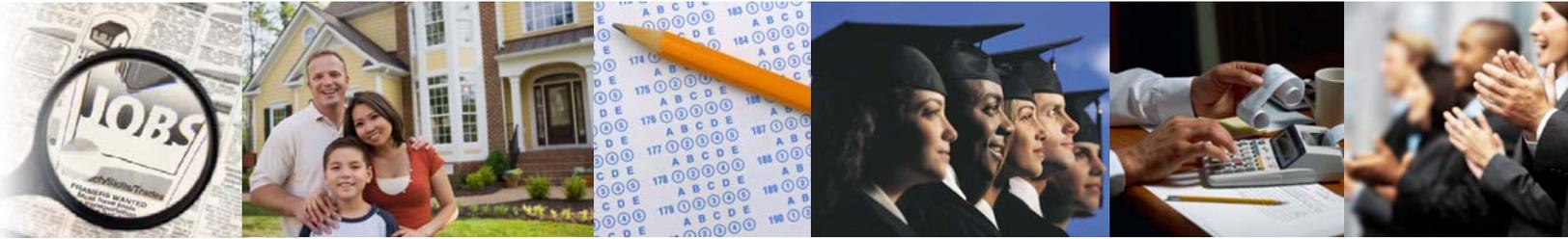


# IOWA

## *Workforce and Economic Development Status Report*



### Strategic Objectives

- 200,000 New Jobs
- 25% Increase in Family Incomes
- Best Schools in the Nation
- 15% Reduction in Government Costs

Released May 2013



# IOWA

## *Workforce and Economic Development Status Report*

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## INTRODUCTION

In January of 2011, Governor Terry Branstad released a set of goals aimed at improving the socio-economic environment of Iowans. These goals include: creating 200,000 new jobs, increasing family incomes by 25 percent, providing Iowa's youth with the best education in the nation and reducing state government costs by 15 percent. This is the second annual report to delineate some of the opportunities and challenges Iowa faces in several areas as they relate to the attainment of these goals. The state of Iowa was analyzed as a whole for this report, however, regional reports based on economic development regional marketing group territories and Laborshed areas are also available.

Iowa is home to just over three million people who are employed in over 1.4 million non-farm jobs. The capital and largest city, with over 203,000 people, is Des Moines, but Polk County is home to just over 437,000 people. Other major cities include Ames, Cedar Rapids, Council Bluffs, Davenport, Dubuque, Iowa City, Sioux City and Waterloo.

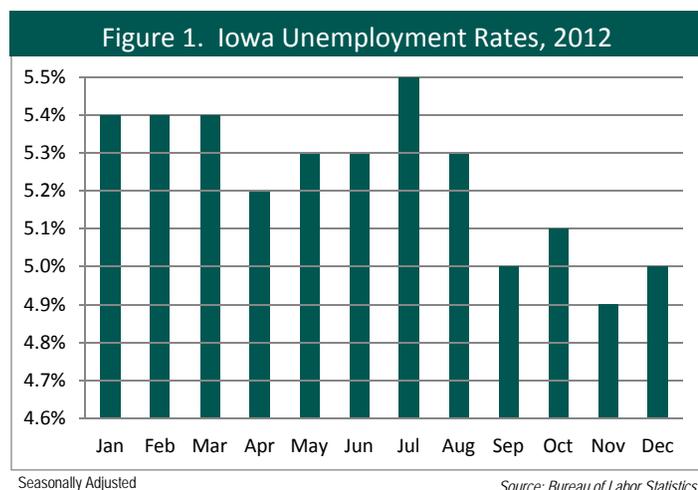
The state of Iowa has many distinct advantages as a place to do business. Though its education system has faced challenges in recent years, Iowa has a well-deserved reputation as a state with an excellent education system. The strong K-12 schools combined with the state's exemplary community college system, private colleges and regent universities contribute to the formation of the state's strong workforce.

The excellent workforce drives the state's top industries and industry clusters – agriculture, advanced manufacturing, biosciences, finance/insurance, transportation and information technology. Additionally, due to the state's central location and its strong interstate network, Iowa is a national logistics and distribution center. Iowa's geographic location also places it in the heart of the nation's wind belt. Currently, Iowa is third to Texas and California in terms of installed wind energy generation capacity. The field of renewable energy will continue to grow in Iowa because of the intersection of the state's traditional industry strengths and the requirements of emerging renewable technologies.

Throughout this report, Iowa will be benchmarked against four other states – Kansas, Minnesota, Missouri and Nebraska – as well as the United States as a whole. These states were chosen because they compare well with Iowa in terms of population size, geography and industry mix. Benchmarking facilitates an analysis of the competitive strengths and weaknesses of Iowa.

Although the majority of the data in this report represents the year ending December 2011, there are some data sources that are updated more frequently than others.

- The Iowa unemployment rate dropped from 5.4 percent to 5.0 percent in 2012 (**Figure 1**)
- Total non-farm employment in January 2011 was 1,409,306 and in December 2011 it was 1,467,642 an increase of 58,336 jobs.
- According to the Iowa Unemployment Insurance Tax Database, there were about 176,933 active business locations as of April 2013.
- Iowa's 2011 real GDP was \$128.6 billion a 1.9 percent increase from the state's 2010 real GDP of \$126.2 billion.



## DEMOGRAPHIC AND INFRASTRUCTURE PROFILE

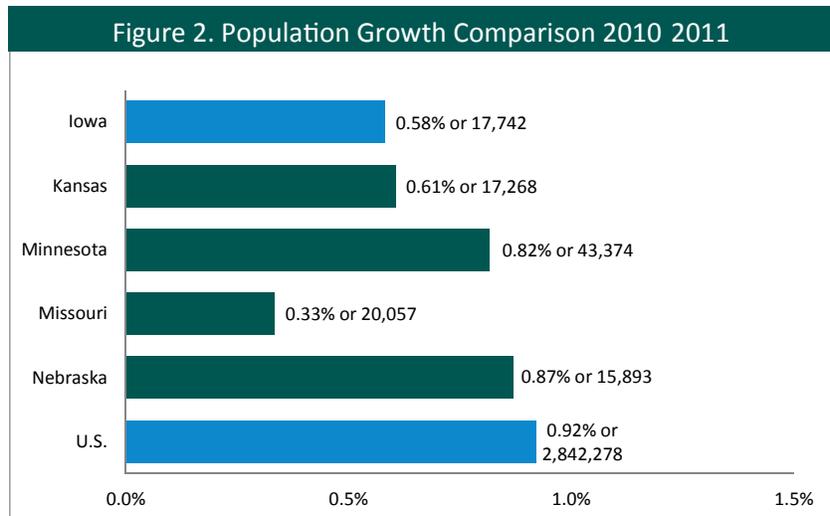
Before addressing the factors that relate to the strategic goals, the overall make-up of both Iowa's population and its infrastructure will be examined. The following section addresses demographic trends in Iowa. Specifically, it assesses Iowa's current population, population trends, diversity and age distribution. In addition, it presents a picture of the current condition of Iowa's physical infrastructure.



### POPULATION GROWTH

Iowa has the second lowest population growth percentage among the benchmark states. From 2010 to 2011, Iowa's population grew by 17,742 people or 0.58 percent. Missouri is the only state with a lower growth rate (0.33%). However, Missouri's total population growth of 20,057 is over two thousand greater than that of Iowa's. Nebraska grew by the largest percentage during this time (0.87%), however, Minnesota added the greatest total number of people at 43,374 (Figure 2).

The United States grew by 0.92 percent over this period which is greater than any of the benchmark states and nearly twice as great as Iowa.



Source: Census Bureau, 2011 population estimates

It has been a national trend for rural areas to lose population as increasing numbers of people migrate to urban areas where more opportunities for employment exists.

### MIGRATION

In 2009-2010, Iowa lost 650 residents on a net basis as a result of migration, compared to a 1,143 gain in 2008-2009. The state gained 909 people from Illinois, 212 from Michigan and 161 residents from Wisconsin. However, there were a number of states to which Iowa had a net loss of residents, including Texas, Colorado, Missouri and Arizona as well as a net loss of 239 residents to countries outside of the United States.

**Figure 3: 2009 2010 Migration: Largest Gains/Losses Iowa**

State	Net Migration
Illinois	909
Michigan	212
Wisconsin	161
Minnesota	106
California	101
Texas	-560
Colorado	-343
Other Countries	-239
Missouri	-211
Arizona	-198

Source: Internal Revenue Service, Statistics of Income

Figure 3 illustrates Iowa's net migration in 2009-2010. Internal Revenue Service (IRS) individual tax return data from 2009-2010 reveals net migration totals as a result of in-flows and out-flows, offering a clear picture of which states Iowa is gaining new residents from and to which states Iowa is losing its residents. Blue indicates where Iowa gained the most new residents and red indicates where Iowa lost the most residents on a net-migration basis.

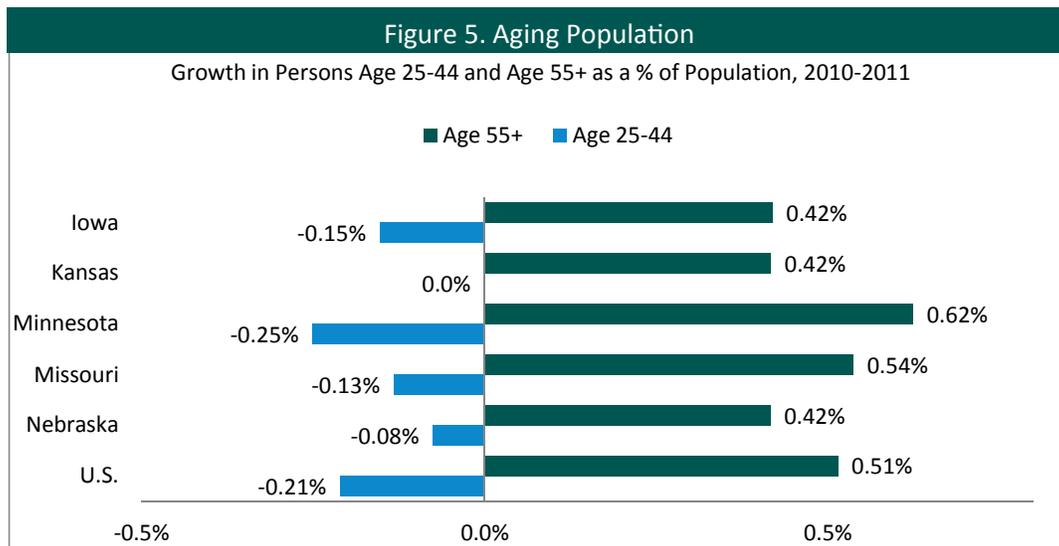
## AGE

An increasing number of states are faced with challenging workforce development climates resulting from aging populations. Iowa is no exception. With a median age of 38.1 years, Iowa is the oldest state among the benchmarks and older than the nation as a whole (Figure 4).

Between 2010 and 2011, Iowa's share of residents in the young adult cohort (age 25-44) decreased by 0.15 percent, representing an estimated 890 residents; while its share of residents 55 and over increased by 0.42 percent, representing an estimated 16,875 residents (Figure 5). This mirrors what occurred in the benchmark states, as well as the nation.

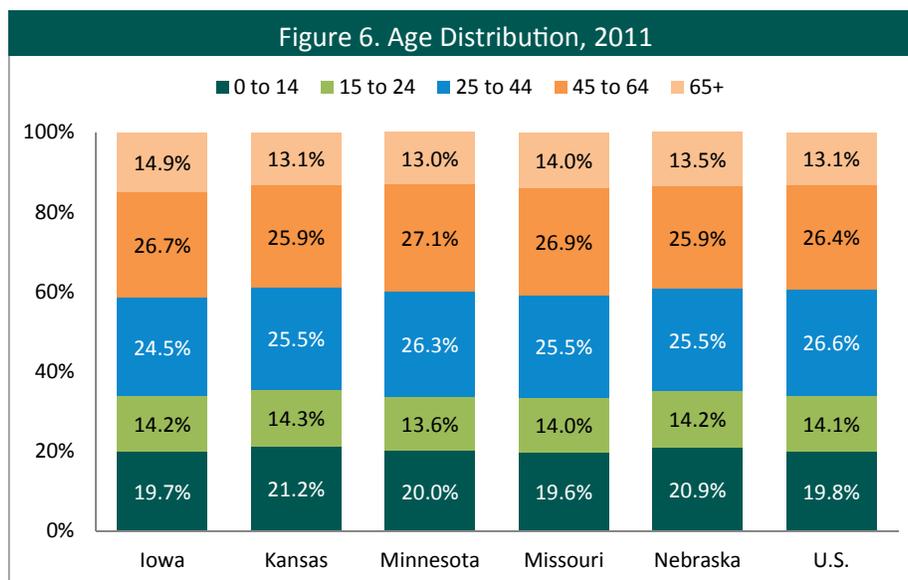
State	Median Age
Kansas	36.0
Nebraska	36.3
Minnesota	37.5
Missouri	37.9
Iowa	38.1
U.S.	37.2

Source: Census Bureau, 2011 ACS



Source: Census Bureau, 2011 ACS

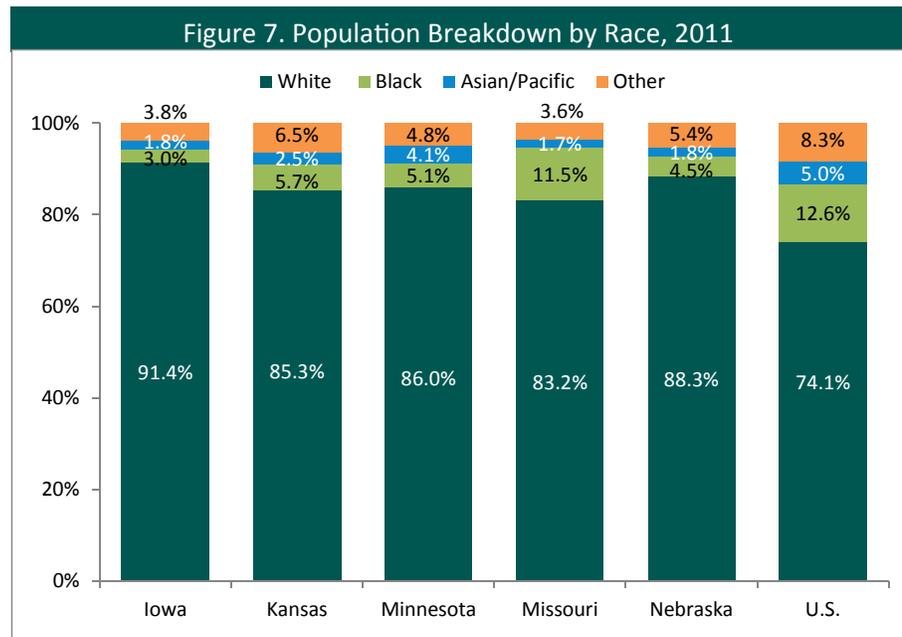
Figure 6 illustrates the breakdown of age distribution for Iowa, each of the benchmark states and the nation. This analysis finds that Iowa, as a percentage, has more residents over the age of 65 than any of the benchmark states and the nation, but parallels the nation in those residents 0 to 24 years of age.



Source: Census Bureau, 2011 ACS

## DIVERSITY

Workforce diversity is a competitive advantage used by innovative firms positioning themselves to maximize market penetration. Innovative companies know that minority consumer spending continues to grow at a faster rate than any other segment of consumer markets; and they want to recruit employees from diverse populations that are reflective of their business customers and future product markets. Businesses have found that homogenous communities are less attractive to this type of workforce.

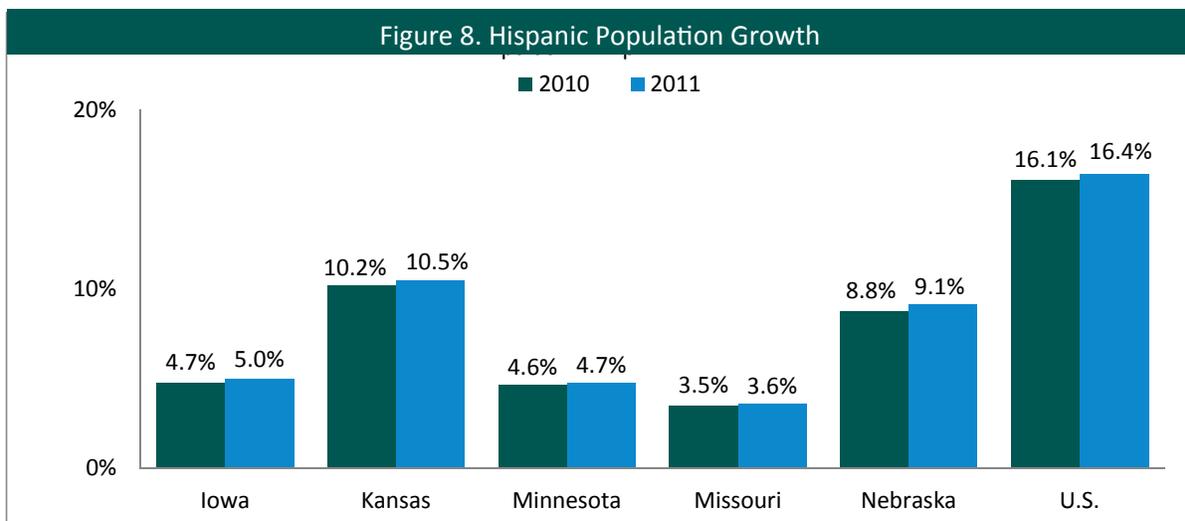


Source: Census Bureau, 2011 ACS

Iowa is the least-racially diverse state among the benchmarks and far less racially-diverse than the nation as a whole. The state has over 91 percent of its population reporting as white, compared with 74.1 percent nationwide (Figure 7).

According to the U.S. Census, "Hispanic or Latino" is an indication of heritage, nationality, lineage or reference to country of birth rather than a particular race. People who identify their origin as Spanish, Hispanic or Latino may be of any race and are therefore not categorized separately within the population breakdown in Figure 7.

When analysis is performed specifically for Hispanic origin, the Hispanic population in Iowa has grown to represent 5.0 percent of the population as of 2011 which is a slight increase from 2010 (Figure 8). Over the 2010-2011 period the Hispanic population in the United States grew by 0.3 percent, an increase that is reflected among the majority of the benchmark states.



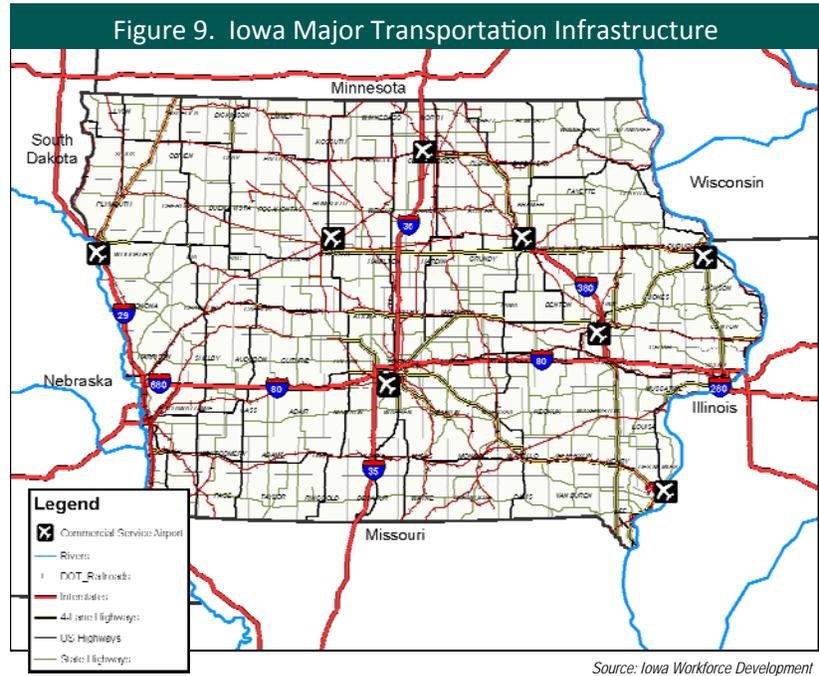
Source: Census Bureau, 2011 ACS

## PHYSICAL INFRASTRUCTURE

Investments in basic infrastructure components such as railroads, highways and ports, as well as communication infrastructure such as broadband and wireless, are critical to addressing complicated regional economic and workforce development challenges.

Iowa is located in the middle of the United States with access to all portions of the country. It is crisscrossed by two major interstates which give the state a strategically competitive advantage (see Figure 9). I-35 is a major North-South interstate which runs from Duluth, MN to Laredo, TX. In addition, I-80 is a transcontinental interstate which runs from San Francisco, CA to Teaneck, NJ which is in the New York City metropolitan area. Iowa is also bordered on the west by I-29 which runs from Kansas City, MO to the Canadian border.

Iowa's central location combined with its strong highway system makes it easy to move goods in and out of the state, to and from locations throughout the country. Additionally, strong rail infrastructure, the Mississippi River bordering the eastern side of the state and the Missouri River bordering the western side of the state all play a part in strengthening Iowa's potential in warehousing, logistics and distribution.



As of 2011, according to the U.S. Army Corps of Engineers, Iowa shipped a total of 6,449,887 tons of goods by water. Bordering states Missouri and Illinois shipped 27,624,815 tons and 90,993,623 tons, respectively. However, the statistics for Illinois include traffic from the Great Lakes and Missouri is able to provide year-round shipping on parts of both the Missouri and Mississippi rivers. Kansas and Nebraska had the lowest totals of waterborne tonnage shipped at 210,350 tons and 7,774 tons respectively (Figure 10).

**Figure 10. Waterborne Tonnage Shipped by State**

State	2011 Origin Tonnage	2010 Origin Tonnage	Increase/Decrease
Iowa	6,449,887	7,758,243	(1,308,356)
Illinois *	90,993,623	91,277,561	(283,938)
Kansas	210,350	232,250	(21,900)
Minnesota	35,485,270	33,333,819	2,151,451
Missouri	27,624,815	27,601,014	23,801
Nebraska	7,774	31,783	(24,009)

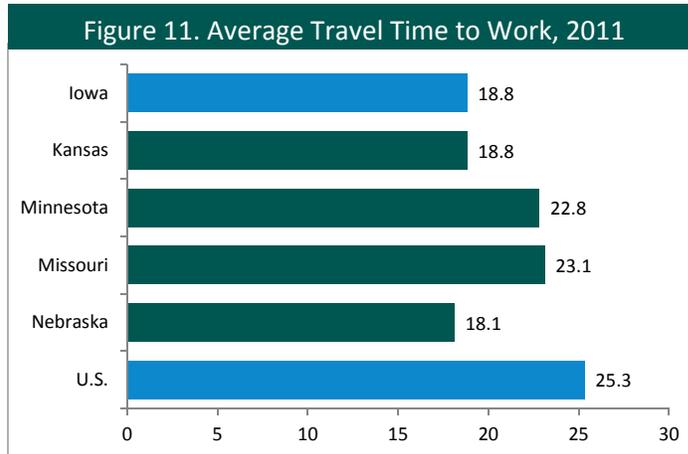
\*Includes traffic from Great Lakes

Source: US Army Corps of Engineers

The strong infrastructure in place throughout the state can play a significant role in Iowa becoming a leader in emerging industries. This includes bio-fuel and ethanol production and wind energy component manufacturing, which rely on strong transportation infrastructure in order to move goods in and out of the state.

## COMMUTE TIMES

Relatively short commute times are an excellent indicator of the strong highway infrastructure in Iowa. Only Nebraska, among the benchmark states, has a lower average commute time than Iowa; and Iowa's average commute time in 2011 was substantially lower than the national average (Figure 11).

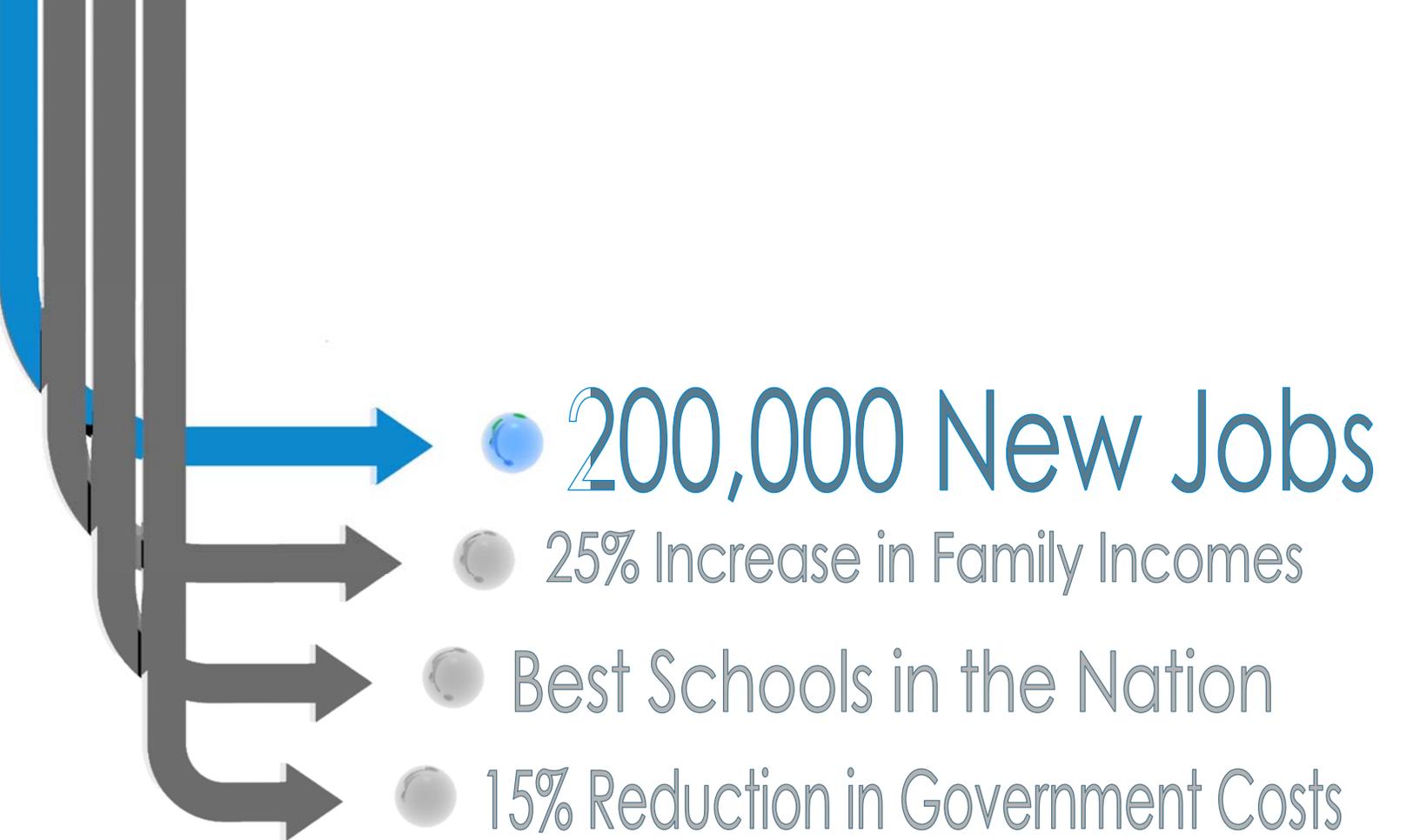


Source: Census Bureau, 2011 ACS

## DEMOGRAPHIC AND INFRASTRUCTURE PROFILE SUMMARY

- Iowa experienced population growth of 0.58 percent between 2010 and 2011, second to lowest among the benchmark states.
- Though it may be gaining residents from certain areas of the U.S., overall, Iowa is losing residents to other states and countries on a net-migration basis.
- Between 2010 and 2011, Iowa's share of population in the young adults cohort (age 25-44) declined by 0.15 percent; but both Minnesota and the nation saw a higher percentage decrease.
- Iowa has a median age of 38.1 which ranks oldest among the benchmark states and is nearly a year older than the national median age of 37.2.
- Iowa is the least racially-diverse among the benchmark states.
- Iowa has strong railroad and highway infrastructure in place, in addition to being bordered by two major rivers, all of which make it easy to move goods in and out of the state.
- Commute times to work in Iowa are extremely low (18.8 minutes) compared to the U.S. (25.3 minutes). Only Nebraska has a lower average commute time (18.1 minutes) among the benchmark states.





● 200,000 New Jobs

● 25% Increase in Family Incomes

● Best Schools in the Nation

● 15% Reduction in Government Costs

## 200,000 NEW JOBS

One of the top goals of this administration is to create 200,000 new jobs in the private industry for Iowans over a five-year period. Providing a competitive business environment is key to success. This section of the report covers areas that relate to this goal; pointing out areas of opportunity and highlighting certain challenges that face Iowa. It will address the recent national economic downturn, economic trends, business resources (such as tax incentives) and workforce support.

### ECONOMIC SCAN

Figure 12 briefly summarizes key data points that are discussed in further detail throughout this report. The State of Iowa is the third most populated state among the benchmarks. Between 2010 and 2011 population growth was 0.58 percent in Iowa, second to last among the benchmark states and well below the population growth nationwide. Labor force growth in Iowa, over the last five years, has been weak when compared to a majority of the benchmarks. Between 2006 and 2011, the labor force in Iowa grew by 0.2 percent, the second lowest of the five states. The 2012 annual unemployment rate in Iowa was 5.2 percent which was lower than all the other benchmark states and nation, with the exception of Nebraska at 3.9 percent. Strong median household income growth since 2001 (20.2%) has pushed the median household income in Iowa to \$49,545 as of 2011. However, Iowa's median household income remains lower than the median household incomes in Minnesota, Nebraska and the U.S. Furthermore, Iowa's 2011 real GDP was \$128.6 billion. This is over \$116 billion less than Minnesota which had the highest figure among the benchmark states. However, from 2010-2011 Iowa experienced a 1.9 percent growth in real GDP, which was the greatest growth among the benchmark states and was also greater than the nation as a whole. Concerning educational attainment, as measured by the percentage of people age 25 and older with an undergraduate degree or higher, Iowa ranks the lowest among the benchmark states, and is lower than the U.S. as well.

	Iowa	Kansas	Minnesota	Missouri	Nebraska	U.S.
Population (2011)	3,064,097	2,870,386	5,347,299	6,008,984	1,842,234	311,587,816
Population Growth ('10-'11)	0.58%	0.61%	0.82%	0.33%	0.87%	0.92%
Annual Unemployment Rate, 2012	5.2%	5.7%	5.6%	6.9%	4.0%	8.1%
Labor Force Growth ('06 - '11)	0.2%	2.1%	2.7%	-0.4%	3.2%	1.4%
Median Household Income (2011)	\$49,545	\$48,844	\$56,944	\$45,231	\$50,281	\$50,502
Median Household Income Growth ('01-'11)	20.2%	16.1%	14.8%	14.1%	27.1%	19.6%
Real GDP (2011, in millions of dollars)**	\$128,597	\$113,367	\$244,912	\$216,099	\$79,889	\$13,108,674
% Annual Change in Real GDP ('10-'11)**	1.9%	0.5%	1.2%	0.0%	0.1%	1.5%
% Undergraduate Degree+ (2011)	25.7%	30.2%	32.4%	26.2%	28.0%	28.5%
% in 25-44 Age Group (2011)	24.5%	25.5%	26.3%	25.5%	25.5%	26.6%

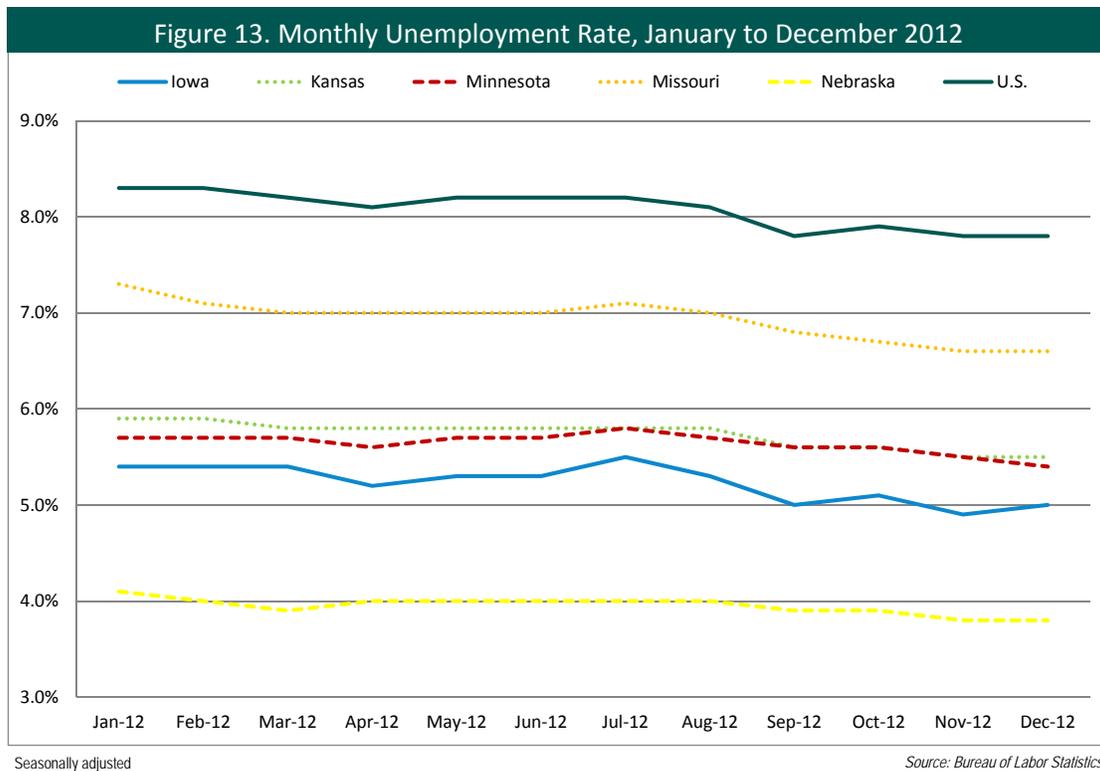
\*\*Advanced/preliminary figures.

Sources: Census Bureau, Bureau of Economic Analysis and Bureau of Labor Statistics

### IOWA AND THE RECENT NATIONAL ECONOMIC DOWNTURN

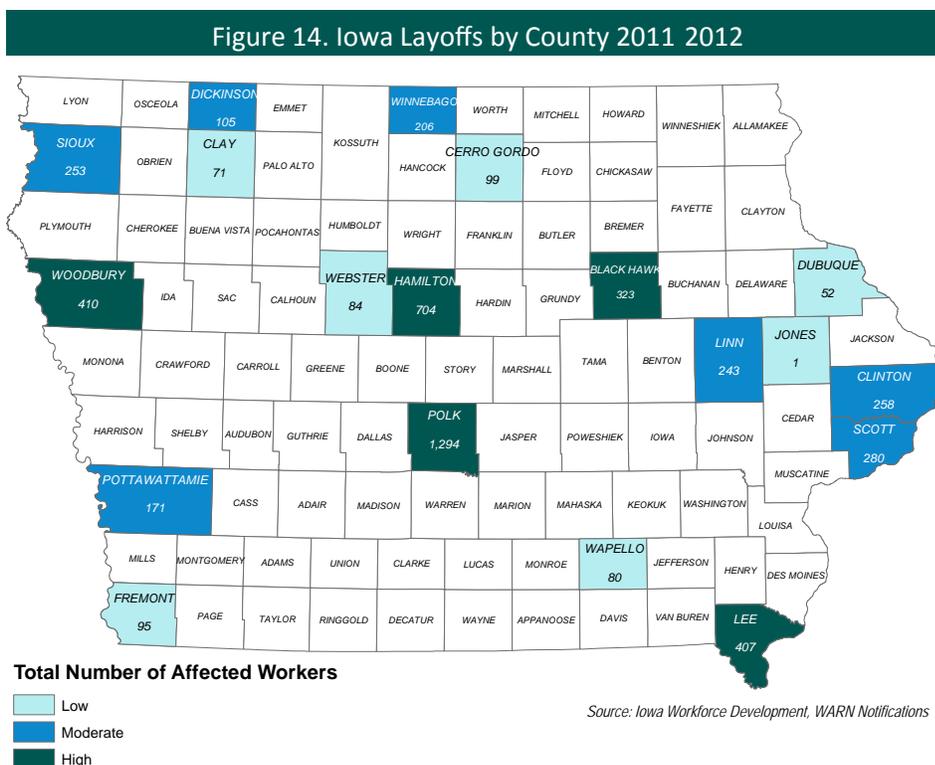
Though this analysis is designed to examine long-term economic, demographic and labor market trends, Iowa's performance in the face of the recent economic downturn must be examined in order to gain a sense of the state's resiliency.

Over the past year Iowa's unemployment rate has consistently ranked below the national unemployment rate; and only Nebraska has experienced lower unemployment among the benchmark states (see Figure 13, on the next page). Although Iowa's unemployment rate increased slightly in July 2012, the state's unemployment rate still remained low compared to the nation and most of the benchmark states.



For the most part, throughout 2012, the unemployment rates within the region mimicked the national trend. Generally, rates fell over the course of the year with a slight bump during the summer months. Iowa's rate started at 5.4 percent in January and ended at 5.0 percent in December (Figure 13).

Though Iowa weathered the recent economic recession rather well, it was not immune to layoffs and job losses. The map below (Figure 14) indicates the number of layoffs by county, as reported through WARN notifications. Darker shades illustrate which counties have been most adversely affected by job losses.



From 2011-2012, Polk, Hamilton, Woodbury, Lee and Black Hawk counties were hit the hardest by layoffs, with each having 400 or greater total workers affected by layoffs. Of the counties that had WARN notifications Cerro Gordo, Fremont, Webster, Wapello, Clay, Dubuque and Jones counties had the fewest number of workers affected by layoffs at less than 100 in each county.

## ECONOMIC TRENDS

This section focuses on the composition of Iowa's employment base, employment and labor force growth trends, unemployment rates over time and growth in business establishments. It is important for gaining an understanding of the strengths and weaknesses of Iowa's economy.

### EMPLOYMENT AND UNEMPLOYMENT

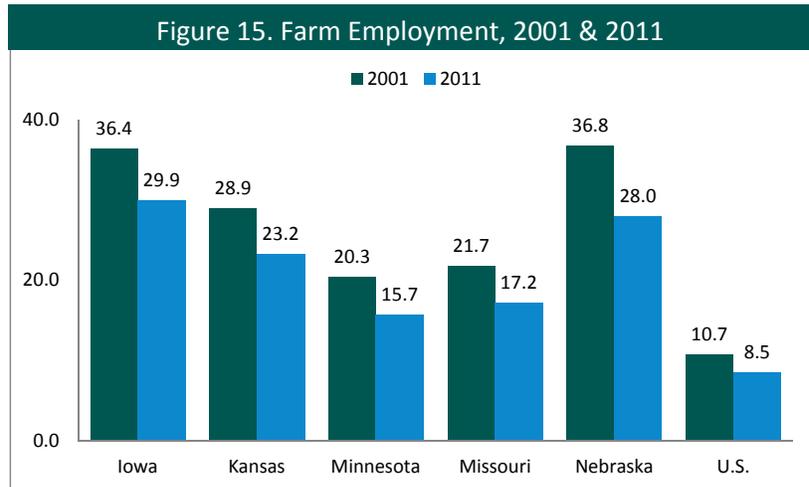
Self-employed farm employment is not reflected by the Bureau of Labor Statistics (BLS), which only includes larger farm employment statistics. **Figure 15** reflects farm employment per 1,000 residents.

It is clear that agriculture is very strong in Iowa, with over three times the number of farm employees per capita than the U.S. In fact, Iowa and Nebraska have more farm employment per capita than any of the benchmark states.

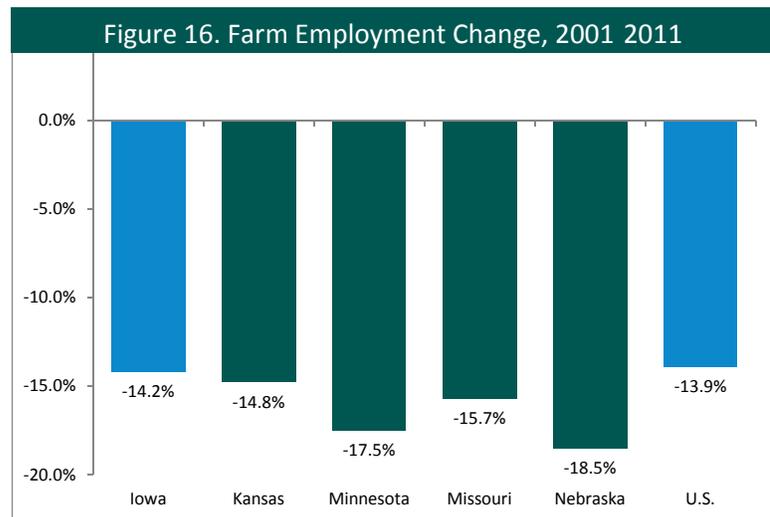
While farm employment has decreased across the board in the U.S., Iowa farm employment has fared better than all of the benchmark states (**Figure 16**).

In addition to a strong agriculture sector, the Iowa economy is dominated by three sectors. Trade, made up of both retail and wholesale activities, is Iowa's largest sector, responsible for nearly 16.6 percent of Iowa's employment. The healthcare & social assistance and manufacturing sectors rank second, each employing 14.2 percent of Iowa's workers (see **Figure 17** on the next page). While the proportion of Iowa's workers employed in both the trade sector and the healthcare sectors are similar to that of the benchmark states, manufacturing makes up a larger percentage of employment in Iowa's economy than any of the benchmark states. At the same time, Iowa lags behind the benchmark states in its percentage of workers employed in the professional, scientific and technical services sector, which often drives innovation.

According to Hoovers On-line, the top employers in Iowa include: Hy-Vee, Inc., Casey's General Stores, The University of Iowa, Rockwell Collins, Inc., Iowa Health System, Aegon USA, LLC, Principal Financial Group, Inc., Wells Fargo Financial Security Services Inc. and Iowa State University. Other companies such as TPI Composites and Siemens have located in Iowa in recent years, helping to make the state a leader in wind turbine manufacturing.



Source: Bureau of Economic Analysis



Source: Bureau of Economic Analysis

Figure 17. Industry Mix, 2011

Industry	Iowa		Kansas		Minnesota	
	Employment	Share	Employment	Share	Employment	Share
Accommodation and Food Services	112,577	7.7%	101,339	7.8%	207,052	8.0%
Administrative and Support and Waste Management and Remediation Services	68,185	4.7%	74,476	5.7%	129,815	5.0%
Agriculture, Forestry, Fishing and Hunting	16,773	1.2%	10,338	0.8%	19,089	0.7%
Arts, Entertainment, and Recreation	20,941	1.4%	13,905	1.1%	48,613	1.9%
Construction	63,847	4.4%	53,597	4.1%	94,895	3.6%
Educational Services	143,272	9.9%	134,967	10.4%	215,958	8.3%
Finance and Insurance	87,927	6.1%	55,879	4.3%	135,860	5.2%
Health Care and Social Assistance	206,489	14.2%	185,768	14.2%	425,532	16.3%
Information	28,620	2.0%	29,865	2.3%	57,033	2.2%
Management of Companies and Enterprises	14,852	1.0%	13,983	1.1%	72,672	2.8%
Manufacturing	206,069	14.2%	161,146	12.4%	300,802	11.6%
Mining, Quarrying, and Oil and Gas Extraction	2,174	0.1%	9,053	0.7%	5,811	0.2%
Other Services (except Public Administration)	42,923	3.0%	34,956	2.7%	84,172	3.2%
Professional, Scientific, and Technical Services	43,404	3.0%	60,924	4.7%	128,660	4.9%
Public Administration	68,631	4.7%	84,501	6.5%	121,413	4.7%
Real Estate and Rental and Leasing	13,056	0.9%	14,554	1.1%	35,609	1.4%
Retail Trade	174,408	12.0%	142,099	10.9%	280,289	10.8%
Transportation and Warehousing	62,269	4.3%	48,395	3.7%	93,174	3.6%
Utilities	8,312	0.6%	9,967	0.8%	14,177	0.5%
Wholesale Trade	66,916	4.6%	59,457	4.6%	125,979	4.8%
<b>Total</b>	<b>1,451,645</b>	<b>100%</b>	<b>1,299,169</b>	<b>100%</b>	<b>2,596,605</b>	<b>100%</b>

Figure 17. Industry Mix, 2011 (cont'd)

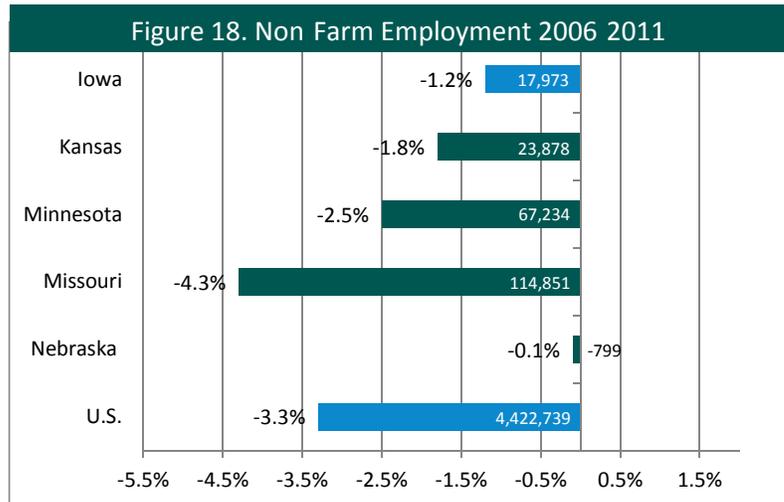
Industry	Missouri		Nebraska		U.S.	
	Employment	Share	Employment	Share	Employment	Share
Accommodation and Food Services	229,938	8.9%	69,600	7.7%	11,452,980	8.9%
Administrative and Support and Waste Management and Remediation Services	147,979	5.7%	42,736	4.7%	7,792,541	6.0%
Agriculture, Forestry, Fishing and Hunting	11,205	0.4%	12,406	1.4%	1,167,195	0.9%
Arts, Entertainment, and Recreation	51,937	2.0%	12,723	1.4%	2,314,565	1.8%
Construction	106,226	4.1%	40,535	4.5%	5,652,439	4.4%
Educational Services	217,691	8.4%	86,030	9.5%	12,099,791	9.3%
Finance and Insurance	120,167	4.6%	53,026	5.9%	5,540,729	4.3%
Health Care and Social Assistance	405,615	15.7%	128,285	14.2%	18,368,506	14.2%
Information	61,328	2.4%	17,207	1.9%	2,817,203	2.2%
Management of Companies and Enterprises	61,228	2.4%	16,671	1.8%	1,914,543	1.5%
Manufacturing	246,220	9.5%	93,579	10.4%	11,748,310	9.1%
Mining, Quarrying, and Oil and Gas Extraction	4,021	0.2%	1,027	0.1%	730,341	0.6%
Other Services (except Public Administration)	87,067	3.4%	25,683	2.8%	4,461,141	3.4%
Professional, Scientific, and Technical Services	126,069	4.9%	44,066	4.9%	7,783,155	6.0%
Public Administration	125,863	4.9%	49,531	5.5%	7,328,607	5.7%
Real Estate and Rental and Leasing	35,333	1.4%	9,123	1.0%	1,955,719	1.5%
Retail Trade	301,833	11.7%	105,028	11.6%	14,734,110	11.4%
Transportation and Warehousing	101,554	3.9%	43,164	4.8%	5,019,736	3.9%
Utilities	18,974	0.7%	9,158	1.0%	804,417	0.6%
Wholesale Trade	116,255	4.5%	40,861	4.5%	5,546,159	4.3%
<b>Total</b>	<b>2,576,503</b>	<b>100%</b>	<b>900,439</b>	<b>100%</b>	<b>129,232,187</b>	<b>100%</b>

Source: Bureau of Labor Statistics, OCEW

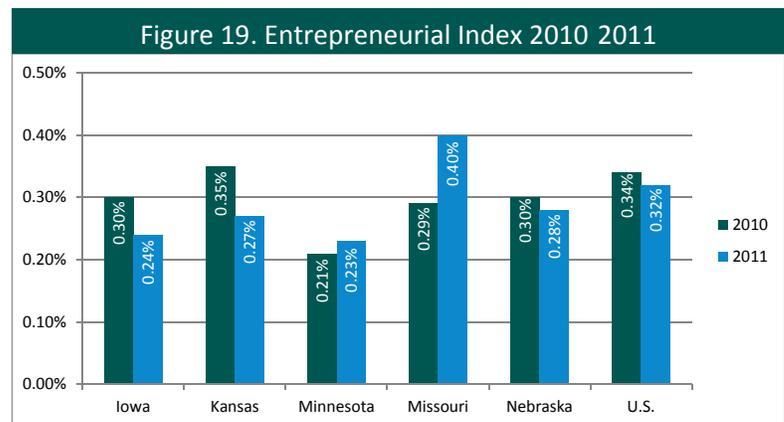
## JOB AND BUSINESS CREATION

Between 2006 and 2011 Iowa experienced a net job loss of an estimated 17,973 jobs, a total decrease of 1.2 percent. Kansas also experienced a similar percentage decrease over the same period. However, the nation saw almost triple the percentage loss (-3.3%) of Iowa and Missouri experienced the greatest percentage loss of any area at -4.3 percent. Nebraska, saw the lowest decrease of employment (-0.1%) during this period (Figure 18).

The *Kauffman Index of Entrepreneurial Activity* measures the rate of business creation at the individual owner level. Figure 19 shows the change in percentages for Iowa and benchmark states from 2010 to 2011. In 2010, Iowa had an average of 0.30 percent of the adult population, or 300 out of 100,000 adults, create a new business each month. This was equal to Nebraska and only slightly less than Kansas which had the highest percentage of 0.35. In 2011, Iowa experienced a decrease to 0.24 percent which was the lowest total percentage in 2011 among the benchmark states except for Minnesota (0.23%). Missouri had the greatest percentage in 2011 at 0.40 percent which out surpassed the nation as well.



Source: Bureau of Labor Statistics



Source: Kauffman Entrepreneurial Index

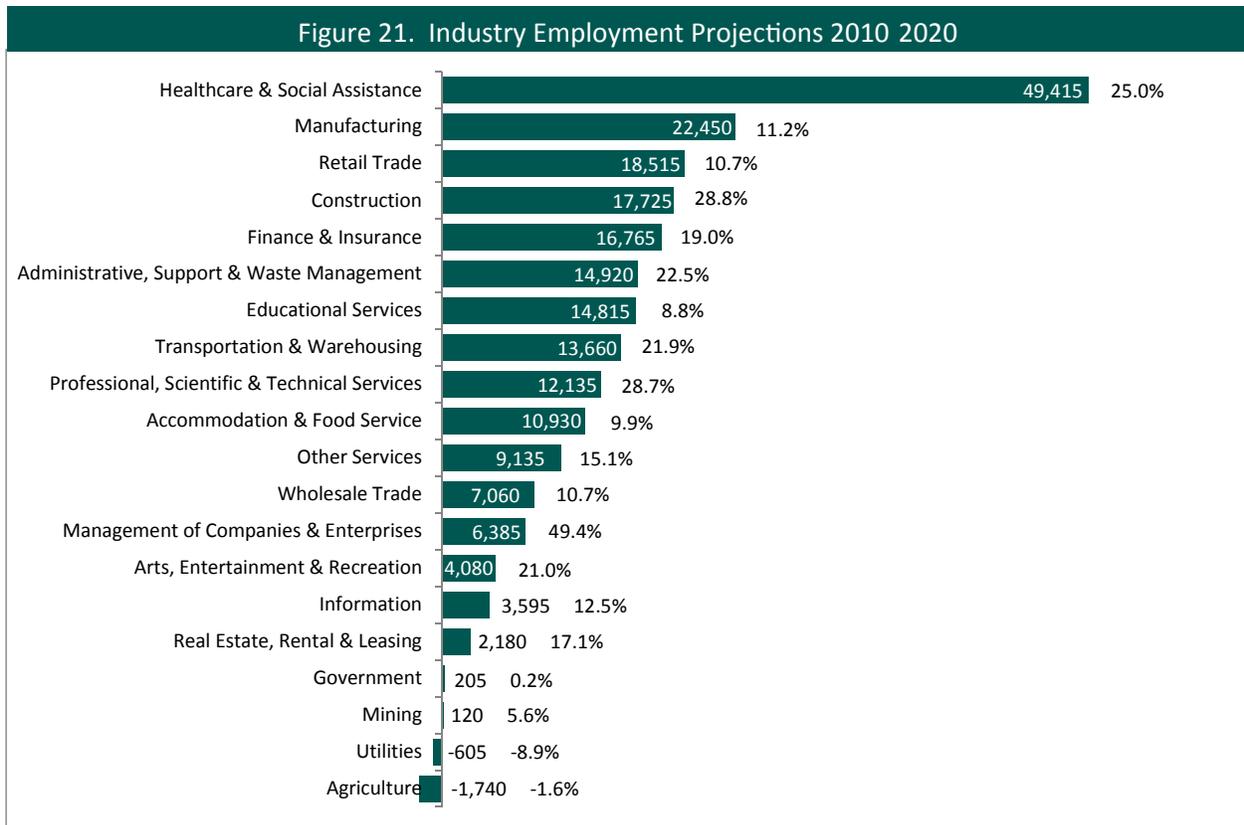
**Figure 20. Change in Employment by Industry, 2006 2011**

Industry	Change in Jobs	Percentage Change
Health Care & Social Assistance	15,508	8.1%
Educational Services	9,377	7.0%
Administrative, Support, Waste Management, & Remediation Services	3,284	5.0%
Professional, Scientific, & Technical Services	2,814	6.9%
Agriculture, Forestry, Fishing & Hunting	2,621	18.5%
Management of Companies & Enterprises	2,412	19.4%
Transportation & Warehousing	2,279	3.8%
Finance & Insurance	1,949	2.3%
Other Services (except Public Administration)	1,164	2.8%
Mining, Quarrying, and Oil & Gas Extraction	35	1.6%
Utilities	-376	-4.3%
Arts, Entertainment, & Recreation	-635	-2.9%
Wholesale Trade	-839	-1.2%
Real Estate and Rental and Leasing	-1,414	-9.7%
Accommodation & Food Services	-2,142	-1.9%
Public Administration	-3,944	-5.4%
Information	-4,864	-14.5%
Retail Trade	-5,762	-3.2%
Construction	-12,102	-15.9%
Manufacturing	-25,009	-10.8%

Source: Bureau of Labor Statistics, QCEW

The largest gains between 2006 and 2011 were in the health care and social assistance sector, which gained over 15,508 jobs. Other substantial job gains occurred within the educational services; administrative support; and professional, scientific & technical services sectors. Additionally, the management of companies and agriculture, forestry, fishing & hunting sectors saw large percentage gains, 19.4 percent and 18.5 percent, respectively (Figure 20).

Statewide industry projections (Figure 21) indicate large employment gains in the healthcare & social assistance; manufacturing; retail trade; construction; and finance & insurance industries. Percentage increases should also be noted. For instance, the management of companies and enterprises (49.4%) and professional, scientific & technical services (28.7%) industries show large projected percentage increases in employment from 2010 to 2020.



Source: Iowa Workforce Development, Labor Force & Occupational Analysis Bureau

Though smaller in overall employment numbers, the professional, scientific and technical services industry includes a wide variety of positions such as: auditors, management analysts, computer support specialists, computer network architects, public relations specialists, mechanical engineers, scientists, architects, etc. The aggregate occupations in the professional, scientific and technical services industry earn an average of \$79,737 per year nationally and \$54,129 per year in Iowa. In 2011, the average annual wage in Iowa was lower than the national average in each industry except agriculture. The greatest disparities were in mining (\$49,654); management of companies (\$31,422); information (\$29,360); finance & insurance (\$26,821); and professional, scientific & technical services (\$25,608) (Figure 22).

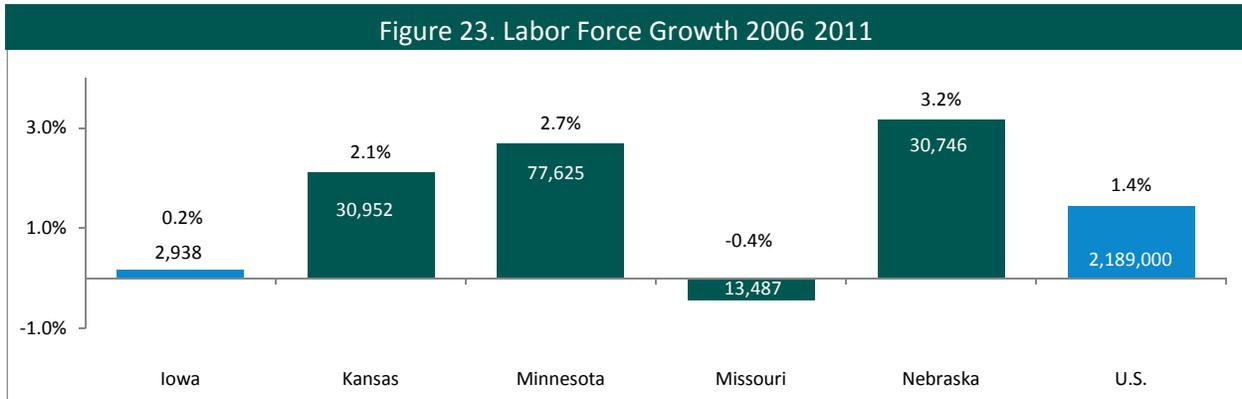
**Figure 22. Industry Average Annual Wages, 2011**

Industry	Iowa Average Annual Wage	National Average Annual Wage
Utilities	\$ 74,719	\$ 81,945
Management of Companies & Enterprises	\$ 71,653	\$ 103,075
Finance & Insurance	\$ 61,412	\$ 88,233
Professional, Scientific & Technical Services	\$ 54,129	\$ 79,737
Wholesale Trade	\$ 53,966	\$ 66,141
Manufacturing	\$ 51,131	\$ 59,277
Information	\$ 46,601	\$ 75,961
Mining	\$ 45,576	\$ 95,230
Construction	\$ 45,237	\$ 50,526
Public Administration	\$ 43,651	\$ 56,112
Transportation & Warehousing	\$ 39,727	\$ 47,566
Real Estate & Rental, Leasing	\$ 39,326	\$ 45,841
Health Care & Social Assistance	\$ 38,994	\$ 45,241
Educational Services	\$ 38,875	\$ 43,365
Agriculture	\$ 32,812	\$ 27,663
Other Services	\$ 26,471	\$ 30,054
Administrative, Support & Waste Management	\$ 26,461	\$ 33,942
Retail Trade	\$ 23,191	\$ 27,122
Arts, Entertainment & Recreation	\$ 18,587	\$ 32,407
Accommodation & Food Services	\$ 13,050	\$ 17,620

Source: Bureau of Labor Statistics, OCEW

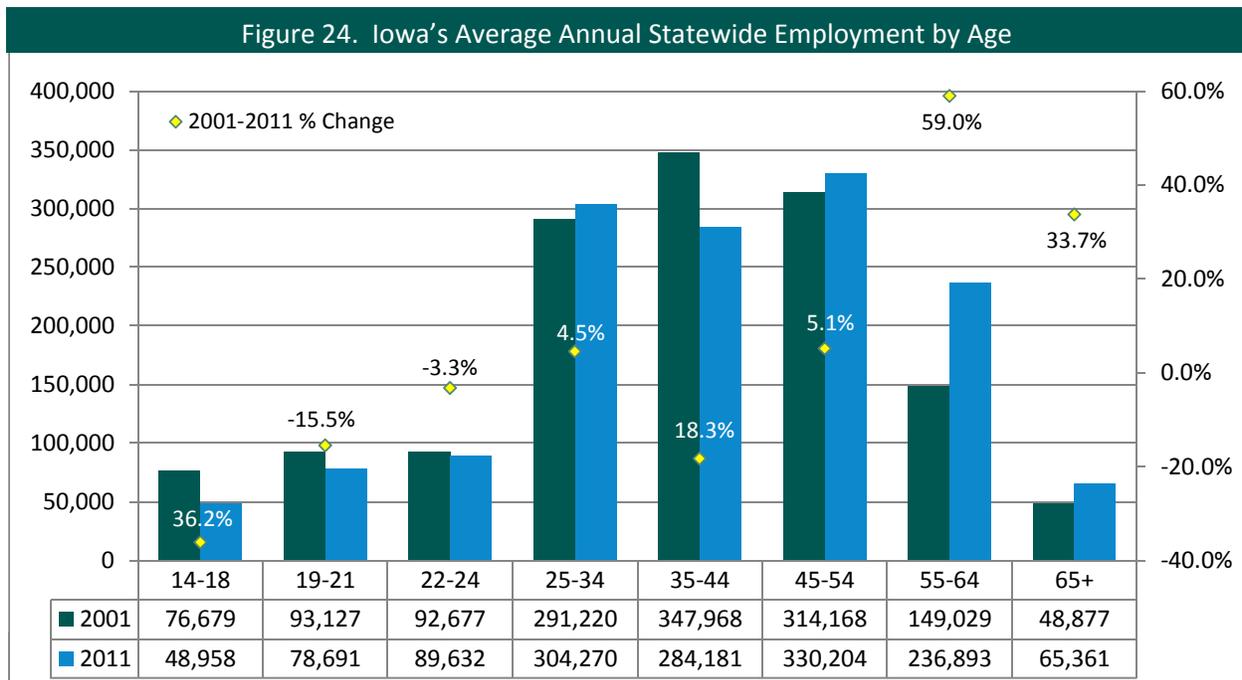
## LABOR FORCE

Iowa's labor force (those actively seeking employment) grew by an estimated 2,938 people between 2006 and 2011 (**Figure 23**). This is the lowest percentage increase (0.2%) among the benchmark states, and is greater only than Missouri which experienced a decrease (-0.4%). Iowa's labor force growth appears weak compared to the other benchmarks, however, it is important to note that Iowa's 2011 labor force level was an estimated 1,659,860 which put it in the middle of the pack among the benchmark states; greater than both Nebraska and Kansas though less than Minnesota and Missouri.



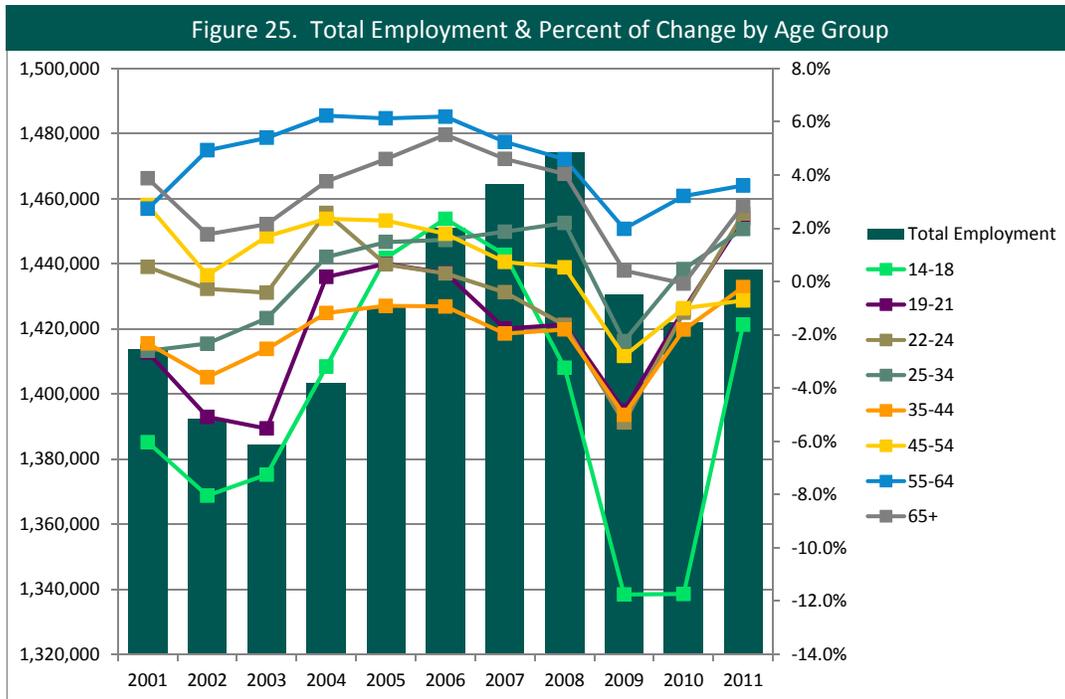
*Source: Bureau of Labor Statistics, Local Area Unemployment Statistics*

Analyzing industry employment by age has played an important role in preparing Iowa for upcoming retirements. As Iowa's average general population has aged, so has Iowa's workforce. From 2001 to 2011 the percentage of Iowa jobholders age 24 and younger dropped from 18.6 percent of the total workforce to 15.1 percent. Workers age 25-54 and declined 2.5 percent from 2001 to 2011. Workers over the age of 54 made up 14.0 percent of the total workforce in 2001 but increased to 21.0 percent (120,384) in 2011, with workers 65 and older increasing by 1.0 percent (16,484) as illustrated in **Figures 24** (below) and **25** (on next page).



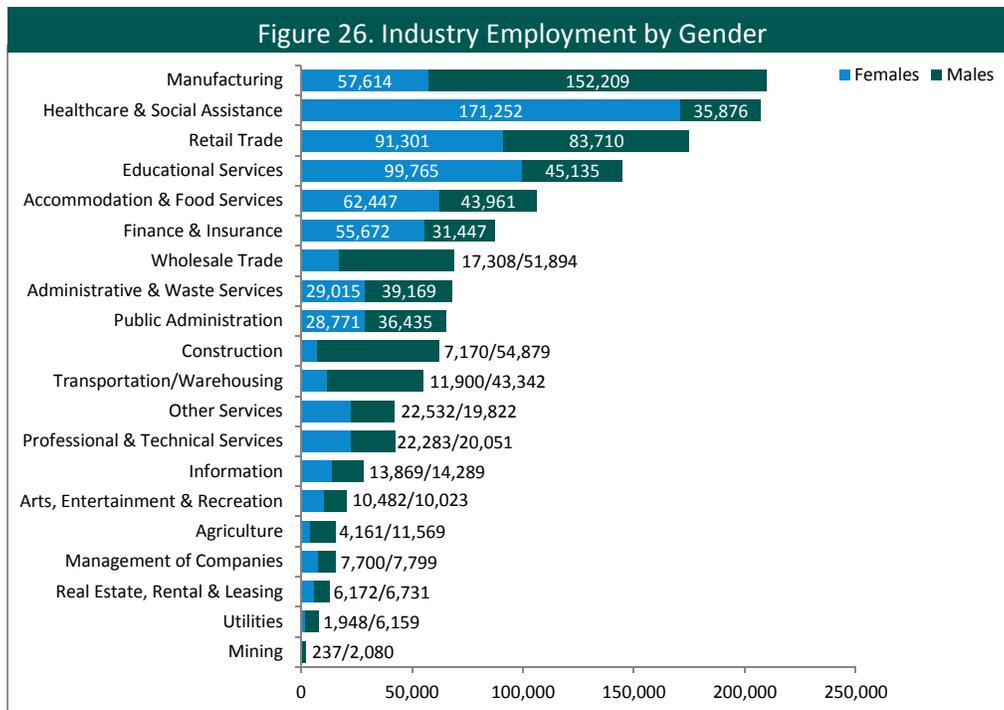
*Source: Census Bureau, Local Employment Dynamics Program: Quarterly Workforce Indicators*

Figure 25 below includes total employment and the percentage change by age group from 2001 to 2011. A higher percentage of workers were ages 14 to 18 in 2001 (5.4%) compared to 2011 (3.4%), even though total employment was comparatively equal in both years. In contrast, employment of those 55 to 64 years of age increased from 10.5 percent of total employment in 2001 to 16.5 percent in 2011.



Source: Census Bureau, Local Employment Dynamics Program: Quarterly Workforce Indicators

Overall, Iowa's workforce has gender balance. However, particular industries are more male or female dominant as illustrated in Figure 26. Males make up a larger number of the workforce in the manufacturing, wholesale trade, construction and transportation/warehousing sectors; and females make up a larger number of the workforce in the healthcare and social assistance, retail trade and educational services sectors.



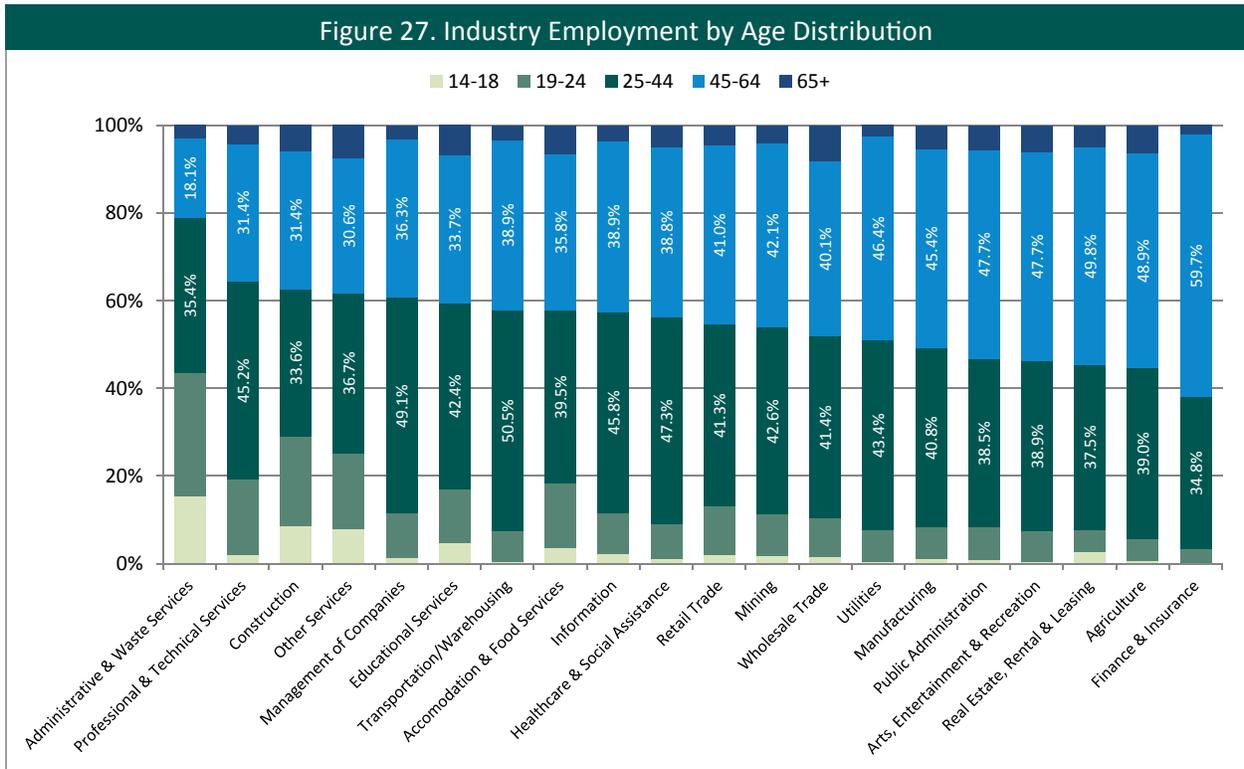
Source: Census Bureau, Local Employment Dynamics Program: Quarterly Workforce Indicators

The top five industries (both genders combined, 2011 employment) were in manufacturing; healthcare & social assistance; retail trade; educational services; and accommodation & food services industries. Among these top five, males have higher employment than females only in the manufacturing industry. The remaining top four industries have a greater number of females than males employed.



**Figure 27** illustrates the industries that will be most adversely affected due to an aging workforce, with blue colors representing those 45 and older. Percentages are annotated in the figure for the 25-44 and 45-64 age groups, representing the majority of workers.

Finance & insurance; agriculture; real estate, rental & leasing; arts, entertainment & recreation; public administration; and manufacturing each have a majority of their workers age 45 years and older. These encompass a wide variety of occupations that will each be affected by retirements. In addition, wholesale trade; other services; educational services; and accommodation & food services contain the highest number of those workers over 65 years of age.



Source: Census Bureau, Local Employment Dynamics Program: Quarterly Workforce Indicators

For more detailed gender, industry and age analysis visit <http://www.iowaworkforce.org/lmi/empstat/index.html>.

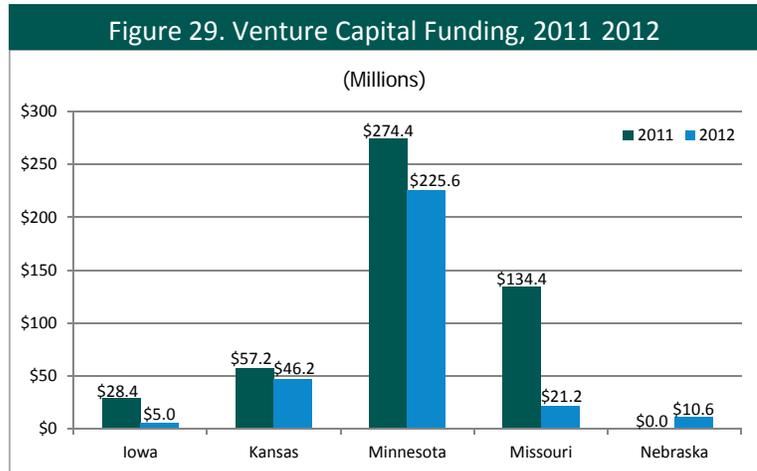


## INNOVATION

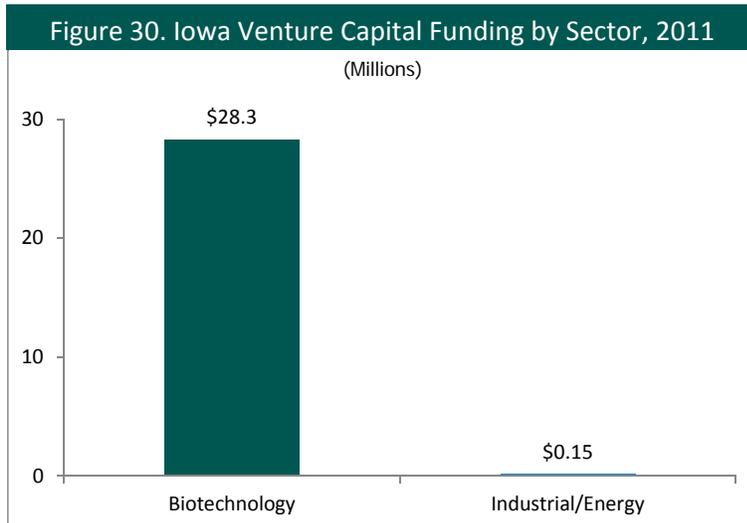
Whether it is renewable energy, healthcare or information technology, high-wage, growing industries rely on technological advancements. States can be effective in supporting innovation by encouraging new start-ups through venture capital funding and protecting intellectual property (patents).

## VENTURE CAPITAL FUNDING

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



Source: PricewaterhouseCoopers/National Venture Capital Association



Source: PricewaterhouseCoopers/National Venture Capital Association

Between 2011 and 2012, venture capital funding in Iowa was low in comparison to the benchmark states, particularly Minnesota. Every state, with the exception of Nebraska, has seen a decrease in venture capital investments from 2011 to 2012 (Figure 29).

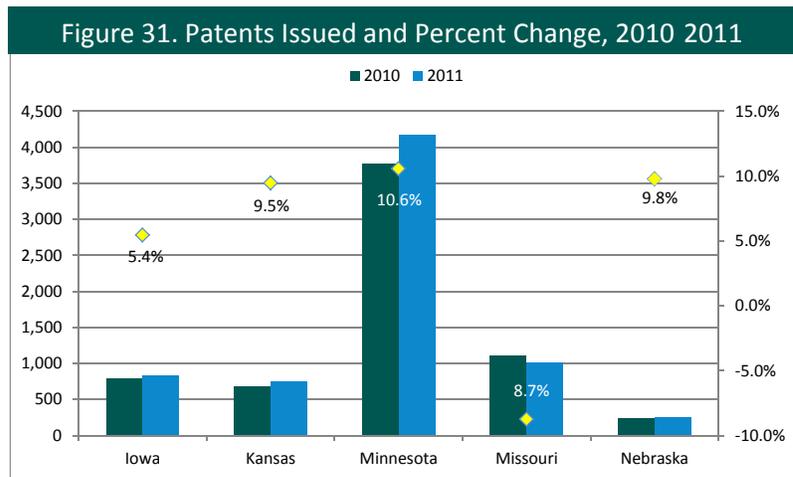
Figure 30 shows nearly all of the 2011 venture capital investment in Iowa was in the biotechnology sector (\$28.3 million) while additionally \$150,000 was invested into the industrial/energy sector. In 2012, \$5 million was invested in the IT services sector.



## PATENTS

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

Patent activity in Iowa saw little change between 2010 and 2011 as patents issued annually were 789 and 832, respectively. While this is higher than Nebraska and Kansas; Minnesota has significantly more patent activity than any of the benchmark states (**Figure 31**). This could be due to the multitude of research institutions and industries in Minnesota such as Mayo Clinic, IBM, Honeywell, 3M and the University of Minnesota.



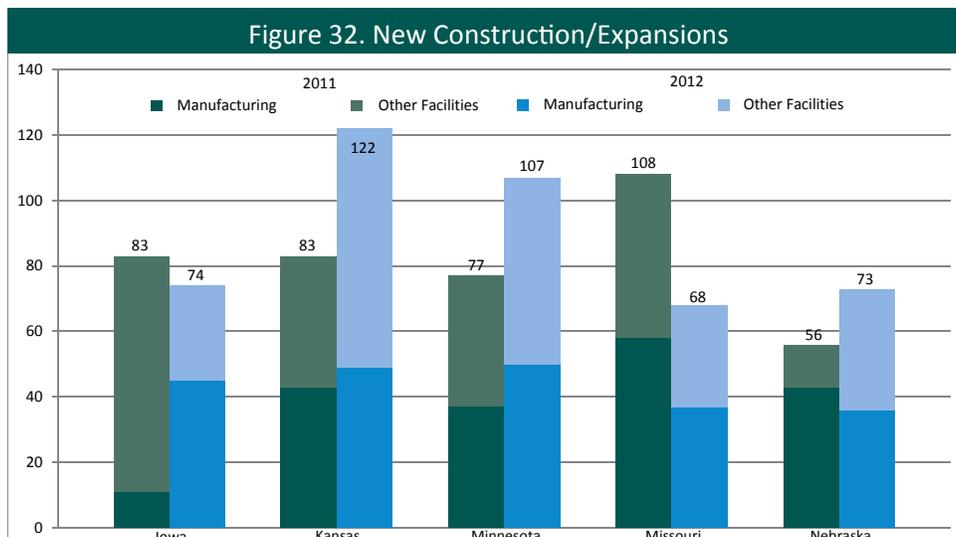
Source: US Patent and Trademark Office

U.S. patents issued in 2011 represented 7.8 per population of 10,000. Among the benchmark states, Minnesota's patent activity matched that of the U.S. with 7.8 issued, followed by Iowa with 2.7, Kansas 2.6, Missouri 1.7 and Nebraska at 1.4. Iowa's patent activity per capita is a little more than one-third of that found in Minnesota and the U.S. However, it is almost double the number issued to Nebraska.

## NEW CONSTRUCTION AND EXPANSIONS

As demonstrated in the previous sections, multiple factors affect how competitive locations are from a business climate perspective. The chart below (**Figure 32**) shows the 2011 and 2012 new plant construction and expansions in Iowa as well as the benchmark states. The chart breaks down the data into two project types: manufacturing and other facilities. The category other facilities includes: offices; headquarters; distribution centers; research and development facilities; and mixed-use facilities.

A total of 74 new construction and expansion projects took place in Iowa in 2012, down from 83 in 2010. In 2012, Iowa was competitive in the manufacturing sector with a total of 45 projects, greater than both Missouri and Nebraska and just below Kansas and Minnesota. Seven of these projects were new construction projects while 38 of them were expansions of existing facilities.

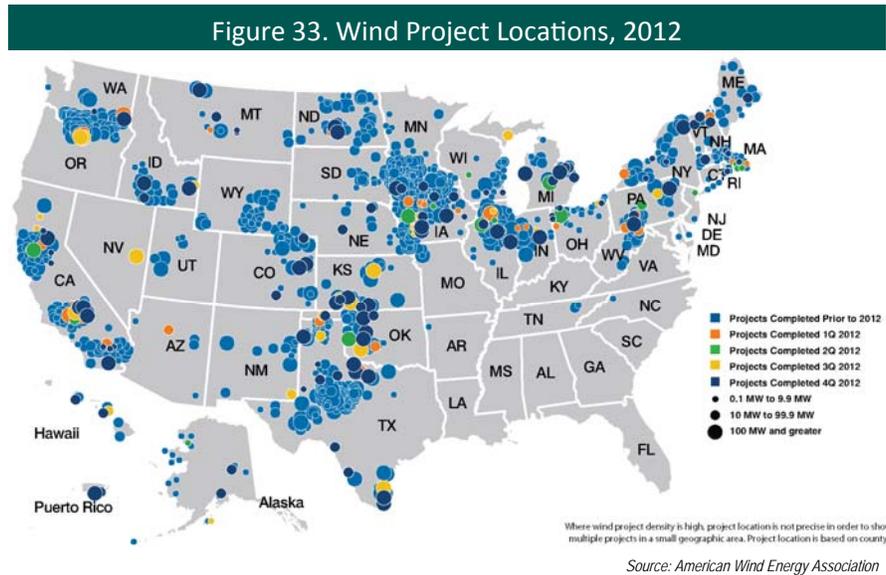


Source: Conway Data

## EMERGING INDUSTRIES

### Wind

Iowa is a magnet for wind energy manufacturing companies, attracted by Iowa's strong manufacturing base, excellent transportation infrastructure and skilled workforce. The *U.S. Wind Industry 2011 Market Report* released by the American Wind Energy Association (AWEA) had Iowa tied for first in the nation for overall wind jobs at 6,000-7,000. Additionally, according to AWEA, Iowa had 5,137 megawatts (MW) of generation capacity by the end of 2012 which was third in the nation behind Texas and California. Iowa also ranked fifth in the nation for most capacity installed during the fourth quarter of 2012 at 600 MW (Figure 33).



### Ethanol

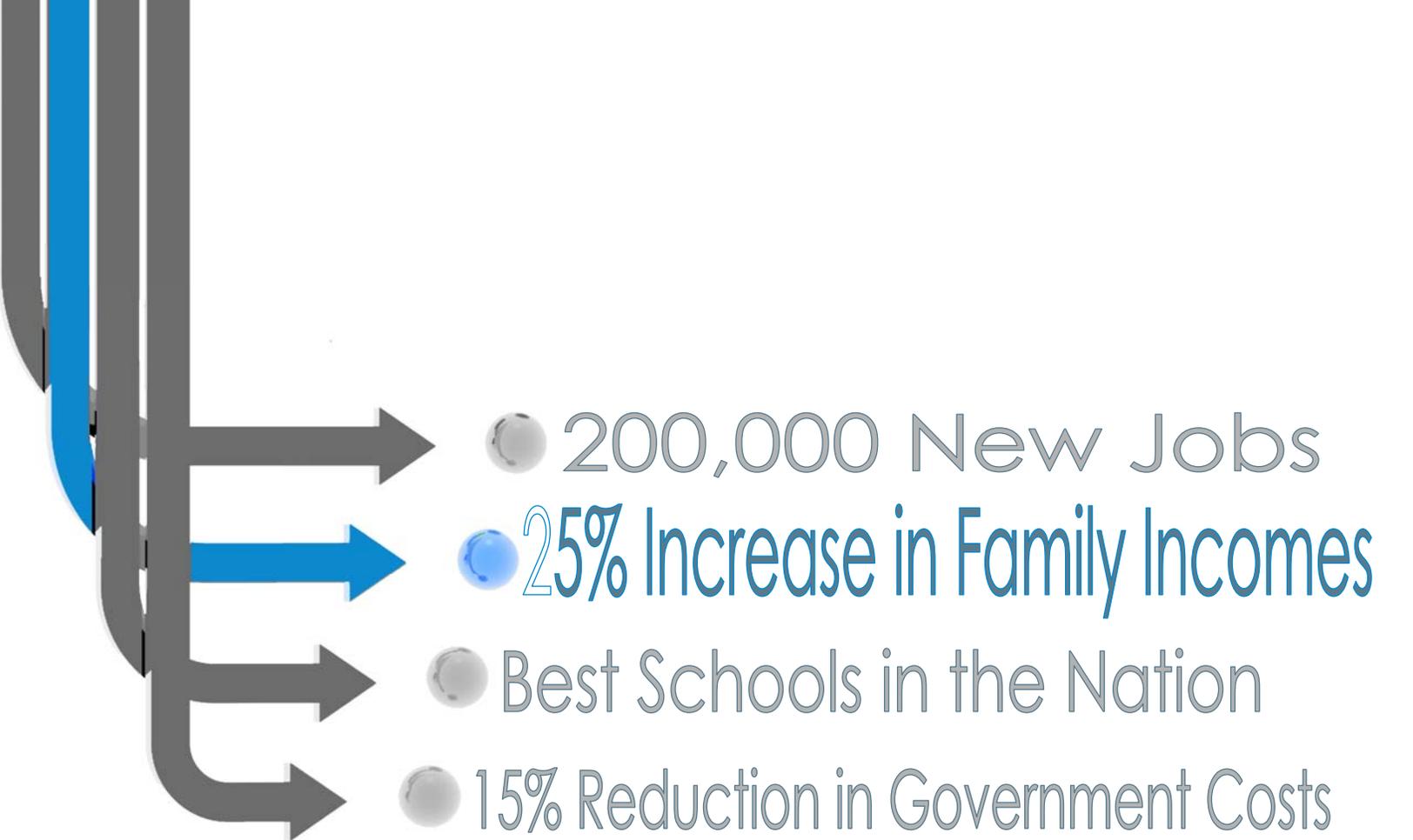
According to the Renewable Fuels Association, Iowa has a current ethanol production capacity of 3.8 billion gallons. This is the greatest capacity in the nation and nearly 1.8 billion gallons more than Nebraska, which is second in the nation for production capacity. Currently there are 41 ethanol facilities in operation across Iowa (including dry and wet mills). The highest concentration of facilities are located in the north central and western portions of the state.

### Biodiesel

Biodiesel is a biodegradable, nontoxic alternative fuel that can be blended at any level with petroleum diesel. With 15 biodiesel plant locations and a production capacity of about 325 million gallons per year, Iowa is a leading state in biodiesel production.

### 200,000 NEW JOBS SUMMARY

- Iowa's economy is heavily dominated by trade, healthcare and manufacturing, that combined employ 45 percent of the state's workers.
- The labor force grew by 0.2 percent in Iowa between 2006 and 2011.
- Health care and social assistance employment increased by over 15,500 between 2006 and 2011, the largest industry increase in the state.
- The sectors that lost the largest numbers of net jobs in Iowa between 2006 and 2011 were manufacturing (25,009), construction (12,102), retail and wholesale trade (6,601) and information (4,864).
- As of December 2012, Iowa had an unemployment rate of 5.0 percent, second only to Nebraska (3.8%), for the lowest among the benchmark states and significantly less than the U.S. unemployment rate of 7.8 percent.
- In 2011, 0.24 percent or 240 out of 100,000 adults started a business each month.
- Patent activity in Iowa was relatively flat between 2010 and 2011 and ranked second among the benchmark states in patents issued per capita (2.7 per 10,000 population).

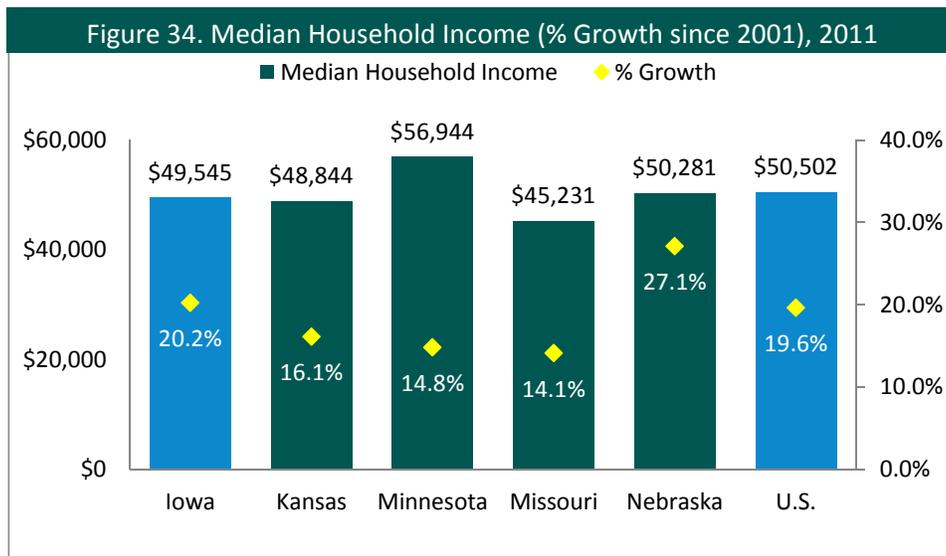


## 25% INCREASE IN FAMILY INCOMES

Another goal of this administration is to increase family incomes by 25 percent. This section will address current household income in Iowa as well as examine income distribution within the state. Thereafter, the business climate and quality of life provided in Iowa, including labor costs, taxes and utilities and housing figures will be discussed.

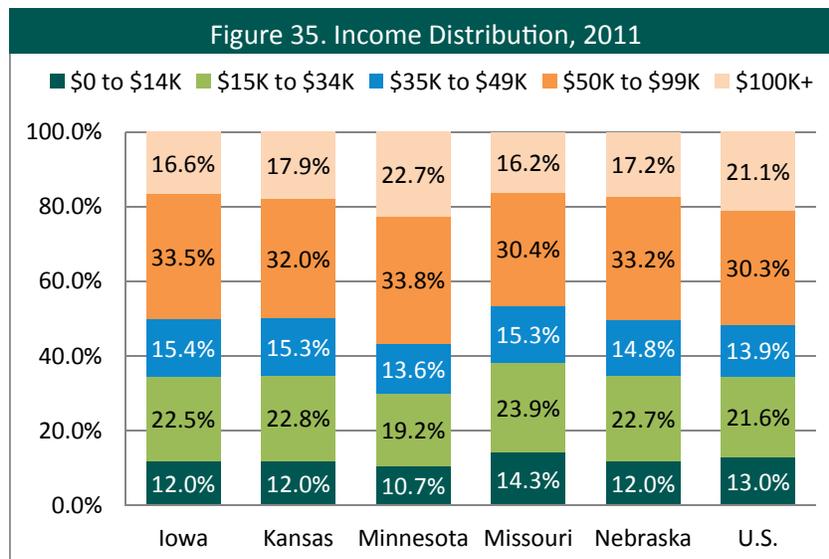
### INCOME

While median household income growth in Iowa has been relatively strong since 2001 (20.2%), the median household income in the state remains below \$50,000 a year. Missouri and Kansas have the lowest median household incomes among the benchmark states and Iowa is \$957 lower than the national median household income (Figure 34).



Source: Census Bureau, Small Area Income and Poverty Estimates

The relatively low median household income of Iowa can be attributed to nearly half (49.9%) of Iowa households having an income of less than \$50,000 per year (Figure 35) and per capita personal income for 2011 at \$41,156. Attracting and expanding industries that bring higher-paying jobs, not just more jobs, needs to be a focus for the state. In addition, the creation of more higher-paying jobs will help to attract and retain talented workers in Iowa.



Source: Census Bureau, 2011 ACS

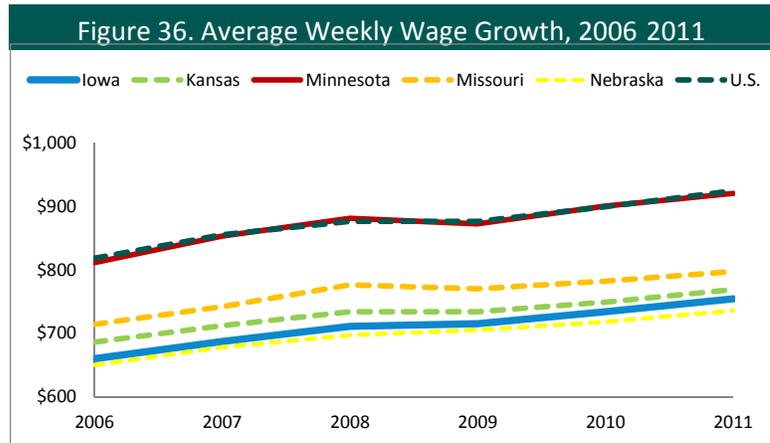
## BUSINESS CLIMATE AND QUALITY OF LIFE

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

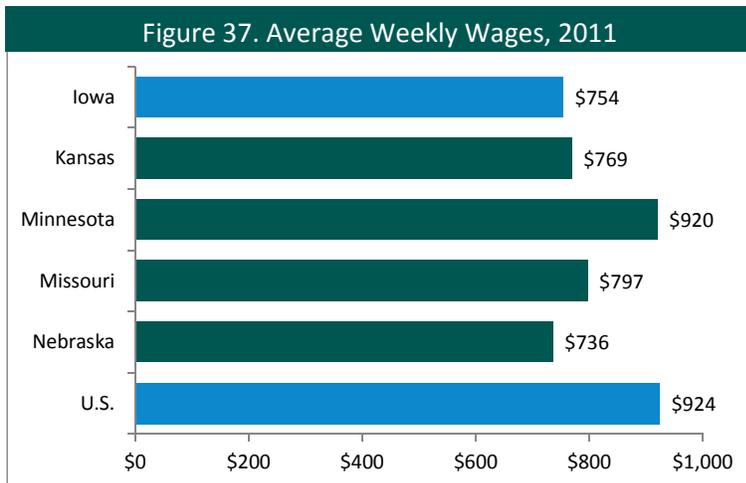
Labor costs, taxes, utility costs and quality of life factors are all important components to be considered. Quality of life indicators are a combination of several factors, some that are quantifiable and some that are not. Taken together, they provide a picture of how appealing a place is to both live and work – a critical factor for attracting and retaining both industry and talent.

### LABOR COSTS

Wages in Iowa are the second lowest among the benchmark states. On a weekly basis, wages in Iowa are \$165 less than average wages nationwide and lower than all but one of the benchmark states (Figures 36 & 37). While businesses seek competitively-priced regions for better profitability, they also want to locate in regions and states that have appropriately skilled labor. Though Iowa has a strong labor force and multiple colleges and universities educating young smart talent, wage levels must be properly addressed to make it a selling point rather than a detractor.



Source: Bureau of Labor Statistics, OCEW



Source: Bureau of Labor Statistics, OCEW

Wages have grown steadily in Iowa since 2006 (\$660 to \$754 in 2011), as is the trend among the benchmark states. Average weekly wage growth will assist in attracting workers to the state, retaining college graduates and building its already strong workforce. A skilled workforce is one of the top factors considered by companies today when deciding where to locate.



## TAXES AND UTILITIES

Tax burden and utility costs can play a strong role in a company's site location decision. Competitive tax climates are an important factor in attracting businesses.

Iowa's high ranking in the Tax Foundation's State Business Tax

Climate Index is most heavily impacted by its ranking for corporate income tax. Iowa's top tax rate is one of the highest in the nation, but the study is incomplete in that it fails to take into account Iowa's federal deductibility or the fact that Iowa taxes corporate income based only on sales made within the state.

With that in mind, **Figure 38** shows Iowa's overall ranking of 41 (1 being the most business friendly) is higher than all of the benchmark states (except Minnesota) and the table demonstrates the components that make up that overall ranking. These are the five areas of taxation that impact business. High corporate tax rates in Iowa are in large part to blame for the state's high business tax climate ranking. However, Iowa's current overall ranking of 41 is down from its 2011 ranking of 45 which can be attributed to significant reductions in the categories of individual income tax and sale tax index.

The U.S. Census Bureau's American Community Survey reports that in 2011 the median residential property taxes for the nation overall, were \$2,335

annually which was \$535 greater than Iowa's median residential property taxes of \$1,800. Only Missouri (\$1,429) had lower residential property taxes than Iowa. Nebraska had the highest median property taxes at \$2,517, followed by Minnesota at \$2,271 and Kansas at \$1,903.

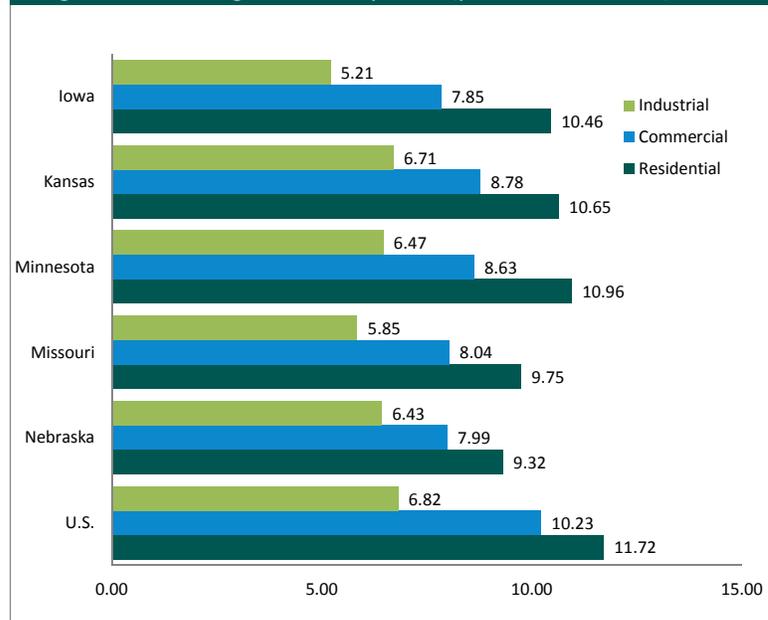
Electricity costs can also be a significant factor in a company's site location decision. This is particularly true for manufacturers whose operations require large amounts of electricity. Iowa is extremely competitive when looking at industrial electricity rates. Iowa has the least expensive industrial electricity rates among the benchmarks at 5.21 cents per kilowatt hour. This is over 1.6 cents less than the national average (**Figure 39**). It is also 2.8 percent less than what the US Energy Information Administration reported for Iowa in 2010.

**Figure 38: Components of State Business Tax Climate (2012 Rankings)**

	Iowa	Kansas	Minnesota	Missouri	Nebraska
Overall Rank	41	25	45	15	30
Corporate Tax Rate Index Rank	48	35	45	8	33
Individual Income Tax Rank	32	21	44	23	29
Sales Tax Index Rank	25	32	36	26	27
Unemployment Insurance Tax Index Rank	35	6	34	9	12
Property Tax Index Rank	36	28	26	7	37

Source: The Tax Foundation

**Figure 39. Average Electricity Rate (per kilowatt hour), 2011**



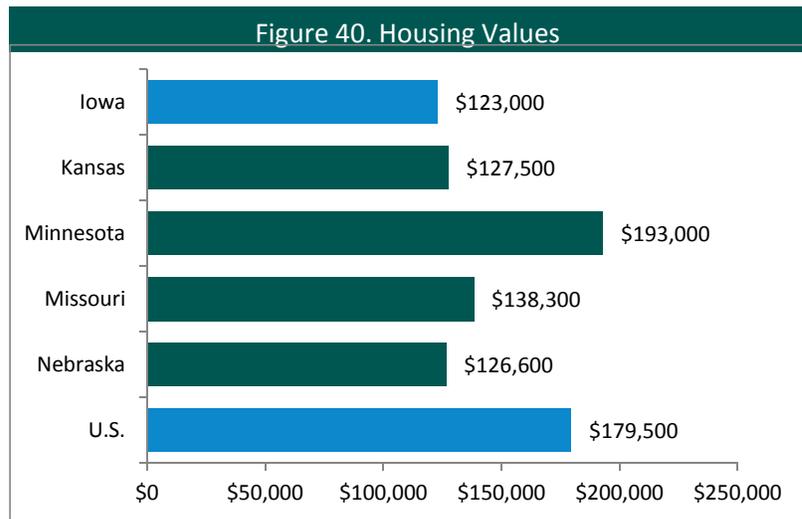
Source: US Energy Information Administration

## HOUSING

A low cost of living and affordable housing prices are important to workers looking to relocate. Housing costs are the strongest component when measuring the affordability of a state.

Iowa is extremely competitive from a cost of living and housing price standpoint. It has the lowest housing costs (Figure 40) among the benchmark states.

As of 2011, Iowa's median home value was \$56,500 less than the U.S. median home value. The affordability of housing should be utilized by the state and leveraged as a strong selling point for attracting new talent.



Source: Census Bureau, 2011 ACS

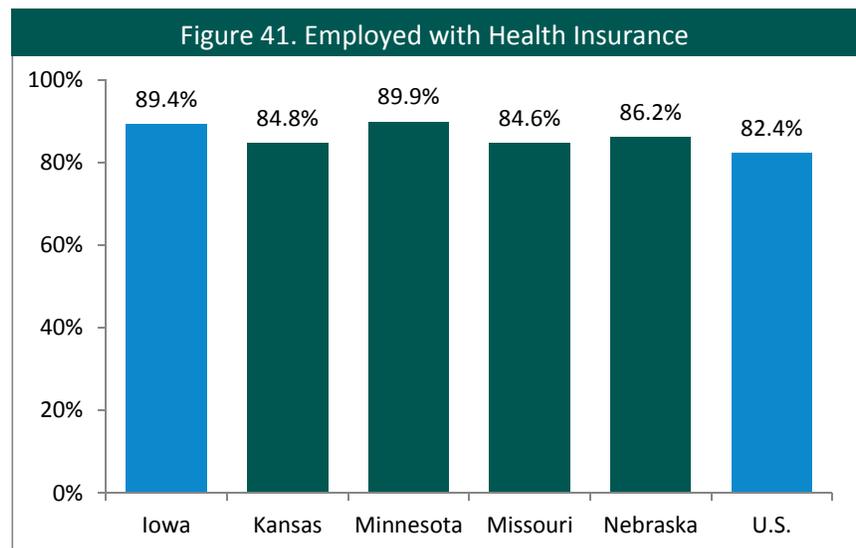
In addition, Iowa's median monthly rental rate of \$645 is the lowest among the benchmark states. In fact, Iowa's rental rate is over 26 percent below the national median of \$878. Minnesota's median of \$790 is \$145 greater than Iowa's and is followed by Missouri at \$790, Kansas at \$708 and Nebraska at \$680.

It should be noted, however, that certain regions of the state, particularly in rural counties, have a lack of quality housing options. So despite affordable housing costs, a lack of quality housing choices makes retaining and attracting talented workers to these regions a challenge.

## HEALTH INSURANCE COVERAGE

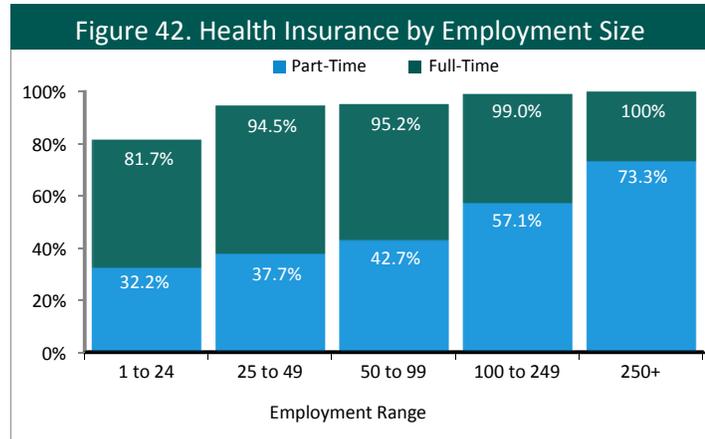
Prospective and current employees value health insurance inclusion in their employment benefit package.

Minnesota and Iowa rank as the top two states, with 89.9 and 89.4 percent respectively, for employed civilian labor force covered by health insurance (Figure 41).



Source: Census Bureau, 2011 ACS

In addition to health insurance coverage, Iowa Workforce Development produces reports for the state of Iowa analyzing fringe benefit packages offered by employers across all industrial classifications and employment ranges. Responding businesses provide information on benefit packages offered throughout the state of Iowa. This information assists businesses, community leaders and workers to make better informed decisions on expansion and retention initiatives, community development projects and job offerings.



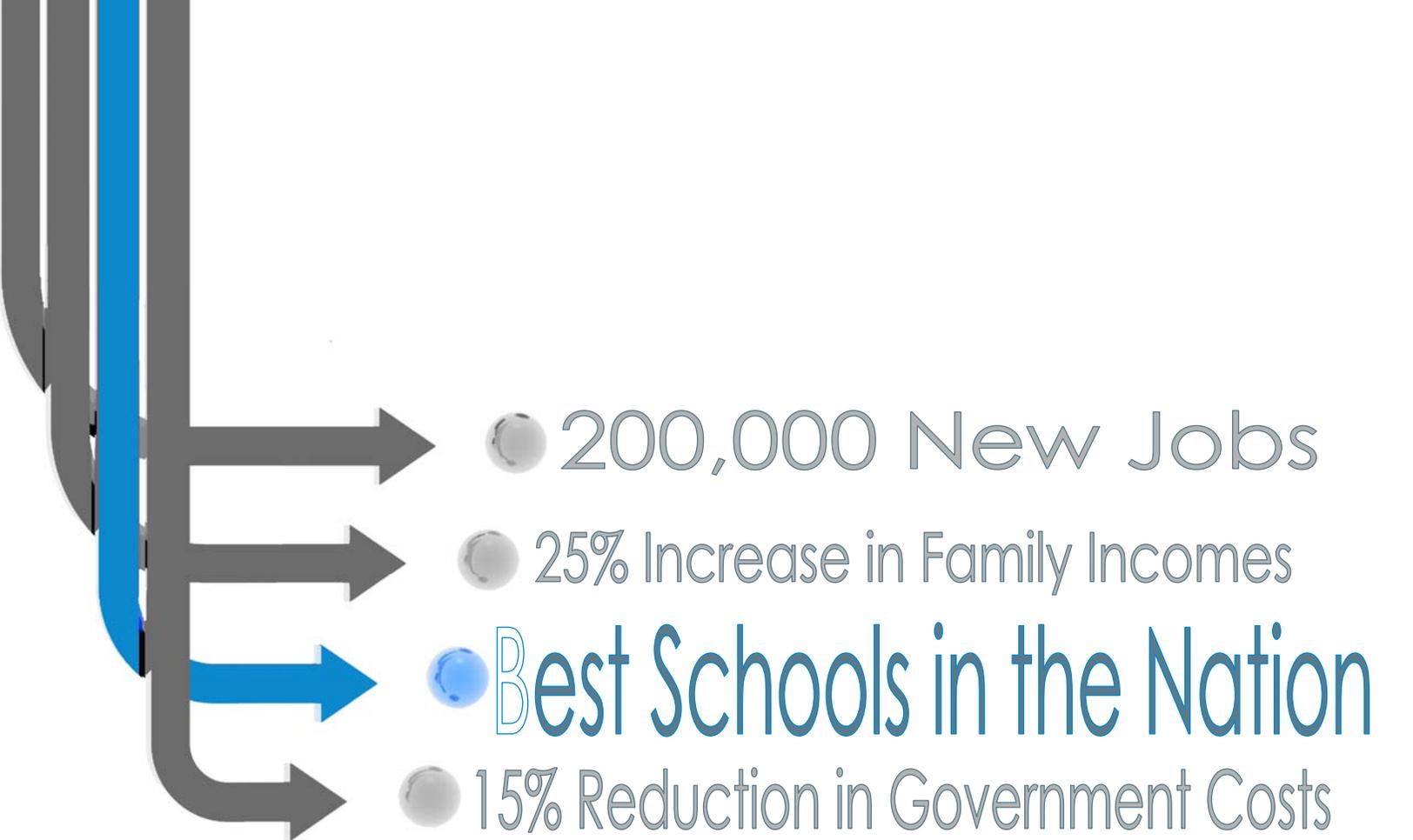
Source: Iowa Workforce Development, Regional Research & Analysis Bureau

Figure 42 illustrates the percentage of employers, by employment size in Iowa, that offer health insurance plans to employees, both full- and part-time. The majority of Iowa employers offer medical insurance to their full-time employees. Additionally, Iowa employers offer other benefits to employees such as flexible spending accounts, company discounts, tuition assistance and incentives. Fringe Benefit Profiles are available at <http://www.iowaworkforce.org/lmi/labsur/benefits.htm>.



### 25% INCREASE IN FAMILY INCOMES SUMMARY

- Iowa's median annual household income ranks third among the benchmark states at \$49,545; \$957 per year lower than the national median household income.
- Average weekly wages in Iowa were \$754 in 2011, second lowest among the benchmark states. The national average was \$924/week.
- Iowa's business tax climate rank is unfavorable due to high corporate tax burden..
- Industrial electricity rates in Iowa are extremely competitive at 5.21 cents per kilowatt hour.
- Housing prices in Iowa are substantially lower than the U.S. average and lowest among the benchmark states.
- Median rents in Iowa are also much lower than the U.S. average and lower than all of the benchmark states.



## BEST SCHOOLS IN THE NATION

Regions and states with an established pipeline of young professionals with advanced degrees in varying fields of study help provide a deep and diverse talent base from which to recruit and retain high-impact industries. Employers say they need a better-prepared, better-trained work force. That means higher expectations for schools. Once Iowa's educational system was recognized globally as a leader in education, however today it is in the middle of the pack. Additionally, the quality of K-12 schools and programs that expose young students to varying career options is important to developing Iowa's available human capital. This section includes indicators on Iowa's rankings compared to benchmark states and the nation regarding education.

### K-12 PROGRAMS

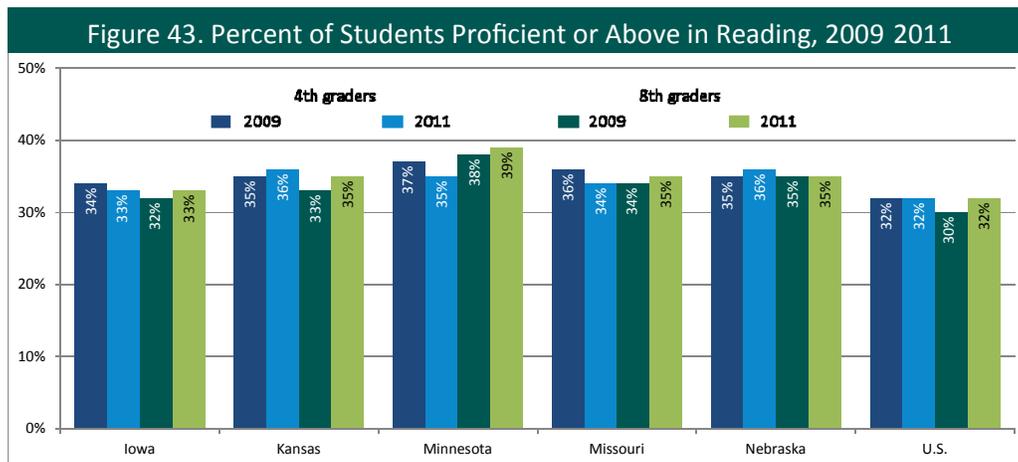
Leveraging the state's strength in K-12 education is important moving forward. Continuing to expand on programs that educate the state's youth about the multiple higher-education opportunities and career options that exist statewide is important for ensuring that Iowa is capitalizing on its strong K-12 educational system.

It is apparent that Iowa recognizes its young people as one of its strongest assets; and the state is quite effective in laying the educational foundation necessary for preparing them for careers down the road.

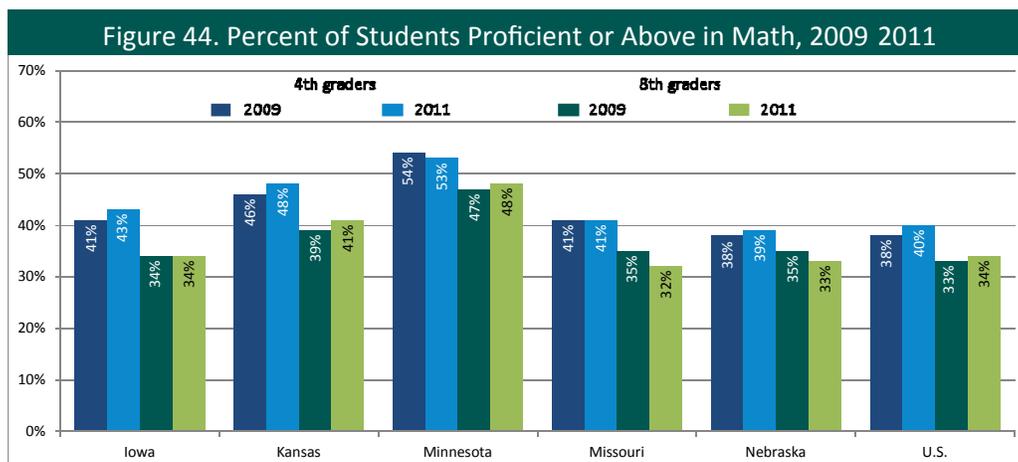
Figures 43 and 44 illustrate where Iowa students rank in proficiency in both reading and mathematics with measurements taken in fourth and eighth grades as reported by the Institute of Education Sciences' National Assessment of Educational Progress (NAEP). The percentage of students that attained an achievement level of proficient or above in 2009 and 2011 are delineated in the charts below.

Though Iowa has a lower percentage than all of the benchmark states in reading proficiency, the difference is not substantial and the percentage is slightly higher, for each year and grade level, than the national average.

Minnesota and Kansas are higher in mathematics proficiency, however, Iowa scores are similar to Missouri, Nebraska and the nation as a whole.

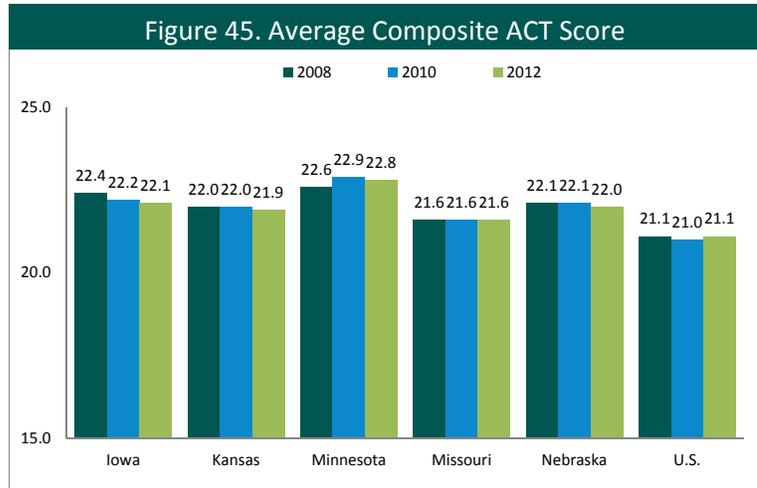


Source: National Center for Education Statistics



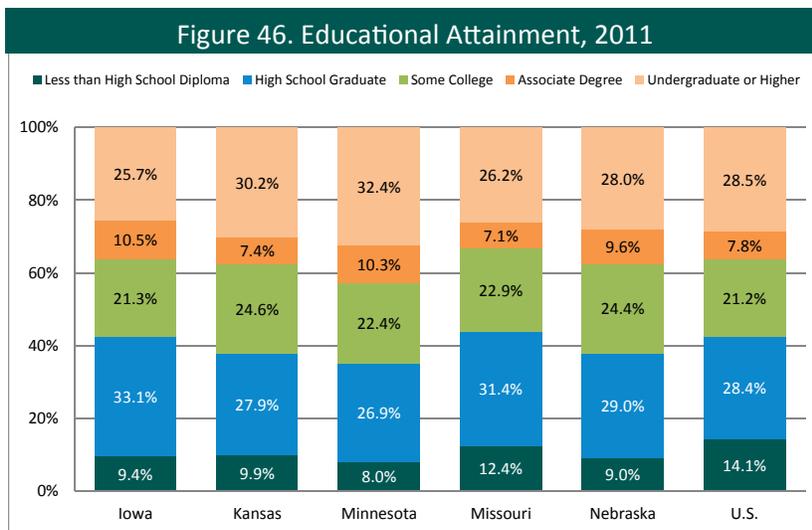
Source: National Center for Education Statistics

Figure 45 illustrates average composite ACT scores for Iowa, the nation and the benchmark states. ACT composite scores range from one to 36. These scores are a combination of four subject areas; English, mathematics, reading and science. Other than Minnesota, Iowa has maintained higher composite scores than all benchmark states and the nation as a whole in 2008, 2010 and 2012. In 2012, over 23,000 of Iowa's graduates, approximately 63.0 percent of the graduating class, took the ACT. From 2008-2012 the number of ACT test-taking graduates increased by 0.7 percent, while the total number of graduates in Iowa decreased by 3.9 percent over the same period.



Source: ACT Profile Reports, 2012

## EDUCATIONAL ATTAINMENT



Source: Census Bureau, 2011 ACS

High school freshman graduation rates for public secondary schools within Iowa are quite strong. Statistics provided by the *Digest of Education Statistics* show that Iowa had an average freshman graduation rate of 85.7 percent in the 2008 - 2009 school year (the most recent year available). This average is more than 10 percent higher than the national average (75.5%). Minnesota (87.4%) leads the way in average freshman graduation rates among the benchmark states followed by Missouri at 83.1%, Nebraska at 82.9% and Kansas at 80.2%. The

average freshman graduation rate provides an estimate of the percentage of students who receive a regular diploma within four years of entering ninth grade.

Slightly over one-fourth (25.7%) of Iowa's population 25 years of age or older holds an undergraduate degree or higher. This ranks lowest among the benchmark states and lower than the nation as a whole (Figure 46). However, Iowa has a greater percentage of high school graduates and a lower percentage of population without a high school diploma than the majority of the other benchmark states. Iowa also has a larger percentage of residents with an associate's degree.



When analyzing those with a high school education or higher, Missouri, Nebraska and Iowa have the highest percentage of population growth from 2010 to 2011 of those 25 years of age and older compared to the other benchmark states (Figure 47).

In addition, between 2010 and 2011, Iowa's percentage of population 25 years or older with an undergraduate degree or higher grew by 0.6 percent, which was the highest among the benchmark states and greater than the nation as a whole which experienced a growth of 0.3 percent.

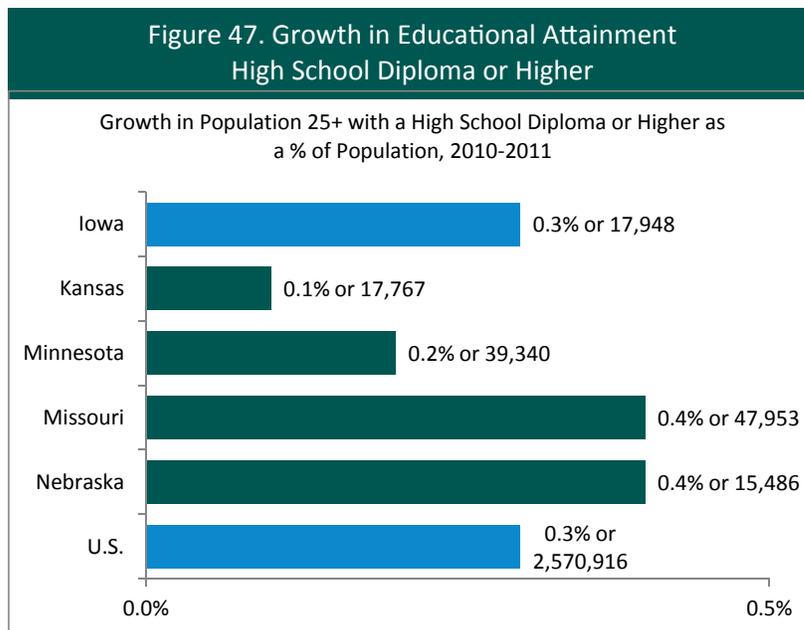
### RESEARCH AND DEVELOPMENT

As touched on before in the 'Innovation' section, the state can be effective in supporting innovation by supporting human capital (education) and funding pre-commercial technology (research and development). Iowa's Research Activities Tax Credit (RAC) promotes business research and new technology by offering tax credits to businesses.

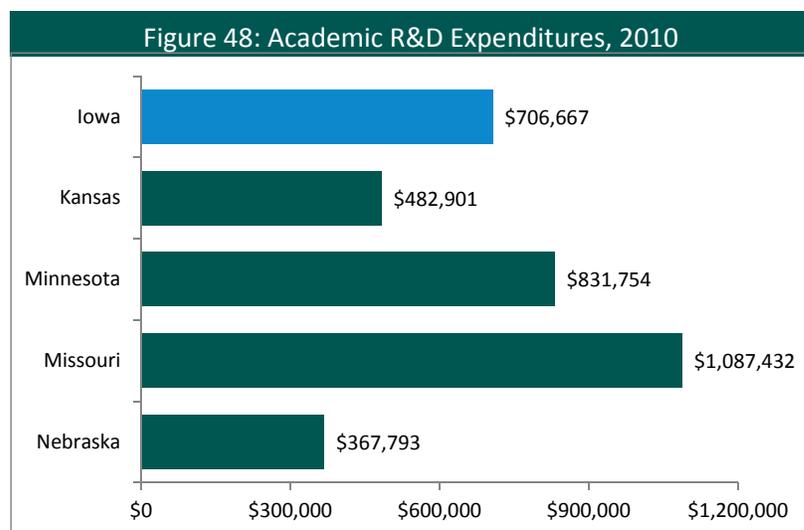
In 2010, over \$707 million was invested in research and development activities in Iowa. This was over \$144 million greater than the amount reported in 2009 and ranks third among the benchmark states (Figure 48).

### SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS

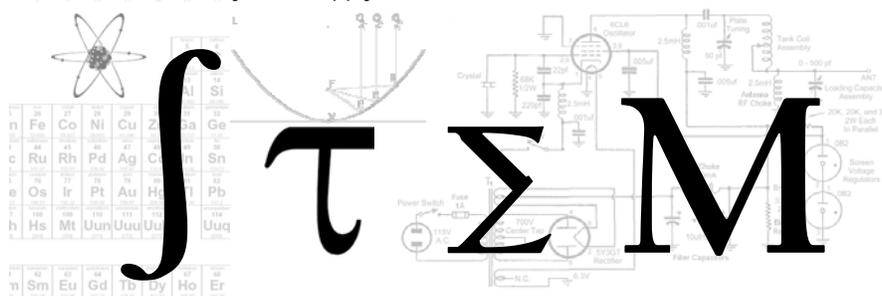
Science, technology, engineering and mathematics education and experience are crucial elements for innovation. The State relies on its workforce to excel in these areas in order to maintain a competitive edge in education, commerce and technological advancements. In the fall of 2011, the Governor's office formed the Science, Technology, Engineering and Mathematics (STEM) Advisory Council. This council works to grow Iowa's commitment to bolstering STEM education, STEM innovation and to better position Iowa's workforce and the state's economy for the future. The following section provides a snapshot of the distribution of the supply and demand of labor in Iowa within STEM disciplines; and also includes an analysis of supply and demand across the state.



Source: Census Bureau, 2011 ACS



Source: National Science Foundation

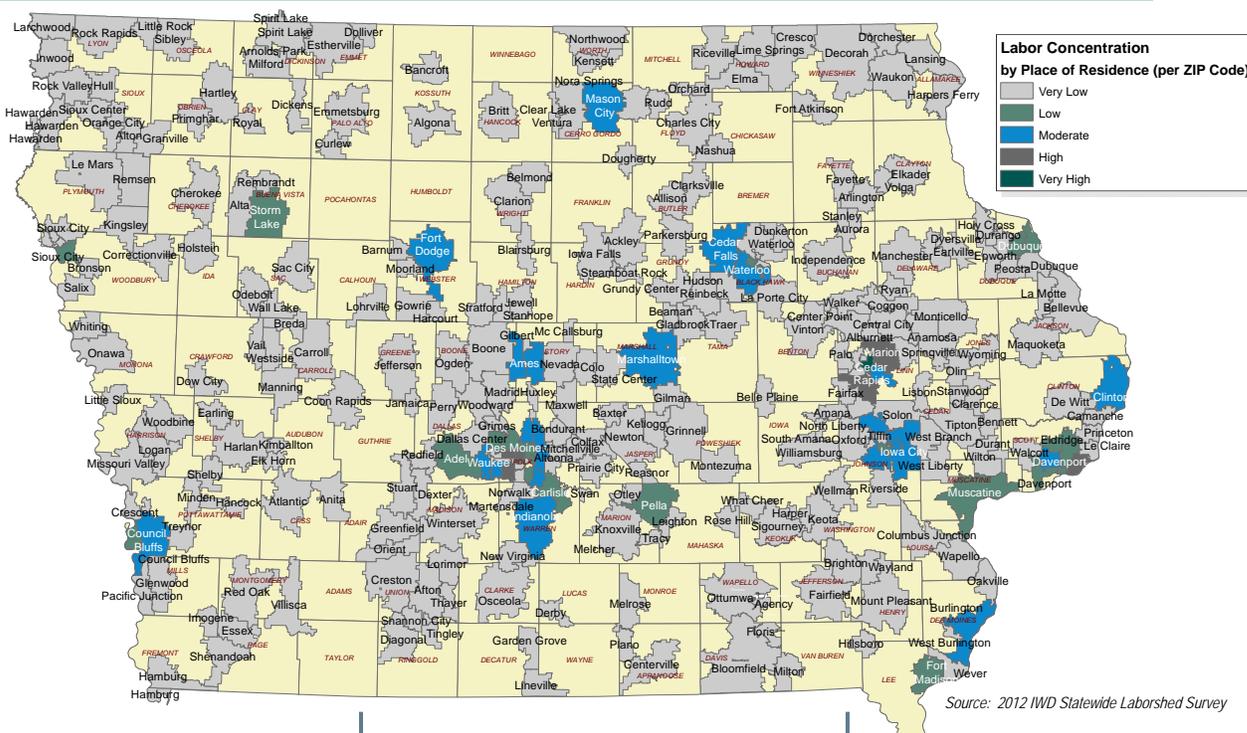


## Labor Characteristics (STEM)

Figure 49 and the data below originates from the 2012 Statewide Laborshed Study. A Laborshed is defined as the area or region from which an employment center draws its commuting workers. This statewide analysis is composed of 6,000 responses of individuals in the State of Iowa. Surveys were conducted in each ZIP code based on a random sample of the population between 18 and 64 years of age and weighted by the total number of people in each ZIP code.

The map and accompanying data below represent where the respondents with experience and education in STEM disciplines live by ZIP code and their responses to the survey questions.

Figure 49. Concentration of Respondents with STEM Experience or Education



### STEM Discipline Breakdown:

- 35.7% Computer Sciences
- 28.0% Environmental Science
- 23.9% Life Sciences
- 23.7% Engineering
- 8.7% Physics/Astronomy
- 8.4% Chemistry
- 2.3% Mathematics
- 0.6% Geosciences

*(Totals greater than 100% due to some occupational codes belonging to more than one STEM Discipline)*

### Employment Status:

#### 80.3% Employed

- 24.8% of the employed are willing to change employment

#### 6.6% Unemployed

- 76.9% of the unemployed are willing to accept employment

#### 3.0% Voluntarily Unemployed/Not Retired

- 50.0% of the voluntarily unemployed/not retired are willing to accept employment

#### 10.7% Retired

- 35.0% of the retired are willing to accept employment

### Education Levels:

- 78.2% Education beyond high school
- 3.5% Trade certified
- 1.0% Vocational training
- 13.0% Associate degree
- 37.5% Undergraduate degree
- 11.2% Postgraduate degree

### Other Facts:

- 58.2% paid an annual salary
- 82.6% are/were full-time
- 9.7% are/were self-employed
- 5.6% are/were part-time
- 11.6% hold more than one job
- Currently working an average of 45 hrs/week

### Underemployment:

- Total Underemployment - 1.6%
  - Low hours - 1.0%
  - Mismatch of skills - 0.9%
  - Low income - 0.0%
- (IWD only counts individuals once when estimating Total Underemployment.)*

### Current Benefits:

- Health/medical insurance - 93.9%
- Pension/retirement/401K - 73.0%
- Dental coverage - 60.1%
- Paid vacation - 51.9%
- Vision coverage - 37.8%
- Paid holidays - 29.4%
- Life insurance - 28.9%
- Paid sick leave - 28.5%

### Flexibility in the Workplace:

*(by percent of interest)*

- Job teams - 77.8%
- Cross-training - 70.7%
- Job sharing - 38.1%
- Varied shifts (2nd, 3rd & split) - 27.2%
- Temporary work - 45.6%
- Seasonal work - 41.7%

### Top Advertising Media:

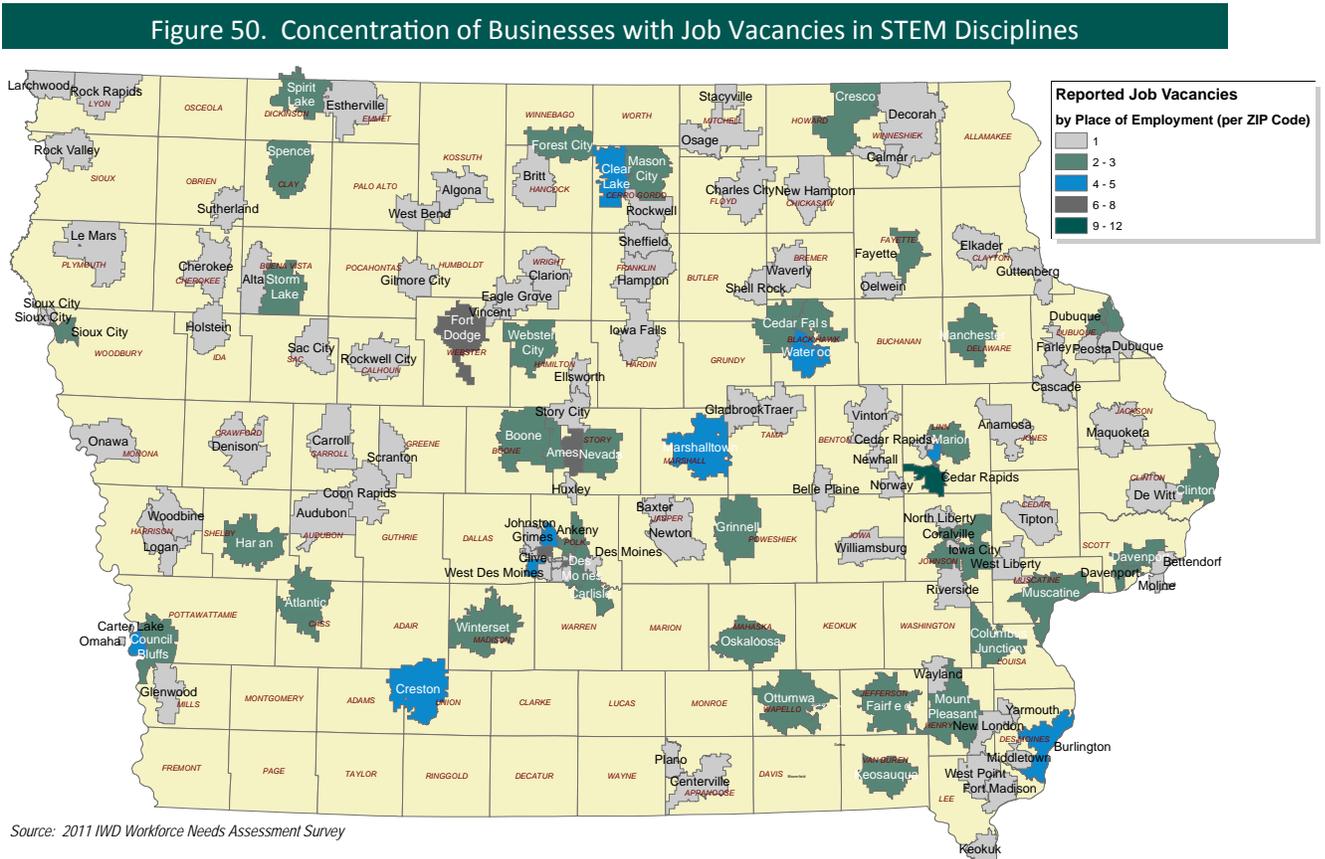
*(for those seeking employment opportunities)*

- Internet - 78.9%
- Local/regional newspapers - 35.6%
- Networking through family, friends or acquaintances - 24.0%
- Local Iowa WORKS centers - 12.9%

## Workforce Needs (STEM)

Figure 50 and the data below originates from the 2011 Workforce Needs Assessment Survey (Job Vacancy). Employers across the state were asked to participate in the survey using on-line technology. The statewide analysis is composed of 8,008 business responses across all different company sizes and industries.

The map and accompanying data below represent where the businesses that have job vacancies in STEM disciplines across the state are located and the employers' responses to the survey questions concerning these vacancies.



### STEM Discipline Breakdown:

- 52.4% Engineering
- 28.9% Life Sciences
- 27.6% Computer Sciences
- 8.9% Physics/Astronomy
- 7.6% Chemistry
- 6.2% Environmental Science
- 2.7% Mathematics
- 0.9% Geosciences

*(Totals greater than 100% due to some occupational codes belonging to more than one STEM discipline)*

### Job Type:

- 87.1% Full-time
- 11.6% Part-time
- 1.3% Seasonal or temporary

### Career Experience Requirements:

- No experience needed - 23.4%
- Less than 1 year - 12.7%
- One to two years - 29.8%
- Three to five years - 22.0%
- More than five years - 12.1%

### Education Requirements:

- No education requirement - 11.2%
- High school diploma/GED - 29.1%
- Trade/technical certification - 19.4%
- Vocational training - 4.4%
- Associate degree - 7.8%
- Undergraduate degree - 24.8%
- Postgraduate/professional degree - 3.3%

### Top Skills Lacking in Applicants:

#### Basic Skills

- Written communication - 19.3%
- Mathematics - 12.1%
- Reading comprehension - 11.1%

#### Hard/Occupational Skills

- Critical/analytical thinking - 31.0%
- Business communication - 15.7%
- Machine operation - 15.0%

#### Soft/Personal Skills

- Motivation - 35.9%
- Dependability - 33.0%
- Communication - 27.8%
- Time management - 19.0%

*(Percentage of applicants that are lacking skills as reported by employers)*

Figure 51 lists the top occupations across STEM disciplines by projected annual growth rate and median hourly wages. Veterinary Technologists & Technicians (4.8%), Diagnostic Medical Sonographers (4.2%) and Actuaries (4.1%) have greatest projected annual growth. Many of the occupations listed are/can be employed in a variety of different industries.

Figure 51. Statewide High Growth STEM Occupations		
Occupation	Projected Annual Growth Rate	Statewide Median Wage
Veterinary Technologists & Technicians	4.8%	\$ 13.75
Diagnostic Medical Sonographers	4.2%	\$ 27.98
Actuaries	4.1%	\$ 48.10
Personal Financial Advisors	3.7%	\$ 27.98
Physical Therapist Assistants	3.7%	\$ 21.08
Heating, AC & Refrigeration Mechanics & Installers	3.7%	\$ 21.47
Environmental Scientists & Specialists, Including Health	3.7%	\$ 27.89
Credit Analysts	3.6%	\$ 26.77
Computer Systems Analysts	3.4%	\$ 35.02
Computer Software Engineers, Systems Software	3.4%	\$ 37.61
Cost Estimators	3.3%	\$ 25.17
Physical Therapists	3.2%	\$ 35.39
Optometrists	3.2%	\$ 48.13
Computer-Controlled Machine Tool Operators, Metal & Plastic	3.2%	\$ 17.95
Chiropractors	3.0%	\$ 28.73
Logisticians	3.0%	\$ 29.26
Architects, Except Landscape & Naval	3.0%	\$ 34.06

Source: Iowa Occupational Projections 2010-2020  
Wage Data - 2012 Iowa Wage Survey

Starting average wages offered by employers can be one of the reasons they have difficulty filling vacancies. By comparing data compiled from the Iowa Workforce Needs Assessment (Job Vacancy Survey) and the Occupational Employment Statistics (OES) survey a large difference in the starting average wages that are offered to job candidates and the average wages currently being paid to employees in these STEM disciplines is clearly identifiable. Figure 52 illustrates that the average starting wage offered by employers in the geosciences STEM discipline (\$26.87/hour) is much lower than what qualified workers are currently receiving for an OES average wage (\$44.82/hour). The starting average wage is much more comparable to the OES entry-level wage for this STEM discipline.

Figure 52. Average Starting Wages vs. OES Wages for STEM Disciplines			
STEM Discipline	Average Starting Wage	OES Average Entry-Level Wage	OES Average Current Wage
Chemistry	\$ 25.98	\$ 24.18	\$ 36.56
Computer Sciences	\$ 22.00	\$ 22.20	\$ 34.73
Engineering	\$ 19.90	\$ 22.05	\$ 32.07
Environmental Scientists	\$ 25.32	\$ 19.64	\$ 32.01
Geosciences	\$ 26.87	\$ 30.63	\$ 44.82
Life Sciences	\$ 17.04	\$ 18.77	\$ 28.58
Mathematics	\$ 26.85	\$ 25.48	\$ 42.67
Physics & Astronomy	\$ 26.62	\$ 24.93	\$ 37.07

Source: Average Starting Wage - 2011 Workforce Needs Assessment Survey; OES Averages - 2011 Occupational Employment Statistics Wage Survey updated to 2012 via the Employment Cost Index

Analyzing each STEM discipline individually provides an opportunity to identify where gaps might exist in the supply and demand of occupational groups. Figures 53 and 54 below represent visually where the supply and demand for workers with engineering education or experience exist across the state. Figure 55, on the next page, illustrates the overlay of the supply and demand data.

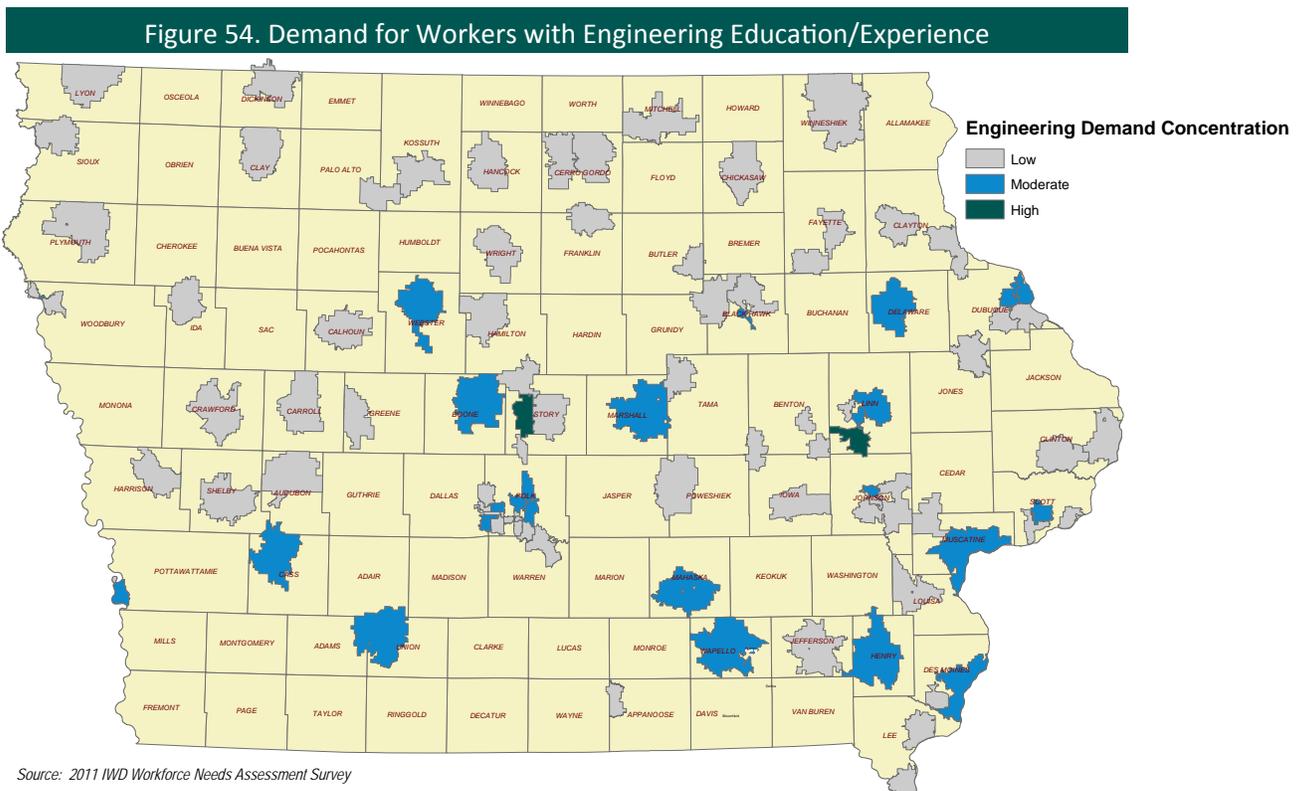
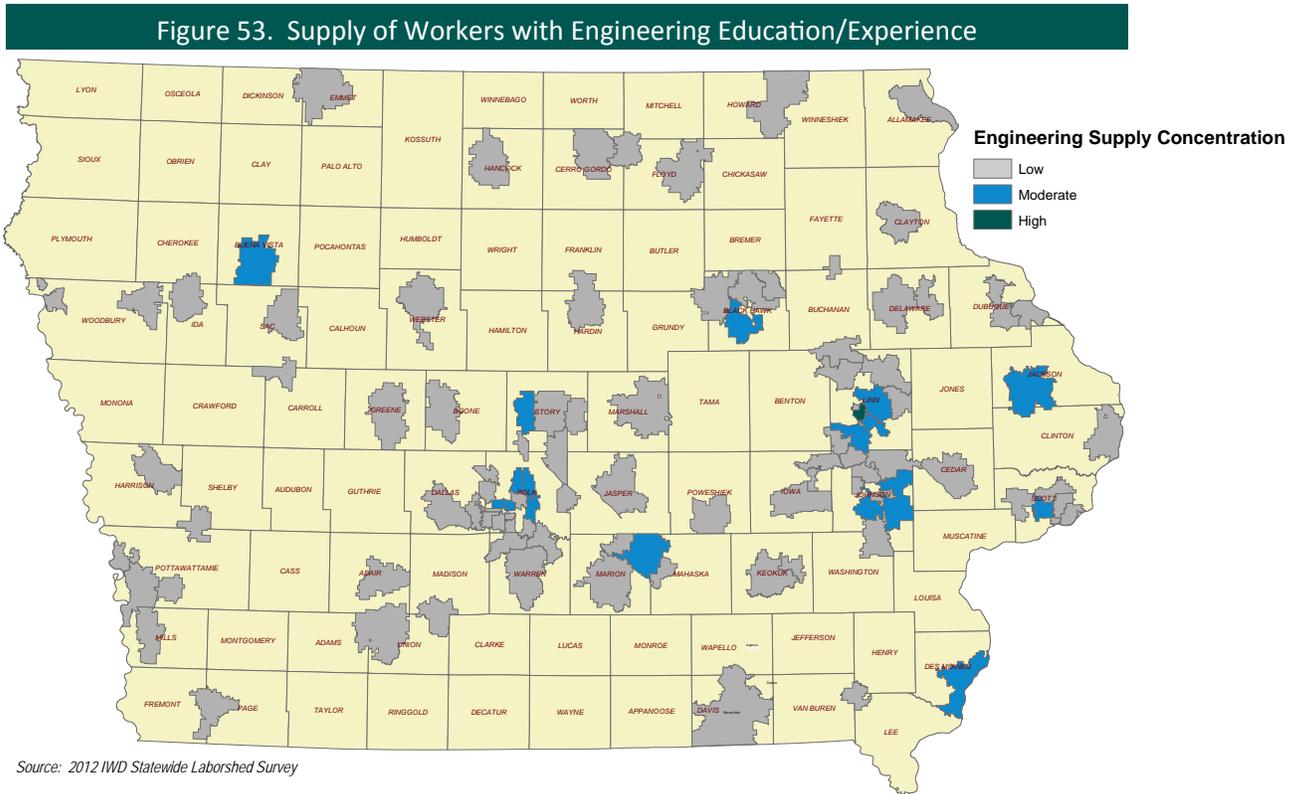
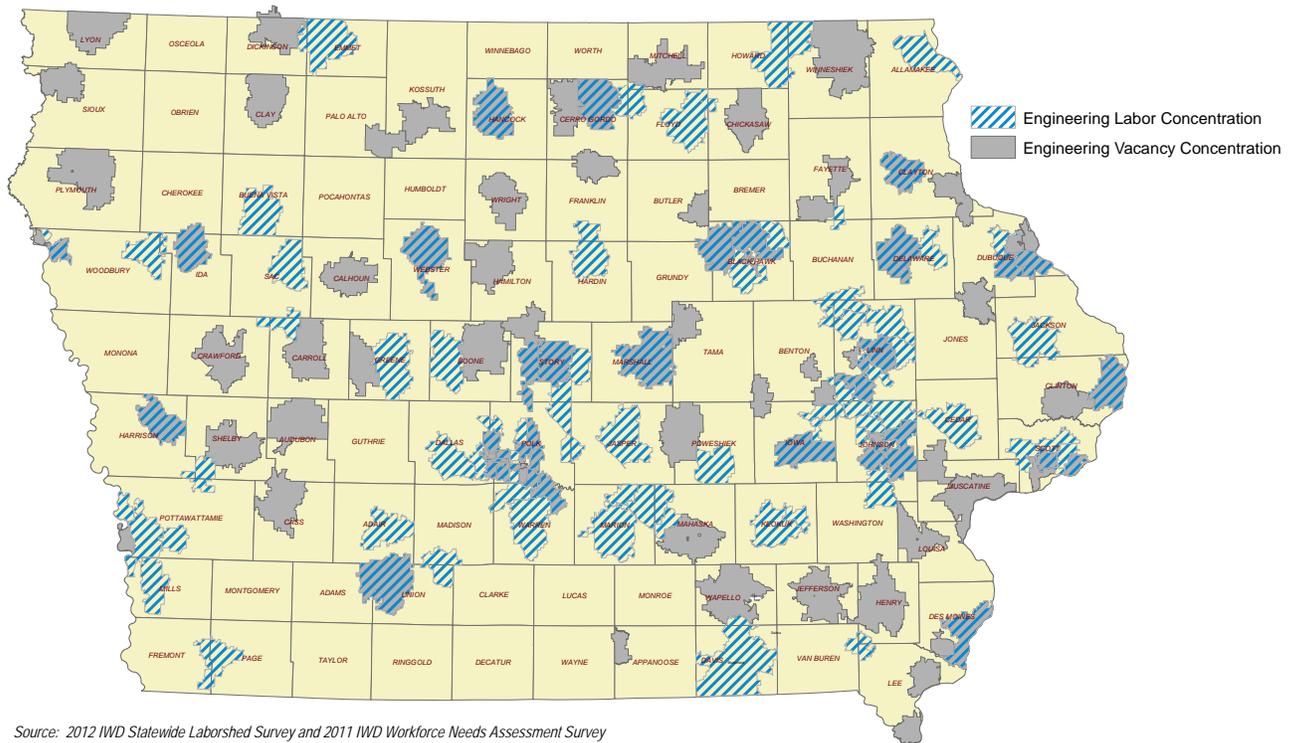


Figure 55. Supply & Demand Overlay of Engineering Discipline



Source: 2012 IWD Statewide Laborshed Survey and 2011 IWD Workforce Needs Assessment Survey

The labor force employed within the engineering STEM discipline is well aligned in many areas of the state where there is a demand for labor in engineering occupations. This alignment is apparent geographically, as shown in **Figure 55**, above. However, there are several areas where the concentration of labor does not correlate closely with the concentration of vacancies.

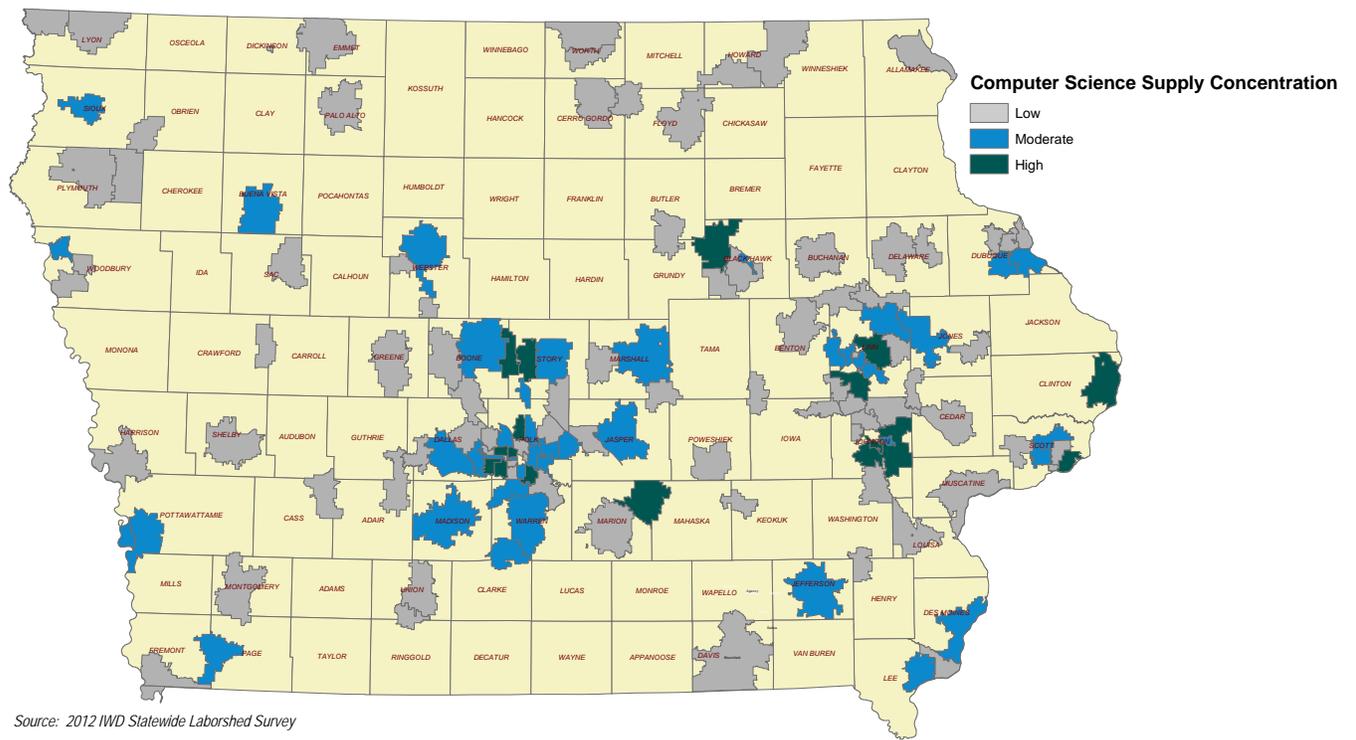
For instance, there are concentrations of engineering vacancies in Plymouth, Lyon and Sioux counties where there is not a similar concentration of labor within this STEM discipline. Likewise, there are several counties that have a significant concentration of labor with experience and/or education within the engineering discipline without a corresponding concentration of vacancies.

This may indicate a gap in the wages offered by employers seeking to fill vacant engineering positions and the average starting wages of those employed within similar occupations. It might also indicate an opportunity for enhanced communication and better matching of potential employees and employers via media outlets and networking opportunities.



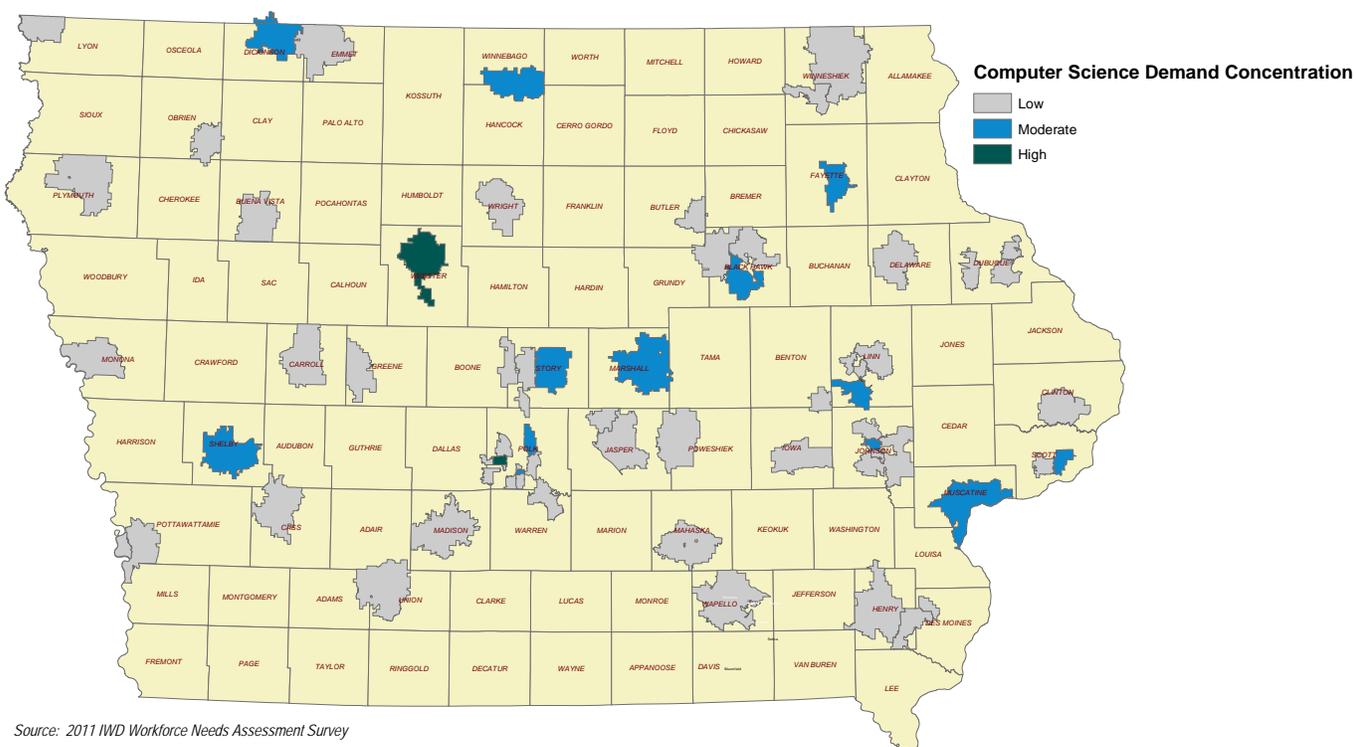
In addition to engineering, computer science occupations are also growing in demand in Iowa. Below, Figures 56 and 57 represent visually where the supply and demand for workers with computer science education or experience exists across the state. Figure 58, on the next page, illustrates the overlay of the supply and demand data.

**Figure 56. Supply of Workers with Computer Science Education/Experience**



Source: 2012 IWD Statewide Laborshed Survey

**Figure 57. Demand for Workers with Computer Science Education/Experience**

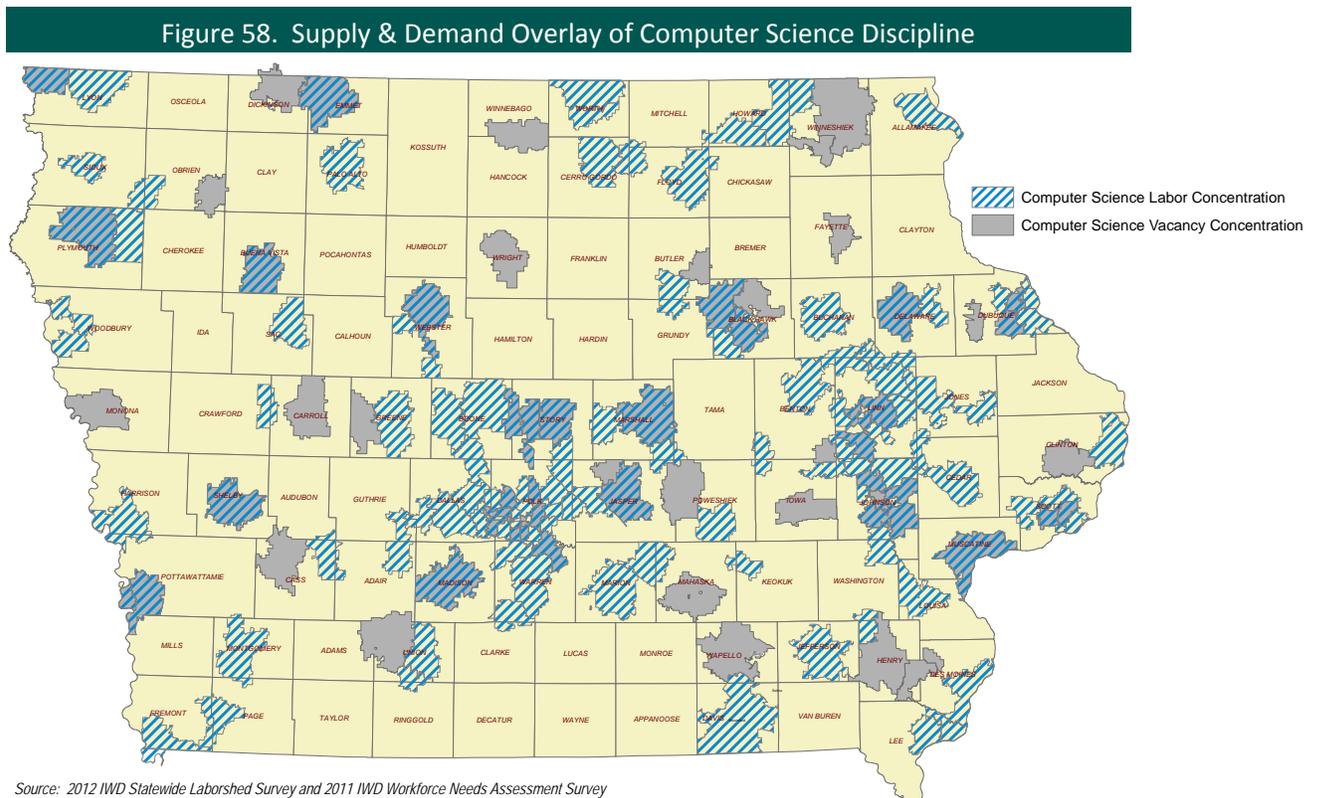


Source: 2011 IWD Workforce Needs Assessment Survey

The labor force employed within the computer science STEM discipline is well aligned in many areas across the state where there is a demand for labor in computer science occupations. This alignment is apparent geographically, as shown in **Figure 58**, below. However, there are several areas where the concentration of labor does not correlate well with the concentration of vacancies.

For instance, there is a significant concentration of computer science workers in Boone, Dallas, Marion and Warren counties where there is not a similar concentration of job vacancies within this STEM discipline.

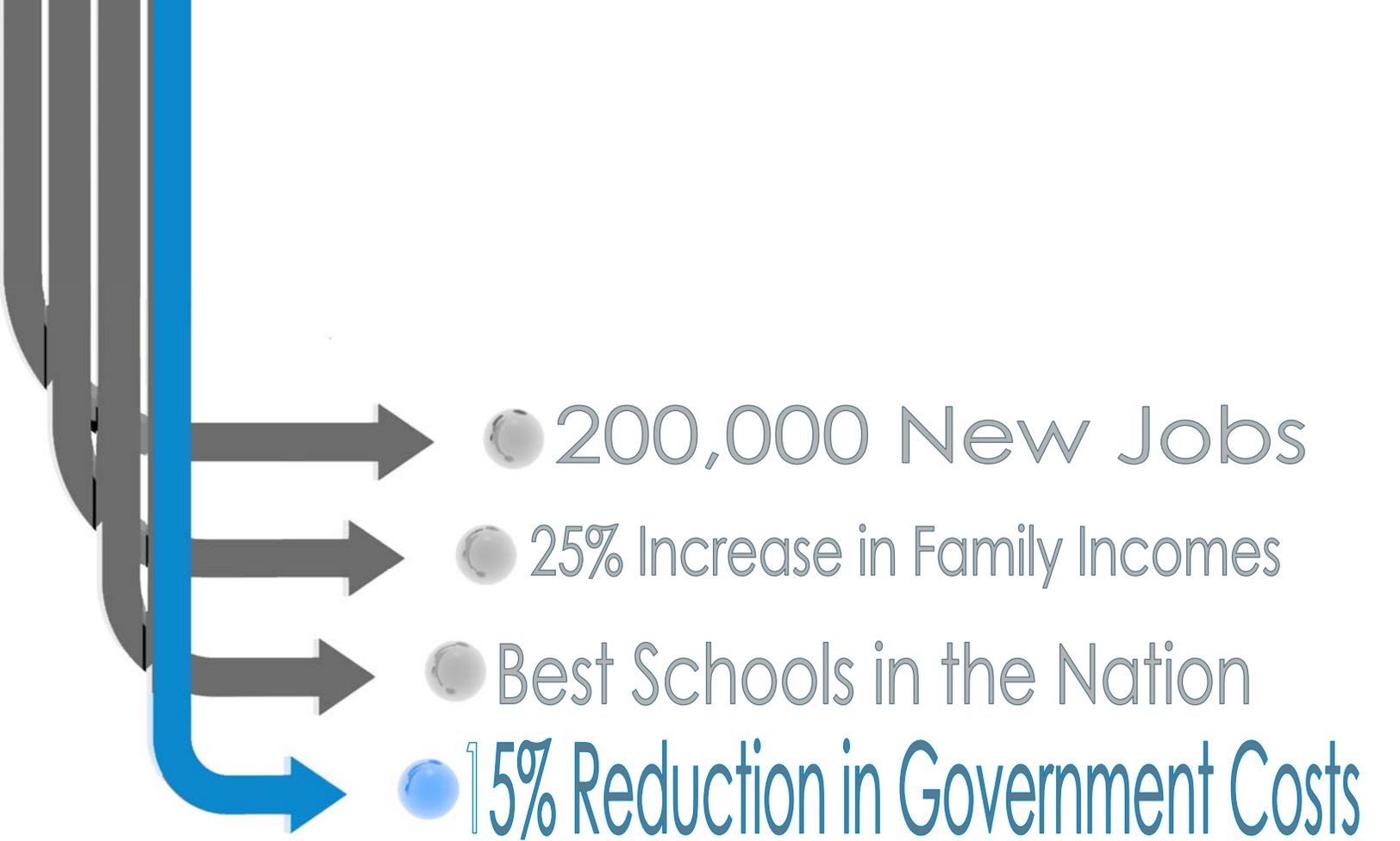
Again, this may be due to a gap in the wages offered by employers seeking to fill vacant computer science positions and the average starting wages of those employed within similar occupations. It might also indicate an opportunity to enhance communication and better matching of potential employees and employers via media outlets and networking opportunities.



### BEST SCHOOLS IN THE NATION SUMMARY

- Iowa's composite ACT score is higher than all benchmark states and the nation with the exclusion of Minnesota.
- Iowa is competitive in both reading and mathematics scores for 4th and 8th grade students.
- Iowa and Minnesota lead the way in average high school freshman graduation rates among the benchmark states.
- Iowa ranks lowest among the benchmarks in its percentage of residents 25 and older with an undergraduate degree or higher.
- Iowa saw a 0.3 percent growth in population of those 25 years and older with a high school degree or higher, this was the second highest percentage growth among the benchmark states and matched the nation.
- Academic R&D expenditures in Iowa totaled over \$706 million in 2010, third among the benchmark states.
- The alignment of vacancies to concentration of workers is necessary to meet the demands of the businesses.





## 15% REDUCTION IN GOVERNMENT COSTS

The final goal is to reduce the cost of government by 15 percent. This will include the use of new technologies and efficiencies allowing governmental savings.

### STATE GOVERNMENT EMPLOYMENT

According to the Census Bureau's preliminary release of the *Annual Survey of Public Employment and Payroll*, in 2011, there were approximately 132 full-time state government employees per 10,000 residents in Iowa. This was in-line with the other benchmark states. Minnesota had the lowest number of full-time state employees per 10,000 residents at 124 while Nebraska had the greatest number at 145.

During fiscal year 2012, over half (56.9%) of these full-time employees were employed within Iowa's Board of Regents. The remaining 43.1 percent were non-Regent employees. Of these, the majority were employed within the human services, corrections, transportation or various other departments. From fiscal year 2002-2012

there has been a 4.6 percent increase in the total number of full-time employees. However, four agencies experienced significant full-time employee reductions relative to other agencies during this 10-year period. These include: the Department of Transportation (DOT), the Judicial Branch, Department of Corrections (DOC) and Iowa Workforce Development (IWD) (Figure 59).

As with total full-time employee positions, the Board of Regents personnel costs comprise over half (55.0%) of the total for State government. The total personnel cost of the Board of Regents has increased from \$1.57 billion in fiscal year 2002 to \$2.24 billion in fiscal year 2012, an average annual increase of 3.7 percent. The total cost of the non-Regents agencies has increased from \$1.25 billion in fiscal year 2002 to \$1.84 billion in fiscal year 2012, representing an average annual increase of 3.9 percent (Figure 60).

**Figure 59. Iowa Full Time Employee Change, 2002 2012**

	Employment Change 2002-2012	% Change
<b>Board of Regents</b>	<b>3,641</b>	<b>14.1%</b>
<b>Non-Regents</b>	<b>-1,366</b>	<b>-5.8%</b>
Human Services	-170	-3.2%
Corrections	-249	-6.2%
Transportation	-591	-17.2%
Judicial Branch	-345	-16.4%
Natural Resources	27	2.7%
Public Safety	7	0.8%
Veterans Affairs	32	3.9%
Workforce Development	-50	-5.9%
Education	-4	-0.5%
Other	-23	-0.5%
<b>Total</b>	<b>2,275</b>	<b>4.6%</b>

Source: Legislative Services Agency, Fiscal Services Division

**Figure 60. Personnel Costs per Fiscal Year, 2002 2012 (Dollars in Millions)**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>Board of Regents</b>	\$1,572.8	\$1,516.2	\$1,651.0	\$1,677.9	\$1,754.3	\$1,857.3	\$1,993.3	\$2,155.2	\$2,095.3	\$2,124.4	\$2,243.9
<b>Non-Regents</b>											
Human Services	\$262.7	\$263.2	\$284.6	\$299.8	\$325.1	\$349.9	\$377.5	\$400.1	\$391.4	\$379.2	\$387.4
Corrections	209.6	218.5	237.3	243.8	261.9	279.3	306.8	317.4	307.3	309.9	311.0
Transportation	177.9	177.7	191.0	196.9	208.1	214.7	225.4	234.2	232.4	229.0	235.0
Judicial Branch	106.3	106.7	112.5	113.5	123.9	132.9	140.2	145.7	144.0	146.8	148.6
Natural Resources	59.4	59.9	61.3	63.6	67.7	73.3	79.5	84.7	83.5	85.9	89.3
Public Safety	53.5	56.7	61.7	64.9	69.2	73.3	48.3	82.8	80.1	80.4	84.3
Veterans Affairs	43.7	44.5	48.4	49.1	51.8	52.7	57.4	60.0	65.1	66.9	63.9
Workforce Development	42.3	43.1	50.0	51.1	53.3	54.8	59.9	64.2	64.8	64.4	68.0
Education	38.8	41.2	45.3	47.7	50.9	53.8	59.4	61.5	60.8	59.4	61.2
Other	259.7	263.7	288.5	308.4	320.3	335.4	366.7	384.6	374.2	378.8	389.4
Subtotal Non-Regents	\$1,253.9	\$1,275.2	\$1,380.6	\$1,438.8	\$1,532.2	\$1,620.1	\$1,721.1	\$1,835.2	\$1,803.6	\$1,800.7	\$1,838.1
<b>Total</b>	<b>\$2,826.7</b>	<b>\$2,791.4</b>	<b>\$3,031.6</b>	<b>\$3,116.7</b>	<b>\$3,286.5</b>	<b>\$3,477.4</b>	<b>\$3,714.4</b>	<b>\$3,990.4</b>	<b>\$3,898.9</b>	<b>\$3,925.1</b>	<b>\$4,082.0</b>

Source: Legislative Services Agency, Fiscal Services Division

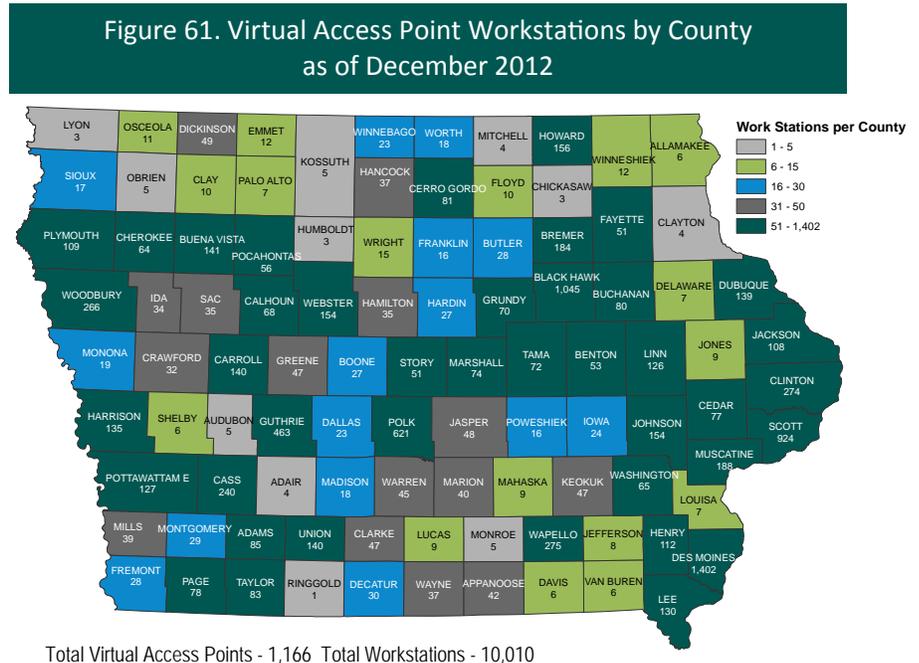
## WORKFORCE DEVELOPMENT SYSTEM

Created in 1996, Iowa Workforce Development (IWD) is the agency that contributes to the economic security of Iowa's workers throughout the state. Services are offered to workers (both employed and unemployed), as well as businesses and communities in each of IWD's workforce regions. Through the use of new technologies and efficiencies, Iowa Workforce Development has been able to contribute to government savings while still providing important services to the public.

In 2011, Iowa Workforce Development launched a new service delivery system consisting of 15 regional centers, 4 satellite offices and over 1,000 virtual access points (Figure 61).

Access Point Services (on-line) include:

- Job search and résumé development assistance
- Access to thousands of employment opportunities
- Skill assessment and testing tools
- Information for veterans
- Workforce data and trends
- Job posting assistance for employers
- Business services



Source: Iowa Workforce Development

The enhanced delivery system has provided greater availability of services to Iowans. Access to workforce services is available in all 99 counties and via a toll free number from 8:00AM – 8:00PM Monday thru Thursday, 8:00AM – 7:00PM on Friday and 9:00AM – 1:00PM on Saturday. With evening and weekend hours, something that was not available in the past, staff members are available through Live Chat or a toll-free number from 8:00AM to 8:00PM Monday through Thursday, 8:00AM – 7:00PM on Friday and 9:00AM – 1:00PM on Saturday, allowing clients new opportunities to connect with a workforce professional.

In addition, integration is an effort to make the workforce system more demand-driven to respond to the actual needs of local economies. Each workforce center adds value to the local economy it supports. The integration model is intended to bring a greater emphasis to the skills development component of the workforce and better prepare workers for the changing world of work. Each Iowan who becomes a member of an integrated workforce center will be given the opportunity to know their skills, improve their skills and get a job with their skills. In the best case scenario, integration is a policy decision which will help to shift the culture to one of lifelong learning and skill development. This is the vision of better service that integration hopes to achieve.

### Integration Model

Under the integration model, employers, job seekers and the unemployed can expect to find services tailored to their individual needs. From the time a customer enters the Integrated Iowa WORKS Center, they are assessed and guided to services, workshops and staff dedicated to finding solutions to their employment needs regardless of program affiliation. Examples of these services include:

- Customized recruitment
- Labor Market Information
- Information and referral on current job openings
- Creation of job search toolkit
- Skills assessment and testing
- Career Interest Evaluations
- Exploration of Training Opportunities
- Financial Planning & Salary Needs Exploration

No longer does the customer need to have knowledge of the programs; eligibility is determined seamlessly with assessment and membership. The model moves beyond co-location to an environment where customers are assisted through shared staff, working toward a common goal.

#### ***15% REDUCTION IN GOVERNMENT COSTS SUMMARY***

- In 2012, there were 132 state government full-time employees to every 10,000 residents in the State of Iowa.
- Iowa Workforce Development has reduced the number of its physical locations from 55 to 19.
- There are in excess of 1,100 Virtual Access Points and 10,000 workstations available requiring minimal investment.
- Nearly 90% of all job leads are transmitted to an e-mail address, reducing the Department's reliance on paper and postage.
- Over 75% of all unemployment insurance claims and 60% of all employer quarterly UI tax filing is completed on-line, again saving staff time and resources.
- IWD's renovation of their systems and processes has significantly reduced government costs and increased the availability of services to the public. Future enhancements include continued technological advancements that will simplify routine procedures and provide more staff time for the customer most in need of individual assistance.

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