher than average wages for neighboring Dallas and Warren Counties.

Table 7-4, Mean Wage, Polk, Warren and Dallas counties and State of Iowa

Occupation	Mean Annual Wage			
	State	Dallas County	Warren County	Polk County
ARCHITECTURE AND ENGINEERING OCCUPATIONS	$51,667	$47,986	$47,653	$56,098
ARTS, DESIGN, ENTERTAINMENT, SPORTS, AND MEDIA OCCUPATIONS	$30,222	$35,443	$27,373	$36,858
BUILDING AND GROUNDS CLEANING AND MAINTENANCE OCCUPATIONS	$20,176	$18,928	$21,861	$21,424
BUSINESS AND FINANCIAL OPERATIONS OCCUPATIONS	$46,800	$41,579	$40,768	$48,984
COMMUNITY AND SOCIAL SERVICES OCCUPATIONS	$31,200	$29,224	$33,301	$34,299
COMPUTER AND MATHEMATICAL OCCUPATIONS	$54,454	NA	$20,654	$57,699
CONSTRUCTION AND EXTRACTION OCCUPATIONS	$33,738	$32,136	$30,909	$37,856
EDUCATION, TRAINING, AND LIBRARY OCCUPATIONS	$35,006	$26,645	$33,093	$34,923
FOOD PREPARATION AND SERVING-RELATED OCCUPATIONS	$16,099	$16,453	$16,224	$17,243
HEALTHCARE PRACTITIONERS AND TECHNICAL OCCUPATIONS	$49,962	$42,786	$68,598	$55,661
HEALTHCARE SUPPORT OCCUPATIONS	$21,882	$22,651	$27,040	$23,941
INSTALLATION, MAINTENANCE, AND REPAIR OCCUPATIONS	$34,174	$32,698	$35,464	$37,315
LEGAL OCCUPATIONS	$65,416		$34,757	$77,210
LIFE, PHYSICAL, AND SOCIAL SCIENCE OCCUPATIONS	$45,136	$42,245	$41,434	$52,374
MANAGEMENT OCCUPATIONS	$70,470	$67,350	$64,979	$80,683
OFFICE AND ADMINISTRATIVE SUPPORT OCCUPATIONS	$26,000	$25,667	$27,456	$28,954
PERSONAL CARE AND SERVICE OCCUPATIONS	$18,720	$17,368	$17,014	$20,467
PRODUCTION OCCUPATIONS	$28,995	$30,576	$30,222	$29,474
PROTECTIVE SERVICE OCCUPATIONS	$31,886	$24,856	$34,008	$34,362
SALES AND RELATED OCCUPATIONS	$26,770	$33,904	$23,317	$33,862
TRANSPORTATION AND MATERIAL MOVING OCCUPATIONS	$27,290	$33,342	$25,938	$28,808

Employment Sector Strengths

Polk County's 242,835 employed persons account for approximately 17 percent of the workforce of the State of Iowa. As Figure 7-11 below demonstrates, Polk County has a locational advantage in nine of the major employment categories. These categories are considered to have a locational advantage in Polk County because they account for a larger percentage of the State's employment in that category than the county possesses for the State total. Of note, the Finance and Insurance sector employs 39,669

people in Polk County, half of all finance and insurance employees in the State of Iowa and 16 percent of the County's employment.

The real estate, professional and technical services and Information sectors are also relatively strong in Polk County – indicating that the Des Moines region has a "head start" on the transition from the old manufacturing/agricultural paradigm to a more business services paradigm.

Table 7-4: Major Employment Sectors

INDUSTRY	Polk County Employment / State of Iowa Employment	Percentage of State Employment in Industry
Construction	13,010 / 66,575	20%
Wholesale trade	14,987 / 65,349	23%
Information	8,835 / 34,182	26%
Finance and insurance	39,669 / 80,594	49%
Real estate and rental and leasing	4,186 / 14,950	28%
Professional and technical services	10,846 / 37,833	29%
Management of companies and enterprises	3,574 / 8,597	42%
Administrative and waste services	14,679 / 60,785	24%
Public administration	14,184 / 71,635	20%
TOTAL EMPLOYMENT	242,835 / 1,403,989	17%

The industrial categories above are a compilation of 67 individual classifications. The five largest categories of employment account for 37% of the total employment in Polk County. The five categories by number of employees are:

- Business Services – 20,388
- Health Services – 20,018
- Insurance Carriers – 19,017
- Eating and Drinking Places – 14,857
- Wholesale Trade – Durable goods – 9,495

Sector Analysis for Polk County: Retail, Office and Industrial

Retail is strong in Polk County, with significant inflow of sales. In 2003, 37% of all retail sales in the county originated from non-Polk County residents. The volume of retail space in existence has expanded recently, both within Polk County and regionally. Most significantly, the Jordan Creek Mall, a General Growth property opened in the summer of 2004 in West Des Moines (Dallas County). The

opening is too recent to determine the impact on existing retail within the region and on potential retail expansion.

Polk County also boasts a strong office base. Occupancy is currently above 90% for all office classifications, and above 95% for class "A" office space. Much of the regional office space remains centered in the Des Moines Business District, as downtown is retaining and expanding premier office space. The region has also seen new expansions of back office and flex space; this development is focused at the western edge of the region.

Industrial space is being condensed within the region. Firestone's 850,000 square foot distribution facility, a recent high-profile project, consolidated other facilities. RR Donnelley's 640,000 square foot shuttered facility remains vacant, indicating the weak absorption of industrial space regionally. Overall occupancy remains high for the time being, but manufacturing space is declining overall, leading to low absorption rates. Less than 700,000 square feet of warehouse space was absorbed annually since 2002. This trend is a result of the continued contraction of the manufacturing sector. Potential for industrial growth may be possible from the distribution and intermodal sectors.

Incentives

Preliminary conversations with development entities within Polk County have identified a number of direct and indirect public incentives for growing the greater Des Moines economy.

Indirect Public Incentives:

Iowa's Corporate Income Tax structure – Iowa's corporate tax is based only on the percentage of total sales income within the state.

- **No Sales and Use Tax on Machinery and Equipment** - The purchase of industrial machinery and computers assessed as real property and used in manufacturing or the processing of data by insurance companies, financial institutions or certain commercial enterprises, is exempt from Iowa sales or use tax.
- No sales tax is due on purchases of **electricity or natural gas** used in the manufacturing process.
- There is no property tax on **new industrial machinery and equipment.**
- **Pollution control** equipment is eligible for exemption from property tax. An application must be filed for exemption.

- **No Personal Property (Inventory) Tax** - Personal property is not assessed for tax purposes. In Iowa, personal property includes corporate inventories of salable goods, raw materials and goods-in-process.

Direct Incentives:

- **New Jobs Tax Credit** - Businesses entering into an agreement under the state's training program, and which increase their workforce by at least 10 percent, qualify for this credit to their Iowa corporate income tax. The credit is equal to 6 percent of the state unemployment insurance taxable wage base. The credit for 2005 is $1,224 per new employee. The tax credit can be carried forward up to 10 years.
- **Employee Training** - Des Moines Area Community College has worked with hundreds of companies as they administer the new jobs program and retraining program.
- **Iowa New Jobs Training Program** - This state program provides funds for:
  - Screening, skills assessment and testing.
  - Travel for new employees to training, anywhere in the world.
  - On-the-job training reimbursement of 50 percent of the new employees' wages and fringe benefits during the training period.
  - In-plant instruction by company instructors.
  - Costs of training facilities, equipment, materials and supplies.

  The program is paid for by revenues generated by a firm's investment in Iowa from a portion of the new employees' withholding tax. These taxes, which the company would normally pay over a 10-year period, are diverted to pay for the up-front training. The up-front training is reimbursed through the sale of tax-exempt certificates (bonds) which are secured by these taxes.
- **Iowa Department of Economic Development Finance Programs** - financial assistance programs to aid in economic development. Funds are awarded from the Community Economic Betterment Account (CEBA) and the Economic Development Set-Aside (EDSA) program based on factors such as job creation, employee wage rates, competition with other Iowa firms, and impact of the project on the economy of the

political subdivision of the State. A political subdivision applies for the funds on behalf of the company. The funds may be awarded as a forgivable loan, a loan, or a principal or interest rate buy down on a loan.

- **Tax Increment Financing (TIF)** – In Iowa, city councils or county boards of supervisors may use the property taxes resulting from the increase in taxable valuation due to construction of new industrial or commercial facilities to provide economic development incentives to a business or industry. Tax increment financing may be used to pay the cost of public improvements and utilities which will serve the new private development, to finance direct grants or loans to a company, or to provide a local match for federal or state economic development assistance programs.
- **State of Iowa Tax Incentive Programs –** The State of Iowa has a set of three primary tax incentive programs for non retail operations new to the State of Iowa or are undergoing expansion.
    - Enterprise Zone Program – available for companies located or locating in an established Enterprise Zone
    - New Capital Investment Program
    - New Jobs and Income Program \

Local Strengths, Weaknesses, Opportunities, and Threats

A preliminary assessment of Polk County's strengths was based on conversations with business and economic development leaders in the region. Identified strengths include a strong employment base, transportation linkages, and a good supply of available properties. These strengths were echoed by the Economic Development Task Force, which also mentioned the benefit of strong core industries in agriculture and finance, civic projects like the planned riverwalk, and the commitment of government leaders and individual citizens to planning and economic development.

Weaknesses identified as part of the preliminary study include difficulty attracting young professionals and potential changes in the financial sector. The shortage of young, college-educated workers in the state has been a source of significant media attention and discussion at all levels of the state, including the Task Force meeting. The Task Force also recognized the double-edged sword of Polk County's successful financial services industry, noting that changes within the industry such as increased outsourcing of jobs,

could be particularly damaging to an economy that is heavily dependent on the industry and on specific firms within the financial services sector.

There are some recognized opportunities to capitalize on the reinvestment that has been going on in the area, especially in downtown Des Moines. Projects like the events center expansion and riverwalk can help attract business and economic development, as well as a more diverse workforce who appreciate the quality of life available in Polk County. Similarly, the focus on redevelopment of brownfield properties is an opportunity to manage growth within the region and attract reinvestment and development to existing infill properties that may already possess desirable infrastructure and access. Task force members also recognized the opportunity to effectively manage assets like transportation infrastructure, quality of life projects, and available land.

Potential threats to economic development in Polk County include unbalanced suburban growth, and the loss of new technology growth to other centers. Task force members noted several specific factors that might impact growth and the retention or loss of new growth, including the tax structure, availability of investment for infrastructure and other business development support, and the ability to attract and retain a qualified workforce.