

WORKFORCE NEEDS ASSESSMENT



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State of Iowa 2009

Iowa Workforce Development conducted the second annual Workforce Needs Assessment from September 2008 through January 2009. In addition to vacancy and retirement data, this year's survey included questions pertaining to average hourly starting wage. Analysis of the survey illustrates the demand for workers and skills required in the workforce. 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.

Beginning in September 2008, 40,884 employers in the State of Iowa were contacted and asked to complete the survey. Two attempts were made to contact each employer. By the end of the survey period (January 10, 2008), the survey had received 8,179 responses, yielding a 20.0 percent response rate.

Throughout this report, estimates and data are given by industry and by occupational category. Industry groups are developed around a specific product and employ many different occupations. Occupational categories are focused on the actual tasks done by a worker. The two formats are given to satisfy different end users of the data. Industry groups are of particular importance to economic developers and policy-makers. Occupational categories may be of more use to job seekers and educators.

Figure 1 details the survey respondents by industry, an estimated number of current job vacancies, and the percentage change of vacancies compared to the previous year across the State of Iowa. Vacancies are classified as current if they are or will become available within 12 months of the survey date.

Estimates were obtained by assuming that the vacancy rate among survey respondents within an industry would apply to the entire industry. For example, the wholesale & retail trade industry had an average vacancy rate of 0.56 vacancies per respondent. Since the state has approximately 10,086 businesses in the wholesale & retail trade industry, it is estimated that there will be 5,686 vacancies¹.

This estimate is only valid if it is assumed that the vacancy rate for survey respondents and non-respondents is the same on average. The vacancy rate may be lower among non-respondents, as businesses that do not have current vacancies are less likely to respond to a Workforce Needs Assessment Survey. The estimates in the table can be viewed as an upper bound (or high estimate) regarding the number of current job vacancies.

Figure 1
Survey Respondents by Industry and Current Vacancy Estimates

Industry	Percent of Respondents	Estimated Current Vacancies	Percent Change of Vacancies from Prior Year
Healthcare	13.1%	10,554	22.8%
Accommodation & Food Services	5.7%	7,561	*
Wholesale & Retail Trade	19.7%	5,686	-15.7%
Administrative Services	3.1%	3,944	-6.4%
Manufacturing	8.8%	3,269	-39.0%
Educational Services, All	4.5%	2,662	75.2%
Transportation & Warehousing	3.5%	2,154	-34.1%
Management	0.7%	1,712	108.0%
Finance, Insurance, & Real Estate	8.0%	1,690	-42.4%
Construction	9.1%	1,455	-38.2%
Personal Services	5.7%	1,423	-80.2%
Professional & Technical Services	6.9%	932	-56.0%
Arts, Entertainment, & Recreation	1.5%	930	132.5%
Public Administration	5.0%	853	-13.2%
Information	1.9%	457	-59.5%
Agriculture & Mining	1.8%	362	-50.8%
Utilities	1.0%	224	47.5%
Total	100%	45,868	-3.1%

* data not previously recorded - In 2008, this data was divided between Personal Services and Arts, Entertainment, & Recreation

¹ 10,086-0.56=5,686 (rounded)

Figure 2 shows estimated vacancies by occupational category. By breaking the data into separate occupational groups, we can see the majority of vacancies are within the office & administrative support occupational category, even though the highest number of vacancies by industry is in the healthcare industry. The occupational categories are clustered using the Standard Occupational Classification (SOC) system. Each broad category includes detailed occupations requiring similar job duties, skills, education, or experience.

**Figure 2
Current Vacancy Estimates by Occupational Category**

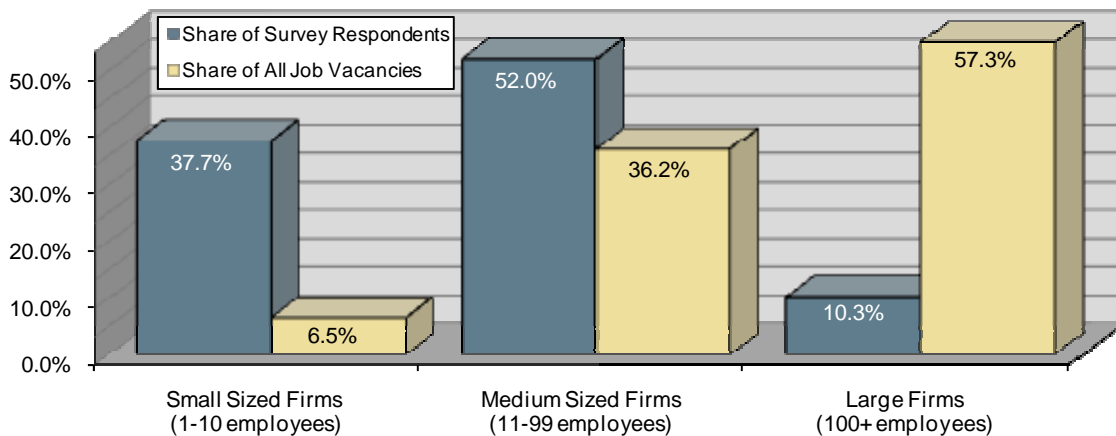
Occupational Category	Percent of Total Vacancies Reported	Estimated Current Vacancies
Office & Administrative Support	11.3%	5,183
Healthcare Practitioner & Technical	10.3%	4,724
Production	9.3%	4,266
Healthcare Support	8.0%	3,669
Food Preparation & Serving Related	6.6%	3,027
Sales & Related	6.5%	2,981
Installation, Maintenance, & Repair	5.9%	2,706
Management	5.8%	2,660
Transportation & Material Moving	5.8%	2,660
Business & Financial Ops	4.5%	2,084
Construction & Extraction	4.1%	1,881
Education, Training, & Library	3.5%	1,605
Building & Grounds Cleaning & Maintenance	3.0%	1,376
Architecture & Engineering	2.7%	1,238
Computer & Mathematical Science	2.7%	1,238
Community & Social Science	2.5%	1,165
Personal Care & Service	2.0%	954
Arts, Design, Entertainment, Sports, & Related	1.7%	780
Life, Physical, & Social Science	1.3%	605
Protective Service	1.1%	505
Farming, Fishing, & Forestry	1.0%	362
Legal	0.4%	197
Total	100%	45,868

Of the survey respondents, 2,158 (26.4%) reported having one or more current or anticipated job vacancies, while 6,021 respondents (73.6%) reported having no job vacancies. A total of 9,080 current job vacancies were reported for the State of Iowa, consisting of 56.2 percent full-time, 32.6 percent part-time, and 11.2 percent temporary/seasonal positions. When asked why positions are currently vacant, employers responded as follows:

- 25.6% - Business growth/expansion
- 5.4% - Replacing retiring employee
- 69.0% - Replacing worker who has left (not retired)

Figure 3 (on next page) shows the breakdown of job vacancies by employer size. Of employers that responded with job vacancies, 37.7 percent were businesses with 10 or fewer employees, 52.0 percent had between 11 and 99 employees, and 10.3 percent had 100 employees or more. **Figure 3** shows the distribution of reported job vacancies by employer size. The response rate for each employer size category is shown next to the respective percentage share of reported job vacancies. While large employers only accounted for 10.3 percent of the survey responses, almost three-fifths (57.3%) of the reported job vacancies were from large employers.

Figure 3
Reported Job Vacancies by Employer Size



Vacancy Rate

One measure of workforce demand is determined by the job vacancy rate. With an estimated 45,868 job vacancies and a statewide employment total of 1,502,600², there is a 3.0 percent vacancy rate or three jobs available for every 100 filled positions (shown in **Figure 4**). A low vacancy rate indicates a lack of jobs while a high vacancy rate may indicate a shortage of qualified workers or simply an industry with a high employee turnover. Conversely, a low vacancy rate may indicate contraction within the industry, an oversupply of workers, or lower than average turnover. Iowa's vacancy rate, comparatively steady from last year's rate of 3.0 percent overall, shows that while many sectors of the economy have contracted, there are still others that are expanding. It should be noted that many states do not use the same methods when calculating job vacancy rates, and many states do not perform such calculations annually.

It is important to note the difference between the number of vacant positions and the vacancy rate. An industry may have a low vacancy rate but have many vacant positions. This is because, when compared to their total workforce, the number of vacant positions is small in comparison.

Figure 4
Vacancy Rate by Industry

Industry	Iowa Employment	Vacancy Rate
Management	14,012	12.2%
Accommodation & Food Services	67,162	5.9%
Administrative Services	67,162	5.9%
Healthcare	198,634	5.3%
Arts, Entertainment, & Recreation	21,723	4.3%
Personal Services	42,246	3.4%
Transportation & Warehousing	62,857	3.4%
Utilities	8,942	2.5%
Wholesale & Retail Trade	247,138	2.3%
Professional & Technical Services	42,892	2.2%
Agriculture & Mining	17,591	2.1%
Construction	74,555	2.0%
Educational Services, All	141,809	1.9%
Finance, Insurance, & Real Estate	103,562	1.6%
Manufacturing	227,505	1.4%
Information	33,925	1.3%
Public Administration	69,779	1.2%

Figure 4 shows the vacancy rate and how many jobs are available per 100 filled positions by industry. The three industries within the state with the highest vacancy rates are management, administrative services, and accommodation & food services (12.2%, 5.9%, and 5.95%) respectively. These industries currently have many vacant positions when compared to the size of their workforce. When looking at vacancy rates, it is important to understand the various reasons an industry might have many vacant positions open relative to their total staff.

²Annual 2008 Total statewide employment from Iowa Workforce Development

**Figure 5
Vacancy Rate by Occupational Category**

Occupational Category	Iowa Employment ³	Vacancy Rate
Healthcare Support	46,680	7.9%
Architecture & Engineering	17,720	7.0%
Farming, Fishing, & Forestry	5,710	6.3%
Healthcare Practitioner & Technical	75,280	6.3%
Community & Social Science	23,550	4.9%
Management	56,380	4.7%
Life, Physical, & Social Science	13,260	4.6%
Computer & Mathematical Science	28,370	4.4%
Installation, Maintenance, & Repair	62,820	4.3%
Arts, Design, Entertainment, Sports, & Related	18,690	4.2%
Business & Financial Ops	60,410	3.4%
Legal	6,780	2.9%
Building & Grounds Cleaning & Maintenance	47,810	2.9%
Construction & Extraction	65,840	2.9%
Personal Care & Service	35,150	2.7%
Production	169,320	2.5%
Protective Service	20,560	2.5%
Food Preparation & Serving Related	131,200	2.3%
Transportation & Material Moving	120,540	2.2%
Office & Administrative Support	237,970	2.2%
Sales & Related	161,280	1.8%
Education, Training, & Library	97,280	1.7%

Figure 5 breaks down the vacancy rate by occupational category. The categories with the highest vacancy rates are healthcare support, architecture & engineering, and healthcare practitioners (7.9%, 7.0%, and 6.3% respectively). The services and construction categories typically have high vacancy rates due to high employee turnover. Employers are constantly hiring for many of these positions, while the high vacancy rate for the healthcare category is usually attributed to growth in employment and lack of workforce.

Hiring Demand Index

Figure 6 (next page) presents the Hiring Demand Index (HDI)⁴ by occupational category. The HDI is another way of looking at the workforce needs within the economy. The vacancy rate shows us the overall demand for workers, but can be misleading because of employee turnover. To account for this, we adjust the vacancy rate by employee turnover to see which industries or jobs are in high demand, using the following equation:

$$(Industry\ Vacancy\ Rate \div Avg.\ Vacancy\ Rate) \div (Industry\ Turnover\ Rate \div Avg.\ Turnover\ Rate)$$

Example: The arts, design, & entertainment occupational category has an above average vacancy rate of 4.2 percent, while the vacancy rate for all categories is 3.8 percent. This implies that the workers within the category have a greater hiring demand than workers in other occupational categories. However, the turnover rate for employees in this category (defined as how often the industry hires for the same job within a year) is also much higher than others. The category has a turnover rate of 36.1 percent, while the turnover rate for all occupations is 26.5 percent. The HDI for the arts, design, & entertainment occupational category, is calculated as follows:

$$(4.2\% \div 3.8\%) \div (36.1\% \div 26.5\%) = .81$$

Using the HDI, we can see that the hiring demand for the arts, design, & entertainment occupations is not as high as it may have previously appeared.

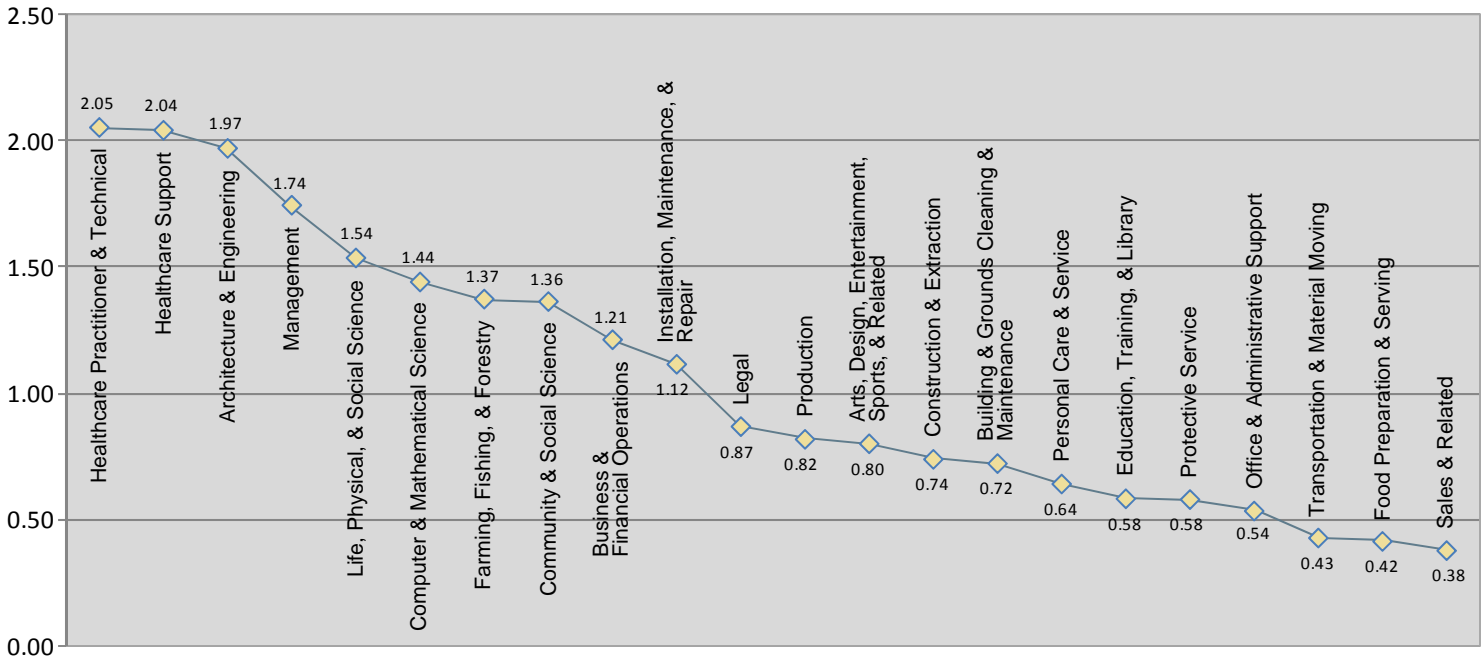
³Iowa employment by industry computed from 2007 Iowa Local Employment Dynamics

⁴The Hiring Demand Index (HDI) adjusts industry vacancy rates, from this survey, by industry employee turnover rates which are computed from 2007 Iowa Local Employment Dynamics.

A value of one is the average demand for all industries or occupations. A value greater than one means a higher demand for workers, while a value lower than one means a lower than average demand for workers.

By comparing the Hiring Demand Index with the vacancy rates of an occupational category, we can see in which occupations there is a real unmet need for workers. It is also in these occupations that employers will need to pay a higher wage to attract qualified workers. This analysis can be an important tool for economic developers, policy-makers, educators, and job seekers.

Figure 6
Hiring Demand Index by Occupational Category



Education, Experience, and Skill Requirements

Employers were asked about the education/training and experience requirements of prospective workers for their reported job vacancies. The results for current job vacancies are shown below in **Figure 7** and **Figure 8**.

Figure 7
Education Required - Current Vacancies

Education Required	Percent	Percent Change from Prior Year
No Educational Requirement	17.4%	-7.0%
High School Education/GED	38.9%	-6.5%
Vocational/Technical Training	15.0%	3.3%
Associate Degree	7.5%	1.3%
Undergraduate Degree	15.8%	7.2%
Postgraduate/Professional Degree	5.4%	1.8%

Figure 8
Experience Required - Current Vacancies

Experience Required	Percent
No Experience Required	41.4%
Less than 1 Year	14.8%
1-2 Years	26.9%
3-5 Years	12.8%
More than 5 Years	4.1%

Employers were asked their perceptions on the degree to which job applicants possessed soft, basic, and occupational skills. In addition, employers were asked if applicants, who may or may not possess the necessary skills for the job vacancy, were being disqualified due to the results of controlled substance testing or background checks. The results for all employers are shown below in **Figure 9**.

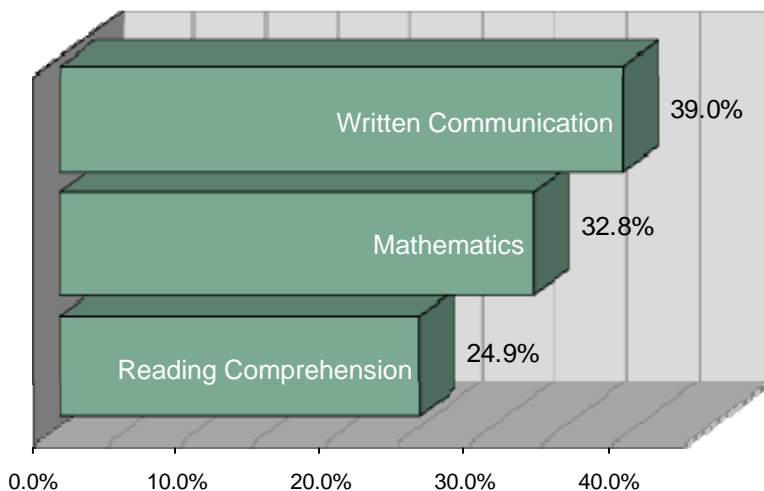
We can begin to analyze any workforce gaps by comparing the inventory of skills needed by employers and those skills held by the population of workers as presented in a Laborshed analysis. This gap is then analyzed and the necessary training and education programs can be formalized through a Skillshed study.

Figure 9
Perception of Applicants

Employer's Perceptions of Job Applicants	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
In general, job applicants fulfill all necessary requirements for the job.	13.7%	39.3%	32.3%	12.6%	2.1%
In general, job applicants possess the basic skills required for the job.	24.9%	43.5%	23.3%	6.0%	2.3%
In general, job applicants possess the soft skills required for the job.	9.8%	36.3%	41.5%	10.6%	1.8%
In general, job applicants possess the occupational skills required for the job.	10.9%	35.8%	37.7%	12.5%	3.1%
There is often a problem filling this position because applicants are disqualified due to controlled substance testing.	1.7%	5.6%	26.2%	20.9%	45.6%
There is often a problem filling this position because applicants are disqualified for failure to pass a background check.	2.5%	7.3%	27.5%	23.2%	39.5%

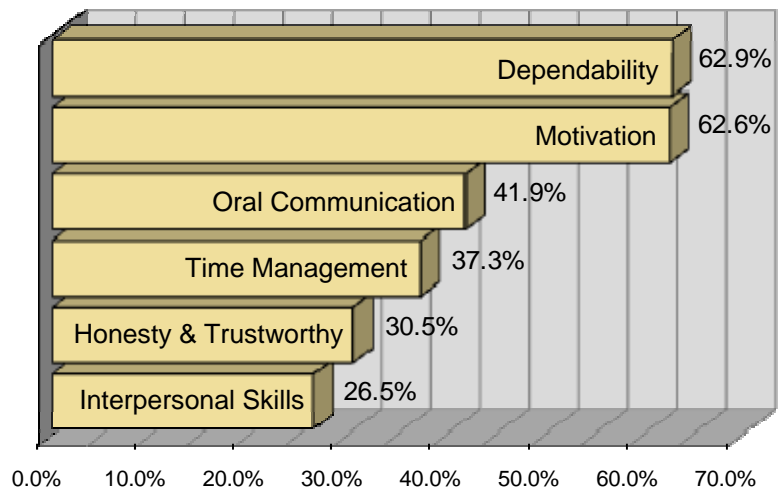
Figures 10, 11, and 12 break down basic, soft, and occupational skills that employers reported were lacking by applicants to fill open positions.

Figure 10
Basic Skills Lacked by Applicants



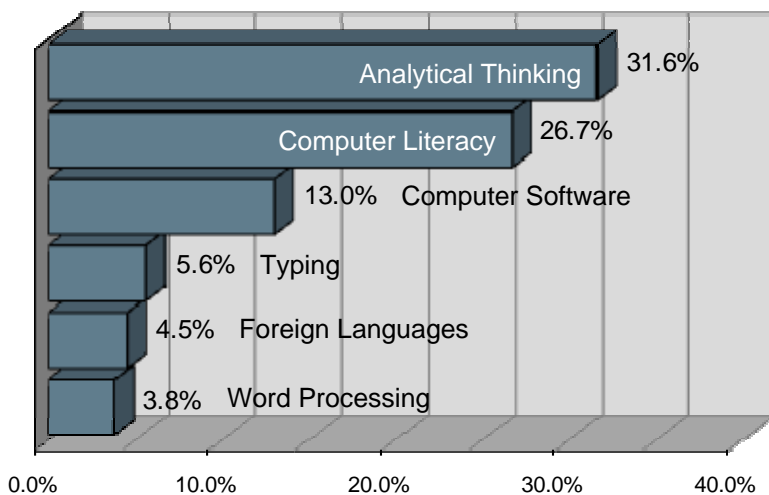
Basic skills are those skills developed during the elementary and middle part of an individual's education. These skills include literacy, numeracy (the ability to do arithmetic and reason with numbers), basic computer skills, and organization. Nearly one-tenth (8.3%) of employers surveyed feel that applicants lack basic skills needed for the job.

**Figure 11
Soft Skills Lacked by Applicants**



Soft skills refer to skills associated with an individual’s habits, personality, and character. Soft skills include timeliness, responsibility, integrity, and self-esteem. Also included are interpersonal skills such as leadership ability, customer service, and teamwork. Individuals with strong soft skills are better suited for working within an organization, as well as with customers and, therefore, are valued by employers. Over one-tenth (12.4%) of employers surveyed feel that applicants lack soft skills needed for the job.

**Figure 12
Occupational Skills Lacked by Applicants**



Occupational skills are the technical and know-how skills that apply directly to a job. Occupational skills are often referred to as “hard skills” and are primarily job-specific. In general, occupational skills include analytical skills, managerial ability, physical ability, knowledgeable, and experience. The exact meaning behind these skills varies, depending on the job in question. Over one-tenth (15.6%) of employers surveyed feel that applicants lack occupational skills needed for the job.

In the event that current or newly hired employees are lacking the soft, basic, and occupational skills necessary to fill current job vacancies, employers were asked where they send employees to upgrade these skills. These results are listed in **Figure 13**.

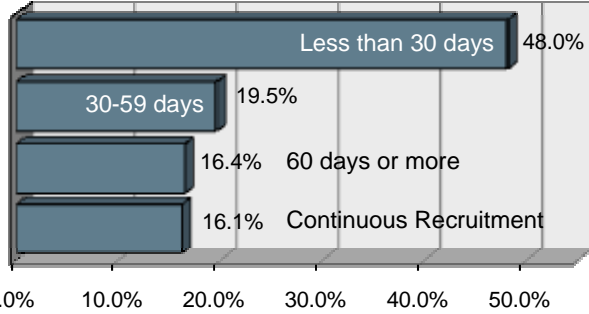
**Figure 13
Where Additional Training is Offered**

Training Provider	Percent
In-house training	60.4%
Commercial training provider	14.2%
No training provided	14.2%
Employee self-directed training	13.3%
Online	9.0%
Other	6.2%
College/University	5.0%
Trade school	4.9%

Figure 13 indicates where employers are sending their employees for training to satisfy job requirements. Most employers are currently using in-house training or a commercial job training provider. Over one-fifth (22.0%) of employers also expressed an interest in working more closely with local education providers to implement training programs.

Recruitment

Figure 14
Recruitment Period for Current Vacancies



The time span from when a job vacancy becomes available to the time it is filled is referred to as the recruitment period. **Figure 14** details the recruitment periods reported by employers within the State of Iowa.

Media Used

Figure 15
Recruitment Media Utilization

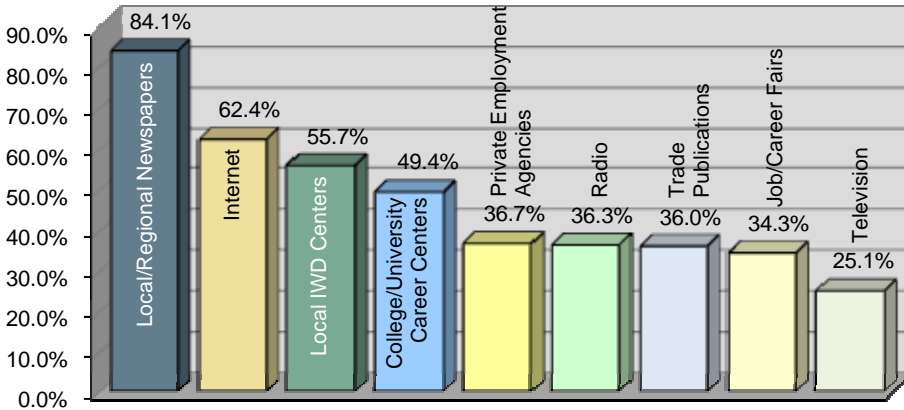


Figure 15 details employer media use for recruitment purposes. Employers utilized a variety of media to recruit potential employees. Along with being the most utilized, respondents also indicated that the most useful media outlets were local/regional newspapers, followed by the internet, Iowa Workforce Development Centers and College/University Career Centers.

Employers who have a clear understanding of the job search resources used by workers in their respective industry will maximize their effectiveness and efficiency in attracting qualified applicants. Understanding and utilizing traditional and non-traditional advertising media will provide employers with a more focused and effective recruitment tool. Residents living in the State of Iowa are exposed to numerous sources by which employers communicate job openings and new hiring. Therefore, it is important to understand what sources potential workers rely on when looking for jobs in the area.

When compared to the Laborshed Analysis, the most frequently utilized job search resources are the internet (66.3%), local/regional newspapers (63.6%), local Iowa Workforce Development Centers (23.7%) and networking (22.1%). Private employment services, walk-in (door-to-door) solicitation, trade publications, college/university career centers, radio, television, and job/career fairs were also mentioned but less frequently as utilized sources for employment opportunities.

Benefits

Figure 16
Benefits Offered by Employers

Benefits Offered	Percent
Health	71.9%
Paid Leave	58.8%
Retirement	56.1%
Dental	50.7%
Vision	27.7%
No Benefits	21.7%

Employers may also use benefits to attract potential employees. Employers were asked about the types of benefits being offered for their current job vacancies. These results are shown in **Figure 16**.

The Laborshed Analysis was used to identify current benefit packages being offered to employees within the State of Iowa. These benefits include; health/medical insurance (93.5%), pension/retirement options (71.1%), dental coverage (48.0%), paid vacation (32.4%), vision coverage (25.5%), life insurance (25.5%), paid holidays (23.0%), paid sick leave (20.4%), disability insurance (13.9%), prescription drug coverage (6.7%), tuition assistance/reimbursement (2.5%), stock options (2.1%), and flextime (1.2%). Nearly three-fourths (74.3%) of the employers and employees in the Laborshed area are reported as sharing in the premium costs of health/medical insurance, 18.5 percent of the employers are reported as covering the entire cost of insurance premiums while 7.2 percent of the employers/employees have made other arrangements.

Wages

Figure 17
Average Wages by Occupational Category

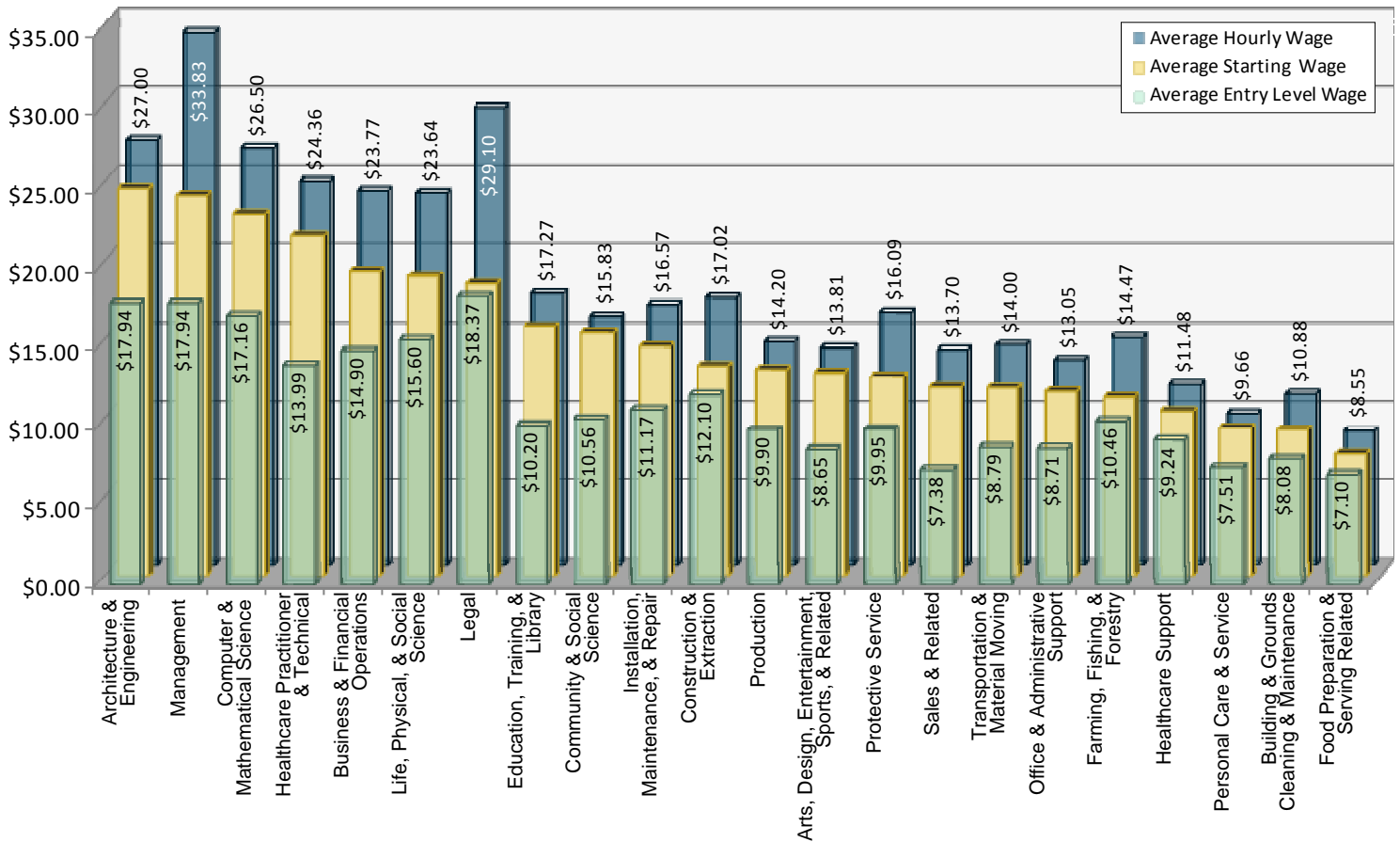


Figure 17 is the average hourly, starting and entry level wages⁵ by occupational category. This is important for job seekers in determining what jobs can provide a livable wage and have higher earning potential. Employers can use the information to determine their competitiveness with wages among all other categories. From the graph, we see that the architecture & engineering; management; and computer & mathematical science occupational categories pay the highest average starting wages while occupations in legal; architecture & engineering; and management categories provide higher entry level wages.

⁵Average Hourly Wage and Average Entry Level Wage are taken from 2007 Occupational Employment Statistics (OES) data. Average Starting Wage is taken from this survey data.

Future Plans

Employers were asked a series of questions about their plans for future payroll changes. They were asked whether they planned on increasing or decreasing the number of workers on payroll or if they planned to keep their workforce at its current strength. Employers were then asked to choose among the following time frames for their planned payroll change: six months to one year, one to two years, two to three years, three to five years, or more than five years. Finally, employers were asked to provide the reason for the change and which jobs would be affected.

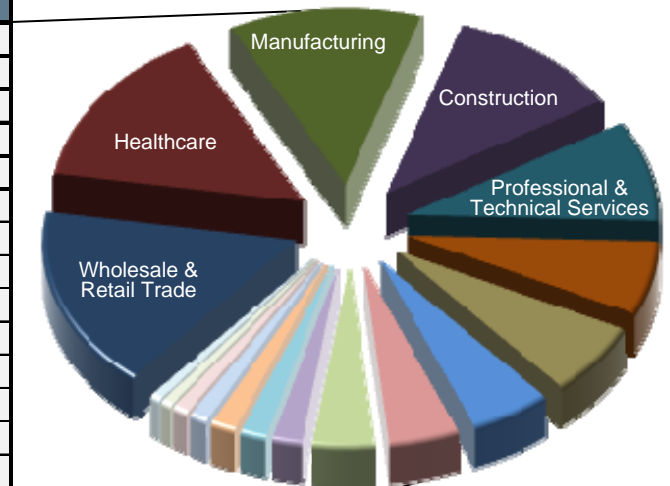
When analyzing reported payroll changes, it is important to note not only the specific reasons provided by employers but also the business and economic environment during which the employers were surveyed. Because of the great uncertainty surrounding the near-term economic health of the state, many employers were not able to state their payroll plans in any definite way.

Planned Workforce Expansion

One-tenth (10.1%) of the employers surveyed are planning to expand their payroll in the future. Of those employers planning on expanding their payroll, 73.4 percent indicated they were planning to do so to satisfy the current market demand for their products/services, while nearly one-fifth (18.8%) indicated that they were expanding in order to enter a new market and 13.3 percent are expanding due to other reasons. Nearly two-fifths (37.5%) of the companies planning to expand would be interested in working with a local education provider to set up a program for training/educating potential employees to fill these needs. **Figure 18** shows those employers who are planning to expand by industry.

Figure 18
Planned Payroll Expansion

Industry	Percent of Each Industry	Percent of Total
Wholesale & Retail Trade	8.5%	16.4%
Healthcare	11.5%	14.9%
Manufacturing	14.3%	12.5%
Construction	12.6%	11.4%
Professional & Technical Services	9.3%	9.2%
Finance, Insurance, & Real Estate	8.4%	6.7%
Administrative Services	21.3%	6.5%
Personal Services	13.4%	5.2%
Accommodation & Food Services	8.0%	4.5%
Transportation & Warehousing	11.0%	3.9%
Agriculture & Mining	10.9%	1.9%
Educational Services, All	3.8%	1.7%
Information	8.3%	1.6%
Public Administration	2.5%	1.2%
Management	14.3%	1.0%
Utilities	7.1%	0.7%
Arts, Entertainment, & Recreation	4.8%	0.7%



The middle column in **Figure 18**, “Percent of Each Industry,” shows what percentage of employers in each industry is planning to expand their payroll. The far right column, “Percent of Total,” shows what percentage of all businesses planning to expand their payroll is accounted for by each industry. For example, 8.5 percent of all businesses in the wholesale & retail trade industry are planning to expand their payroll in the future. Those businesses within the wholesale & retail trade industry make up 16.4 percent of all the businesses in the survey that are planning to expand their payrolls in the future.

Figure 19
Time for Planned Expansion

Estimated Time for Expansion	Percent of Respondents
6 months - 1 year	71.5%
1-2 years	21.5%
2-3 years	3.4%
3-5 years	1.9%
More than 5 years	0.4%

Figure 19 shows the timeframe for those employers who are planning to expand their payrolls.

Figure 20
Planned Payroll Expansion by Occupational Category

Occupational Category	Percent Planning to Expand
Production	16.5%
Office & Administrative Support	12.7%
Transportation & Material Moving	10.2%
Sales & Related	8.1%
Healthcare Support	6.2%
Construction & Extraction	5.7%
Food Preparation & Serving Related	5.4%
Healthcare Practitioner & Technical	4.7%
Installation, Maintenance, & Repair	4.7%
Computer & Mathematical Science	3.8%
Management	3.7%
Building & Grounds Cleaning & Maintenance	3.7%
Personal Care & Service	2.6%
Business & Financial Ops	2.3%
Education, Training, & Library	2.2%
Architecture & Engineering	1.7%
Protective Service	1.6%
Community & Social Science	1.5%
Life, Physical, & Social Science	1.0%
Farming, Fishing, & Forestry	1.0%
Legal	0.5%
Arts, Design, Entertainment, Sports, & Related	0.1%

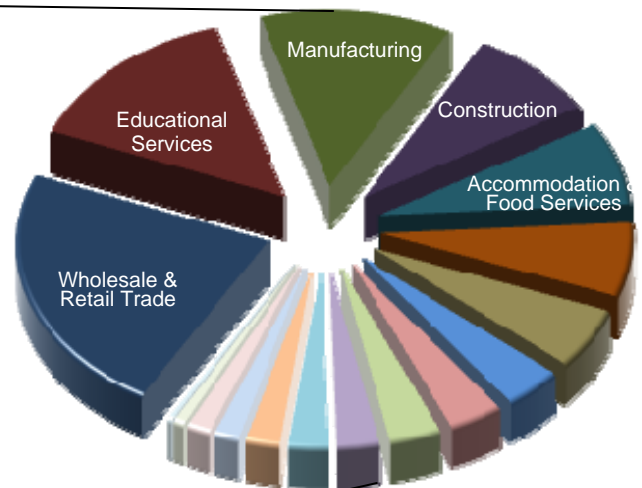
Figure 20 shows the percent of planned expansion by occupational category. While office & administrative support represents the largest category among current vacancies (**Figure 2**, page 2), only 12.7 percent of the employers in the category plan on expanding their payroll in the near-future. And while the production occupations only represent about 9.3 percent of current vacancies, employers planning to expand their payrolls indicated they plan on increasing payroll most frequently within this category. The three occupational categories that will be most affected are: production, office & administrative support, and transportation & material moving.

Planned Workforce Reduction

A small amount (6.7%) of the employers surveyed are planning to reduce their payroll in the future. Of those employers planning on reducing their payroll, 56.4 percent indicated they were planning to do so because current market demand for their products/services was declining, while nearly two-fifths (39.5%) indicated that they were downsizing in response to other reasons, such as those who plan to enter a new market and will need to consolidate employees with those having more skills. More than one-fifth (21.0%) of the companies planning to downsize would be interested in working with a local education provider to set up programs to train/educate employees to fill these needs. **Figure 21** shows employers planning to downsize by industry.

Figure 21
Planned Payroll Reduction

Industry	Percent of Each Industry	Percent of Total
Wholesale & Retail Trade	7.8%	22.7%
Educational Services, All	21.7%	14.5%
Manufacturing	9.4%	12.4%
Construction	6.3%	8.5%
Accommodation & Food Services	9.1%	7.6%
Finance, Insurance, & Real Estate	5.7%	6.7%
Healthcare	2.8%	5.5%
Transportation & Warehousing	7.2%	3.8%
Professional & Technical Services	3.3%	3.5%
Personal Services	3.9%	3.3%
Information	9.6%	2.7%
Arts, Entertainment, & Recreation	2.5%	2.5%
Administrative Services	4.7%	2.2%
Agriculture & Mining	6.1%	1.6%
Public Administration	2.0%	1.5%
Management	7.0%	0.7%
Utilities	1.2%	0.3%



The middle column in **Figure 21** (previous page), “Percent of Each Industry,” shows what percentage of each industry is planning to reduce their payroll in the future. The far right column, “Percent of Total,” shows what percentage of all businesses planning to reduce their payroll is accounted for by each industry. For example, 7.8 percent of all businesses in the wholesale & retail trade industry are planning to reduce their payroll in the future. Those businesses within the wholesale & retail trade industry make up 22.7 percent of all the businesses in the survey that are planning to reduce their payrolls in the future.

Figure 22
Time for Planned Reduction

Estimated Time for Reduction	Percent of Respondents
6 months - 1 year	82.9%
1-2 years	12.0%
2-3 years	1.5%
3-5 years	0.5%
More than 5 years	0.0%

Figure 22 shows the timeframe for those employers who are planning to reduce their payrolls.

Figure 23 shows the percent of planned reduction by occupational category. While office & administrative support represents the largest occupational category among current vacancies (**Figure 2**, page 2), 14.1 percent of employers in the category plan on downsizing their payroll in the near future. Production occupations currently represent about 9.3 percent of current vacancies, and employers planning to reduce their payrolls indicated that they plan on decreasing payroll most frequently within this category. The three occupational categories that will be most affected are: production, office & administrative support, and education, training, & library.

Figure 23
Planned Payroll Reduction by Occupational Category

Occupational Category	Percent Planning to Downsize
Production	19.2%
Office & Administrative Support	14.1%
Education, Training, & Library	13.5%
Construction & Extraction	9.8%
Transportation & Material Moving	7.2%
Food Preparation & Serving Related	6.1%
Sales & Related	5.6%
Management	4.0%
Farming, Fishing, & Forestry	3.4%
Building & Grounds Cleaning & Maintenance	3.3%
Arts, Design, Entertainment, Sports, & Related	2.4%
Architecture & Engineering	2.3%
Business & Financial Ops	2.0%
Installation, Maintenance, & Repair	2.0%
Healthcare Support	1.1%
Personal Care & Service	1.1%
Healthcare Practitioner & Technical	1.0%
Community & Social Science	0.7%
Computer & Mathematical Science	0.5%
Protective Service	0.4%
Legal	0.2%
Life, Physical, & Social Science	0.1%

Retirement

Workforce Retirements

Currently, there are 60,412 lowans over the age of 64 working throughout the state. They represent approximately 4.2 percent of the total workforce. Of these workers, educational services, personal services, and agriculture & mining have the highest percentage (6.5%, 6.3%, and 5.7%) of their respective workforces over the age of 64. This portion of the workforce is also equally split between males and females with 49.7 and 50.3 percent respectively.

In the near future, it is projected that there will be a workforce shortage as the Baby Boomer generation begins to retire. Employers were asked to indicate the number of workers that will be eligible to retire within the next five years and whether or not they meet the current skill requirements. Of those employees eligible to retire, nearly all (93.7%) of them meet the current skill requirements of the positions they occupy. It’s also notable that retirement eligibility requirements do vary by employer and industry.

While the number of retirees can be somewhat hard for employers to gauge as they look toward the future, **Figure 24** presents the annual estimated number of eligible retirees through 2013. Recognizing that some employees will not retire the year that they first become eligible, employers were asked not to double count employees who were eligible to retire in subsequent years.

For example, an employee eligible to retire in 2009 that continues to work is counted as an eligible retiree in 2009 but not in 2010. This explains why the first year (2009) estimate is much higher than in years that follow. This number also includes an accumulation of employees who became eligible to retire prior to 2009 and are still employed. According to the survey, an average of 6.4 percent of Iowa's workforce becomes eligible for retirement each year (101,984 divided by total employment of about 1.6 million). Future analysis of trend data will help us understand how many retirement eligible workers are remaining in the workforce and for how long.

The future year estimates in subsequent reports will reflect employees who did not retire in the year they actually were eligible as they may choose to continue their employment because of retention efforts by employers.

Figure 24
Estimate of Those Eligible to Retire

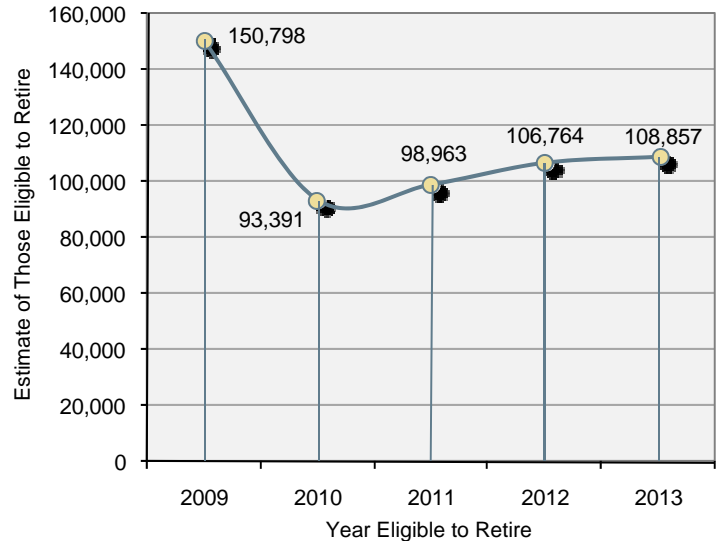


Figure 25 shows the estimated percentage of worker loss due to retirement by industry in the next five years. In the near future, there will be a significant number of workers retiring from the educational services; manufacturing; healthcare; and public administration.

Figure 25
Retirement Eligibility by Industry

Industry	Percent of Respondents
Educational Services, All	36.1%
Manufacturing	15.5%
Healthcare	14.2%
Public Administration	8.8%
Wholesale & Retail Trade	6.0%
Finance, Insurance, & Real Estate	5.0%
Transportation & Warehousing	2.4%
Construction	2.3%
Professional & Technical Services	1.9%
Management	1.8%
Utilities	1.5%
Personal Services	1.3%
Information	0.8%
Arts, Entertainment, & Recreation	0.8%
Administrative Services	0.6%
Accommodation & Food Services	0.6%
Agriculture & Mining	0.4%

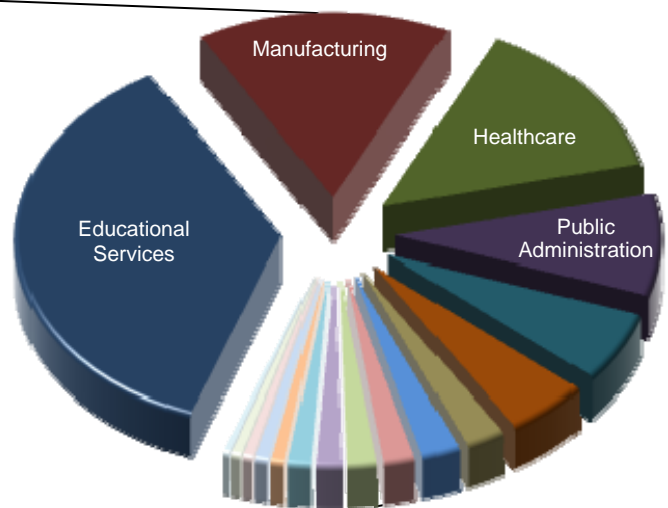


Figure 26
Retirement Eligibility by Occupational Category

Occupational Category	Jobs Affected by Retirements
Office & Administrative Support	21.6%
Management	13.2%
Production	9.5%
Sales & Related	7.4%
Healthcare Practitioner & Technical	6.3%
Education, Training, & Library	5.7%
Installation, Maintenance, & Repair	5.7%
Transportation & Material Moving	5.2%
Business & Financial Ops	4.8%
Construction & Extraction	4.3%
Building & Grounds Cleaning & Maintenance	2.6%
Healthcare Support	2.5%
Food Preparation & Serving Related	2.2%
Community & Social Science	1.6%
Architecture & Engineering	1.3%
Protective Service	1.2%
Personal Care & Service	1.1%
Life, Physical, & Social Science	1.0%
Legal	0.8%
Computer & Mathematical Science	0.7%
Arts, Design, Entertainment, Sports, & Related	0.7%
Farming, Fishing, & Forestry	0.6%

Figure 26 shows the percent of eligible retirement by occupational category. Office & administrative support not only represent the largest occupational category among current vacancies (**Figure 2**, page 2), but also the largest occupational category among jobs affected by retiring workers. And while healthcare practitioner & technical occupations make up 10.3 percent of the state's current vacancies (**Figure 2**, page 2), they are not significantly affected by retiring workers (6.3%). The three occupational categories that will be most affected are: office & administrative support, management, and production.

Figure 27
Retiree Retention Efforts by Employers

Efforts to Keep/Attract Retirees	Percent
Increase wages and/or bonuses	69.1%
Flexible work schedules	57.0%
More recognition	27.1%
Additional training	26.3%
Change in duties/responsibilities	23.4%
Benefits to part-time employees	16.4%
Seasonal work schedules	12.0%
Benefits to retirees	5.8%
Allow telecommuting/working from home	5.4%
Other	2.9%

Nearly three-fourths (73.2%) of employers indicated that they are engaged in retiree retention efforts. **Figure 27** details employer responses regarding the strategies used to retain retirees. Over two-thirds (69.1%) of the employers are offering retirees increased wages and/or bonuses; followed by a flexible work schedule, allowing them both the benefits of retirement and the income from work; more recognition for work done; additional training to upgrade their skills; and a change in duties/responsibilities to take away from the repetitiveness in the workplace.

Figure 28
How Companies Plan to Replace Those Who Retire

Replacing Vacancies Due to Retirements	Percent
Combination of hiring outside workers and promoting from within the company	26.3%
Hire workers from outside of the company	25.5%
Not currently planning to fill these positions	25.5%
Promote employees from within the company	6.7%

Figure 28 shows how companies plan to fill vacant positions left behind from those who have retired. Of those who reported, 26.3 percent plan to use a combination of hiring outside workers along with promoting from within the company, 25.5 percent plan only to hire workers from outside the company, 25.5 percent do not currently plan on filling these positions, and 6.7 percent plan on only promoting from within.

Conclusion

The Workforce Needs Assessment gives us an idea of the demand for workers within an industry. The survey shows increasing demand in the healthcare, education services, management, arts, entertainment & recreation, and utilities industries and decreasing demand in the wholesale & retail trade, administrative services, manufacturing, transportation & warehousing, finance, insurance & real estate, construction, personal services, professional & technical services, public administration, information, and agriculture & mining industries over the last year. The decreasing demand in workforce is most attributed to the slowing economy at the time of the survey.

Currently, Iowa has a large number of job vacancies in healthcare related occupations, particularly in the health diagnosing, treating practitioners, nursing, and home health-aide occupations. There is an additional demand for health technicians and technologists. Metal and plastic workers along with all types of production occupations represent 9.3 percent of the current openings across the state. Together, these occupational categories account for 27.6 percent of all reported job vacancies, signaling a large number of opportunities for students and workers in related industries.

Most of the current job vacancies (78.8%) reportedly require an education level at or below an associates degree, a decrease of 8.9 percent from the previous year. Over one-fifth (21.2%) of current job vacancies require an undergraduate degree or higher. Vacancies due to upcoming retirements are following a similar pattern to current job vacancies, where 42.7 percent of jobs will require a high school education, 35.7 percent will require a vocational or associates degree, and 21.6 percent will require an undergraduate degree or higher.

As a result of this survey, the state has been able to identify the gap between the existing workforce and the skills it possesses and the existing needs of industries. Identifying this gap will allow the state to assist community colleges, universities, and other educational institutions in preparing upcoming workers with the necessary and appropriate skills to make them successful in the workforce.

This Workforce Needs Assessment Survey was conducted by Iowa Workforce Development's Regional Research & Analysis Bureau in partnership with the Iowa Association of Business and Industry and validated by the University of Northern Iowa's Institute for Decision Making.

Top Ten Job Vacancies

The following section details each of the top ten job vacancy categories (**Figure 24**) utilizing data from the workforce needs assessment survey in conjunction with information documented on the O*Net Website. These sources enable a more detailed analysis to be performed regarding the education, experience, and skill requirements for each job vacancy category.

Included at the end of each job title are the corresponding Standard Occupational Codes (SOC) for each job vacancy category. They are provided to enable further research by occupational code.

Job Description - overview of the position (<http://online.onetcenter.org>)

Sample of Reported Titles - reported identified by surveyed businesses

Job Skills/Experience - listing of both reported skills needed and skills identified through the O*Net Website (<http://online.onetcenter.org>)

Education Requirements - not all positions require a certain level of education; therefore, it is important to note that this section also gives a percent in parenthesis which pertains to the percent of positions within the job title that would require the level of education listed, depending upon employer preference. Source: O*Net Online (www.onetonline.org)

Median Wages - Source: Iowa Wage Survey 2007 (www.iowaworkforce.org/lmi/occupations/wages/index.htm)

National & State Employment Trends - information in these charts were acquired from the O*Net Website (www.careeronestop.org) Note: the data for these trends are not directly comparable. The projections period for state data is 2004-2014, while national data is 2006-2016.

Nursing Aides, Orderlies, & Attendants (31-1012)

Job Description:

Provide basic patient care under direction of nursing staff. Perform duties: feed, bathe, dress, groom, move patients, or change linens.

Sample of Reported Titles:

Certified Nurses Aide (CNA), Certified Nursing Assistant (CNA), Nursing Assistant, Patient Care Assistant (PCA), Patient Care Technician (PCT), Certified Medication Aide (CMA), Attendant, Psychiatric Attendant, Hospital Assistant.

Job Skills/Experience:

- **Occupational Skills**
 - Answer patients' call signals.
 - Turn and reposition bedridden patients, alone or with assistance, to prevent bedsores.
 - Observe patients' conditions, measuring and recording food and liquid intake and output and vital signs, and report changes to professional staff.
 - Feed patients who are unable to feed themselves.
 - Provide patients with help walking, exercising, and moving in and out of bed.
 - Provide patient care by supplying and emptying bed pans, applying dressings and supervising exercise routines.
 - Bathe, groom, shave, dress, or drape patients to prepare them for surgery, treatment, or examination.
 - Transport patients to treatment units, using a wheelchair or stretcher.
 - Clean rooms and change linens.
 - Collect specimens such as urine, feces, or sputum.

Education Requirements:

(percent of openings requiring)

- High school or less (55%)
- Some college (37%)
- Bachelor's degree or higher (7%)

Median Wages:

State	\$10.85/hour
Nation	\$11.14/hour

National & State Employment Trends

United States	Occupational Code	Employment		Percent Change
		2006	2016	
Nursing Aides, Orderlies, & Attendants	31-1012	1,447,200	1,710,900	18%
Iowa	Occupational Code	Employment		Percent Change
		2006	2016	
Nursing Aides, Orderlies, & Attendants	31-1012	21,770	25,370	17%

Registered Nurses (29-1111)

Job Description:

Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required. Includes advance practice nurses such as: nurse practitioners, clinical nurse specialists, certified nurse midwives, and certified registered nurse anesthetists. Advanced practice nursing is practiced by RNs who have specialized formal, post-basic education and who function in highly autonomous and specialized roles.

Sample of Reported Titles:

Registered Nurse, RN.

Job Skills/Experience:

- **Occupational Skills**
 - Monitor, record and report symptoms and changes in patients' conditions.
 - Maintain accurate, detailed reports and records.
 - Record patients' medical information and vital signs.
 - Order, interpret, and evaluate diagnostic tests to identify and assess patient's condition.
 - Modify patient treatment plans as indicated by patients' responses and conditions.
 - Direct and supervise less skilled nursing or health care personnel or supervise a particular unit.
 - Consult and coordinate with health care team members to assess, plan, implement and evaluate patient care plans.
 - Monitor all aspects of patient care, including diet and physical activity.
 - Instruct individuals, families and other groups on topics such as health education, disease prevention and childbirth, and develop health improvement programs.
 - Prepare patients for, and assist with, examinations and treatments.

Education Requirements:

(percent of openings requiring)

- Bachelor's degree or higher (56%)
- Some college/license (43%)
- High school or less (1%)

Median Wages:

State	\$23.04/hour
Nation	\$28.85/hour

National & State Employment Trends

United States	Employment		Percent Change
	2006	2016	
Registered Nurse	2,504,700	3,092,000	23%
Iowa	Employment		Percent Change
	2006	2016	
Registered Nurse	31,810	39,040	23%

Truck Driver, Heavy & Tractor-Trailer (53-3032)

Job Description:

Drive a tractor-trailer combination or a truck with a capacity of at least 26,000 GVW, to transport and deliver goods, livestock, or materials in liquid, loose, or packaged form. May be required to unload truck. May require use of automated routing equipment. Requires commercial drivers' license.

Sample of Reported Titles:

Truck Driver, Over the Road Driver (OTR Driver), Line Haul Driver, Delivery Driver, Owner Operator, Road Driver, City Driver, Feeder Driver, Flatbed Truck Driver, Pick Up and Delivery Driver (P & D Driver).

Job Skills:

- **Occupational Skills**
 - Follow appropriate safety procedures for transporting dangerous goods.
 - Check vehicles to ensure that mechanical, safety, and emergency equipment is in good working order.
 - Maintain logs of working hours and of vehicle service and repair status, following applicable state and federal regulations.
 - Obtain receipts or signatures for delivered goods and collect payment for services when required.
 - Check all load-related documentation to ensure that it is complete and accurate.
 - Maneuver trucks into loading or unloading positions, following signals from loading crew and checking that vehicle and loading equipment are properly positioned.
 - Drive trucks with capacities greater than 3 tons, including tractor-trailer combinations, to transport and deliver products, livestock, or other materials.
 - Secure cargo for transport, using ropes, blocks, chains, binders, or covers.
 - Read bills of lading to determine assignment details.
 - Report vehicle defects, accidents, traffic violations, or damage to the vehicles.

Education Requirements: (percent of openings requiring)

- High school or less (71%)
- Some college (25%)
- Commercial Drivers License (CDL)

Median Wages:

State	\$16.56/hour
Nation	\$17.41/hour

National & State Employment Trends

United States	Employment		Percent Change
	2006	2016	
Truck Drivers, Heavy & Tractor-Trailer	1,859,800	2,052,900	10%
Iowa	Employment		Percent Change
	2006	2016	
Truck Drivers, Heavy & Tractor-Trailer	42,670	50,060	17%

Production Worker, All Other (51-9199)

Job Description:

Production Worker skills and job description will vary dependent upon specific job title. Some of the production worker occupations include: inspectors, precision workers, machine setters and operators, assemblers, fabricators, and plant and system operators.

Sample of Reported Titles:

Production Worker, Production Laborer, Fabricator, Press Brake Operator.

Job Skills/Experience:

- **Occupational Skills**
 - Operate machinery used in the production process, or assist machine operators.
 - Examine products to verify conformance to quality standards.
 - Observe equipment operations so that malfunctions can be detected, and notify operators of any malfunctions.
 - Lift raw materials, finished products, and packed items, manually or using hoists.
 - Count finished products to determine if product orders are complete.
 - Mark or tag identification on parts.
 - Load and unload items from machines, conveyors, and conveyances.
 - Help production workers by performing duties of lesser skill, such as supplying or holding materials or tools, and cleaning work areas and equipment.
 - Clean and lubricate equipment.
 - Record information such as the number of products tested, meter readings, and dates and times of product production.

Education Requirements:

(percent of openings requiring)

- High school diploma or less(72%)
- Some college (23%)
- Bachelor's degree or higher (5%)

Median Wages:

State	\$12.41/hour
Nation	\$12.33/hour

National & State Employment Trends

United States	Employment		Percent Change
	2006	2016	
Production workers, all other	304,900	312,000	2%
Iowa	Employment		Percent Change
	2006	2016	
Production workers, all other	7,310	7,720	6%

Laborers & Freight, Stock, & Materials Movers, Hand (53-7062)

Job Description:

Manually move freight, stock, or other materials or perform other unskilled general labor. Includes all unskilled manual laborers not elsewhere classified.

Sample of Reported Titles:

Material Handler, Warehouse Worker, Laborer, Loader, Receiving Associate, Receiver, Shipping and Receiving Materials Handler, Merchandise Pickup / Receiving Associate, Line Tender, Stock Replenisher.

Job Skills/Experience:

- **Occupational Skills**
 - Attach identifying tags to containers, or mark with identifying information.
 - Read work orders or receive oral instructions to determine work assignments and material and equipment needs.
 - Record numbers of units handled and moved, using daily production sheets or work tickets.
 - Move freight, stock, and other materials to and from storage and production areas, loading docks, delivery vehicles, ships, and containers, by hand or using trucks, tractors, and other equipment.
 - Sort cargo before loading and unloading.
 - Assemble product containers and crates, using hand tools and precut lumber.
 - Load and unload ship cargo, using winches and other hoisting devices.
 - Connect hoses and operate equipment to move liquid materials into and out of storage tanks on vessels.
 - Pack containers and re-pack damaged containers.
 - Carry needed tools and supplies from storage or trucks, and return them after use.

Education Requirements:

(percent of openings requiring)

- High school or less (72%)
- Some college (24%)
- Bachelor's degree or higher (4%)

Median Wages:

State	\$10.48/hour
Nation	\$10.53/hour

National & State Employment Trends

United States	Employment		Percent Change
	2006	2016	
Laborers & Freight, Stock & Material Movers, Hand	2,416,000	2,465,800	2%
Iowa	Employment		Percent Change
	2006	2016	
Laborers & Freight, Stock & Material Movers, Hand	24,820	25,870	4%

Waiters & Waitresses (35-3031)

Job Description:

Take orders and serve food and beverages to patrons at tables in dining establishment.

Sample of Reported Titles:

Waitress, Server, Waiter, Food Server, Banquet Server, Cocktail Server, Room Service Server, Restaurant Server, Food and Beverage Server, and Room Service Waiter.

Job Skills/Experience:

- **Occupational Skills**
 - Check patrons' identification to ensure that they meet minimum age requirements for consumption of alcoholic beverages.
 - Collect payments from customers.
 - Write patrons' food orders on order slips, memorize orders, or enter orders into computers for transmittal to kitchen staff.
 - Take orders from patrons for food or beverages.
 - Check with customers to ensure they are enjoying their meals and take action to correct any problems.
 - Serve food or beverages to patrons, and prepare or serve specialty dishes at tables as required.
 - Prepare checks that itemize and total meal costs and sales taxes.
 - Remove dishes and glasses from tables or counters, and take them to kitchen for cleaning.
 - Present menus to patrons and answer questions about menu items, making recommendations upon request.
 - Inform customers of daily specials.

Education Requirements: (percent of openings requiring)

- High school or less (51%)
- Some college (35%)
- Bachelor's degree or higher (14%)

Median Wages:

State	\$7.07/hour
Nation	\$7.62/hour

National & State Employment Trends

United States	Employment		Percent Change
	2006	2016	
Waiters & Waitresses	2,360,600	2,615,300	11%
Iowa	Employment		Percent Change
	2006	2016	
Waiters & Waitresses	25,320	28,310	12%

Cashiers & Retail Salespersons (41-2011, 41-2031, & 41-9099)

Job Description:

Sell merchandise, such as furniture, motor vehicles, appliances, or apparel in a retail establishment.

Sample of Reported Titles:

Sales Clerk, Sales Associate, Clerk, Sales Consultant, Sales Person, Merchandise Manager, and Retail Salesperson.

Job Skills/Experience:

- **Occupational Skills**
 - Greet customers and ascertain what each customer wants or needs.
 - Open and close cash registers, performing tasks such as counting money, separating charge slips, coupons, and vouchers, balancing cash drawers, and making deposits.
 - Maintain knowledge of current sales and promotions, policies regarding payment and exchanges, and security practices.
 - Compute sales prices, total purchases and receive and process cash or credit payment.
 - Maintain records related to sales.
 - Watch for and recognize security risks and thefts, and know how to prevent or handle these situations.
 - Recommend, select, and help locate or obtain merchandise based on customer needs and desires.
 - Answer questions regarding the store and its merchandise.
 - Describe merchandise and explain use, operation, and care of merchandise to customers.
 - Ticket, arrange and display merchandise to promote sales.

Education Requirements:

(percent of openings requiring)

- High school or less (38%)
- Some college (36%)
- Bachelor's degree or higher (25%)

Median Wages:

State	\$8.24/hour
Nation	\$9.16/hour

National & State Employment Trends

United States	Occupational Code	Employment		Percent Change
		2006	2016	
Cashier & Retail Salespersons	41-2011	3,500,200	3,381,900	-3%
	41-2031	4,476,900	5,033,800	12%
	41-9099	179,600	204,700	14%
Iowa	Occupational Code	Employment		Percent Change
Cashier & Retail Salespersons	41-2011	41,720	43,240	4%
	41-2031	48,810	56,110	15%
	41-9099	1,840	2,100	15%

Customer Service Representative (43-4051)

Job Description:

Interact with customers to provide information in response to inquiries about products and services and to handle and resolve complaints.

Sample of Reported Titles:

Customer Service Representative, Customer Service Specialist, Member Services Representative, Account Service Representative, Call Center Representative, Claims Adjuster, Claims Service Representative.

Job Skills/Experience:

- **Occupational Skills**
 - Confer with customers by telephone or in person in order to provide information about products and services, to take orders or cancel accounts, or to obtain details of complaints.
 - Keep records of customer interactions and transactions, recording details of inquiries, complaints, and comments, as well as actions taken.
 - Resolve customers' service or billing complaints by performing activities such as exchanging merchandise, refunding money, and adjusting bills.
 - Check to ensure that appropriate changes were made to resolve customers' problems.
 - Contact customers to respond to inquiries or to notify them of claim investigation results and any planned adjustments.
 - Refer unresolved customer grievances to designated departments for further investigation.
 - Determine charges for services requested, collect deposits or payments, or arrange for billing.
 - Complete contract forms, prepare change of address records, and issue service discontinuance orders, using computers.
 - Obtain and examine all relevant information to assess validity of complaints and to determine possible causes, such as extreme weather conditions that could increase utility bills.
 - Solicit sale of new or additional services or products.

Education Requirements: (percent of openings requiring)

- High school or less (34%)
- Some college (44%)
- Bachelor's degree or higher (22%)

Median Wages:

State	\$13.15/hour
Nation	\$13.96/hour

National & State Employment Trends

United States	Employment		Percent Change
	2006	2016	
Customer Service Representative	2,202,300	2,747,400	25%
Iowa	Employment		Percent Change
	2006	2016	
Customer Service Representative	24,010	30,880	29%

Automotive Service Technicians & Mechanics (49-3023)

Job Description:

Diagnose, adjust, repair, or overhaul automotive vehicles.

Sample of Reported Titles:

Automotive Technician, Automotive Service Technician, Shop Foreman, Certified ASE Master Automotive Technician (Certified Automotive Service Excellence Master Automotive Technician), Master Automotive Technician, ASE Master Mechanic (Automotive Service Excellence Master Mechanic), Auto Mechanic.

Job Skills/Experience:

- **Occupational Skills**

- Examine vehicles to determine extent of damage or malfunctions.
- Test drive vehicles, and test components and systems, using equipment such as infrared engine analyzers, compression gauges, and computerized diagnostic devices.
- Repair, reline, replace, and adjust brakes.
- Review work orders and discuss work with supervisors.
- Follow checklists to ensure all important parts are examined, including belts, hoses, steering systems, spark plugs, brake and fuel systems, wheel bearings, and other potentially troublesome areas.
- Plan work procedures, using charts, technical manuals, and experience.
- Test and adjust repaired systems to meet manufacturers' performance specifications.
- Confer with customers to obtain descriptions of vehicle problems, and to discuss work to be performed and future repair requirements.
- Perform routine and scheduled maintenance services such as oil changes, lubrications, and tune-ups.
- Disassemble units and inspect parts for wear, using micrometers, calipers, and gauges.

Education Requirements:

(percent of openings requiring)

- High school or less (62%)
- Some college (34%)
- Bachelor's degree or higher (4%)

Median Wages:

State	\$14.68/hour
Nation	\$16.43/hour

National & State Employment Trends

United States	Employment		Percent Change
	2006	2016	
Automotive Service Technicians & Mechanics	772,700	883,100	14%
Iowa	Employment		Percent Change
	2006	2016	
Automotive Service Technicians & Mechanics	8,970	10,470	17%

Home Health & Healthcare Support Workers, All Other (31-1011 & 31-9099)

Job Description:

Provide routine, personal healthcare, such as bathing, dressing, or grooming, to elderly, convalescent, or disabled persons in the home of patients or in a residential care facility.

Sample of Reported Titles:

Home Health Aide (HHA), Residential Counselor, Certified Nursing Assistant (CNA), Home Health Provider, Habilitation Training Specialist, Caregiver, Direct Support Person, Personal Care Attendant, Residential Assistant (RA).

Job Skills/Experience:

- **Occupational Skills**
 - Maintain records of patient care, condition, progress, or problems to report and discuss observations with supervisor or case manager.
 - Provide patients with help moving in and out of beds, baths, wheelchairs or automobiles, and with dressing and grooming.
 - Provide patients and families with emotional support and instruction in areas such as caring for infants, preparing healthy meals, living independently, or adapting to disability or illness.
 - Change bed linens, wash and iron patients' laundry, and clean patients' quarters.
 - Entertain, converse with, or read aloud to patients.

Education Requirements:

(percent of openings requiring)

- High school or less (55%)
- Some college (37%)
- Bachelor's degree or higher (7%)

Median Wages:

Region	\$10.14/hour
State	\$9.62/hour

National & State Employment Trends

United States	Occupational Code	Employment		Percent Change
		2006	2016	
Home Health & Healthcare Support Workers	31-1011	787,300	1,170,900	49%
	31-9099	204,400	236,300	16%
Iowa	Occupational Code	Employment		Percent Change
Home Health & Healthcare Support Workers	31-1011	9,970	14,260	43%
	31-9099	2,640	2,940	11%



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