

2008



**IOWA'S WORKFORCE  
AND THE ECONOMY**

Labor Market and Workforce  
Information Division

Iowa Workforce Development

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## Message from the Director

As director of Iowa Workforce Development, I have a genuine appreciation for the reliable economic data and workforce information prepared by our research staff. Since the enactment of the Workforce Investment Act of 1998, this information is playing a more substantial role in enhancing workforce and economic development strategies at the local, regional and statewide levels. The information that IWD has available on the labor force, employed and unemployed workers, industries, occupations in demand, wages and benefits, skill requirements for jobs, the labor supply, and job vacancies is increasingly valuable to planners and policymakers who are working to keep Iowa competitive in the global marketplace.

The second edition of *Iowa's Workforce and the Economy* includes a discussion of Iowa's key economic indicators as well as commentary on various aspects of the statewide economy. This publication is funded by the Employment and Training Administration, U.S. Department of Labor, and is being prepared by all the states, and the District of Columbia. The purpose of the report is to inform the governor, the State Workforce Investment Board, local Workforce Investment Boards and other stakeholders in the workforce investment system of important trends in the Iowa economy.

I hope that this report will prove to be a valuable resource for you, and assist you with your planning needs.



Elisabeth Buck, Director  
Iowa Workforce Development

## Executive Summary

- The housing boom that fueled both the national and statewide economies for several years came to an abrupt halt in 2007. The outlook for the current year depends on how resilient the Iowa economy will be in the face of the housing downturn, rising energy costs, a tightening credit environment and a weaker job market.
- For the past three decades, Iowa's unemployment rate has been substantially below the comparable U.S. rate for every year with the exception of 1985. Due to its low unemployment rate and high labor force participation rates, Iowa has experienced tight labor supplies for most of the past decade.
- Nonfarm employment averaged a record level of 1,516,200 in 2007 even though job growth slowed for the year. Iowa's job growth of nine-tenths of one percentage point for 2007 compared with 1.1 percent for the nation. The service-providing industries were the catalyst for growth in the state, while the goods-producing industries lost jobs last year.
- The Iowa Leading Indicators Index (ILII), developed by the Iowa Department of Revenue, showed strong growth throughout 2007. The index rose from 104.3 in January 2007 to 107.3 in December 2007. The increase in the index was driven by price increases for agricultural commodities and strength in the market valuations of companies included in the Iowa Stock Market Index. The continued increases in the ILII throughout 2007 and into 2008 indicate that the housing slump and credit crunch, which are slowing much of the rest of the U.S. economy, have not had as great of an impact on the Iowa economy.
- Entrepreneurship is a vital part of the Iowa economy, and is supported by several organizations that specialize in turning concepts and ideas into successful businesses. Iowa's Pappajohn Entrepreneurial Centers (JPECs), which are located at the state universities, Drake University and the North Iowa Area Community College; offer a wide range of consulting and mentoring services to entrepreneurs. The Iowa Department of Economic Development provides assistance to entrepreneurs interested in starting or expanding a business in one of the state's three targeted industries (Advanced Manufacturing, Biosciences and Information Solutions), or in an area planning for rapid expansion. In addition, Iowa's Small Business Development Centers offer individualized counseling and connections to other resources, and the Iowa Entrepreneur Network (IEN) provides a way to share entrepreneurial expertise and interests across the state.
- Iowa's population continues to get older and more diverse. Between 1990 and 2000, immigration contributed to two-thirds of Iowa's 5.4 percent population growth, and by 2000, Latinos became Iowa's largest minority group. Per capita income for the state stood at \$35,023 in 2007, which ranked 27th nationally. In 2006, Iowa ranked 11th in the U.S. for individuals 25 and over having a high school diploma or equivalent. For individuals 25 and over holding a bachelor's degree, Iowa's ranking dropped to 37th in the U.S.
- Currently, many of Iowa's emerging industries are in the area of renewable energy technology, particularly wind power and biofuels for transportation. The biofuels produced in Iowa are mostly ethanol and biodiesel. Iowa has also made a commitment to expand its advanced manufacturing sector, including nanotechnology, and the information solutions sector, which is a leader in the development of photonic technology.

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- One of the best ways to track new and emerging occupations is through the state's colleges and universities. The schools maintain a close collaboration with employers, allowing them to react proactively to occupational changes in the economy through academic program modification. More recently, there is a growing interest in the "green-collar" jobs. These are occupations that directly improve environmental quality. Many corporations and institutions of higher learning are adding "sustainability officers" to their payrolls in an effort to educate their workforces with a primary view toward neutralizing the carbon imprint their organizations produce.
- The statewide industry projections for 2006-2016 show that administrative and support services will add the most jobs over the projection period. This industry will add more than 16,000 jobs, growing by over one-fourth of its base year employment. Social assistance, which is also one of the industries adding the most jobs, will grow at the fastest rate among the larger industries.
- Since 1997, Iowa's average annual wage has fallen below the national average; however, Iowa has outpaced the U.S. in percentage gain for all years except 2005 and 2006. In addition, over the past decade Iowa has made progress in closing the gap between the state and national average weekly wage.
- Median hourly wages by major occupational group (2006) for Iowa and the six neighboring states reflected a fairly consistent pattern. In most of the occupational groups, the hourly rate of pay was higher in Illinois, Minnesota and Wisconsin. Missouri was also included among these higher-paying states in the following occupational groups: management, computer and mathematical, and architecture and engineering. On the other hand, occupational wage rates tended to be lower in Iowa, Nebraska and South Dakota. Iowa ranked second in pay for the farming, fishing and forestry occupations, and held the third-place ranking for the production occupations.
- Iowa Workforce Development recently conducted a new survey called the *Workforce Needs Assessment Survey*. A total of 39,958 Iowa employers were contacted from September 2007 through January 2008 to obtain information regarding their current job vacancies (including vacancies expected to become available within 12 months of the survey date). The results of the survey showed that healthcare (8,593), personal services (7,187), wholesale and retail trade (6,745) and manufacturing (5,363) accounted for 57 percent of the state's job vacancies.
- To assist community colleges in their efforts to determine the effectiveness of their educational programming, Iowa Workforce Development is currently able to provide wage data that can be used to measure the success of students who have entered the workforce. This research uses student records provided by the schools and wage records obtained from the state's unemployment insurance (UI) database. So far, this research has shown that the earnings of school completers were significantly higher than the earnings of students who left college without completing the courses.

## Overview of the Iowa Economy

### Will the Iowa Economy Remain Resilient in the Face of Turmoil?

As 2007 came to a close, Iowa had marked close to four years of prosperity that was largely driven by a thriving housing market, strong agricultural commodity prices, and a resurgence in the state's manufacturing industries. The key concern at the beginning of 2008 seemed to be how resilient the Iowa economy will be in the face of the housing downturn and capital market turmoil. The health of banks has become one of the biggest uncertainties for 2008. In recent months, major banks across the country have written off multibillion-dollar losses stemming from bad mortgage-related investments. Banks have reacted to the current situation by tightening credit. As a result, the housing and mortgage crisis has escalated into a credit crunch that threatens to throw the economy into a recession.

What began as a housing industry downturn more than a year ago has widened into a broader financial industry crisis. An analysis by The Wall Street Journal indicates that from 2004 to 2006, when home prices peaked in many parts of the country, more than 2,500 banks, thrifts, credit unions and mortgage companies made a combined \$1.5 trillion in high-interest rate, high risk loans. Too many risky mortgages were made to people who eventually would not be able to afford the payments. By July 2007, the ripple effects from mortgage losses hit big banks, and the stock market began to trend downward.

The loans causing the bulk of the problems were adjustable rate loans offered to subprime borrowers. These loans featured low initial rates for the first two to three years, followed by an adjustable interest rate in the ensuing 28 or 27 years. Because the teaser rate was frequently below the market interest rate, the payment reset was often substantial. These types of loans worked well for borrowers when rates remained flat and home values were rising quickly. However, they began to cause problems in an environment of falling home prices and rising interest rates. Furthermore, many of the high-risk mortgages were bundled into securities that were sold to investors who were often unaware of the risk they were absorbing.

Although some of this activity occurred in Iowa, it does not appear to be a widespread problem. Iowa ranks 47<sup>th</sup> in the country in the percentage of subprime loans to total real estate loans—only eight percent of Iowa's loans are subprime. On the other hand, prime loans account for 83.9 percent of Iowa's mortgage loans. This is particularly good news considering Iowa has one of the highest home ownership rates in the country. Nationally, the number of homes that slipped into some stage of foreclosure in 2007 was 79 percent higher than in 2006. According to RealtyTrac, an online marketplace for foreclosed properties nationwide, Iowa ranked 33<sup>rd</sup> in the nation during 2007 in foreclosure filings as a percentage of total households. This figure represented slightly more than 0.3 percent of the total households in the state.

*What began as a housing industry downturn more than a year ago has widened into a broader financial industry crisis.*

The housing boom that fueled both the national and statewide economies for several years came to an abrupt halt in 2007. According to a report from the Iowa Association of Realtors, home sales in the state fell about 18 percent in 2007, reflecting the slowdown in the housing market. Meanwhile, the median price of homes in the state remained flat, increasing from \$128,200 in 2006 to \$128,750 in 2007. Fortunately, Iowa is included among the states that may be somewhat advantaged because of the small size of its construction industry. Construction comprises about 5 percent of total nonfarm employment. As a result, a decline in home building activity does not tend to slow the statewide economy as much as it has in other parts of the country.

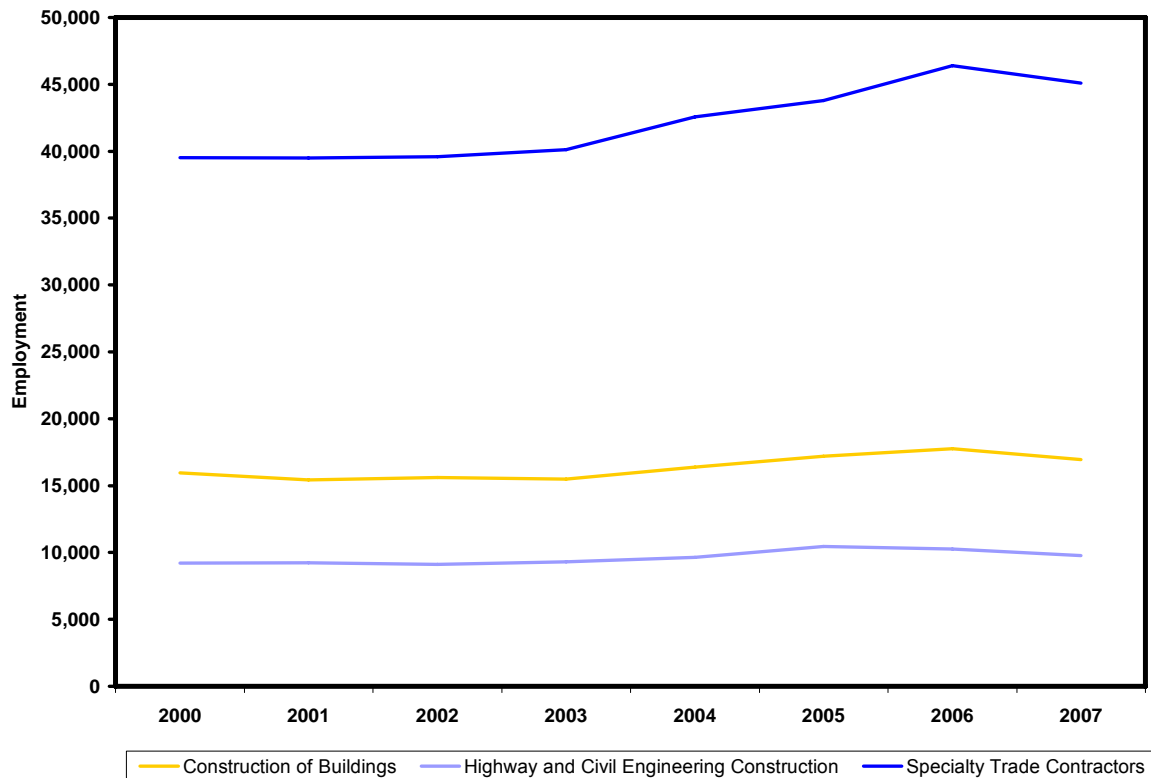
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The state's construction industry grew at a healthy pace since the beginning of the decade, as low interest rates fueled the housing boom. The fastest-growing and largest component of the industry during this period was Specialty Trade Contractors. Employment in this sector grew from 39,500 in 2000 to about 45,000 in 2007. Specialty Trade Contractors perform a variety of activities involved in building construction, e.g., concrete work, site preparation, electrical work, painting and plumbing.

While Iowa's housing market slowed during 2007, the state reaped the benefits of a strong agricultural economy and an increase in worldwide demand for its export products. The United States Department of Agriculture has predicted that 2008 will be another banner year for producers of corn, soybean,

### Iowa's Construction Industry by Subsector 2000-2007\*

\*Note: 2007 data based on an average of the first two calendar quarters.



Source: Labor Market and Workforce Information Division, Iowa Workforce Development.

wheat and related products. The boom in agriculture is being driven by biofuel production and the growth in China, India, and other countries. Prices for corn, soybeans and other commodities have doubled over the past two years, and the value of Iowa's farmland set a record in 2007 for the fifth year in a row. Farmland increased to an average of \$3,908 an acre, up 22 percent from a year ago. This was the largest one-year increase since 1976.

The fact that farmers have more money to spend on farm equipment and supplies has translated into larger profits for many of the state's agribusinesses. In February 2008, Deere & Company reported that its fiscal first-quarter earnings had increased by a better-than-expected 55 percent. The company also increased its full-year profit forecast, citing strong global demand for its agricultural equipment. Companies that supply fertilizer, seed and other inputs to farmers are also prospering. With farmers receiving higher prices for their crops, they are more willing to increase the amount that they spend on inputs. For example, DuPont, which includes Pioneer Hi-Bred, is predicting double-digit earnings

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through 2012 because of the strong farm economy which has increased the demand for its new seed and pesticide products.

A weak U.S. dollar, coupled with strong marketing efforts on the part of the state's businesses and economic development officials, contributed to a record \$9.6 billion in exports last year. The 2007 figure represented a gain of 14.3 percent from \$8.4 billion in 2006; nationally, exports grew by 12.1 percent last year. Farm crops accounted for a significant share of Iowa's exports in 2007; however, the true value of these products is often understated because they are handled by middlemen, and the shipments cannot be traced back to the producing states. Leading manufactured products that were exported in 2007 were: machinery (bulldozers and harvest cleaner machines), vehicles (tractors, compressors, air conditioners, motors and engines), and electrical machinery (radar navigation, sound equipment and insulated wires). Consistent with past trends, Canada remained Iowa's top trading partner. Other major destinations for the state's export products were Mexico, Japan, Germany and China. During the first half of 2008, the Iowa Department of Economic Development will lead trade missions to the Philippines, Taiwan, Brazil, Mexico, central Europe and China.

### **Assessing the Risk**

As concerns continue to grow over Iowa's economic prospects for 2008, several members of the Governor's Council of Economic Advisers were asked to provide their perspectives on the current status of the Iowa economy. These individuals have been charged with the duty of advising the Governor's Office on events and trends that affect economic activities within the state. Taken collectively, their views depict a statewide economy that is still thriving despite increasing signs of weakness at the national level. The following are comments from select members of the Council:

*"Our nation is currently in the throes of fear and gloom that a nationwide housing bust and spreading credit crunch will send the overall economy into a severe recession. That fear does have some real basis. The U.S. economy stalled in the fourth quarter, U.S. payroll jobs fell in January for the first time in years, house prices are falling in many cities across the country, billions of dollars are disappearing from balance sheets of global banks and brokers, and defaults on mortgages and housing foreclosures have risen to high levels. If you're in the housing industry, it's a collapse; in the auto industry, it's a severe recession; if you're in agriculture, it's a boom. Housing and credit problems are not casting the same pall over Iowa that seems to be happening nationally.*

*While economists ask whether emerging market economies have "decoupled" from the U.S. economy, the question here at home is whether the Iowa economy has "decoupled" from the national economy. The insatiable demand and rising prosperity from a vast global population, many of whom are boot-strapping their way into a growing middle class, for energy, materials and a changed diet (from starch to protein) is creating boom-like conditions for U.S. agriculture. That is especially true here in Iowa with our rich soil, terrific work ethic and savvy business leadership. Low unemployment, dynamic businesses large and small, a skilled workforce, excellent educational opportunities and a keen demand for Iowa's products are providing Iowa a strong foundation for continued growth."*

**Bob Bauer**  
**Chief Economist**  
**Principal Global Investors**

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*“Though there is more and more talk about a national recession, I believe that Iowa’s economy does not mirror it. Maybe it’s because I’m a banker in Dubuque County, Iowa, where businesses are still expanding and the notices of foreclosure in the local newspaper are still infrequent. Maybe it’s because I’m a member of the Iowa Department of Economic Development Board, where we have not seen applications for business expansions or start-ups slow down yet. Maybe it’s because I see Iowa’s ethanol and biodiesel plants have given our farm customers premium prices for their crops, and this additional income will cause further spending in Iowa.*

*My cautious optimism is also based on the Iowa Business Council’s Economic Outlook Survey which still shows projections for Iowa businesses to be positive. In addition, our own Greater Dubuque Development conducts its own CEO survey to gather valuable economic information, and this, too, shows no indication of slowing down or layoffs planned.*

*As for the banking industry, we are in a good position to weather any economic turndown. Community banks were never in the subprime game, and therefore we have moderate investment exposure. Earnings for banks for 2007 were mixed with our own group of banks within the Fidelity Holding Company (a total of six separate banks in 22 locations), and were at record levels.*

*Statistics from the Department of Banking for year end 2007 show classified loans to total assets to be at 1.69 percent compared to 1.71 percent at the beginning of that year, and past due loans show no change from the previous year at 1.7 percent of total loans. Loan demand is still strong with an average loan-to-deposit ratio of 91.55 percent for all banks, indicating continued strong credit needs. Going into 2008, finding money to fund loans will still be a problem for us.*

*Other issues that are sure to affect the Iowa economy into the next year include the high gasoline prices, high student loan debt and helping students to find avenues to finance their education, raising or lowering of interest rates, the price of farm real estate and our aging population.”*

**Nancy Dunkel  
Vice President  
Fidelity Bank & Trust Bank**

*“Among the economic development community, I’d say that most are less concerned about shorter-term fluctuations in the national economy, and more concerned about their own long-term prospects. Iowa’s economic development community is working hard to plan, locally and regionally, to diversify their economies so they can weather economic blips and recessions. They’ve been successful in large part, but mostly in urban areas. Also, they’re trying to position themselves so they can survive changes caused by global competition and technological change (e.g., Maytag) and take advantage of new opportunities (e.g., biofuels). They’re information-hungry, and they’re always searching for good information to help them understand their competitive position relative to other regions.”*

**Liesl Eathington  
Census Data Analyst  
Iowa State University**

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*“In the last few months, many informed forecasters and prognosticators have increased the probability of a recession—two successive quarterly declines in GDP for the nation. Should there be a recession—something that is far from clear in February 2008—the impact on Iowa will almost certainly be less severe than in most states.*

*Business cycle fluctuations have always been smaller in Iowa than in the nation as a whole. Booms are not as strong; busts not as traumatic. This can be traced to the cyclical insensitivity of economic activity in Iowa relative to the nation as a whole—agriculture, manufacturing concentrated in less cyclical sectors, financial services and education. For the foreseeable future, our strengths in agriculture, and increasingly in energy, will add to the state’s ability to lean into the wind of any recession. So long as India and China continue their strong growth, agriculture and energy prices will remain high, and unlikely to fall even if there is a typical postwar recession in the U.S. The price trends in these sectors mean that if there is a recession—and this is still far from a foregone conclusion—the downturn here will be mild, and the recovery strong relative to the rest of the country.”*

**John Geweke  
Professor of Economics  
University of Iowa**

*“Iowa’s two largest sources of tax revenue are withholding tax and sales-use tax, which have accounted for 41.7 percent and 32.8 percent, respectively, of total tax revenues so far this fiscal year. Both of these revenue sources provide a good indication of the State’s economy. Withholding tax captures changes in employment, hours worked, wage levels, and bonuses. Sales tax captures retail expenditures on both goods and many services. Through the middle of February 2008, withholding tax payments have increased by over 7.0 percent compared to the same period last year, and sales and use tax payments have increased by 5.6 percent. The rate of growth in withholding tax receipts has not been this strong since the mid-1990s. Sales and use tax receipts have not been this strong since 1999.*

*Nevertheless, there are some reasons for caution in looking forward. A revenue source that provides a good indication of what is going on in the housing market is the real estate transfer tax. Over the twelve months ending in January 2008, revenues from this source were down 2.0 percent. Compared to the rest of the country, this is actually pretty good news. However, revenues from this source are down considerably from the first six years of the decade when the average annual rate of increase equaled over 9.6 percent.*

*Based on what we see in tax payments, and what we hear from other states’ revenue departments, Iowa is doing better economically than much of the rest of the country. The agricultural and financial sectors seem to be providing some strength, and since the outlook for these sectors remains positive for the remainder of the year, we expect tax revenues to continue growing. However, since Iowa’s economy is so integrally linked with the rest of the*

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*United States, Iowa cannot completely escape being adversely impacted if the national economy continues to decline. Recognizing this possibility, the revenue estimates made by the Department do anticipate lower rates of growth as the year progresses.”*

**Mark Schuling**  
**Director**  
**Iowa Department of Revenue**

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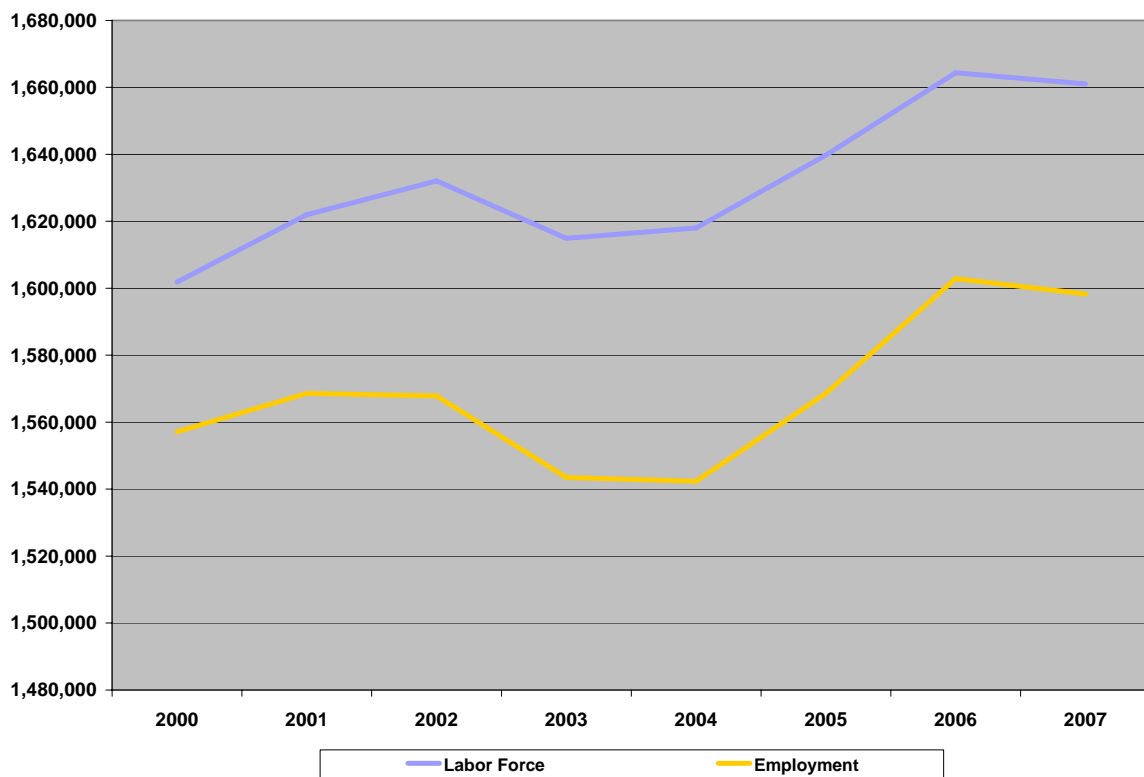
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## Labor Force Trends

### Weaker Job Market Stalls Labor Force Growth

After two years of relatively strong growth, Iowa's labor force dropped slightly in 2007 to 1,661,000. Total employment reflected the same downward trend, as last year's average edged down to 1,598,300. Peak levels were reported for both indicators in 2006, as the Iowa economy continued to reap the benefits of a strong construction boom. The weakness in the housing industry caught up with Iowa during the second half of 2007. Due to slower job growth anticipated for 2008, the state's labor force and total employment levels are expected to remain flat for the current year.

**Figure 1. Iowa Labor Force and Total Employment, 2000-2007**



Source: Labor Market and Workforce Information Division, Iowa Workforce Development

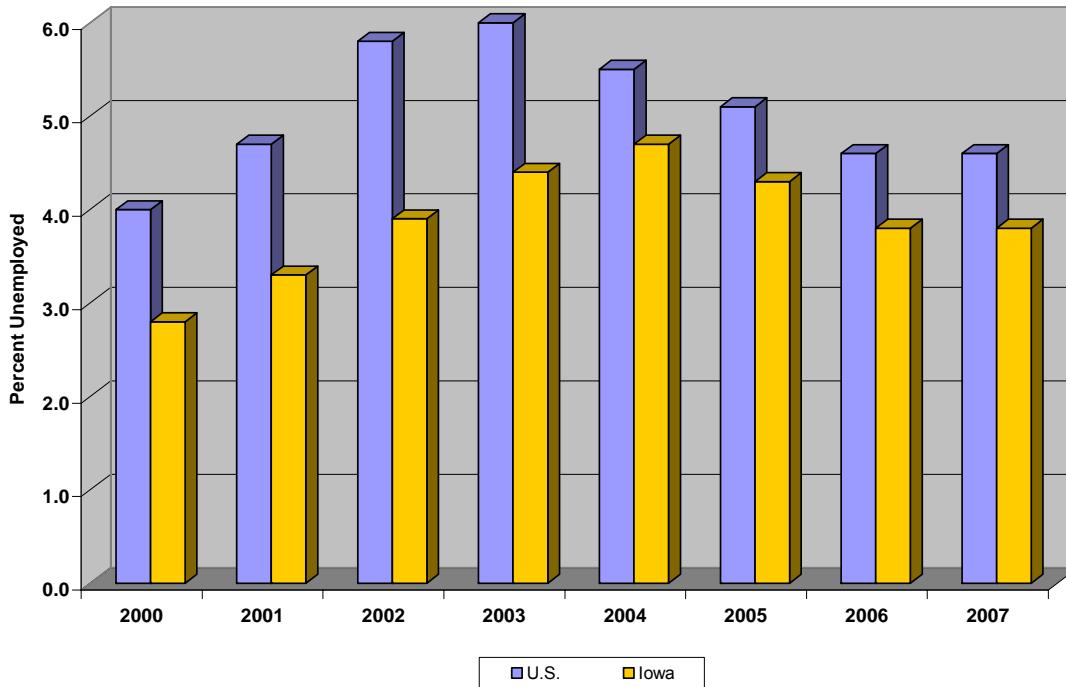
### Iowa and U.S. Unemployment Rates Stable in 2007

The Iowa unemployment rate remained at 3.8 percent in 2007, while the U.S. jobless rate was unchanged at 4.6 percent. Unemployment data back to 1976 show that Iowa's unemployment rate has been substantially below the comparable national rate for every year with the exception of 1985. Figure 2 illustrates the fact that the unemployment rate is a lagging economic indicator that confirms an event that has already occurred in the economy.

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For the current decade, Iowa's unemployment rate peaked at 4.7 percent in 2004, three years after the 2001 recession.

**Figure 2. Iowa and U.S. Unemployment Rates, 2000-2007**



Source: Labor Market and Workforce Information Division, Iowa Workforce Development

The total number of unemployed in Iowa averaged 62,700 in 2007, which represented a slight increase from the 2006 level of 61,500. Since 1980, annual average unemployment for the state has ranged from a high of 118,400 in 1983 to a low of 41,800 in 1999. It is also important to mention that not all unemployed workers are eligible for unemployment insurance. In fact, about 40 percent of the state's unemployed received benefits in 2007.

In general, Iowa can be characterized as a low unemployment state. The fact that the state's number of unemployed is small, along with high labor force participation rates, has resulted in a tighter labor market for most of the past decade. Iowa's labor force participation rates are among the highest in the nation. For those individuals ages 25-54, labor force participation hovers near 89 percent. At age 55 and over, labor force participation rates begin to fall as individuals retire. Also, labor force participation rates for women have leveled off after a long period of growth, suggesting that the rate may have reached its practical limit. For 2006, Iowa's total labor force participation rate was 72.7 percent. Men participated at a rate of 78.4 percent, while the rate for women was 67.2 percent.

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A comparison of states' annual average unemployment rates for 2007 showed that Iowa had the 15<sup>th</sup> lowest rate in the nation at 3.8 percent. Iowa shared this ranking with the states of Arizona, Colorado and Louisiana, where unemployment was also reported at 3.8 percent. Hawaii posted the lowest unemployment rate among the states, 2.6 percent in 2007, followed closely by Idaho and Utah at 2.7 percent each. The states with the highest unemployment rates in 2007 were Michigan at 7.2 percent, Mississippi at 6.3 percent and Alaska at 6.2 percent.

**Figure 3. States with the Highest and Lowest Unemployment Rates - 2007**

Rank	State	Unemployment Rate	Rank	State	Unemployment Rate
1	Michigan	7.2	41	Delaware	3.4
2	Mississippi	6.3	42	North Dakota	3.2
3	Alaska	6.2	43	Montana	3.1
4	South Carolina	5.9	44	Nebraska	3.0
5	District of Columbia	5.7	45	South Dakota	3.0
6	Ohio	5.6	46	Virginia	3.0
7	Kentucky	5.5	47	Wyoming	3.0
8	Arkansas	5.4	48	Idaho	2.7
9	California	5.4	49	Utah	2.7
10	Oregon	5.2	50	Hawaii	2.6

Source: Bureau of Labor Statistics, U.S. Department of Labor

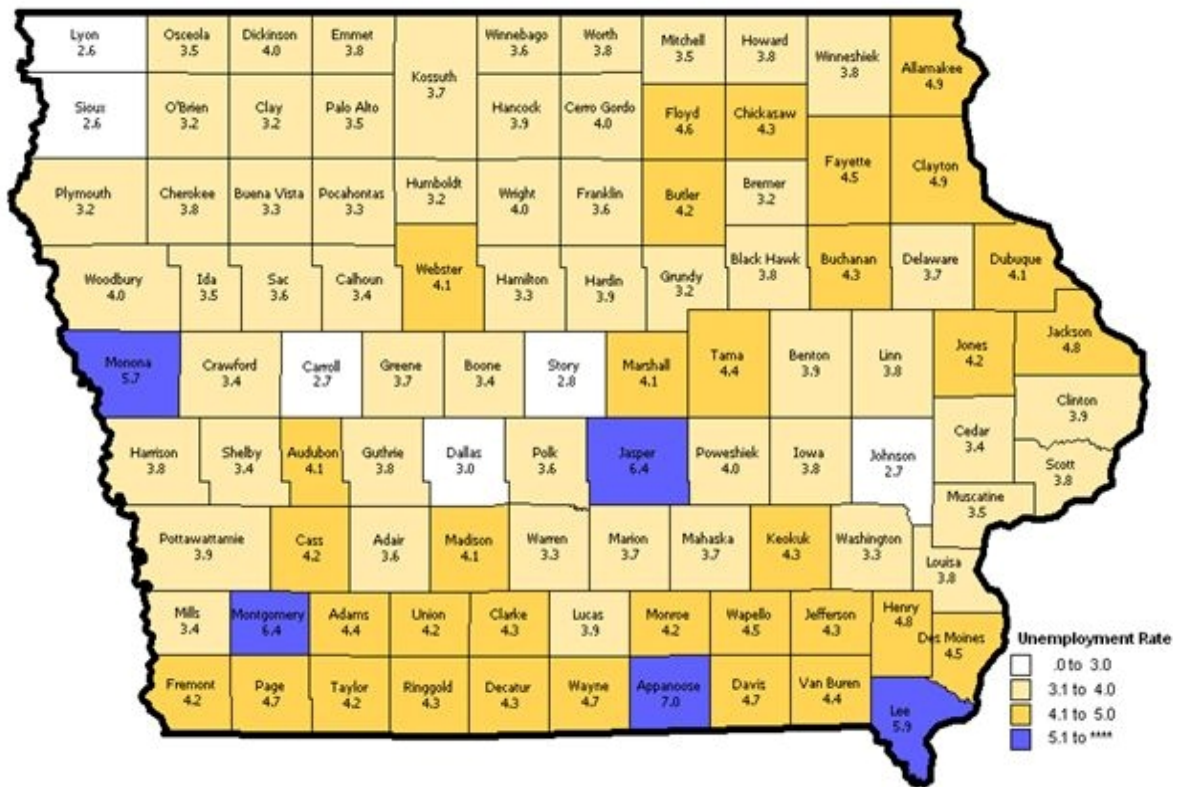
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## County Unemployment Rates Capture Regional Differences

In 2007, Iowa's counties reported unemployment rates that ranged from a low of 2.6 percent in the northwest counties of Lyon and Sioux to a high of 7.0 percent in Appanoose County, which is located along the Iowa-Missouri border. Over one-half of the state's counties experienced jobless rates of less than 4.1 percent. A major share of these counties were located in the northwest quadrant of the state. On the other hand, counties that reported the higher unemployment rates were clustered in the southern part of the state and in the northeast corner. Appanoose and Jasper counties reflected the largest increase in unemployment over the year. The significant increase in unemployment for these counties was tied to two major plant closings. Maytag closed its doors in Newton (Jasper County) in late 2007, while Appanoose County continued to suffer the effects of the Rubbermaid closing in Centerville (Appanoose County) in late 2006.

**Figure 4. Iowa Unemployment Rates by County- 2007**



Source: Labor Market and Workforce Information Division, Iowa Workforce Development



## Nonfarm Employment in Iowa – 2007

### The Year at a Glance

Continuing a four-year trend started in 2003, Iowa's total nonfarm employment gained 12,800 in 2007, bringing the total to a record level of 1,516,200. Although positive, this increase is somewhat less than the previous two years, when nonfarm employment averaged gains of 23,100.

The largest over-the-month gains in total nonfarm employment occurred in May and June of 2007, when a combined total of 7,200 jobs were added. Jobs were lost in July, October, and a three-month-span from February to April.

The service-providing industries were again the catalyst for growth in 2007, bolstering employment by 16,400 jobs. This gain was on par with previous years, and was a reassuring sign amid fears of a recession. On the other hand, the goods-producing sectors shed 3,600 jobs. By contrast, this sector gained 5,000 jobs in 2006.

All of the service sectors added employment compared to 2006. Professional and business services exhibited the biggest gains for the year, adding 3,700 jobs. Education and health services added 3,400 jobs in 2007. Health services fueled this sector, adding 2,600 jobs for the year. This has been a consistent industry in terms of growth, both in Iowa and nationally. Other sectors adding employment were government, up 2,800, leisure and hospitality, up 2,600, and financial activities, up 2,100 jobs over the year. Other services and information had modest increases in jobs of 900 and 600, respectively. Trade and transportation had the least growth of all the service-providing sectors, adding a mere 300 jobs over the last twelve months. This was the result of the slumping retail trade industry, down 1,100 jobs since 2006. This marks the third straight year for job losses in this sector, which has shed 1,700 jobs since 2004.

On the other hand, the goods-producing industries lost jobs during 2007. Construction dropped the most jobs, down 1,900. This industry was at its peak in 2006, reaching a level of 74,400 jobs. These losses are reflective of the housing slump, which is currently having a negative impact on the country. Manufacturing also pared jobs during 2007, down 1,700 jobs compared to 2006. Both durable and nondurable goods employment was down for the year. Durable goods was down 1,300 jobs, and nondurable goods contracted by 400 jobs. This was in stark contrast to 2006, when manufacturing gained 2,000 jobs. Natural resources and mining, the state's smallest industry sector, has been relatively stable over the past few years. The sector's employment averaged 2,100 for 2007.

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**Figure 1. Iowa Nonfarm Employment 2003-2007**

Industry (in thousands)	2003	2004	2005	2006	2007	Change 2006-2007	
						Number	Percent
Mining	1.9	2.1	2.1	2.1	2.1	0.0	0.0
Construction	65.1	68.6	71.4	74.4	72.5	-1.9	-2.6
Manufacturing	220.0	223.3	229.1	231.1	229.4	-1.7	-0.7
Durable Goods	131.4	136.2	140.9	142.9	141.6	-1.3	-0.9
Nondurable Goods	88.5	87.1	88.2	88.2	87.8	-0.4	-0.5
Trade & Transportation	303.2	304.7	306.4	308.5	308.8	0.3	0.1
Wholesale Trade	65.3	66.1	67.4	67.5	67.8	0.3	0.4
Retail Trade	180.4	180.4	180.0	179.8	178.7	-1.1	-0.6
Transportation	57.5	58.2	59.0	61.2	62.3	1.1	1.8
Information	33.6	33.7	33.0	32.9	33.5	0.6	1.8
Financial Activities	95.2	96.9	98.3	100.5	102.6	2.1	2.1
Finance & Insurance	80.4	82.3	83.6	86.1	88.7	2.6	3.0
Prof. & Business Services	105.6	108.4	113.2	117.2	120.9	3.7	3.2
Prof., Scientific & Tech Services	37.3	37.8	38.4	40.1	41.4	1.3	3.2
Admin & Support	59.4	60.6	63.1	64.1	65.6	1.5	2.3
Education & Health	189.6	191.5	195.1	198.9	202.3	3.4	1.7
Educational Services	32.5	32.7	33.1	34.0	34.8	0.8	2.4
Health Services	157.1	158.8	162.0	164.9	167.5	2.6	1.6
Leisure & Hospitality	125.3	127.2	130.5	134.1	136.7	2.6	1.9
Accommodation & Food Services	104.9	107.5	110.9	113.5	116.0	2.5	2.2
Other Services	56.2	56.4	56.3	56.8	57.7	0.9	1.6
Government	244.8	244.6	245.2	246.9	249.7	2.8	1.1
Federal Government	19.0	18.2	18.1	18.1	18.2	0.1	0.6
State Government	64.0	64.0	63.7	64.1	65.0	0.9	1.4
Local Government	161.8	162.3	163.4	164.7	166.5	1.8	1.1
<b>Total Nonfarm</b>	<b>1,440.4</b>	<b>1,457.3</b>	<b>1,480.5</b>	<b>1,503.4</b>	<b>1,516.2</b>	<b>12.8</b>	<b>0.9</b>

Source: Labor Market and Workforce Information Division, Iowa Workforce Development

The 2007 total nonfarm data paints a bittersweet picture of the Iowa economy. On the positive side, Iowa still experienced growth in almost all of the service-providing sectors—retail trade being the only exception. Alternatively, growth exhibited during 2007 was significantly less than the previous post-recession years. Iowa's job growth of nine-tenths of one percentage point for 2007 compared with 1.1 percent for the nation. Wyoming experienced the fastest job growth of any state, increasing its nonfarm employment by 3.9 percent. Michigan reported the largest job loss for 2007 at -65,100 jobs (-1.5 percent).

### Iowa's Last Recession

The last recession officially started in March of 2001, and ended in November of the same year. However, Iowa began to lose jobs a full eight months before the national economy began to decline, and continued falling 17 months after the *official* recession ceased. Iowa began its own downturn in July 2000, and began recovering jobs during the summer of 2003. The beginning and ending dates of a recession are identified by the Business Cycle Dating Committee of the National Bureau of Economic Research.

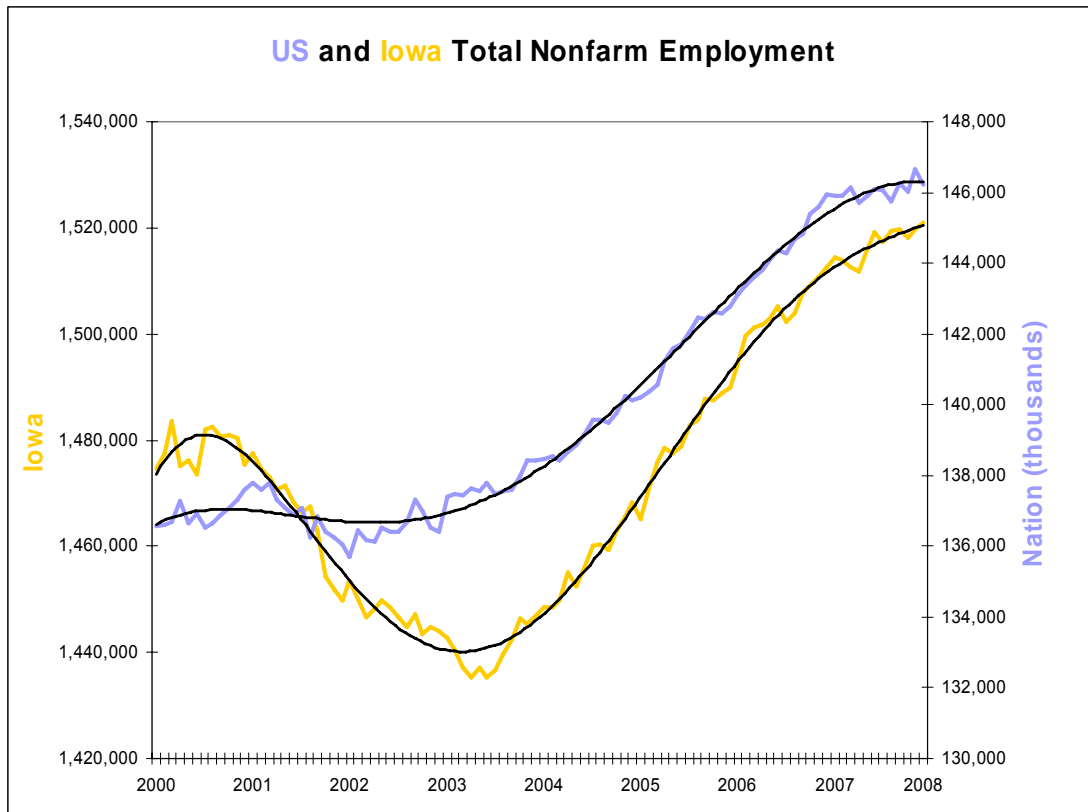
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The key variables that determine whether or not a recession has begun are nonfarm employment, real personal income (adjusted for transfer payments), industrial production and real total business sales.

When attempting to gauge the health of the state or national economy, many economists will reference the manufacturing sector. In the past, this sector has generally led the statewide economy into a recession. Prior to the 2001 recession, Iowa's nonfarm employment began to show signs of weakening during the second half of 2000, precisely the same time manufacturing started to pare employment. From July 2000 to July 2001, total nonfarm employment dropped in Iowa by 15,500 jobs; manufacturing dropped 12,300 jobs—just under 80 percent of all jobs shed. During the subsequent twelve months (July 2001-July 2002), both manufacturing and total nonfarm employment experienced another contraction. Over this time period, total nonfarm employment dropped 19,900 jobs, while manufacturing dropped 12,900 jobs—a smaller percentage of the total loss (64.8 percent). This drop in percentage would seem to indicate that other sectors began to feel the delayed effects of the recession. While nonfarm employment reached an all-time record of 1,516,200 in 2007, the manufacturing sector remained 31,800 below its peak employment level of 261,300 reported for 1998.

Other sectors most affected by the economic downturn during the last recession were trade and transportation, information, and professional and business services. Combined, these sectors declined by 21,700 jobs from July 2000 to July 2003. During this same period, total nonfarm employment dropped 45,700 jobs. Manufacturing accounted for the majority of these jobs—34,900. Gains in education and health services, financial activities, and in construction partially offset some of the job losses incurred during the period.

**Figure 2. Iowa and U. S. Nonfarm Employment**



Source: Labor Market and Workforce Information Division, Iowa Workforce Development in cooperation with the Bureau of Labor Statistics

(Continued on page 20)

## How are the Predictor Sectors Faring?

Since the end of 2003, Iowa's total nonfarm employment has added 75,800 jobs. In fact, since the recessionary period, only the information sector has declined, down 100 jobs. Manufacturing, the standard when measuring the well-being of the Iowa economy, has added 9,400 jobs. Yet, this industry, as previously stated, has contracted over the past year by 1,700 jobs. However, over the past few years Iowa's economy has, to some degree, diminished its reliance on manufacturing. In 2000, manufacturing represented 17.0 percent of Iowa's nonfarm employment. By 2007, the proportion had dropped to 15.1 percent. This trend should not be alarming, as Iowa, and the nation, continue to become more "service-oriented" economies.

Construction, another goods-producing industry, has also begun to feel the effects of sagging consumer demand in Iowa and at the national level. This industry actually continued to experience growth throughout the last recessionary period. However, circumstances are much different for the current period. The housing "bubble", as it has been dubbed, represents a change in indicators in the state and national economy, as the housing market affects several sectors: construction (new homes and maintenance of existing homes), finance and insurance, manufacturing (construction materials, "big-ticket" household items such as appliances, home furnishings, etc.), and even retail trade (home furnishing sales go hand-in-hand with home buying). The 2007 annual data shows construction losing jobs for the first time since 2000.

Retail trade, which lost jobs during the recession, dropped 1,100 jobs during 2007. In fact, this sector has decreased its employment every year since 2004. From 2004 to 2007; 1,700 jobs were lost in the sector. Retail trade generally fluctuates elastically with the economy, just as construction and manufacturing do, and could become more of an indicator in predicting the general direction of the overall economy.

Financial activities showed no signs of slowing through 2007. This sector is not as elastic as some of the other predictor sectors, such as construction or manufacturing. Iowa's financial activities sector continued to grow through all of last year despite problems that began to surface in the national financial markets. The fact that Iowa was not a major player in the subprime mortgage market has helped to shelter the state from some of the financial turmoil being experienced in the national economy.

Iowa's total nonfarm employment continues to reflect growth, yet at a decreasing rate than in previous years. Currently, the nation has been feeling the preliminary effects of a recession, while Iowa's economy remains resilient. The state's economic outlook for 2008 will greatly depend on how well businesses and consumers navigate through the housing slump, rising energy costs, a tightening credit environment, and a weaker job market.

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Labor Market and Workforce Information Division, Iowa Workforce Development  
<http://www.iowaworkforce.org/>

The National Bureau of Economic Research (NBER)  
<http://www.nber.org/cycles.html>

## Tracking the Iowa Leading Indicators Index

The Iowa Leading Indicators Index (ILII) was developed by the Iowa Department of Revenue in 2006 to serve as another tool for monitoring the future direction of the Iowa economy and State revenues. The ILII provides a signal of changes in future economic activity in Iowa by combining monthly changes in each of its eight components. Because data for many components become available three or four weeks after the close of the month, the ILII for a given month is released with a two month lag. The components, selected to capture the direction of Iowa employment and the key sectors of agriculture, manufacturing, and finance, include:

- Agricultural Futures Price Index (AFPI)
  - Average daily futures prices for
    - Corn
    - Soybeans
    - Lean hogs
    - Live cattle
- Iowa Stock Market Index
- Average Weekly Manufacturing Hours in Iowa
- Initial Unemployment Claims in Iowa (inverted)
- Iowa New Orders Index (One component of the Iowa Business Conditions Index – Creighton University)
- Yield Spread (national series)
- Residential Building Permits in Iowa
- Diesel Fuel Consumption in Iowa

The agriculture sector is captured by the AFPI, which includes the top four commodities by income production in the state. Hog and cattle prices are the net of estimated production costs. The finance sector is captured by the Iowa Stock Market Index which includes the total value of outstanding equity of 39 Iowa-based or Iowa-concentrated companies, including 15 finance-related companies. The yield spread also plays a key role in driving profits at finance companies, and has a strong record of predicting national recessions. Indicators that capture manufacturing in Iowa include average weekly manufacturing hours, the new orders index, and diesel fuel consumption. The new orders index, produced by Dr. Ernest Goss at Creighton University, gauges future demand for output produced by manufacturers in Iowa. Diesel fuel consumption is a proxy for demand for manufacturing inputs and finished products in Iowa, where both are transported by truck within and through the State. General labor market conditions are measured by unemployment claims. The housing sector, currently a key sector in national economic news, is captured by the count of residential building permits issued in the State.

For all but one (the national yield spread) of the eight indicators, the ILII relies on 12-month moving averages to smooth out monthly volatility in the series. This allows the index to pick up trends from the indicators without reacting to one-month fluctuations in data values.

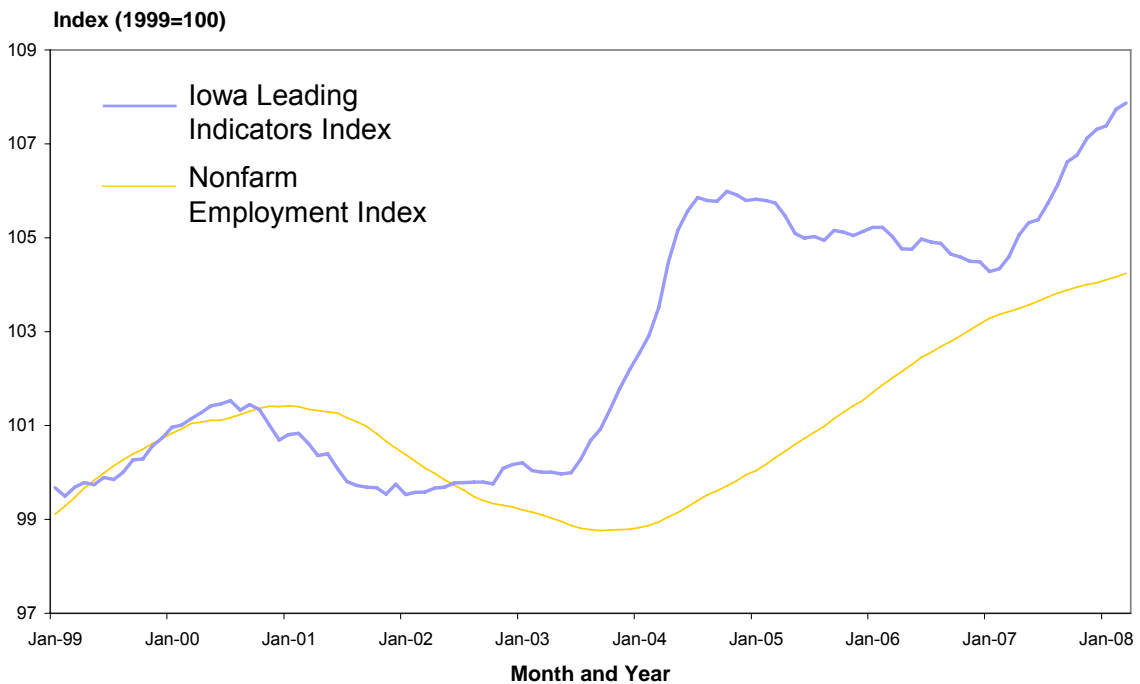
The ILII is calculated using the same techniques as The Conference Board uses to calculate the U.S. Leading Economic Indicators.<sup>1</sup> A movement in the ILII for only one month does not produce a clear signal, rather it is necessary to consider the direction of the index over several consecutive months. A signal of a coming contraction is viewed reliable when the index declines by two percent over a six month period (using an annual rate) and a majority of the individual components decline, measured as a six-month diffusion index below 50. Through March 2008, the annualized rate of growth seen over the last six months is a positive 2.4 percent with a diffusion index of 75.0. Both numbers suggest growth in the Iowa economy for the next six to nine months.

<sup>1</sup>The Conference Board is a business membership and research network founded in 1916. In 1995, The Conference Board assumed responsibility for computing the national leading indicators index from the U.S. Department of Commerce.

*(Continued on page 22)*

Throughout 2007 the ILII showed strong growth, rising from 104.3 in January 2007 to 107.3 in December 2007 (see Figure 1). The rise was driven by price increases for agricultural commodities and strength in the market valuations of companies included in the Iowa Stock Market Index. At the same time, residential building permits in Iowa fell throughout the year, while initial unemployment insurance claims filed by Iowans rose slightly (where the impact of this component is inverted). Through the first three months of 2008 the index has continued to climb, reaching 107.9 in March 2008.

**Figure 1. Iowa Leading Indicators Index and Iowa Non-Farm Employment Coincident Index: January 1999-March 2008**



Source: Tax Research and Program Analysis Section, Iowa Department of Revenue

Most of the strengths and weaknesses that drove the ILII in 2007 persisted through the first quarter of 2008 (see Figure 2.) While corn and soybean prices continue to rise, hog and cattle profits have declined. Despite the opposite movements by these commodities, the overall AFPI continued to signal strength for future economic activity. The Iowa Stock Market Index is starting to show signs of weakness with a slight drop in March. Unemployment claims also continued to creep upward, while some strength remains in manufacturing hours. The new orders index is bouncing up and down as manufacturers report alternating good and bad news regarding demand for their output. Residential building permits in February were the lowest reported since January 1998, and March numbers were nearly 50 percent below the previous year.

(Continued on page 23)

The continued increases in the ILII throughout 2007 and into 2008 indicate that the housing slump and credit crunch, which are slowing much of the rest of the U.S. economy, have not had as great of an impact on the Iowa economy. Although the ILII continues to provide positive signals for future economic activity, the track record of this new tool is still short. Because the Iowa economy has not experienced an entire business cycle since the index was developed in the summer of 2006, it is possible that an indicator is missing which could provide a signal counter to those currently working together in the index.

**Figure 2. Iowa Leading Indicators Index Components: Six Month Overview**

Component Series Monthly Values <sup>a</sup>	2007			2008		
	October	November	December	January	February	March
AFPI <sup>b</sup>						
Corn (cents per bushel)						
Hog Profits (cents per pound)						
Soybeans (cents per bushel)						
Cattle Profits (cents per pound)						
Iowa Stock Market Index (10=1984-86)	↓					
Yield Spread (10-year less 3-month)	↑					
Building Permits	↓					
Average Weekly Unemployment Claims <sup>d</sup>	↓					
Average Weekly Manufacturing Hours	↑					
New Orders Index (percent)	↓					
Diesel Fuel Consumption (mil gallons)	↑					

Source: Tax Research and Program Analysis Section, Iowa Department of Revenue, produced April 29, 2008.

- a. For all component series except for the yield spread (the only national series) the values represent 12-month backward moving averages.
- b. The agricultural futures price index is computed as the sum of the standardized symmetric percent changes in the four series, each weighted by the commodity's annual share of Iowa cash farm income (updated August 28, 2007).
- c. Arrows indicate the direction of the series' contribution to the ILII for the latest month.
- d. Changes in unemployment claims are inverted when added to the ILII, thus a negative change in the series contributes positively to the index.



## Entrepreneurship in Iowa

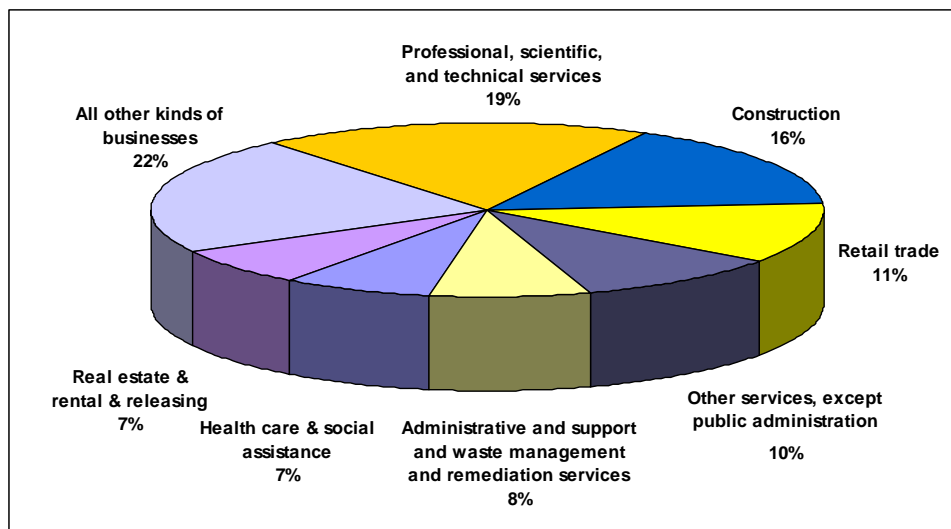
### What is Entrepreneurship?

Who was the first person to think of a mechanical pencil? Who first produced and marketed a felt-tipped pen? Who decided to open a shop and sell gently-used baby furniture and clothes? People have numerous ideas. Some dream of working for themselves, of being their own bosses. Others are determined to live that dream. They are Iowa's entrepreneurs.

Entrepreneurs are people who organize business enterprises or ventures and assume their inherent risks. A successful entrepreneur must be independent, creative, motivated, and a risk-taker. Some begin their businesses in their homes as sole proprietors while others opt for rental spaces and form partnerships or corporations.

According to the U.S. Census Bureau, over 49 percent of the nation's businesses are home-based firms. More than 60 percent of the owners use their personal finances to start their businesses. Three-fourths of the businesses in the United States are operated by self-employed individuals.

**Figure 1. Industries With the Most Home Based Firms - 2002**



Source: U. S. Census Bureau. 2002 Survey of Business Owners: Characteristics of Businesses: 2002 and Characteristics of Business Owners: 2002

### Entrepreneurs are Leading Drivers of the Economy

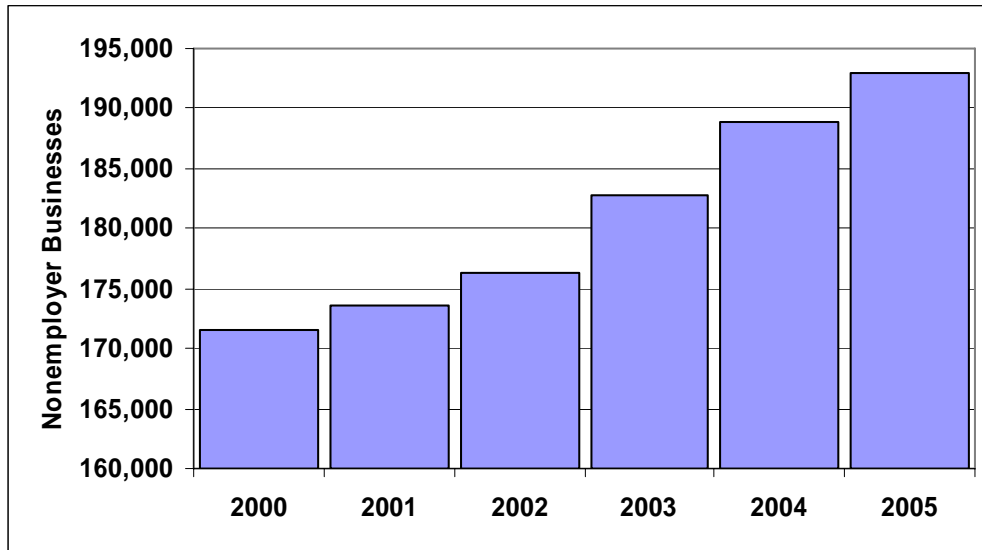
The Small Business Association's Office of Advocacy defines a small business as an independent business having fewer than 500 employees. In 2005, over 97 percent of Iowa's total businesses were small businesses that employed over 52 percent of Iowa's workers in the private sector. More than half of the state's total businesses, employed fewer than five workers. Over the last few years, Iowa entrepreneurs continue to develop new and improved products and services and successfully market them. While some believe Iowa's economy may be in a downturn, the number of nonemployer establishments (businesses with no employees) continues to grow.

(Continued on page 25)



**Figure 2. Growth in Nonemployer Businesses\***

\*Nonemployer businesses have no paid employees, annual business receipts of \$1,000 or more, and are subject to federal income taxes.



Source: Census <http://www.census.gov/epcd/nonemployer/2005/ia/IA000.HTM>

### **Well-Established Organizations Provide Resources for Entrepreneurs**

Iowa's entrepreneurs are fortunate to have well established organizations to develop their initial ideas into successful businesses.

Iowa's Pappajohn Entrepreneurial Centers (JPECs) are instrumental in giving new business people the confidence and knowledge to build their dreams. The Centers are located at the University of Iowa (U of I), Iowa State University (ISU), the University of Northern Iowa (UNI), Drake University, and the North Iowa Area Community College. They emphasize the needs of their individual regions and educate and encourage individuals to start and grow businesses in Iowa.

In an initial meeting with a consultant, an entrepreneur will discuss his/her business idea to determine where in the process he/she is. Discussion will center on what type of opportunities the business presents, the type of customer the product or service will attract, and the items the business needs. Based on the assessment, JPEC can provide direct consulting to the clients, and may provide referrals to other service organizations. Their objective is to help people start and grow sustainable ventures.

JPEC offers entrepreneurial training, workshops, consulting/mentoring, field study projects, partnerships, and business incubators. One important activity for the Centers is to provide assistance in accessing capital. JPEC is also the regional administrator for a financial tool for start-up and early stage Iowa-based companies. Entrepreneurs must also be ready to invest their own personal finances into the business, as well as those from friends and family.

Iowa's Department of Economic Development (IDED) will aid entrepreneurs in expanding or starting a business. Depending on their business needs, several programs and services will be offered. The Business Development Division-Targeted Small Business and Regulatory Assistance is the primary support area for small businesses. Their Innovation and Commercialization Division works with entrepreneurs in three targeted industries –Advanced Manufacturing, Biosciences, and Information Solutions. They also assist businesses that are seeking high growth and planning for rapid expansion.

Iowa's Small Business Development Centers (SBDCs) are coordinated by ISU and hosted by ten community colleges, the U of I and UNI. They offer individualized counseling, workshops and

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publications, and connections to other resources. Based on their discussions, an entrepreneur will be referred to resources for planning, training, or networking.

In the last seven years, Iowa's SBDCs have helped to generate almost 7,000 new jobs. During the last three years, Iowa's SBDC clients have contributed \$11 million in new state taxes and increased firm gross revenues by \$240 million. They have added or retained 3,795 jobs and raised \$77 million in new capital. In 2007, Iowa's centers counseled 2,152 clients who added or retained 824 jobs and raised over \$29 million in capital for their businesses.

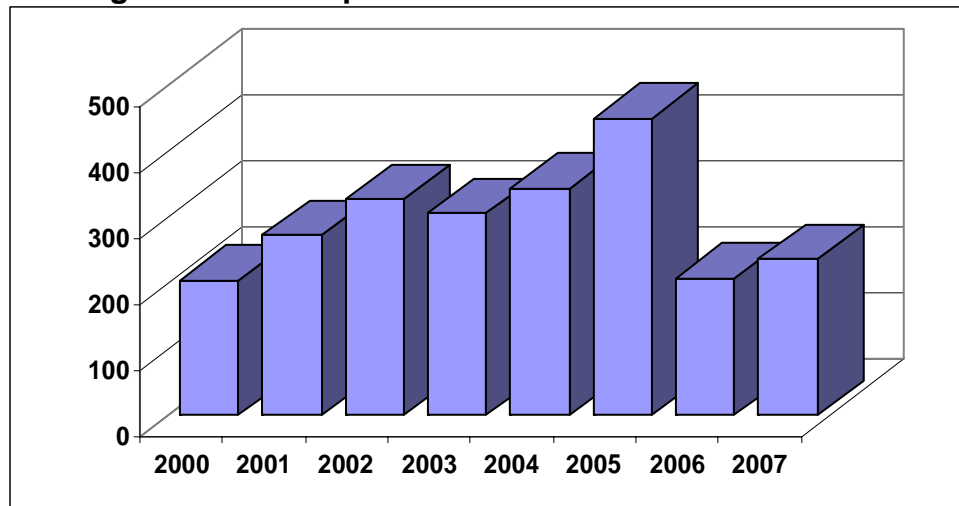
The Iowa Entrepreneur Network (IEN) provides a way to share entrepreneurial expertise and interests across the state. The Network locates materials for best practices, self-teaching aids, and links to other Iowa organizations. IEN's goal is to develop talent and accelerate the growth of Iowa's businesses.

Other areas of expertise for entrepreneurs are available through the Small Business Association and one of its resource partners, SCORE (Service Corps of Retired Executives). SCORE is a nonprofit association, committed to entrepreneurial education. It is also dedicated to the formation, growth, and success of small businesses nationwide. SCORE has 10,500 volunteer counselors, who are working or retired business owners, executives, or corporate leaders, who share their experiences and business lessons. Volunteers meet with and guide entrepreneurs to needed resources from the start to the finish.

### **Business Closures: Strive for Success; Prepare for Failure.**

While every entrepreneur dreams of a successful and growing business, in truth, some businesses fail. Two-thirds of new businesses survive at least two years, and 44 percent survive at least four years. Some businesses terminate the original type of business, but convert to others, such as corporations, trusts, or nonprofits. Some entrepreneurs lack organizational or marketing skills. Others fail to find funding that can keep them from bankruptcies. While bankruptcy occurrences continued to rise from 2000 through 2005, they dropped by more than 50 percent in 2006 and 2007.

**Figure 3. Bankruptcies of Iowa Businesses 2000-2007**



Source: United States Bankruptcy Court for the Northern and Southern Districts of Iowa

### **Entrepreneurship Enriches Iowa**

Despite the risks, entrepreneurs in Iowa continue to make the state rich and prosperous. Their risk-taking is thought to be an important way that individuals with skills, ideas, and business savvy introduce new products, technology, and business strategies into the economy. They are important sources of saving and of the creation of wealth. With the continued support of available resources throughout the state, it appears that Iowa's economy can continue to prosper through the spirit of its entrepreneurs.

*(Continued on page 27)*

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## Iowa Demographic Profile

### Introduction: Iowa's Population Growth.

By 1850, Iowa had been a state for only four years. Farmers divided the landscape with fences, log cabins, and wheat fields. At that time, the first federal census in Iowa estimated its population to be 192,214. While many of the people living in Iowa were from surrounding states, approximately ten percent were immigrants from northern Europe—Germany, Ireland, Scotland, England, and Wales. Throughout the 1850s, more immigrants settled in Iowa. They included the Dutch, Norwegians, and Swedes. During and immediately after the Civil War, many blacks settled in Iowa cities. By the 1900's, the Census estimated Iowa's population at 2,231,853, a fifty-year growth of 91.3 percent.

In 1990, approximately 1.6 percent of the state's total population was foreign-born. Between 1990 and 2000, immigration contributed to two-thirds of Iowa's 5.4 percent population growth. Many of these individuals came from Bosnia, Sudan, Somalia, and Latin America. By 2000, Latinos became Iowa's largest minority population. In 2006, 72.3 percent of Iowans were born in the state, while 3.8 percent were born in foreign countries.

While the majority of ancestry groups in Iowa are from the European countries listed in the following table, Iowa's residents continue to come from many countries around the world.

**Figure 1. Iowa Population: Top 10 Ancestries - 2006**

Ancestry Group	Number	Percent
German	1,222,577	41.0
Irish	469,665	15.7
English	314,866	10.6
Norwegian	163,263	5.5
Dutch	149,454	5.0
Swedish	104,820	3.5
French	86,688	2.9
Danish	68,854	2.3
Italian	68,389	2.3
Czech	63,431	2.1

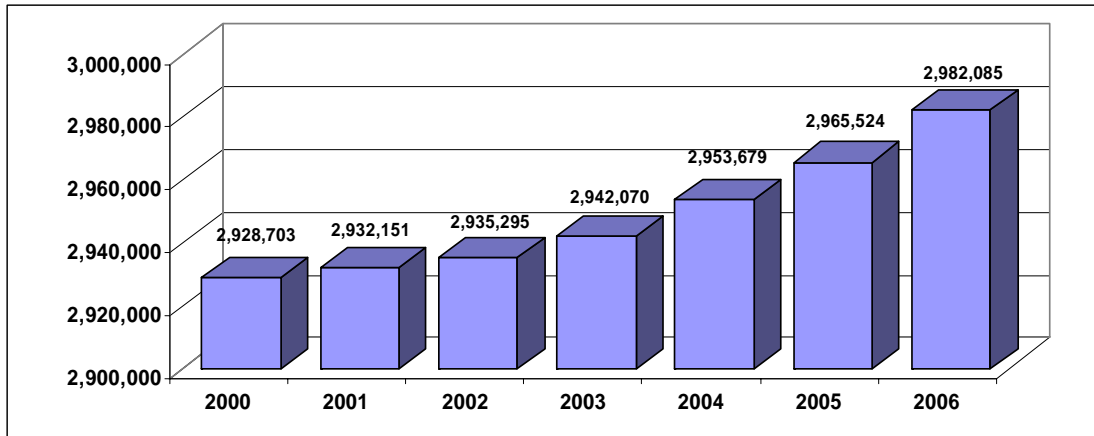
Source: 2006 American Community Survey, U.S. Census Bureau

The 2006 American Community Survey has estimated Iowa's population to be 2,982,085, ranking 30<sup>th</sup> in the nation. Iowa's population makes up one percent of the nation's population of 299,398,485. Immigration continues to contribute to Iowa's growing population with people arriving from countries all over the world, especially from Mexico and Latin American countries. At this time, Hispanics make up 3.8 percent of Iowa's population, becoming Iowa's largest minority group. Iowa's total estimated population growth for 2000 through 2006 was 53,382 with an average growth of 8,900 for each year.

The median age in Iowa is 37.8 percent. The median age for females is 39.4 percent, and for males, it is 36.4 percent. Iowa ranked third in the nation with 2.5 percent of the state's population at 85 years and older, and fourth with 14.6 percent of the population 65 and older.

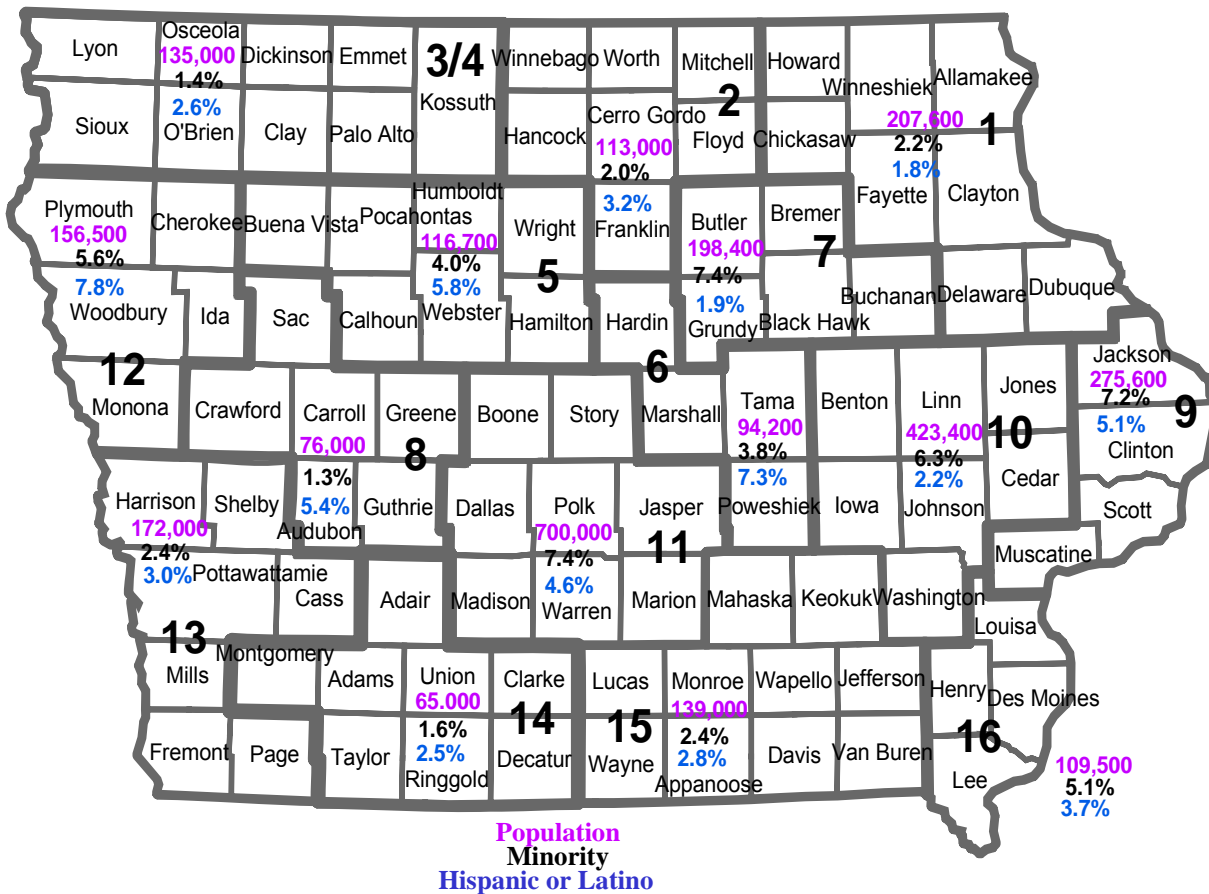
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**Figure 2. Iowa's Population Growth 2000-2006**



Source: 2006 American Community Survey. U.S. Census Bureau

**Figure 3. Iowa Race/Ethnicity for WIA Regions 1-16 - 2006**



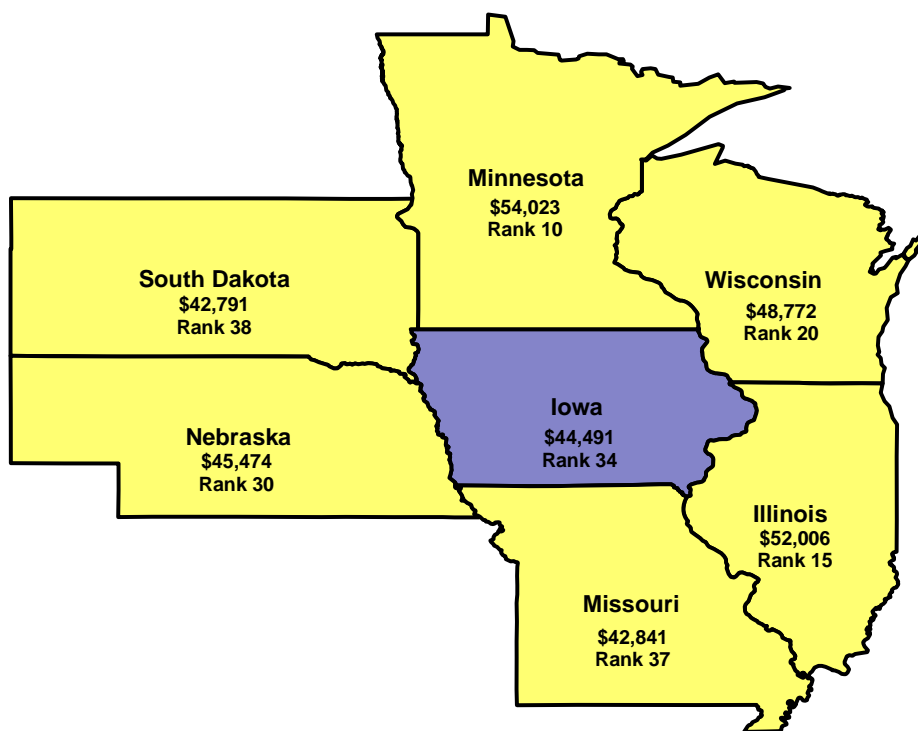
Source: U.S. Census Bureau, Population Division. August 9, 2007. Prepared By: State Library of Iowa. State Data Center Program.

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## Economic Characteristics

The 2006 median household income for the United States was \$48,451. States' median household incomes ranged from \$65,144 in Maryland to \$34,473 in Mississippi, a difference of \$30,671. Iowa's median household income was \$44,491 which ranked 34<sup>th</sup> nationally. Of its surrounding states, the median household incomes of Minnesota, Wisconsin, Nebraska, and Illinois were higher, while those of South Dakota and Missouri were lower.

**Figure 4. 2006 U.S. Median Household Income - \$48,451**



Source: U.S. Census Bureau, 2006 American Community Survey

The 2007 U.S. per capita income was \$38,611, a growth of 5.2 percent since 2006. Iowa's per capita state personal income of \$35,023 is ranked 27<sup>th</sup> nationally. Of the surrounding states, three states ranked lower, North Dakota at 29<sup>th</sup>, Missouri at 32<sup>nd</sup> and South Dakota at 34<sup>th</sup>. Personal income includes wages and salaries, rent, dividends, interest, and transfer payments, such as unemployment benefits and Social Security payments. Nationally, Connecticut had the highest per capita income at \$54,117, while Mississippi had the lowest at \$28,845.

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**Figure 5. State Personal Income - 2007**

Geography	Per Capita Personal Income			(Millions of Dollars) Personal Income	
	2007 <sup>p</sup>	U.S. Rank <sup>p</sup>	Percent Change 2006-2007	2007 <sup>p</sup>	Percent Change 2006-2007
<b>United States</b>	<b>38,611</b>		<b>5.2</b>	<b>11,645,882</b>	<b>6.2</b>
<b>Plains States:</b>					
Iowa	35,023	27	6.0	104,651	6.6
Kansas	36,738	22	5.7	102,069	6.4
Minnesota	41,034	11	5.6	213,282	6.5
Missouri	34,389	32	4.9	202,153	5.6
Nebraska	36,471	24	5.9	64,721	6.5
North Dakota	34,846	29	6.4	22,291	6.7
South Dakota	33,905	34	5.9	26,996	6.9

p=preliminary

Source: Bureau of Economic Analysis, U.S. Department of Commerce

Nationally, the number of people whose income lies below the poverty level is 13.3 percent. Iowa's poverty level of eleven percent ranks it 37<sup>th</sup> among all states. The poverty rate for men in Iowa is 9.8 percent; for women, 12.2 percent. Of Iowa's female households with related children under 5 and no husband present, 52.8 percent live below the poverty level. For Iowa's population of 65 and over, 36 percent are disabled, while eight percent are living with incomes below the poverty level.

**Figure 6. Percent of Racial Groups Below Poverty Level - Iowa 2006**

Race	Percent Below Poverty Level
<b>White</b>	<b>10.0</b>
<b>Black</b>	<b>31.1</b>
<b>Asian</b>	<b>15.6</b>
<b>Other Race</b>	<b>24.7</b>
<b>Hispanic Origin (any race)</b>	<b>24.5</b>

Source: 2006 American Community Survey, U.S. Census Bureau

## HOUSING CHARACTERISTICS

Only seven states reported lower median housing values than Iowa: Kentucky, Alabama, North Dakota, Oklahoma, Arkansas, West Virginia and Mississippi. South Dakota and Iowa held a ranking of 43rd with a median housing value of \$112,600. At the same time, the median home value in the United States was \$185,200.

(Continued on page 32)

**Figure 7. Housing Costs Comparison-U.S. vs. Iowa**

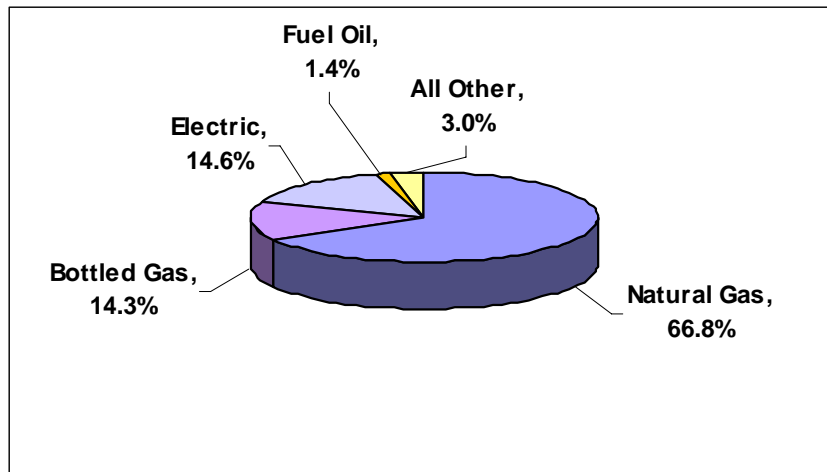
	Median Household Income	Median Home Value	Monthly House Payment*
<b>U.S.</b>	\$48,451	\$185,200	\$1,232.14
<b>Iowa</b>	\$44,491	\$112,600	\$749.13
<b>Difference</b>	\$3,960	\$72,600	\$483.01

Source: 2006 Community Survey. U.S. Census Bureau

\*Note: 2006 American Community Survey data based on 100 percent of the median home value. \*Thirty-year loan at eight percent interest. Represents principal + interest only (no fees, points, insurance, taxes or other costs associated with house ownership).

A person buying a house with the Iowa median home value will pay \$483.01 per month less than for a home with the U.S. median home value. For median selected monthly owner cost of specified owner-occupied housing units with a mortgage, Iowa ranked 41<sup>st</sup> with a cost of \$1,063. California ranked the highest with a monthly owner cost at \$2,142, while the lowest was in West Virginia at \$853. Iowa's median rent of \$584 ranked 42<sup>nd</sup> nationally. Ranges of median rent ranged from a high of \$1,116 in Hawaii to \$497 in North Dakota.

**Figure 8. Heating Sources for Iowa Homes – 2006**



Source: 2006 American Community Survey. U.S. Census Bureau

(Continued on page 33)



## **Social Characteristics**

Iowa ranked eleventh nationally for individuals 25 and over with a high school graduation rate (including equivalency) of 88.9 percent. Minnesota was ranked first in the nation with a high school graduate rate of 90.7 percent, while Mississippi was the lowest with 77.9 percent.

For this same age group, 24 percent of Iowans hold bachelor's degrees, giving Iowa a ranking of 37<sup>th</sup> nationally. Massachusetts held the highest state ranking with 37.0 percent of the population holding bachelor's degrees, while West Virginia ranked the lowest with 16.5 percent. The District of Columbia had the highest with 45.9 percent. Fourteen states were ranked lower than Iowa.

For individuals 25 and over, 9.9 percent of the nation's population hold advanced degrees (master's, professional, doctorate). Iowa ranked 41<sup>st</sup> at 7.4 percent with only ten states ranking lower. The highest ranking state, Maryland, had 15.7 percent, with Mississippi, the lowest, at 6.1 percent. The District of Columbia had 25.4 percent.

For housing units with two or more vehicles, Iowa ranks ninth with 64.9 percent. Idaho had the highest number of these housing units with 70.3 percent, while New York had the lowest at 39.3 percent. Of those Iowa workers 16 years and older, 78.5 percent travel to work alone, while 10.8 percent use carpools, a decline from 11.9 percent since the 1990's. The average time an Iowan spends traveling to work is 18.2 minutes. Approximately 4.7 percent of Iowa's workers are employed at home.

In 2006, veterans in the United States comprised 10.4 percent of the civilian population. At this time, 11.2 percent of this population in Iowa who are eighteen years and older are veterans of the U.S. armed forces. Of Iowa's 253,159 veterans, 9.3 percent are female.

## **Conclusion**

Since before Iowa's statehood, it has experienced the continual arrival of immigrants. Not only is Iowa's workforce growing, but Iowa's population continues to increase. Immigration is one of the reasons that Iowa's birth rate has increased. While the state continues to have a large population aged 65 and older, immigration continues to infuse Iowa with youth. Because of Iowa's reasonably priced homes and good school systems, young people are encouraged to stay and raise their families. Iowa's increased diversity can be seen in its communities, schools and workplaces. While Iowa's population growth continues to hold steady, its population is becoming increasingly more diverse.

*(Continued on page 34)*

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## New and Emerging Industries

Imagine a machine so small a hundred of them could fit on the head of a pin, or one with the ability to instantaneously map any place on the planet, a battery powered by urine, or a computer one hundred times faster than those being sold in stores. Science fiction? No, these are some of the technologies being produced today in new and emerging industries. Some examples of these industries worldwide are very revolutionary, such as: nanotechnology, geospatial, bioscience, and photonics. When will these industries appear in Iowa? They are already here. In fact, Iowa is the national leader in developing the renewable energy branch of bioscience.

Nanotechnology is the engineering of functional systems at the molecular level. Uses for this infant technology are just emerging, but it is believed that in the next ten to fifteen years it will be used to produce materials five times as strong, ten times more efficient and millions of times as compact.

Geospatial is a term widely used to describe the combination of spatial software and analytical methods with terrestrial or geographic datasets. Geospatial information's most notable use came when hurricane Katrina struck New Orleans. Geospatial data allowed authorities to know such things as: the exact extend of the flooding, what escape route would be close and how many structures and individuals were affected. Other uses include police plotting the location of crimes, routing of emergency rescue teams, monitoring the spreading of emissions, locating new highways, locating utility lines, and identifying where dangerous materials are located.



Bioscience is any of several branches of science, such as biology, medicine, anthropology, or ecology, that deal with living organisms and their organization, life processes, and relationships to each other and their environment. While none of these branches of science are new, knowledge of everything from molecules to the environment is rapidly growing, resulting in a host of new medicines, medical tools and equipment, dietary improvements, and health care techniques.

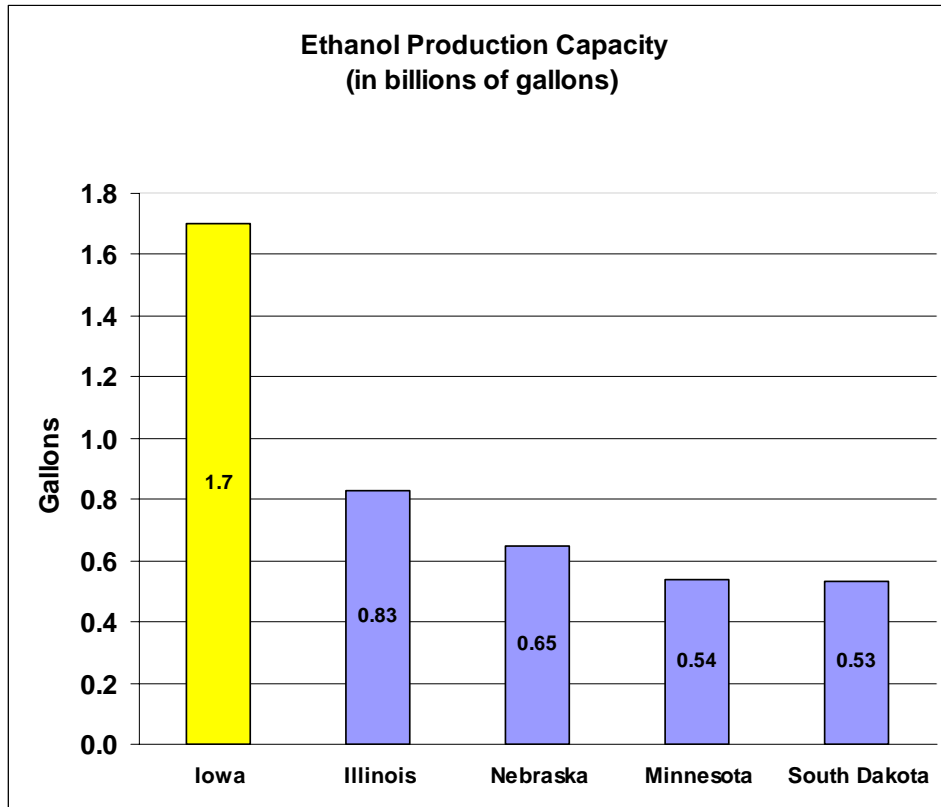
Photonics is the science of generating, controlling, and detecting photons. Some of the more noted applications of this science are: optical data recording, fiber optic telecommunications, displays, and optical pumping of high-power lasers. The potential applications of photonics are virtually unlimited and include chemical synthesis, medical diagnostics, on-chip data communication, laser defense, and fusion energy to name several interesting examples.

Many of the industries emerging in Iowa are in the area of renewable energy technology. Renewable energy effectively uses natural resources such as sunlight, wind, rain, tides and geothermal heat, which are naturally replenished. Iowa's renewable energy technologies are primarily focused on wind power and biofuels for transportation. This focus has made Iowa a major producer of alternative energy, leading the U.S. in ethanol and biodiesel fuel capacity, and wind electrical generation. Nationally, Iowa ranks only behind Texas and California in wind energy output.

*(Continued on page 36)*

About half the state has significant areas with enough wind for commercial scale wind generation. Estimates show these areas are capable of generating five times the amount of electricity being used in Iowa and making Iowa an exporter of electrical energy.

Biofuels produced in Iowa are mostly ethanol and biodiesel. Ethanol is made from corn. When mixed with gasoline it makes a fuel suitable for powering automobiles. Iowa currently has 63 facilities capable of producing over 1.7 billion gallons. Iowa leads the nation in production capacity, and can produce twice as much as the second-place state, Illinois with a capacity of 0.83 billion gallons. Biodiesel is made from soybeans, and may be substituted for diesel fuel. Biodiesel has virtual none of the air pollution produced by other fuels.



Source: Renewable Fuels Association Industry Outlook 2007

Biofuel is not the only branch of bioscience emerging in Iowa. Other branches growing rapidly in Iowa include organic and agricultural chemicals, drugs and pharmaceuticals, and medical equipment and devices.

Iowa is also involved in the other emerging industries. Iowa has made a commitment to expand its advanced manufacturing sector, including nanotechnology, and the information solutions sector, which is a leader in the development of photonic technology. Additionally, Iowa has been a strong supporter and active developer of geospatial data. These data are stored in Iowa's Geographic Information Clearinghouse for easy access.

Industries so advanced they seem like science fiction are emerging in Iowa. Iowa's future participation in these new industries promises to be both full of wonder and awe-inspiring.

(Continued on page 37)

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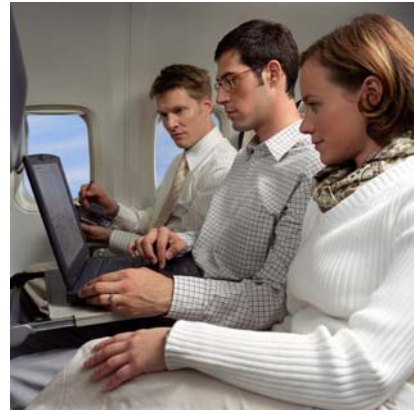
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## New and Emerging Occupations

### Defining New and Emerging Occupations

Simply put, there is no quick and easy definition for new and emerging occupations. Any dynamic economy creating new industries will provide new ways of doing things, and new ways of doing old things. Certainly, a webmaster is a relatively new occupation that has not been in existence for a long time. On the other hand, consider the occupation of a secretary. The occupation itself is not new, but the duties required to perform this occupation have evolved from typewriting and basic office procedures to software application work and the operation of highly technical office machines.

Perhaps the key word is evolve. Traditional occupations that require different job descriptions to reflect today's workplace needs are simply classified as evolving. Secretaries probably fit this description. New and emerging occupations must stem from entirely new labor paradigms. These are often driven by major technological advances from the scientific community that give credence to new ways of producing goods and providing services. The IT revolution of the past couple of decades is a good example of where technology provided the spark for a multitude of occupations that previously did not exist. Essentially, when an economic need is not being met, change becomes a necessary catalyst, and new and emerging occupations begin to appear in a wide range of industries.



The U.S. Bureau of Labor Statistics (BLS) maintains that, although not definitive, new and emerging occupations are those "...created by changes in technology, society, markets or regulations..." and "... may also be created by existing occupations that have been substantially modified by the same changes, and are increasing in employment." Established criteria are often employed to sort fads from stable positions, but elements of subjectivity are nonetheless present.

### New and Emerging Occupations in Iowa

Many new and emerging occupations can be found in Iowa's economy. However, tracking their development involves a process. Basically, occupational data are gathered from a number of sources, but perhaps most ostensibly through the Occupational Employment Statistics (OES) program directed by BLS. This biennial survey collects industry-specific employee data on occupations, wages, and staffing patterns. To be sure, most responses fall under existing Standard Occupational Classification (SOC) codes but, where not applicable, employers are granted leeway to write in job titles on supplemental sheets.

Research analysts at the state level make the determination of whether the written job titles actually correspond to an SOC code or should be recorded in a residual "all other" category, and passed on to BLS experts at the regional and national levels for further review. New and emerging occupations are to be determined upon such subsequent review and analysis.

*(Continued on page 39)*

## Higher Education and Targeted Industry Clusters

Many of Iowa's colleges and universities maintain a close collaboration with employers, allowing them to react proactively to occupational changes in the economy through academic program modification. At the university level, Iowa State University (ISU), the University of Iowa (U of I), and the University of Northern Iowa (UNI) all have academic programs that address economic employment changes, especially in three industry clusters identified by the state for targeted growth: advanced manufacturing, information solutions, and biosciences. Iowa's community colleges likewise have broadened their curricula to train workers in emerging fields.

Advanced manufacturing uses cutting-edge technologies and processes in all areas of manufacturing, including, design, control, fabrication and assembly. The firms that have been identified as the state's advanced manufacturers are currently experiencing significant change. Biosystems engineering, industrial and manufacturing systems engineering, manufacturing processes, production management, and computing-integrated manufacturing are just a few of the fields in university industrial engineering and technology departments experiencing curriculum change and growth.

Similarly, information technology continues to be a high growth area with a broadening curriculum at the college level. Informatics and/or bioinformatics are new degrees now being offered at ISU, UI, and UNI. Informatics is basically an emerging interdisciplinary pursuit between information technology and disciplines found in the arts, humanities, and the natural and social sciences. In addition, ISU recently added a software engineering degree, and UNI a degree in networking and systems administration. All are in response to significant increased demand in the exploding information sector.

Biosciences are changing the face of college programs as well. ISU, for example, is expanding its biorenewables programs into a new state-approved Bioeconomy Institute focused on maintaining a leadership role in biofuels, bioenergy, biochemicals, plant sciences, and other technologies. Many biotechnology disciplines including biosystems engineering, biochemistry, biophysics, biomedical sciences, bioethics, and bioinformatics often lead to scientific research careers in the renewable energy, pharmaceutical, and life science fields. The University of Iowa's prominence in medical research has prompted creation of the new state-approved Institute for Biomedical Discovery. The Institute promises contributions to the University's training of biopharmaceutical and biomedical researchers in such emerging fields as medicine, pharmacology, pharmaceuticals, microbiology, and molecular physiology.

Whereas state universities are focused primarily on producing future workers at the research level, community college programs are training students most notably in the technical fields, and engaging them with hands-on industry experience. In fact, many of Iowa's community colleges are partnering with regional employers (i.e., advanced manufacturing and ethanol production plants) and area high schools to create and broaden such high growth programs as biotechnology, industrial technology, and health.

These new and evolving programs are responsive to industry demands in such fields as: analytical protein chemistry; animal pharmaceuticals; biofuels; bioprocessing; environmental science; enzyme technology/enzymology; fermentation; genetic engineering/genomics; geographic information systems; food technology/production; forensics; and protein chromatography/proteomics. The university and community college programs mentioned are designed to train future Iowa workers in new and emerging occupations. The following table provides a sampling of such occupations.

*(Continued on page 40)*



## New and Emerging Occupations Recognized by Iowa's Higher Education Institutions, 2008

Advanced Manufacturing	Information Technology
Biofuels Maintenance Technicians	Bioinformatics Specialists
Control Technicians/Technologists	Biotechnicians
Electronic Engineering Technologists	Biotechnology Laboratory Technicians
Electrical Sales Engineers	Information Technologists
Fabrication Operators	Crop Specialists
Industrial Laboratory Technicians	Electroneurodiagnostic Technologists
Instrumentation Engineers	Ethanol and Biodiesel Plant Process Technicians
Mechatronic Engineering Technicians	Medical Laboratory Technicians and Technologists
Pollution Control Technicians	Microbiologists
Quality Control Technicians	Research Technicians
Technical Service Personnel	
Wind Energy Technicians	
<b>Life Sciences</b>	
Bioinformatics Specialists	
Biotechnicians	
Biotechnology Laboratory Technicians	
Information Technologists	
Crop Specialists	
Electroneurodiagnostic Technologists	
Ethanol and Biodiesel Plant Process Technicians	
Medical Laboratory Technicians/Technologists	
Microbiologists	
Research Technicians	

Source: O\*Net, Kirkwood Community College and various state university and community college websites

### Going Green

The occupational lexicon is becoming “greener” even though it’s been around for years. We’ve heard of blue and white collar jobs, but currently “green collar” is being touted more and more in the media for occupations relating to the “green” renewable energy and clean technology fields. Sensing the eco-friendly or “green” momentum, politicians are even using the terminology to advance the “green” cause. This sounds rather abstract, and at this point there are no clear definitions, but it does reflect society’s increasing interest in all things “green.”

Raquel Pinderhughes, Urban Studies Professor at San Francisco State University, contends that “green collar” jobs are basically “blue-collar work force opportunities created by firms and organizations whose mission is to improve environmental quality.” Citing 22 specific “green” labor sectors ranging from bicycle repair and biodiesel car mechanics to public transit and green building, she maintains “the vast majority of local green collar jobs do not require high levels of education.”

Broader definitions are prevalent as well with emerging areas like “green marketing” and “green engineering” that incorporate more highly educated and technical workers into the mix. Therein lies the difficulty of placing numbers on “green” occupations. Which occupations are being selected for inclusion? Newsweek writer Daniel McGinn believes “it’s impossible to say precisely how many people work in green jobs, partly because there’s no formal definition of the term. Does a clerk stocking organic produce at Whole Foods Market qualify? How about an engineer working to make a coal-fired power plant run more efficiently?” Most analysts do agree, though, that the trend lines for “green” occupations, however defined, are going up.

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A challenge facing organizations is inculcating green awareness into the workplace culture. “Regardless of the business you are in,” says Kyle Cahill, Environmental Defense Project Manager, “the idea is to consider environmental opportunities in every job. In an ideal world, sustainability would go far beyond a department of a business. The concept of sustainability would be built into the company.” As a result, many corporations and institutions of higher learning are adding positions such as “sustainability officers” to their payrolls in an effort to educate their workforce with a primary view toward neutralizing the carbon imprint their organizations produce. Through proactive education, implementing a more energy efficient and conservation-oriented strategy in the workplace is deemed not only achievable, but necessary for future cost-effectiveness, not to mention competitiveness.

Iowa, itself, is witnessing a significant impact in the renewable energy movement. No other state can claim the leadership position Iowa has attained from the ethanol and biodiesel industries in terms of scale and production. Quite frankly, no other state produces more. Adding to Iowa’s alternative energy sources, numerous wind farms can be seen dotting the state’s landscape. In fact, plants in Keokuk and Newton are expected to employ hundreds in the manufacture of wind turbine components. The implication is that Iowa is well positioned and committed to becoming a renewable energy state. Critical for Iowa to grow its economy, however, are continued investments in higher education and incentives for new and existing businesses to further their research capabilities. Likewise, developing an entrepreneurship-friendly culture with venture capital ties will be keys to Iowa’s economic future, as well as for new and emerging occupations.

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## Employment Outlook by Industry, 2006-2016

### Iowa Industries Adding the Most Jobs

For the 2006–2016 projection period, the industry expected to add the most jobs is administrative and support services. This industry will add more than 16,000 jobs, growing by over one-fourth of its base year employment. Administrative and support services includes areas such as office administrative services, employment services, and business support services.

Of the 20 industries to add the most jobs, three are classified as health service industries: ambulatory health care, hospitals, and nursing and residential care facilities. These industries will add a combined total of 32,000 jobs, which is more than 17 percent of the expected total statewide job gains. The food services and drinking places and amusement, gambling and recreation activities industries will account for more than 18,000 jobs over the decade.

Educational services are expected to add almost 15,000 jobs, and local government (excluding education), and hospitals will grow by 6,800 jobs for the period. Retail trade, in the form of general merchandise stores, motor vehicle and parts dealers, and building material and garden equipment, will provide over 10,000 jobs.

Despite limited overall growth in construction, the specialty trade contractors industry is expected to add nearly 8,000 jobs. Manufacturing, the other supersector to experience decreased growth for the projection period, was represented in the top 20 growth industries with wood product manufacturing expected to gain 3,000 jobs.

**Figure 1. Iowa Industries Adding the Most Jobs**

Industry Description	NAICS Code	2006	2016	Job Growth	Percent Change
		Estimated Employment	Projected Employment		
Administrative & Support Services	561	61,365	77,430	16,065	26.2
Educational Services	616	158,780	173,610	14,830	9.3
Nursing & Residential Care Facilities	623	52,170	64,625	12,455	23.9
Food Services & Drinking Places	722	96,445	108,270	11,825	12.3
Ambulatory Health Care Services	621	46,015	57,525	11,510	25.0
Professional, Scientific, & Technical Services	541	40,310	50,920	10,610	26.3
Social Assistance	624	24,445	34,315	9,870	40.4
Self Employed & Unpaid Family Workers	671	138,025	147,855	9,830	7.1
Insurance Carriers & Related Activities	524	41,925	50,615	8,690	20.7
Hospitals	626	62,505	70,535	8,030	12.8
Specialty Trade Contractors	238	46,390	54,265	7,875	17.0
Truck Transportation	484	30,725	37,780	7,055	23.0
Local Government, Excluding Education & Hospitals	930	58,930	65,800	6,870	11.7
Amusement, Gambling, & Recreation Industries	713	17,185	23,485	6,300	36.7
Credit Intermediation & Related Activities	522	40,005	46,215	6,210	15.5
General Merchandise Stores	452	34,780	38,710	3,930	11.3
Motor Vehicle & Parts Dealers	441	21,530	24,890	3,360	15.6
Management of Companies and Enterprises	551	12,435	15,715	3,280	26.4
Wood Product Manufacturing	321	12,550	15,555	3,005	23.9
Building Material & Garden Equipment	444	16,425	19,425	3,000	18.3

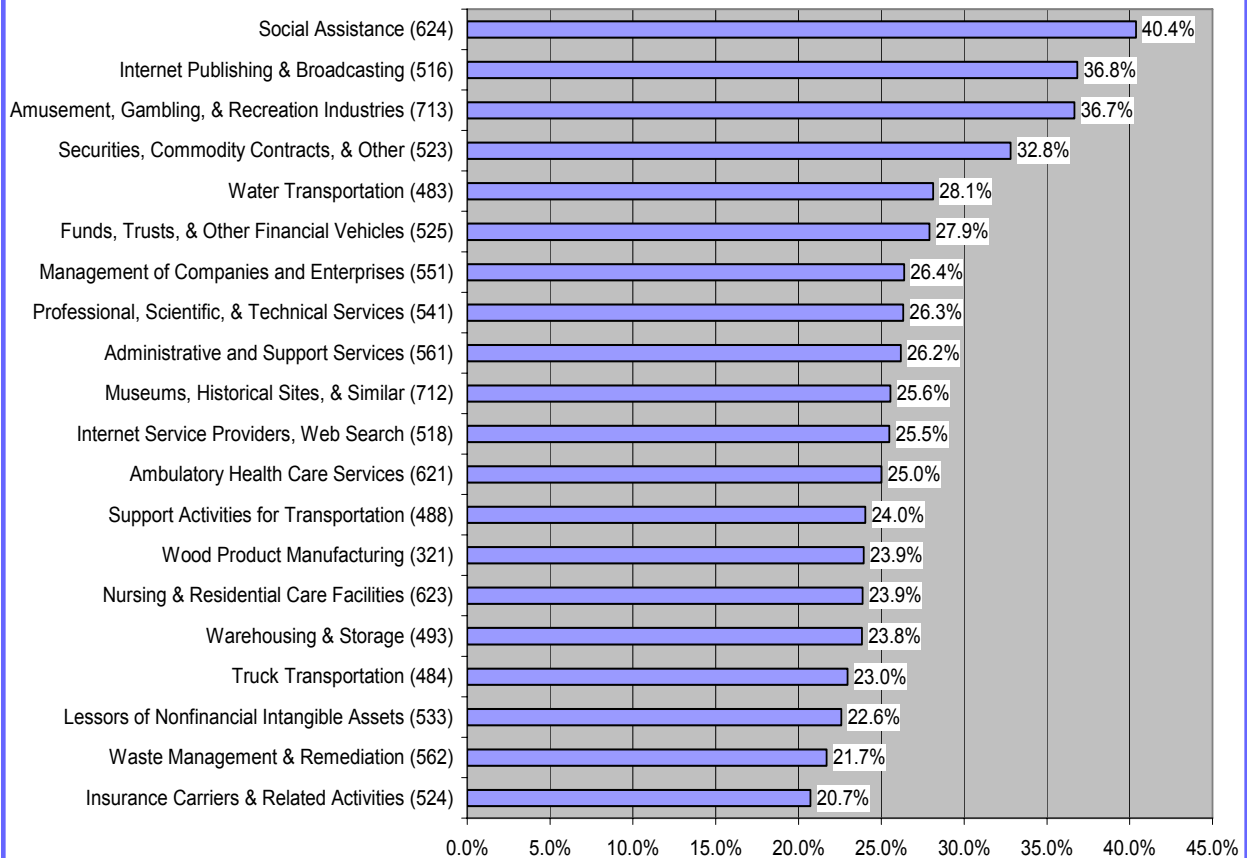
Source: Labor Market and Workforce Information Division, Iowa Workforce Development

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## Iowa's Fastest-Growing Industries

When looking at these growth rates, it is important to remember that they fall into one of two general categories. The first is industries with a small number of jobs. Any growth in this type of industry will appear significant. The other category is comprised of larger industries. Because of the large number of jobs, growth rates will tend to be less misleading because the gain of a few jobs will affect the growth rate much less than in a small industry. For example, three industries with high projected growth rates; internet publishing and broadcasting, water transportation and funds, trusts and other financial vehicles; fall into the small industry category. Social assistance, which is also one of the industries adding the most jobs, will grow at the fastest rate among the larger industries.

**Figure 2. Industries (3-digit) with the Fastest Growth Rates, 2006-2016**



Source: Labor Market and Workforce Information Division, Iowa Workforce Development

Note: Codes are based on the North American Industry Classification System (NAICS).

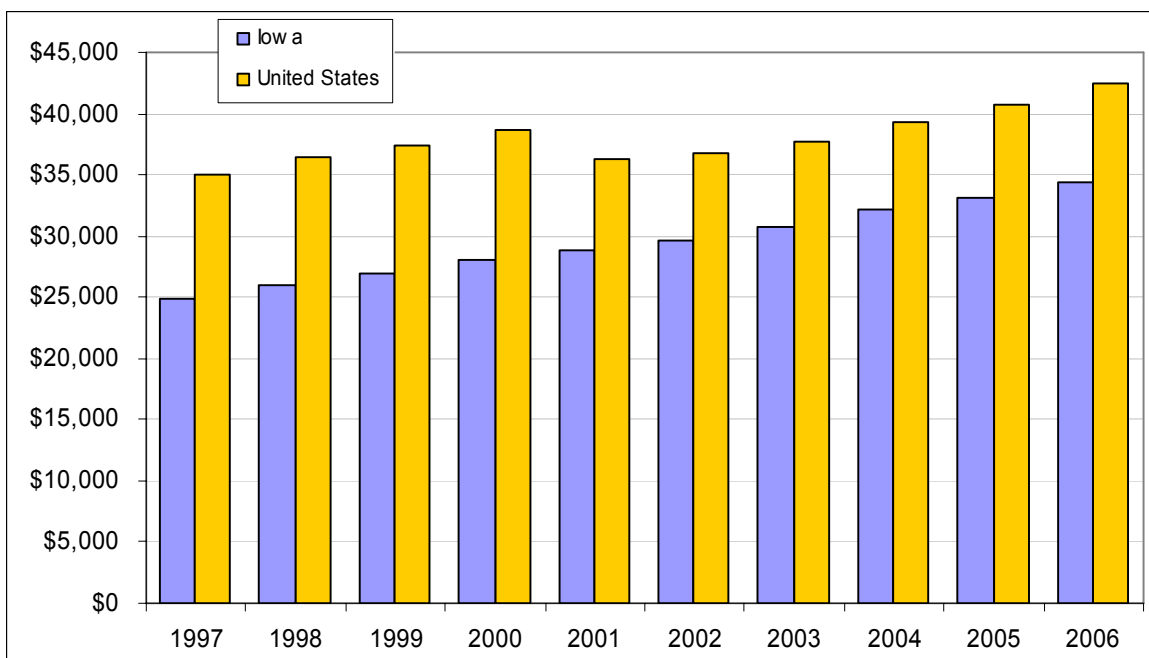
## Statewide Wage Trends, 2001-2006

Average annual wages—what story do they tell? Can an average wage in a particular industry tell us anything about whether a sector is on the rise or declining? If you look at a particular number, you might be misled as to the actual meaning behind it. For instance, the average annual wage for the health services sector for 2006 was \$33,892. This statistic was derived from Iowa's Quarterly Census of Employment and Wages (QCEW) program, based on wage information submitted by employers covered by Unemployment Insurance (UI). The average includes all workers in the industry from nurses' aides, maintenance and laundry personnel (who quite possibly make near minimum wage) to physicians and research scientists that have several years of advanced schooling and experience. Therefore, one particular number does not necessarily represent the whole sector's wage accurately. However, if you compare this number to other industries, to other states or the nation, or look at the wage over several years, trends appear. It is valid to compare these wages over time and geography to determine whether a particular sector of the economy is growing or not.

### National Comparison

The following table displays the average annual wage for Iowa and the United States since 1997. Although the average wage for Iowa is less than the national average, Iowa has outpaced the U.S. in percentage gain in all years except 2005 and 2006.

**Figure 1. Comparison of Iowa's and United States' Average Annual Wage**



Source: Quarterly Census of Employment and Wages, Bureau of Labor Statistics, U.S. Department of Labor

Iowa's average annual wage in 2006 was \$34,320, ranking the state 41<sup>st</sup> in the nation. This statistic tells us that our wages do not compare favorably to the nation in terms of industry pay; especially when Iowa is ranked 31<sup>st</sup> in terms of total covered employment. In 1997, Iowa's average wage was 41.1 percent less than the United States. However, in the past decade, Iowa has started to make gains in closing the gap between the state and national average weekly wage. In 2006, Iowa's average weekly wage was only 23.4 percent lower than the national equivalent.

*(Continued on page 45)*

## Midwest Regional Comparison

The following table provides data about Iowa's surrounding states, and how they compare by average wage from 2001 to 2006. In the Midwest region, Iowa ranks near the bottom in terms of wages. However, only the state of Nebraska increased their percentage of annual earnings more than Iowa over the five-year period. In 2006, only Illinois reported a greater average annual wage than the national figure of \$42,535. Illinois is ranked 6<sup>th</sup> in the nation in terms of employment, and has more than double the workers than any other Midwest state in this comparison.

**Figure 2. Comparison of Iowa and Surrounding States 2001-2006**

	2001		2006		Percent Change 2001-2006
	Average Annual Wage	Percent of National Average	Average Annual Wage	Percent of National Average	
<b>United States</b>	<b>\$36,219</b>	<b>100.0</b>	<b>\$42,535</b>	<b>100.0</b>	<b>17.4</b>
Illinois	39,083	107.9	45,650	107.3	16.8
<b>Iowa</b>	<b>28,837</b>	<b>79.6</b>	<b>34,320</b>	<b>80.7</b>	<b>19.0</b>
Kansas	30,153	83.3	35,696	83.9	18.4
Minnesota	36,587	101.0	42,185	99.2	15.3
Missouri	32,421	89.5	37,143	87.3	14.6
Nebraska	28,377	78.3	33,814	79.5	19.2
South Dakota	25,601	70.7	30,291	71.2	18.3

Source: Quarterly Census of Employment and Wages, Bureau of Labor Statistics, U. S. Department of Labor

## Comparisons of IWD Regions within Iowa

Iowa has fifteen Iowa Workforce Development regions. In 2006, two of these regions--Cedar Rapids (Region 10) and Des Moines (Region 11) reported average annual wages higher than the statewide average of \$34,320. All regions showed double-digit growth in wages during the six year period; five regions reported gains of over 20.0 percent.

(Continued on page 46)

**Figure 3. Comparison of Iowa Wages by IWD Regions 2001-2006**

	2001		2006		
	Average Annual Wage	Percent of Iowa Average	Average Annual Wage	Percent of Iowa Average	Percent Change 2001-2006
<b>IOWA</b>	<b>\$28,837</b>	<b>100.0%</b>	<b>\$34,320</b>	<b>100.0%</b>	<b>19.01%</b>
<b>Region</b>					
1 - Dubuque	25,831	89.6	30,478	88.8	18.0
2 - Mason City	24,933	86.5	30,190	88.0	21.1
3/4- Spencer/Sheldon	22,823	79.1	27,438	80.0	20.2
5 - Fort Dodge	25,076	87.0	29,242	85.2	16.6
6 - Marshalltown	26,348	91.4	31,344	91.3	19.0
7 - Waterloo	28,087	97.4	33,521	97.7	19.3
8 - Carroll	22,709	78.8	27,527	80.2	21.2
9 - Davenport	29,086	100.9	33,705	98.2	15.9
10- Cedar Rapids	32,179	111.6	37,302	108.7	15.9
11- Des Moines	33,061	114.7	40,102	116.9	21.3
12- Sioux City	26,246	91.0	30,706	89.5	17.0
13- Council Bluffs	24,485	84.9	30,823	89.8	25.9
14- Creston	22,187	76.9	26,482	77.2	19.4
15- Ottumwa	24,912	86.4	29,271	85.3	17.5
16- Burlington	27,743	96.2	31,465	91.7	13.4

Source: Quarterly Census of Employment and Wages, Bureau of Labor Statistics, U. S. Department of Labor

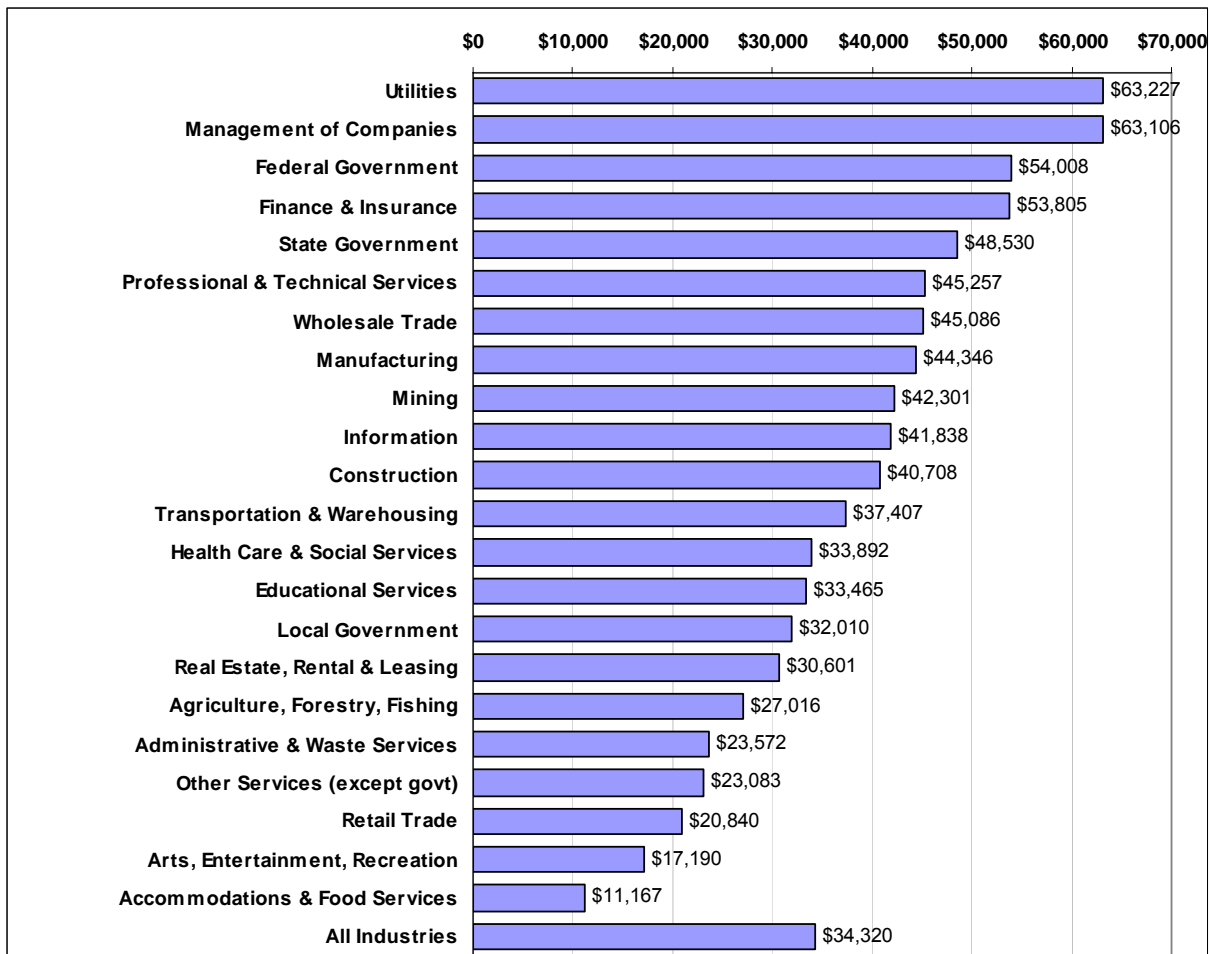
The Council Bluffs region (Region 13) reported the greatest percentage gain of 25.9 percent, yet this region's wage is 89.8 percent of the statewide average. The Des Moines region ranks first in average annual wage, and also reported a gain in its wage of 21.3 percent. Six industries in Region 11 reported average annual wages of more than \$50,000--utilities (\$71,653), finance and insurance (\$62,717), management of companies (\$62,115), wholesale trade (\$55,823), professional and technical services (\$53,235) and information (\$52,678).

**Average Annual Wage by Industry in Iowa – 2006**

The utilities industry reported the highest average annual wage for Iowa during 2006, with \$63,227, followed by the management of companies sector with \$63,106. There are twelve industry sectors that reported a wage higher than the statewide average of \$34,320. Iowa's accommodations and food services sector followed the national trend with the lowest wage for all industries, \$11,167. This is due, in part, to the majority of workers being part-time. This trend holds true for the arts and entertainment and retail trade sectors as well.

(Continued on page 47)

**Figure 4. Average Annual Wage by Sector- 2006**



Source: Quarterly Census of Employment and Wages, Bureau of Labor Statistics, U. S. Department of Labor

In conclusion, Iowa's wages do not compare favorably to the nation or the Midwest; however, the state is increasing its wage at a faster rate than the nation as a whole. Wages continue to rise, even though employment in some sectors is declining, due partially to cost-of-living increases and, somewhat, to migration of work internationally and to other states. Iowa is slowly but surely closing the gap between its wages and the nation's, but the subject of wage equity continues to be a topic of concern in the rank and file of the state's workforce.



## Iowa Wages by Occupation

Occupational wages are used by many individuals to make business and career-related decisions. Students view the wages to discover if their education or training will lead to a lucrative career. Job seekers compare wages to find a good fit with an employer. Employers and economic developers examine the wages to determine the cost of moving or expanding existing businesses.

The following table compares median hourly occupational wages for the state of Iowa and its neighboring states:

**Median Wages by Occupational Group, Iowa and Regional States (2007)**

Major Occupational Group	IA	NE	SD	MN	WI	IL	MO
Management	\$34.64	\$34.95	\$32.66	\$43.12	\$38.00	\$40.74	\$38.91
Business and financial operations	\$22.78	\$23.80	\$22.02	\$25.56	\$24.36	\$27.36	\$24.33
Computer and mathematical	\$28.71	\$29.08	\$22.78	\$33.36	\$28.45	\$34.07	\$29.88
Architecture and engineering	\$26.69	\$25.57	\$23.87	\$29.13	\$26.97	\$31.23	\$29.70
Life, physical and social science	\$22.66	\$22.28	\$20.15	\$27.80	\$23.13	\$26.92	\$23.27
Community and social services	\$15.55	\$15.02	\$15.67	\$17.38	\$18.97	\$18.65	\$16.15
Legal	\$25.12	\$24.41	\$22.35	\$34.53	\$26.58	\$39.54	\$28.21
Education, training and library	\$16.67	\$18.10	\$15.71	\$19.85	\$19.71	\$22.39	\$17.81
Art, design, entertainment, sports, media	\$13.85	\$15.19	\$13.47	\$20.30	\$17.43	\$19.04	\$17.43
Healthcare practitioners and technical	\$21.98	\$22.72	\$22.09	\$28.01	\$26.09	\$25.64	\$22.43
Healthcare support	\$11.12	\$11.18	\$10.75	\$12.37	\$12.50	\$11.39	\$10.25
Protective service	\$15.72	\$15.52	\$13.99	\$16.68	\$17.03	\$18.26	\$13.95
Food preparation and serving related	\$7.60	\$7.50	\$7.63	\$8.85	\$8.14	\$8.06	\$7.61
Building, grounds cleaning, maintenance	\$9.81	\$9.46	\$9.30	\$11.27	\$10.42	\$10.70	\$9.64
Personal care and service	\$8.73	\$8.72	\$9.23	\$10.86	\$9.73	\$9.65	\$8.77
Sales and related	\$10.28	\$10.16	\$10.20	\$11.98	\$11.11	\$11.88	\$10.52
Office and administrative support	\$12.69	\$12.46	\$11.49	\$15.01	\$13.75	\$14.27	\$13.11
Farming, fishing and forestry	\$12.53	\$11.39	\$11.08	\$12.36	\$11.92	\$11.11	\$9.89
Construction and extraction	\$17.00	\$15.31	\$13.76	\$22.64	\$20.58	\$26.88	\$19.88
Installation, maintenance and repair	\$16.71	\$16.84	\$15.79	\$19.62	\$18.61	\$19.74	\$17.35
Production	\$13.62	\$12.99	\$12.22	\$14.89	\$14.67	\$13.37	\$13.06
Transportation and material moving	\$13.08	\$13.84	\$11.47	\$13.87	\$13.21	\$13.17	\$12.65

Source: Bureau of Labor Statistics, U. S. Department of Labor

Iowa's wages ranked the highest in **farming, fishing and forestry occupations**. Of Iowa's surrounding states, Minnesota placed the highest in thirteen occupational groups, while South Dakota placed lowest in seventeen groups.

### Resources:

Bureau of Labor Statistics, U.S. Department of Labor. May 2006 National and State Occupational Employment and Wage Estimates. Retrieved from: [http://stats.bls.gov/oes/oes\\_dl.htm](http://stats.bls.gov/oes/oes_dl.htm). March 17 2006.

## Iowa Workforce Needs Assessment Survey

The Workforce Needs Assessment is a new workforce survey being conducted by Iowa Workforce Development's Research & Strategic Initiatives Bureau with support from the Iowa Association of Business and Industry. A pilot survey was conducted from September 2007 through January 2008. Employers were asked to provide information regarding both their current level of employment and their current and expected job vacancies. Information on workforce expansion and upcoming retirements was also collected. The goal of the survey is to obtain quality information regarding the demand for workers and the skills required of workers in the State of Iowa. This information can be used by economic developers, government leaders, educators, and state agencies to guide their decision making on issues related to workforce development, vocational training, and employee recruitment programs.

### 2007-2008 State of Iowa Results

Beginning in September 2007, 39,958 employers were contacted and asked to complete the Workforce Needs Assessment Survey. Two attempts were made to contact each employer. By the end of the survey period (January 17, 2008), the survey had received 8,580 responses, yielding a 21.5 percent response rate. Figure 1 details the survey respondents by industry.

Figure 1 also presents estimates of the number of current job vacancies by industry across the State of Iowa. Vacancies are classified as current if they are or will become available within 12 months of the survey date. These numbers establish a baseline for future estimates of job vacancies in Iowa.

**Figure 1. Survey Respondents & Current Vacancy Estimates by Industry**

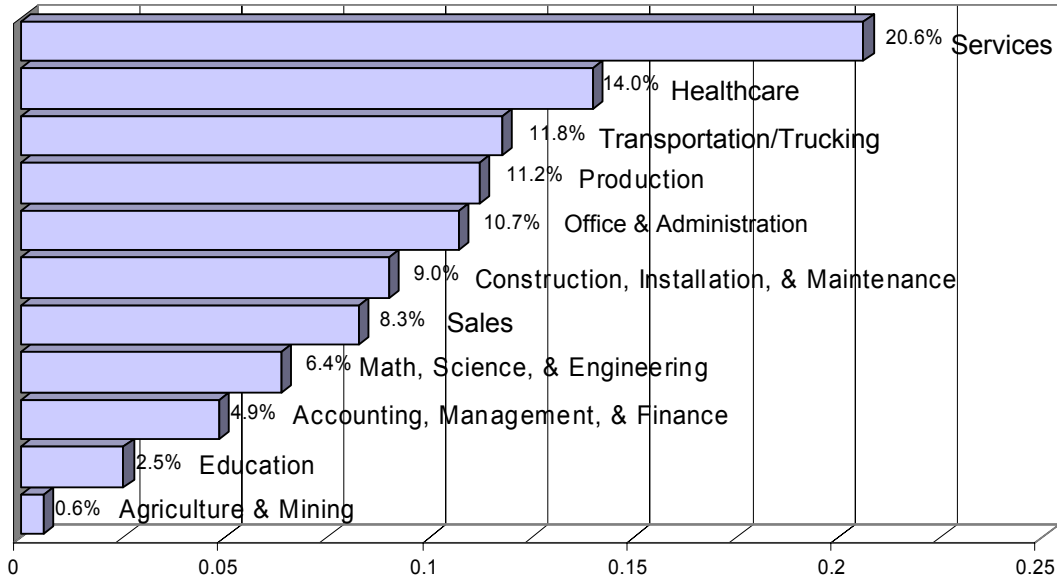
Industry	% of Respondents	Estimated Current Vacancies
Healthcare	11.6	8,593
Personal Services	12.1	7,187
Wholesale & Retail Trade	20.7	6,745
Manufacturing	8.4	5,363
Administrative Services	3.0	4,215
Transportation & Warehousing	3.6	3,267
Finance, Insurance, & Real Estate	7.6	2,935
Construction	9.1	2,354
Professional & Technical Services	6.5	2,119
Educational Services, All	4.6	1,519
Information	2.1	1,128
Public Administration	5.7	983
Management	0.8	823
Agriculture & Mining	1.6	735
Arts, Entertainment, & Recreation	1.5	400
Utilities	0.9	152
<b>Total</b>	<b>100.0%</b>	<b>48,521</b>

Source: Labor Market and Workforce Information Division, Iowa Workforce Development

Job vacancies can also be categorized by occupation utilizing the Office of Management and Budget's Standard Occupational Classification (SOC) system. Figure 2 presents the reported current job vacancies by occupational category utilizing a slightly aggregated version of the SOC system.

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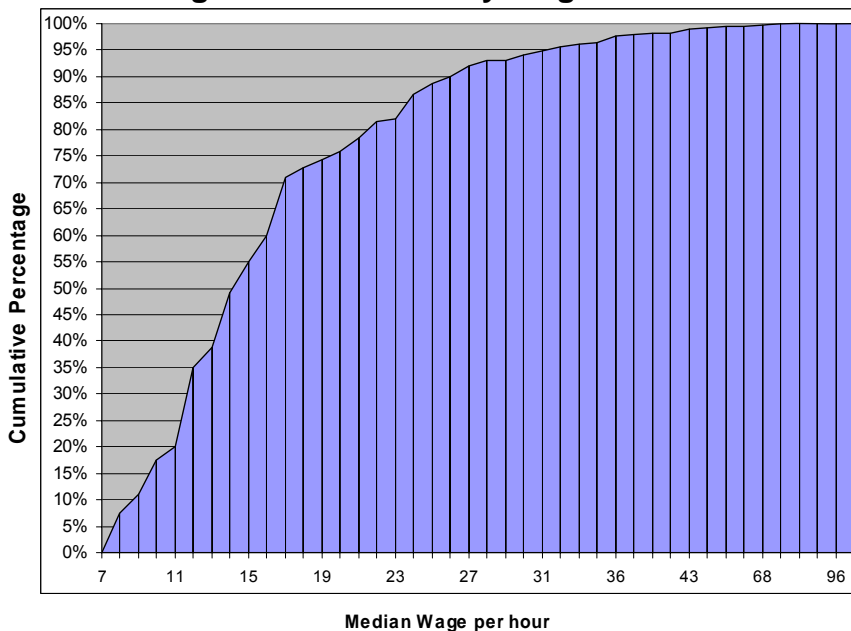
**Figure 2. Job Vacancies by Occupational Category**



Source: Labor Market and Workforce Information Division, Iowa Workforce Development

Data from the Iowa Workforce Needs Assessment was compared with the wage data from Iowa Workforce Development's 2007 Wage Survey. Wages for jobs in the 2007 Wage Survey were matched with similar current job vacancies reported in the Needs Assessment Survey in order to estimate what these job vacancies will likely pay. Figure 3 presents the results by showing the cumulative distribution of median wages for reported current vacancies in Iowa. Each percentage is a *cumulative percentage*, which means it is the percentage of job vacancies paying the corresponding median wage or less. For example, 20 percent of job vacancies are estimated to have a median wage of \$11.00 per hour or less.

**Figure 3. Job Vacancy Wage Distribution**



Source: Labor Market and Workforce Information Division, Iowa Workforce Development

## Measuring the Success of Iowa Community College Programs

Fifteen Iowa community colleges have been offering postsecondary educational and training opportunities for students to assist them in becoming skilled professionals and/or to continue their higher education. Effective educational programming is always in demand as it helps support the state's economy and the prosperity of Iowans.

To assist community colleges in their efforts to determine the effectiveness of their educational programming, Iowa Workforce Development (IWD) provides wage data that can be used to measure the success of students in the workforce. IWD uses wage records from the state's unemployment insurance (UI) database to answer questions regarding the state's employment rate, earning levels, types of industry by gender, race, academic titles, and types of programs. All of the wage data as well as student records are used for research purposes only, and are published as aggregated data to protect individuals' identities. This research service was not always readily available in the past, but with the cooperation of the Iowa Department of Education and Iowa community colleges, IWD is now able to provide this information.

Some examples of the researches for the educational outcome are as follows:

In this study, IWD analyzed the student educational outcomes of fiscal year 2004 Northeast Iowa Community College (NICC) graduates. NICC provided their incoming student records for the fall term of fiscal years 2001-2003, and IWD provided wage records from the state's UI database for the period fiscal year 2004 to 2007.

Figure 1 and corresponding table show the aggregated statistics with the medians of students' gross earnings by all students, completers, and leavers. Completers were those who completed the college courses and earned the titles. Leavers were those left college without completing the courses. State earning averages are also shown for comparison.

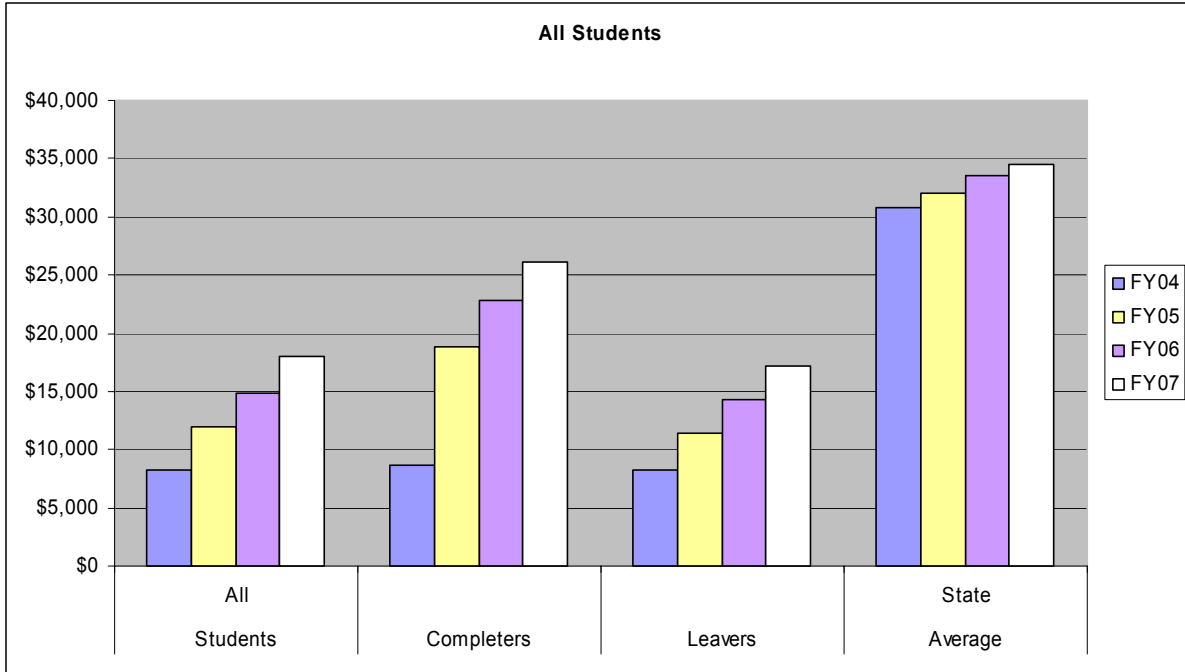
This analysis indicates that in fiscal years 2005-2007 the earnings of completers were significantly higher than the leavers. Compared with the state averages, the completers' earnings level was 59 percent in fiscal year 2005 and 76 percent in fiscal year 2007, whereas the leavers' earnings level were 35 percent and 50 percent respectively.

Figure 2 and related table show the aggregated statistics with the medians of students' gross earnings by all students, female completers, and male completers. Completers were those who completed the courses and earned the titles. State earnings are also shown for comparison.

This analysis indicates that male completers' earnings were higher than female completers in fiscal years 2005-2007. When compared with the state averages, male completers' earnings level was 72 percent in fiscal year 2005, and 86 percent in fiscal year 2007. Female completers' earnings level was 51 percent in fiscal year 2005, and 65 percent in fiscal year 2007.

*(Continued on page 52)*

**Figure 1: Gross Earnings by All Students, Completers and Leavers**

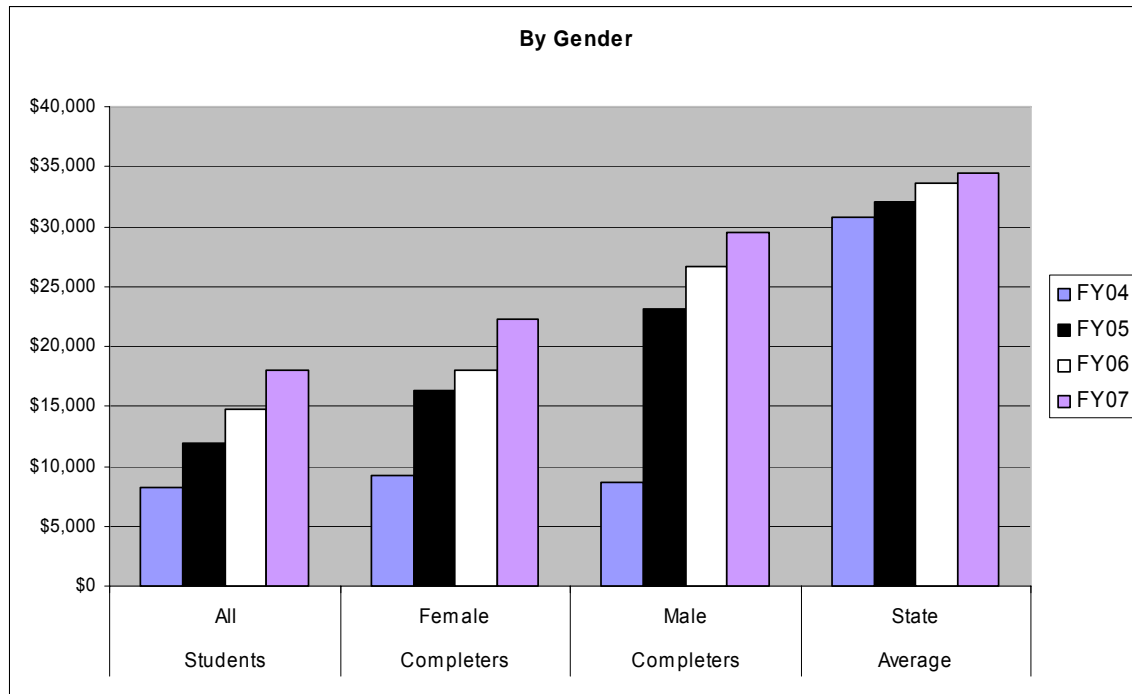


Source: Northeast Iowa Community College in cooperation with Labor Market and Workforce Information Division, Iowa Workforce Development

	FY04	FY05	FY06	FY07
All Students	\$8,270 (27%)	\$11,939 (37%)	\$14,779 (44%)	\$17,951 (52%)
Completers	\$8,720 (28%)	\$18,864 (59%)	\$22,780 (68%)	\$26,184 (76%)
Leavers	\$8,270 (27%)	\$11,355 (35%)	\$14,234 (42%)	\$17,216 (50%)
State Average	\$30,782	\$32,090	\$33,600	\$34,471

(Continued on page 53)

**Figure 2: Gross Earnings by All Students, Gender**



Source: Northeast Iowa Community College in cooperation with Labor Market and Workforce Information Division, Iowa Workforce Development

	FY04	FY05	FY06	FY07
All Students	\$8,270 (27%)	\$11,939 (37%)	\$14,779 (44%)	\$17,951 (52%)
Female Completers	\$9,176 (30%)	\$16,267 (51%)	\$18,077 (54%)	\$22,305 (65%)
Male Completers	\$8,601 (28%)	\$23,140 (72%)	\$26,694 (79%)	\$29,526 (86%)
State Average	\$30,782	\$32,090	\$33,600	\$34,471

Limitations:

1. Completers and leavers are identified by the student records from the community college, and the data from the National Student Clearinghouse.
2. The wage records are from the Unemployment Insurance (UI) database of the state of Iowa. Therefore, the database does not include federal government employees, postal workers, those in the military, self-employed, proprietors, church employees, railroad workers who were covered by the railroad unemployment insurance system, those employed in other states, or enrolled in four-year institutions with employment tied to student financial aid.
3. The wage records are unable to differentiate between full-time and part-time employment.
4. The wage records don't include the records from the other states.

## Announcements of Business Openings and Expansions

### Central Iowa

**Ames** - Ames-based PowerFilm Inc. is expanding after raising \$15.6 million through a London stock exchange. The money will be used to more than double the size of operations for the maker of flexible solar panels, ahead of a previously announced schedule. The expansion is driven by growing demand for portable power supplies for commercial and industrial use in oil and gas exploration, Global Positioning Systems and other operations. PowerFilm is also working with the U.S. Department of Defense to develop a line of solar panels to produce electricity for use by the military in remote locations. The company employs 58 people and expects employment to double once the expansion is complete. The land has been purchased, and the building has been ordered for the meter-wide expansion facility. Production is expected to begin in early to mid-summer.

**Ankeny** - Monsanto, an agricultural company, completed a \$4 million expansion of its laboratory and office facilities. The 22,000 square feet of new space is used to house state-of-the-art, robotic genetic analysis systems. The expansion also added \$2.7 million in new equipment. The Ankeny facility currently employs more than 70 people with jobs ranging from office staff to advanced research geneticists.

**Des Moines** - Mesaba Airlines, a subsidiary of Northwest Airlines, will open an \$11.8 million aircraft maintenance center at the Des Moines airport that will provide 30 jobs in management and technical occupations. Work on the maintenance facility began in late 2007, and construction is scheduled for completion in late 2008. The new center will house four aircraft bays, where workers will maintain 50-seat Bombardier CRJ200 jets and new 76-seat CRJ900 jets.

**Johnston** - Pioneer Hi-Bred International Inc., will add 400 workers as part of the company's largest research and development expansion. The expansion will increase research staff by about 20 percent as part of a plan to speed development of new genetically modified crops. Wilmington, Del.-based DuPont is Pioneer's parent company.

**Johnston** - Plant genetics research company, Pioneer International Inc., and its parent company, DuPont, plan to spend \$41.7 million to expand seed genetics research in Iowa. About \$34 million will be spent at the headquarters in Johnston, where a \$21 million, 60,000-square-foot research laboratory will be built and 52 jobs will be added.



**Mason City** - In November 2007, Martin-Brower Company, L.L.C. went into operation in Mason City. The 45,000-square-foot facility enables the company to deliver even greater services to McDonald's Midwest Region by servicing approximately 157 McDonald's restaurants throughout Iowa, South Dakota, and Wisconsin. The company, located in the Mason City Industrial Park, employs approximately 70 people.

**Mount Ayr** - Heartland Energy Solutions of Mount Ayr plans to hire 106 workers to make wind turbines and blades. The company, investing \$1.1 million in the business, expects its initial line of Freedom wind turbines to be available by July 2008.

**Newton** - TPI Composites Inc., announced plans to build a factory in Newton to make wind turbine blades and employ 500 workers over the next three years. The company, based in Warren, RI., is scheduled to begin construction on a 316,000 square-foot factory to make blades for General Electric Energy's 15-megawatt wind turbines. GE Energy stated that it has 6,500 of the turbines installed, and expects to have 10,000 operating around the world by the end of 2009. The facility, located on 33 acres, will make turbine blades that weigh up to 20,000 pounds and are up to 150 feet long.

(Continued on page 55)



**Newton** - Texas-based Trinity Structural Towers is planning to bring a \$21 million wind tower factory and 140 jobs to Newton, with 40 jobs paying \$17.88 per hour. It's the second wind energy company to locate in the city. Trinity Industries is a 50-year-old company active in the transportation energy, industrial and construction industries. The new Iowa location puts the company in the perfect position to serve a market with outstanding growth potential. Trinity plans to use about 300,000 square feet of a former Maytag production facility. Production in the space should begin by early 2009.

**Osceola** - Majona Corporation, of Waukee, is planning to build a 40,000 square-foot steel fabrication facility in Osceola. The company is family-owned and has operated with more than 30 years of experience in the structural steel fabrication business. It is due to open in late summer of 2009, and will employ between 30 and 40 people with an average wage of \$17.15 an hour.

**Pella** - Vermeer Manufacturing Company is pleased to announce two acquisitions. Vermeer and the Lely Group announced plans to jointly acquire German agricultural baler and bale-wrapper manufacturer Welger Maschinenfabrik GmGH. The combined strength and resources of the three organizations offer a potential gain in new product development and manufacturing efficiencies, serving customers in the grassland machinery and baling equipment industry. Welger is a leading manufacturer of high-quality baling and bale-wrapping equipment for the agricultural market, employing 375 individuals.

**Pella** - Vermeer has also purchased substantially all of the operating assets of Horizontal Rig & Equipment Inc. (HRE) of Conroe, Texas. HRE is a prominent manufacturer of mega-size horizontal directional drilling rigs. The company currently produces three models of jumbo drills, a 500,000, 750,000 and 1,000,000 pound (pull-back force) drill rig. The units will be manufactured in Pella under the Vermeer brand name, and will be available through the Vermeer exclusive distribution channel beginning in the spring of 2008. There are a few primary competitors currently producing mega-size drills in this category, both domestically and internationally. However, none has a global sales and service distribution network, which will distinguish Vermeer in this market.

**Urbandale** - Marsh and McLennan Companies plan a \$31 million expansion in Urbandale, which is scheduled for completion next year. The risk and insurance management company's expansion would bring 450 more workers to the office complex that will be home to 1,300 existing workers. The project now under construction calls for 215,000 square feet at Paragon Office Park at 123rd Street and Meredith Drive in Urbandale. The 50,000 square-foot expansion is being driven by business growth, new product lines and consolidation of some operations. Des Moines area operations support Marsh's U.S. consumer business, which includes developing risk management programs for employers, associations and franchise holders. Among the jobs to be created by 2011, 61 will pay an average of \$44.33 per hour, and 245 will pay an average of \$26.54 per hour. The original office is expected to be operational in 2008, with the expansion completed in 2009.

**West Des Moines** - Windsor Windows & Doors has begun production of wood windows and doors in a 100,000-square-foot addition at its West Des Moines plant. Windsor will add approximately 125 manufacturing jobs over the next two years. The company currently employs 400 workers at its divisional headquarters in West Des Moines and operates a plant in Monroe, N.C., with 300 workers.

**West Des Moines** - Insurance and pension provider Aviva USA plans to build its new national headquarters in West Des Moines, a project that will result in an investment of up to \$150 million and 400 jobs. Aviva USA, the U.S. unit of London-based Aviva PLC, Britain's largest insurer, said it has purchased 71 acres to consolidate operations from the company's three locations in downtown Des Moines to West Des Moines. Construction on the 360,000 square-foot facility will begin during 2008, and be completed in late 2009 or early 2010.

**West Des Moines** - Statistics & Control Inc., a start-up company in West Des Moines, will bring initial software and services to market in 2009 for advanced process and turbo machinery control applications. The company expects to create eleven jobs and retain four jobs paying an average wage of \$28.88 per hour.

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## Eastern Iowa

**Allison** - Hayes Business Group, located in Allison will create 19 additional jobs. The company is expanding its Allan Industrial Coatings business to include an autophoretic line and monorail shot blasting system.

**Amana** - German companies Alb-Gold Teigwaren GmbH and Bionade GmbH made a joint announcement October 9, 2007, revealing plans to build a 121,500 square-foot production facility, a restaurant and visitor center in Amana. The \$50 million project will create 99 new jobs in production and management, and approximately 25 new positions in the restaurant and center. The joint project will produce organic egg-based pastas and organically fermented Bionade beverage, a unique soft drink for the North American market. The environmentally green facility will be constructed by higher standards than the LEED Green Building Rating System, and be one of the first of its kind in the U.S.

**Cedar Falls** - Martin Brothers Distributing Company, one of the area's oldest businesses, has announced a \$6.2 million expansion in Cedar Falls. The addition to its frozen and refrigerated warehouse will create 18 new jobs with an average hourly wage of \$20.34.

**Cedar Falls** - Target Corporation plans to build a 400,000-square-foot food distribution center in Cedar Falls. The \$86 million project will be located near the Minneapolis-based retailer's existing 1.2 million-square-foot dry goods distribution center. The project is expected to pay an average hourly wage of \$23.62 for 37 of the jobs.

**Cedar Rapids** - Assembling massive wind turbines is developing into a new industry in Iowa. Initially, Clipper Windpower occupied 50,000 square feet of the Bowling Street plant. It is expanding to use the rest of the 320,000 square-foot facility. About 170 of the Cedar Rapids plant's employees are involved in the assembly of 2.5 megawatt Liberty wind turbine nacelles, while 50 are employed in the office. Clipper Windpower is also developing wind farms throughout the state that will generate enough energy to power 45,000 homes.

**Cedar Rapids** - Genencor, a division of Danisco A/S of Copenhagen, announced plans to build a 20,000-square-foot building on 80 acres in Cedar Rapids. The \$3.5 million laboratory and training center will employ 20 people. Construction is expected to be complete in the fall or early 2009. The facility, will primarily focus on final development of fuel ethanol and sweeteners made from corn.

**Cedar Rapids** - A Danish company disclosed plans to build a \$20 million animal feed ingredient plant on 14.5 acres in southwest Cedar Rapids. Hamlet Protein A/S of Horsens, Denmark, will employ 20 to 30 people with an average wage of \$19 to \$20 per hour. The company produces a vegetable protein made from soybeans. Hamlet Protein's all-natural feed ingredient provides the nutrition to allow piglets to gain weight and improve their overall health. Construction on the 30,000 square-foot facility is scheduled to begin April 2008 and will be operational by early 2009.

**Cedar Rapids** - Quaker Oats, a division of PepsiCo Inc., is planning a more than \$16 million expansion of its cereal and snack foods plant in Cedar Rapids. The expansion, beginning in May, will create 11 new jobs with an average wage of \$24.44 per hour. Quaker Oats operates the world's largest cereal mills in Cedar Rapids. With a 134-year history in Cedar Rapids, the plant is situated on 30 acres with 22 buildings and 1.9 million square feet under roof. It operates continuously with 35 packaging lines.

**Cedar Rapids** - Red Star Yeast and Bio Springer North America Corporation are planning a joint \$75 million expansion in Cedar Rapids. Red Star Yeast Company will expand to produce more yeast, and a new Bio Springer facility will make yeast extracts and similar products. Scheduled for completion in 2009-2010, the projects will create 35 jobs with an average wage of approximately \$23 per hour. Red Star is owned by Archer Daniels Midland and Lesaffre Yeast Corporation. Bio Springer is a subsidiary of the Lesaffre Group of France.

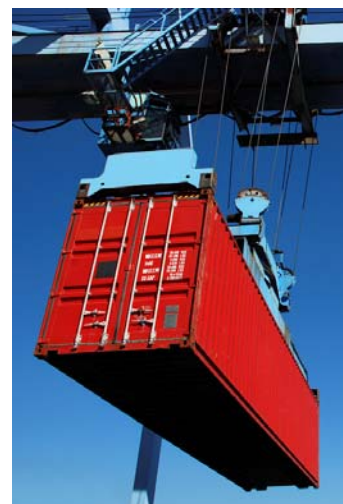
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**Cedar Rapids** - Rockwell Collins began construction of a new building in Cedar Rapids, and signed an agreement to lease the former K's Merchandise building for additional engineering space. The 106,500 square-foot former retail building comes with over 300 parking spaces on site plus a satellite parking lot of an additional 88 spaces across the street. It is located next to the Rockwell campus in Cedar Rapids about two miles from Interstate 380. The expansion will create approximately 500 jobs paying about \$37.40 per hour and include health and life insurance benefits. The company's expansion in Cedar Rapids will handle new government and commercial contracts for aviation electronic and communications equipment.

**Clinton** - Gov. Chet Culver was on hand for a groundbreaking ceremony for the new Ashford University facility being built at the Lyons Business & Technology Park in Clinton. The 18,360 square-foot facility will be a support center for Ashford's on-line enrollment programs. The new building will significantly improve access to higher education for an expanding and diverse group of students. "By leasing not one, but two buildings in the state-of-the-art Lyons Business and Technology Park, Ashford University will add an additional 235 jobs to the local economy," said the Governor. In the next few months, the college plans to hire more than 100 employees. The University hopes to choose a developer for the major expansion project by this summer. This expansion will involve renovating its existing Clinton campus, building a new campus at another Clinton location, or both. The college has 579 students on campus, plus an online enrollment of 13,000. There are 170 faculty members, including adjunct campus faculty.

**Clinton** - Beneficial Technologies was created earlier this year to treat a by-product of the new ADM Clinton Electrical Cogeneration Plant. Its new facility will be located next to the ADM plant in Clinton at a cost of \$2.29 million. The business will create 11 new jobs at \$16.88 per hour.

**Clinton** - Metabolix Inc., a leader in the use of bioscience to provide sustainable, clean solutions for plastics, fuels and chemicals, and Archer Daniels Midland (ADM), the global leader in BioEnergy and a premier agricultural processor, announced they will jointly produce Mirel™ Natural Plastics. Mirel™ is a family of high performance natural plastics that are biobased, sustainable and completely biodegradable. Both companies are commercializing Mirel™ through their joint venture, Telles. Telles will build its first commercial-scale plant in Clinton. The facility will make biodegradable plastic out of corn sugar from ADM's wet milling operations. The plant will employ about 100 people, and is expected to be completed in mid-2008. It will produce an estimated 110 million pounds of Mirel™ per year. The total investment in the project is estimated at more than \$900 million.



**Coralville** - The fourth largest private auto insurer in the country, GEICO, plans to add 100 more employees to its Coralville location, the manager said. Dina Pon, manager of GEICO insurance in Coralville, said the new jobs will be entry-level sales and service occupations. GEICO already employs 300 in Coralville. "We're growing our service operation," Pon said. "Essentially, we have a need for service professionals." The location hired 88 people last year, and was chosen by the company to grow because of better-than-average sales and service results.

**Coralville** - A Cedar Rapids company opened a customer call center with 244 employees in Coralville in October. Thomas L. Cardella & Associates opened the center to handle inbound calls, we chat, email and outbound calling for clients. The company created 230 entry-level jobs along with 14 managerial positions. The customer call center will bring \$6.1 million of annualized payroll to the city of Coralville.

**Davenport** - MANCOMM, a Davenport-based safety training provider, has announced plans to more than double its staff over the next year with the addition of 50 new sales representatives. Company officials said the rapid staff expansion comes amid rising sales of its workplace training programs and its safety publications. "We provide safety training and materials to help businesses nationwide comply with the Occupational Safety and Health Administration (OSHA) and the Department of Transportation, and our growth has been steady since we began doing business in 1996," said Ben Mangan, the company's president and founder.

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**Davenport** - A Davenport machinery wholesale company, CML USA Inc., created 15 years ago in Florida built a new \$2.5 million world headquarters on a new 9-acre site in the city's growing industrial park. The expansion will allow CML to double its work force from 15 jobs to 30-35 jobs over the next two years, while doubling its facility size at 3100 Research Parkway in the Eastern Iowa Industrial Center. Steady growth in sales of its pipe, tube and profile-bending machines is credited for the need to expand operations. Centennial Contractors of Moline completed the new 50,000-square-foot facility by August 2007.

**Dubuque** - John Deere Dubuque Works has added another production segment. It is an addition that might absorb potential short-term layoffs ahead, as the plant slows down from record activity in the midst of a national housing downturn. Jim Schrempf, general manager of Dubuque Works, said the plant recently launched production of crawler cabs. "Deere & Co.'s Construction and Forestry division opted to move production from an outside supplier to the Dubuque factory. We decided it would be best here," the manager said. "We'll have it right at the start of the crawler line, where they will do the assembly to the cab." The new production adds about 15 jobs, with room to grow.

**Dubuque** - Hormel, an Austin, MN, meatpacker said it's selling so many microwaveable meals that it plans to build a fourth plant to produce more. "We literally can't make them fast enough," company spokeswoman Julie Craven said. The new 327,000-square-foot plant, to be built in Dubuque, Iowa, will open in November 2009. The project will cost \$89 million, and the plant is expected to create 180 jobs. The microwaveable meals produced at the plant need no refrigeration while in storage, a characteristic known in the food business as "shelf-stable." Hormel makes about 20 such meals—lasagna to Swedish meatballs to tuna casserole—under the Hormel Compleats brand.



**Eddyville** - Midwest Chlor-Alkali, LLC, a chemical distributor, will build a \$68 million manufacturing plant adjacent to Cargill's Eddyville operation. Midwest will make sodium hydroxide, hydrochloric acid and bleach on 10 acres at Cargill's Eddyville complex, known as the Iowa Bio-processing Center. They will supply Cargill corn-milling plants and other customers. Cargill spokesman Bill Brady stated that besides the workers needed to build the site, there would be a range of jobs at the plant. "We think the number will be 15 to 20 permanent employees," he said, adding that the jobs would average "a shade under \$30 [an hour]." Midwest is a subsidiary of Harris and Ford of Indianapolis, a chemical distributor with sales of more than \$100 million per year. Its president, Tim Harris, will also serve as president of Midwest. "With this project, our company moves beyond distribution into manufacturing," Harris said. "It's a major expansion in scope for us, and we couldn't ask for a more respected partner than Cargill to help us take this step."

**Fairfield** - FoodChain Global Advisors will make a \$137,000 capital investment for the creation of 57 jobs with an average hourly wage of \$23.98. Global ID Group is a family of companies dedicated to the production of safe, healthy and ethical food. Product manufacturers will be submitting lists of products and ingredients to FoodChain through a custom-designed and proprietary online database application. The submissions will be evaluated for their compliance with the Project's non-genetically modified organisms (GMOs) standards. The company believes that it is likely to evaluate in excess of 35,000 products and over 100,000 ingredients in the next three years. Each product will have an annual review to ensure its non-GMO status. They believe this contract will add over \$20 million in annual revenue within two years. In addition, the contract will drive other revenue areas (testing, consulting, and certification services) resulting in accelerated global growth.

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**Fort Madison** - Iowa is growing its reputation as being the national leader in renewable energy. The state led the way in biofuels, and is now leading the way with respect to wind energy. Iowa's fast-growing renewable energy industry prompted a German manufacturer to choose Iowa for its first U.S. plant which will make parts for wind turbines. Siemens Power Generation opened its new wind turbine blade factory in Fort Madison on September 21, 2007. The factory is expected to produce approximately 600 wind turbine blades per year, which will be shipped to wind farms in the U.S. The company started with about 200 employees, and expected to grow to 250 workers by the end of the year. Siemens Wind Power now employs more than 3,200 employees worldwide, including 400 people in the U.S.

**Iowa City** - A plastic bottle manufacturer in Iowa City is planning an estimated \$5 million expansion. Alpla of Iowa Inc. will expand into an 82,200 square-foot addition to the old General Mills building. The Georgia-based manufacturer will maintain 180 permanent full time positions, and add 25 additional jobs at an average of \$14 per hour or greater, plus benefits.

**Janesville** - W.S. Darley Company plans to purchase and expand Ohler Machinery Company, a manufacturer of pumps in Janesville. The company will create 14 jobs and retain 10 paying an average wage of \$17.02 per hour. Approximately 5,000 to 10,000 square feet and new machinery and equipment will be added to the facility as part of the \$2.6 million expansion. Headquartered in Melrose Park, Illinois, W.S. Darley manufactures fire-fighting pumps, compressed air foam systems and other fire-fighting apparatus in Wisconsin and Oregon.

**Keokuk** - Keokuk Ethanol Company has purchased 17 acres next to Archer Daniels Midland Milling to build a \$7 million facility. The project is expected to create 20 jobs paying an average wage of \$21 per hour. The company will recycle a byproduct from ADM's wheat starch plant and convert it to make ethanol. The ethanol will be sold back to ADM's ethanol division for distribution through its system. By using wheat slurry, a waste product, Keokuk Ethanol will avoid using food grains such as corn or wheat to manufacture the fuel. The plant expects to make nearly 10 million gallons of ethanol a year.

**Keokuk** - Hendricks Industries, based in Denmark, said it will build a \$32 million plant that makes wind energy equipment, and spend \$2.5 million upgrading the Southeast Iowa Port Terminal, which can accommodate any kind of incoming and outgoing barge freight. In addition to shipping towers from Hendricks and blades from Siemens, the port will be a major landing point for industry-moving raw materials on the Mississippi River, including salt, steel and coal. Together, the projects will employ about 380 workers. Factory workers will earn an average of \$48,800 annually to build turbine towers that stand 260 feet tall and weigh about 80 tons. Port workers would earn about \$39,728 annually. Hendricks Industries is proceeding with plans for a wind turbine tower plant in Keokuk despite the death of the company's leader, Ken Hendricks. Company spokesman Mike Slavish said that the company is committed to carrying the vision forward, and that Hendricks' death will not affect the timeline. They are expected to open in March 2009 with 400 employees. In 2008, Hendricks Holding Co, Inc., purchased Denmark-based-wind turbine tower maker Roug A/S, which has produced wind turbine towers for 25 years and owns plants in Denmark and Germany. When the plant is completed in Keokuk, Hendricks Industries will be the largest wind turbine tower manufacturer in the world. The blade manufacturer, Siemens has a plant eight miles from Keokuk. Siemens is also Hendricks Industries' largest customer.

**Marion** - Involta, LLC of Cedar Rapids announced plans to build a \$6.8 million high security co-location data center. The facility will house mission critical computer systems and related components for area businesses, government and educational institutions. Construction of the 20,000-square-foot building was scheduled to begin in October 2007 with the data center operational by August 2008.

**Mt. Pleasant** - A company that improves the barrier between plastic containers and their contents has located in Mount Pleasant. Houston-based Fluoro-Seal, formed in 1983, is a world leader in the surface modification of plastic. The company currently employs 27 workers.

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**Mount Pleasant** - Metrogroup Marketing Services Inc., will expand its southeast Iowa operations by 80 jobs. The company's fulfillment and marketing services will be moved from Seward, NE, to Iowa's facility at Mount Pleasant to enhance the company's value delivery process to its customers. The Iowa facility is strategically located geographically and is equipped to facilitate large scale, accurately targeted in-home delivery of mail throughout the country for its clients.

**Muscatine** - HNI Corp. said it will close its manufacturing plant in Richmond, VA., and consolidate the production into facilities in two other locations, Muscatine and Cedartown, GA. Production at the Richmond facility will be phased out over the next three to six months with the closing planned for the first half of 2008. Hon has operated the Richmond facility since the 1970's. The shift in production will create between 25 and 30 new jobs in Muscatine.

**Ottumwa** - Synovate, a Chicago-based market research firm, opened a call center in Ottumwa in May 2007. The business will employ 300 workers who will be performing customer-satisfaction research for U.S. automakers and other companies. While there will be only six or seven full-time positions, it is estimated that there will be 20 supervisory positions ranging from 30-40 hours per week, with the majority of the employees working 20-30 hours each week. Employees will also have an opportunity to buy into health care plans and other benefits.

**Peosta** - Bodine Electric Co. is pushing a \$3 million expansion plan that would nearly triple the size of its Peosta manufacturing plant and add scores of jobs to the Dubuque area. Bodine would relocate the majority of its production from the Chicago headquarters to Peosta. Construction was to begin in November 2007, with hiring starting in February 2008. The expansion plan will add 105 jobs paying an average of \$15 per hour to the Peosta factory, which now boasts a workforce of 160.

**Shell Rock** - Unverferth Manufacturing Co. plans a \$7 million expansion that is expected to create 60 jobs paying an average starting wage of \$13.61 per hour. The company plans to construct a 55,250 square-foot plant in Shell Rock and equip it with advanced manufacturing equipment to meet increased customer demand. The company manufactures farm machinery and equipment.

**Traer** - A Cedar Falls manufacturer is bringing more jobs to this eastern Iowa town. Wayne Industrial Holdings announced it will open a 100,000-square-foot facility in Traer to build truck mounted street sweepers. Company officials said they plan to open the facility this spring and employ between 20 and 30 people within a year. The pay scale for the town's new factory will be \$15 to \$20 an hour.

**West Branch** - Acciona Windpower, a division of Pamplona, Spain-based Acciona Energy, turned out its first American-made wind turbine in West Branch in December 2007. A result of a \$23.2 million investment, the facility now employs 60 workers, a number expected to gradually increase to 110. It is scheduled to turn out 200 turbines in 2008 and 400 units at full capacity. By harvesting abundant resources from wind and agriculture, Iowa has become a national leader in alternative energy, leading the U.S. in ethanol and biodiesel fuel capacity and leading the Midwest in wind electrical generation. Nationally, Iowa ranks only behind Texas and California in wind energy output. Manufacturers of wind power components such as Clipper Windpower Incorporated and Siemens Power Generation are investing in new production facilities in Iowa because the state is strategically located in the center of the U.S. wind turbine market. About half of the state of Iowa has significant areas of the Class 3, 4, and 5 winds needed for commercial scale wind generation.



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## Western Iowa

**Atlantic** - A new store opened in Atlantic on August 14, 2007, with a familiar name—Sears. The store sells home appliances, lawn and garden equipment, Craftsman tools and exercise equipment. Kyle Lensch, the owner of the new authorized-dealer retail store, stated that he thought Sears was something the community needed, and he wanted to bring people to Atlantic to shop. The store has made deliveries to cities as far away as Creston and Stanton.

**Atlantic** - The owners of Duke Aerial Equipment, Inc. and Precision Components of Iowa, LLC are planning a major expansion project. A 20,000 square-foot addition is planned for the Duke Aerial building, creating a facility with 42,000 total square feet. Precision Components has purchased the Cross Dillon Tire building located at the Valley Business Park. By December, they plan to hire up to 25 additional mechanics, assemblers, painters and sanders.

**Council Bluffs** - The city is going gah-gah for Google. The Internet giant's formal announcement of its decision to invest \$600 million in a data center and create 200 jobs in Council Bluffs came at the Mid-America Center. While the initial development will take place at the 54-acre site on the South Omaha Bridge Road, Google has options on additional parcels of land. This announcement could be just the start of the company's local presence. The data center, or server farm, is a collection of computers that respond to requests for information from the Internet. Full-time Google employees will earn an average salary and benefits equal to about \$50,000 for positions that include facilities support, systems administration and data center technicians. Additional support services like security, catering and grounds keeping will be contracted. Limited testing of the facility should be underway in the second half of 2008, and the center should be fully operational sometime in 2009.

**Council Bluffs** - More than 50 jobs will be created when a new ethanol plant south of Council Bluffs is built, local officials said. Officials of Southwest Iowa Renewable Energy, the company that's building the plant, stated that the plant will have the capacity to grind 39 million bushels of corn a year. The company will make an investment of more than \$10 million, and create 50 or more jobs that pay an average \$25.40 an hour.

**Hull** - Masters Gallery Foods, a leader in the private label, retail and food service cheese business, and Green Meadows Dairy LLC, which is currently building a cheese production facility in northwest Iowa, announced they have entered into a multi-year marketing agreement. Under the agreement, Wisconsin-based Masters Gallery Foods will purchase all of the cheese produced by the new Iowa plant. The Green Meadows plant in Hull, Iowa, is in the process of building a state-of-the-art cheese and whey facility that will employ up to 50 people and process more than 700 million pounds of northwest Iowa milk a year. It is scheduled to open in late 2008. The facility will produce a number of American-style cheeses in both 40-pound block and 640-pound block styles and will produce both stirred curd and milled curd.

**Rembrandt** - Rembrandt Enterprises Inc., is looking to expand again. General manager Dave Rettig presented plans for the addition of an egg pasteurization and oil processing plant, a soybean meal excursion plant and an egg drying facility to the Buena Vista County Board of Supervisors. The \$20 million investment would initially create 30-35 higher paying jobs, and later create an additional 20-30 jobs. Rembrandt is a livestock-oriented company, with the expansion, it hopes to branch into the food service business. "Our next step is to sell eggs to food companies, not just egg companies," Rettig said. The pasteurization plant would allow Rembrandt to pasteurize and package eggs into different formats like pails and totes, as opposed to tanker trucks, which is what the plant currently uses.

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**Ruthven** - A growing manufacturing company in the community of Ruthven is expanding. Farmers Corrugated Solutions, a subsidiary of the Farmers Co-op Elevator Co., purchased the existing business from Arkansas and moved its production of pallets to Ruthven. Over the next three years, the company will create 116 new manufacturing and shipping jobs, paying an average wage of \$12.47 per hour. According to John Steinkamp, the general manager of Farmers Co-op, the pallets are environmentally and ergonomically friendly. Currently the company is beginning construction on its new 18,000-square-foot manufacturing facility, and adding to its 17 employee operation.

**Sioux Center** - Siouxland Energy & Livestock Cooperative (SELC) recently completed a \$40 million expansion at its ethanol refinery near Sioux Center creating, 11 new jobs with an average hourly wage of \$16.70. The plant now processes more than 20 million bushels of corn into nearly 60 million gallons of ethanol, 400,000 tons of wet distillers grains, and 140,000 tons of condensed-distillers solubles (syrup) annually. SELC is the oldest operating farmer owned ethanol plant in Iowa.

**Sioux City** - John Morrell & Co. increased its pork production to fulfill a new trade deal with China. During September 2007, the company added 250 workers to restart half of the plants' second shift. The move reversed cuts that earlier last year idled about 485 workers, about a third of the plant's workforce. Morrell's parent company, Smithfield Foods of Virginia, announced a deal in August to sell 60 million pounds of pork to a Chinese trading firm which prompted the need for more workers. John Morrell & Co. continues to recruit workers for their plant.



**Sioux City** - In October 2007, Northwest Airlines opened a new reservations call center in Sioux City. The center handles incoming domestic reservations calls and employs up to approximately 200 reservations-sales agents and management personnel. They hope to reach their employment goal of 330 by the end of May 2008.

"The announcement expands on Northwest's long-standing relationship with the people of Iowa," said Perry Cantarutti, Northwest vice president of reservations sales and services. Today, Northwest and its Northwest Airlink partners serve seven communities throughout Iowa, including Cedar Rapids, Des Moines, Fort Dodge, Mason City, the Quad Cities, Sioux City and Waterloo.

## RESOURCES:

The company-specific information contained in this section was taken from articles that have appeared in newspapers and periodicals across the state. Iowa Workforce Development has made every effort to verify the accuracy of these events.

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