

# A Profile Of Older Workers In Iowa

Issued April 2004

## Local Employment Dynamics

LED/OW-IA

### Executive Summary

A new information source, the Local Employment Dynamics (LED) program for Iowa, shows:

- The workforce is aging. From 1999 through 2002, an increasing percentage of the workforce was 45 years and older. The proportion of people 65 years and older who continue working has also increased, but only slightly.
- Industries in which more than 1-in-5 workers were 55 years and older in 2002 include: local/suburban transit, real estate, mining and quarrying — nonmetallic, and educational services. Of these, only the educational services industry employed more than 3,000 older workers.
- An example of an industry with a high turnover rate for workers 55 years and over is amusement and recreation.
- An example of an industry with a low turnover rate for older workers is the health services industry.
- Industries where workers 65 years and over are most likely to be employed include health services, business services, and wholesale trade — nondurables.
- On average, in 2002, for workers 65 years and over, 2,864 jobs were created and 4,249 were lost.
- Of the industries that employed more than 500 workers 65 years and older, the highest paying was industrial and commercial machinery (\$2,829 a month). The industry with the highest average monthly earnings in 2002 for

workers 65 years and older was security/commodity brokers (\$4,305), but the number of such workers was only 115.

### Introduction

A large wave of workers born during the Baby Boom of 1946 to 1964 will be leaving the workforce over the next few decades. A larger share than in past generations may “retire” to collect the pensions they earned over their work life and then continue working part-time or in more flexible working arrangements.<sup>1</sup>

Decision makers are looking at the economic and policy implications for a wide range of programs and institutions, including Social Security and Medicare; financial markets; the housing market; and recreation, transportation, and health-care systems.

What the workforce of the future looks like will depend on many factors. This report focuses on one possible scenario that some scholars consider to be reasonable. It assumes that Baby Boomers replicate the retirement behavior of previous generations and that immigrant workers do not fill all of the jobs left vacant by these retirements. If these assumptions prove accurate:

*The United States will lose the services of millions of highly skilled, experienced workers. Because of the baby dearth that followed the Baby Boom,*

<sup>1</sup> The term “retirees” refers to workers who collect pensions — who may have varied labor market experiences. Some may completely leave the labor force and others may continue to work. Of those who continue to work while they receive pensions, some may work fewer than 35 hours a week, some may work only part of the year, and others may continue in the labor force year-round and full-time.

By  
Nick Carroll  
and  
Cynthia Taeuber

Sponsored by the  
National Institute on Aging  
National Institutes of Health  
Department of Health and  
Human Services



U S C E N S U S B U R E A U

Helping You Make Informed Decisions

U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU

*there will not be many new workers to replace them, even as the senior adult population grows significantly. Labor force growth is expected to fall from 1.1 percent per year in the 1990s to 0.36 percent per year in the period 2010 to 2020.<sup>2</sup>*

Regardless of how the future unfolds, information about the workforce decisions made by the Baby Boomers can be useful to a number of groups. Decision makers in Iowa need to know which industries and regions of the state are likely to be most affected by changes in the size and composition of the labor force in coming decades. Similarly, businesses need such information both to make more informed plans for transitions and to pinpoint potential problem areas and new opportunities. Older workers who want to continue working need to know in what industries and in what areas of Iowa jobs are available, how flexible businesses are about their working arrangements, and the level of earnings they can expect.

The Census Bureau, together with state partners, is developing several new sources of information to support these needs. The Local Employment Dynamics (LED) program, one of the newest resources, produces workforce indicators that are updated every quarter for each partner state and its metropolitan areas, counties, and Workforce Investment Areas.<sup>3</sup> Statistics are available without cost on the program's Web site <http://lehd.dsd.census.gov/> and additional indicators are available from partner states.

<sup>2</sup> Penner, Rudolph, Pamela Perun, and Eugene Steuerle. "Legal and Institutional Impediments to Partial Retirement and Part-Time Work by Older Workers," The Urban Institute, 2002.

<sup>3</sup> Other related information sources from the Census Bureau include the American Community Survey [www.census.gov/acs/www/](http://www.census.gov/acs/www/) and the Economic Census [www.census.gov/epcd/www/econ2002.html](http://www.census.gov/epcd/www/econ2002.html).

The statistics are historical and come from multiple, high quality information sources that include most of the working population (see "Sources and Accuracy of the Data" at the end of this report for additional information about coverage).

The LED program is a partnership between the Census Bureau and participating states. As of February 2004, 29 states are partners with the Census Bureau in creating this information.<sup>4</sup> Those 29 states cover about 65 percent of America's workers. Additional states are planning to join the partnership.

This report uses Quarterly Workforce Indicators (QWIs) from the LED program for the state of Iowa to focus on two groups of older workers: those who are likely to be receiving pension income (65 and older) and the preretirement group (55-64 years old). People in the preretirement group may collect pensions within the next ten years, but may or may not continue to participate in the labor force.

With the LED, we can respond to questions such as:

*What changes are occurring in the age composition of the workforce in a geographic area?*

*Which industries will be most affected by the departure of older workers from the workforce?*

*In what industries do older people tend to continue working and under what circumstances?*

*Which industries create jobs for older workers? Suffer the most job losses?*

<sup>4</sup> As of February 2004, the partner states whose data were being processed were: CA, CO, FL, IA, ID, IL, KS, MD, MN, MO, MT, NC, NJ, NM, OK, OR, PA, TX, VA, WA, WI, and WV. Additional partner states include: AR, DE, GA, KY, ME, MI, and ND. This is an ongoing project and additional states are expected to join.

*Which industries have the lowest job turnover rates for older workers?*

*How much do older workers earn in various industry groups and geographic areas?*

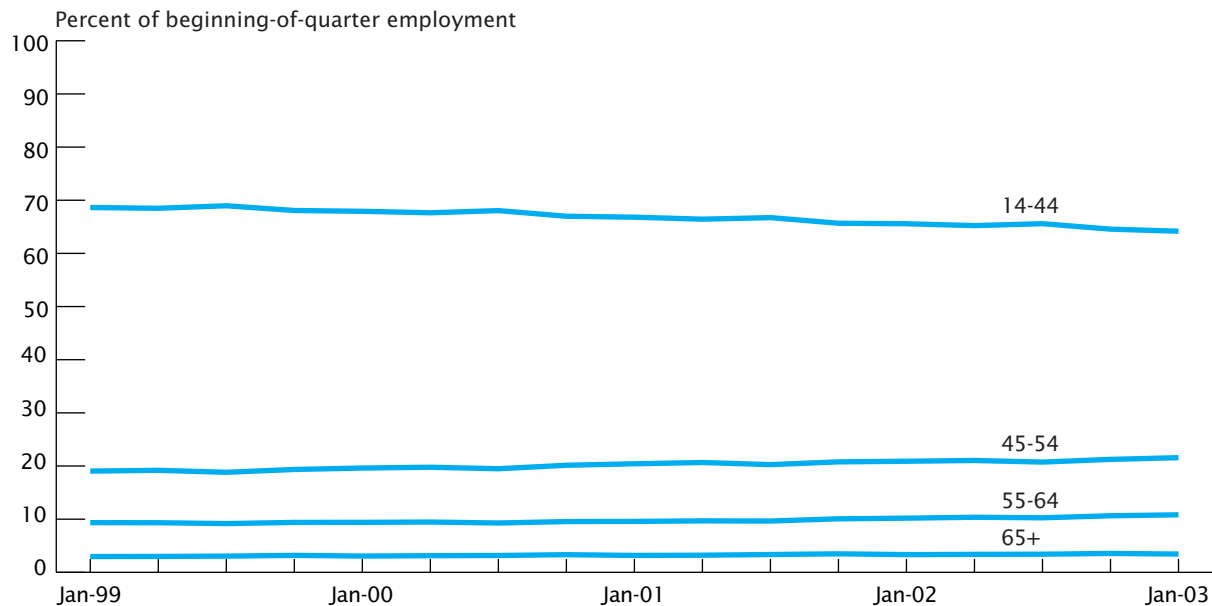
As the LED statistics in this report show, older workers in Iowa have been an increasing proportion of the labor force. We learn from the LED information that older workers tend to be employed in the same industries that employ large numbers of younger workers, but the best-paid are those who work in financial and manufacturing firms with relatively few older workers. We do not know yet whether Iowa will undergo rapid and massive changes, or gradual changes due to the retirement of experienced workers of the Baby Boom generation along with the movement of workers into and out of Iowa. We do know that both have the potential to affect the age distribution of the workforce significantly. Planners in Iowa will be able to keep an eye on the impact of such factors and emerging trends by using the LED statistics.

### **How is the age composition of the workforce in Iowa changing?**

The aging of Baby Boom workers led to an increase in the proportion of the workforce 45 years and older from 1999 to 2002 in Iowa. Many planners anticipate this proportion will grow even more rapidly over the next two decades unless a large influx of younger

Quarterly Workforce Indicators for partner states and detailed information about the LED program are available at:  
<http://lehd.dsd.census.gov/>.

Figure 1.  
**Iowa Workforce by Age Group: 1999 to 2002**



Source: U.S. Census Bureau and the Iowa Workforce Development, Local Employment Dynamics program's Web site: <http://lehd.dsd.census.gov>.

workers comes into Iowa. In 1999, about 69 percent of Iowa workers were 14-to-44 years old (Figure 1). By 2002, that figure dropped to about 65 percent of workers. Nineteen percent of Iowa workers were 45-to-54 years old in 1999 and 21 percent were in that age group in 2002.

The falling share of younger workers occurred across the economy of Iowa. The share of workers in Iowa who are 65 years and older, the traditional age when most

workers leave the labor force permanently, increased slightly, from 3.1 percent to 3.4 percent from 1999 to 2002.

### Which industries will be most affected by the aging workforce?

Unless there is an infusion of new workers from outside Iowa, or from other Iowa industries, the industries identified in Figure 2 are those likely to be most affected by the aging of the workforce.<sup>5</sup> If older workers seek either more

<sup>5</sup> Because the QWIs come from a mixture of sources, they are not directly comparable with statistics from worker-based surveys such as the decennial census, the American Community Survey, and the Current Population Survey. Industries are based on the Standard Industrial Classification (SIC) system. The LED program will convert from the SIC system to the North American Industry Classification System (NAICS) in early 2004. Some classification titles appear to be similar but the detailed industry groups that compose the categories may differ between the SIC and NAICS systems.

### Skill Level

Quarters of work experience

flexibility in hours or leave these industries completely, companies may suffer a considerable loss of skills and knowledge. Thus, industries with a high proportion of workers near retirement might need, for example, to plan for increased training to respond to the loss of older workers and their institutional knowledge.

Figure 2 shows that the mining/quarrying — nonmetallic and local/suburban transit industries in Iowa had a high proportion of older workers — about 17 percent were 55-64 years old in each industry. Six percent and 13.5 percent respectively were 65 years and older. Other industries with a

### Beginning-of-Quarter Employment

Total number of workers who were employed by the same employer in the *reference* and *previous* quarters.

relatively high proportion of workers 55 years and older included real estate (26.1 percent), educational services (20.3 percent), and legal services (18.7 percent). Of these three industries, legal services has a relatively small number of older workers, employing less than 2,000 older workers (Appendix Table A1).

### The demand for older workers and job stability

An indicator of the degree to which businesses need older workers is the turnover rate of older workers within an industry. Industries with a history of relatively high turnover rates may have little need for specific skills and may find it easy to replace employees. As a result, firms in such industries may be likely to pay relatively low wages. A relatively low turnover rate for a specific age group, such as older workers, may indicate that workers in that age group are relatively skilled or not readily replaced. The LED data enable us, for the first time, to identify the nature of demand for older workers in particular industries.

*Turnover Rate — A measure of workforce stability, the turnover rate reflects the movement of workers into and out of jobs.*

Turnover rate =

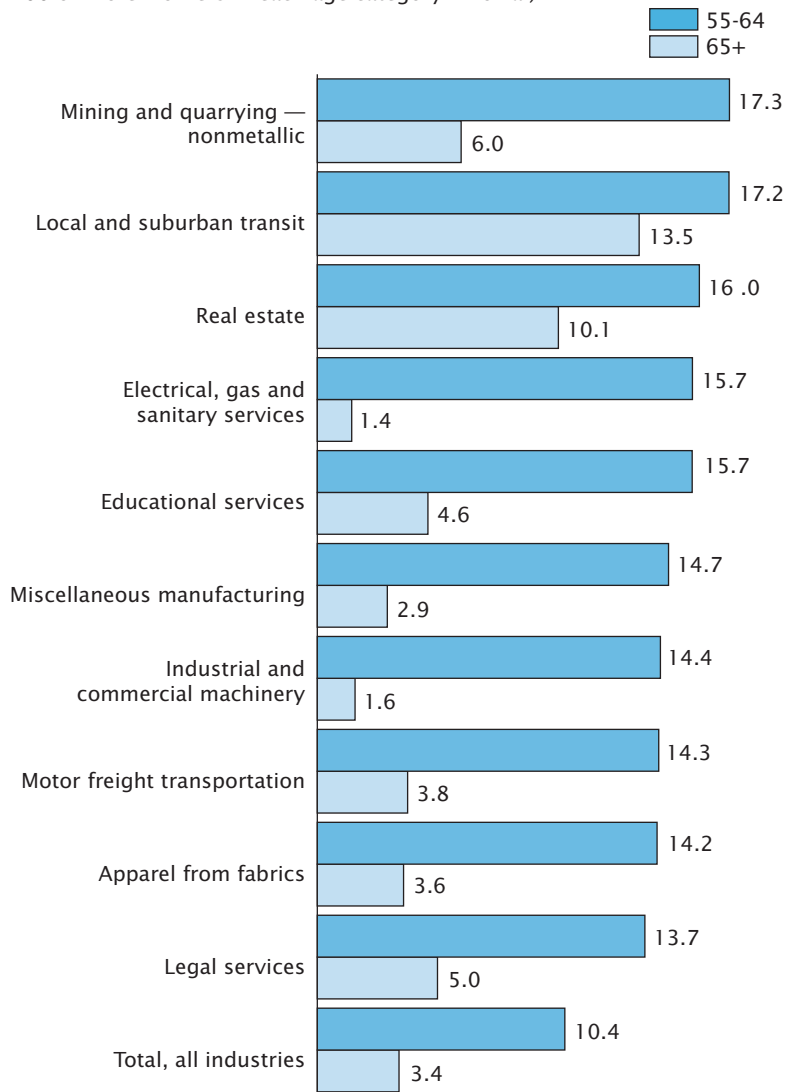
$$\frac{1}{2} * \left( \frac{\text{accessions}_t + \text{separations}_t}{\text{average employment}_{t,t-1}} \right)$$

(A worker who retires is included in the turnover rate.)

The job turnover rate is also a measure of job stability. Older workers who work in low turnover industries may spend less time

Figure 2.  
**Selected Industries With a High Proportion of Older Workers by Age, for Iowa: 2002**

(Percent of industry's workers. Includes only industries that employed 100 or more workers in each age category in Iowa.)



Note: Details do not cover the total workforce in these age categories.

Source: U.S. Census Bureau and the Iowa Workforce Development, Local Employment Dynamics program, 2002, Appendix Table A1 and Web site: <http://lehd.dsd.census.gov>.

looking for work and retraining for new jobs. The average quarterly turnover rate for all workers in Iowa was 10.8 percent in 2002 (although this includes the relatively high turnover rates of teenagers and young adults).<sup>6</sup> For workers

65 years and older, it was 9.4 percent; for those 55 years and older, 8.2 percent.

The industries in Figure 2 with the highest average quarterly turnover rates for workers 55-64 years old in 2002 were local/suburban transit (10.2 percent), motor freight transportation (10.2 percent), and

<sup>6</sup> This is a simple average of four quarters in a calendar year.

Table 1.  
**Job Stability in Iowa by Industry: 2002**

(Top 10 industries statewide employing workers 65 and older)

Industry	Number of workers 65 and older	Average quarterly turnover rate for workers 65 and older (percent)	Average quarterly turnover rate for workers 14 and older (percent)	Number of workers 14 and older
Health services .....	4,529	6.1	8.1	122,687
Business services .....	2,658	14.5	17.4	73,796
Wholesale trade—nondurables. .	1,979	10.3	7.6	43,087
Eating and drinking places .....	1,947	11.5	19.6	85,786
Car dealers and gas stations ...	1,837	8.8	12.2	38,664
Social services.....	1,799	8.0	11.5	36,555
Miscellaneous retail.....	1,613	8.4	12.9	28,560
Food stores.....	1,526	6.8	11.6	39,561
Motor freight transportation .....	1,265	10.5	13.5	33,495
Real estate .....	1,026	8.1	10.6	10,171

Source: U.S. Census Bureau and the Iowa Workforce Development, Local Employment Dynamics program, 2002, Appendix Tables A1 and A2. See Web site: <http://lehd.dsd.census.gov>.

real estate (7.6 percent). Industries from Figure 2 with lower average quarterly turnover rates for this age group include educational services (5.6 percent), industrial and commercial machinery (4.2 percent), and legal services (5.1 percent). Average quarterly turnover rates for 2002 for these and other industries are shown in Appendix Table A2.

Of the top ten industries in Iowa employing workers 65 years and older in 2002 (Table 1 and Figure 3), the industries of business services (14.5 percent) and eating and drinking places (11.5 percent) had the highest average quarterly turnover rates; the lowest were the health services and food stores (6.1 percent and 6.8 percent respectively) industries.

### Where do older workers work?

This section asks where older workers are most concentrated because the types of work performed by today's older workers may indicate the work that older people will perform in the future. Planners might also examine the type of work done

by younger age groups, such as those 35-44 years old, for the changes they might expect among older workers, given differences in the type of education different age groups received and changes in the needs of industries.

As shown in Figure 3, the industries where workers 65 years and over were most likely to be employed in Iowa in 2002 were health services (11 percent), business services (7 percent), and wholesale trade — nondurables (5 percent). About half of the workers 65 years and older in Iowa were employed in the ten industries shown in Figure 3, compared with 43 percent of all workers. Older and younger workers may be employed in distinctly different types of firms within these industries, however, and may be assigned different tasks.

Between 1999 and 2002, there were few changes in the top ten industries that employed the largest number of workers 65 years and older in 2002 (Table 2).<sup>7</sup> Service

<sup>7</sup> Historical statistics are consistent in the LED program, so it is possible to make comparisons of statistics over time.

industries are the major employers of the oldest workers in Iowa.

### Employment dynamics and older workers

The employment numbers in the preceding section show only one part of the employment picture. Even when *levels* of employment in an industry change little, enormous *change* can occur in the underlying numbers. Economists refer to the underlying changes as “job creation” and “job destruction.” Even if employment levels in an industry stay the same, some firms add jobs and others eliminate jobs. So, while Figure 3 identifies the industries that employed a high proportion of workers 65 years and older in Iowa in 2002, LED program data reveal more detail. LED indicators also tally the number of jobs gained and lost by older workers in the Iowa economy.<sup>8</sup>

The LED statistics reveal that, on average in Iowa in 2002, for workers 65 years and older, 2,864 jobs were created in a quarter (Appendix Table A4) and 4,249 were lost (Appendix Table A5) — on average, a net decrease of 1,385 such workers employed in a quarter. The industries that created the most jobs for workers 65 years and older (Table 3) were wholesale trade — nondurables, with 227 jobs created on average a quarter, followed by amusement and recreation (211 jobs), and business services (206 jobs). The industries that destroyed the most jobs for the oldest workers were business services (395 jobs a quarter destroyed on average) and health services (294 jobs). These changes represented, in Iowa in 2002, an average net loss of

<sup>8</sup> Job losses for older workers can happen in two ways — a firm can actually reduce employment, or it can substitute a younger worker for an older worker who may have taken another job, retired or left involuntarily.



189 jobs in business services and 141 jobs in health services.

### What do older workers earn?

On average, full-quarter workers 65 years and older in 2002 earned \$1,474 a month in Iowa, and workers of all ages averaged \$2,544 a month (Table 4 and Appendix Table A6).

As is the case for all workers, the average earnings levels of older workers vary greatly among industries. For example, in the health services industry, which employed 11 percent of all workers 65 years and older in Iowa in 2002, the average monthly earnings were \$1,569. Workers 14 years and older in that industry had average monthly earnings of \$2,828. About 7 percent of the oldest workers in Iowa were employed by the business services industry, and they had average monthly earnings of \$1,068. Of the top ten industries of older workers in Iowa in 2002, the industry with the highest average monthly earnings was motor freight transportation, with an average of \$2,039 a month; the lowest was the eating and drinking places industry, with an average \$755 a month.

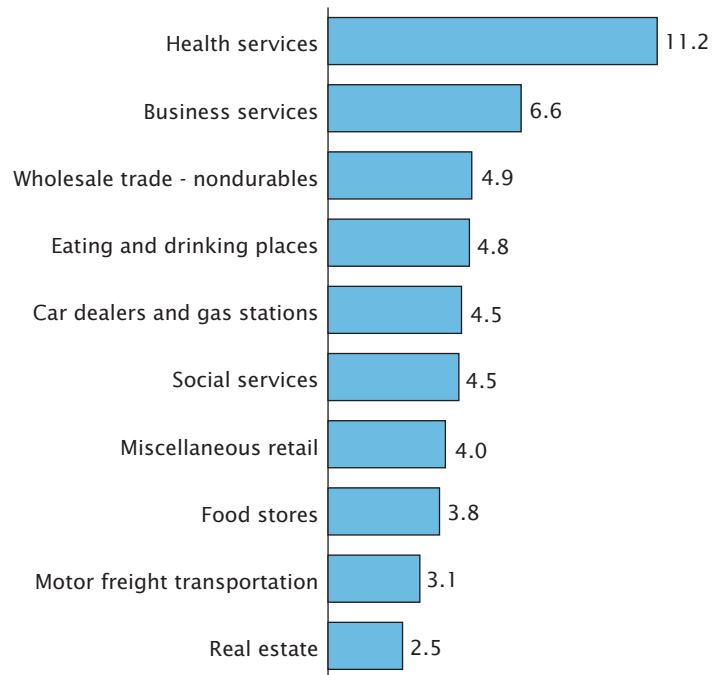
**Job Creation** — New jobs are created either by new businesses opening or by existing firms adding new jobs.

**Job Destruction** — Jobs are lost to the economy when businesses close or reduce employment.

**Net Job Flow** — The difference between current and previous beginning-of-quarter employment across all businesses.

Figure 3.  
**Workers 65 Years and Older in Selected Industries for Iowa: 2002**

(Percent of all workers aged 65+ years)



Source: U.S. Census Bureau and the Iowa Workforce Development, Local Employment Dynamics program, 2002, Appendix Table A3. See Web site: <http://lehd.dsd.census.gov>.

Among all industry groups, the security and commodity brokers industry had the highest average monthly earnings in 2002 for workers 65 years and older — \$4,305 — compared with \$5,474 for all workers in this industry (Table 5). The number of workers 65 and older in this industry is relatively small — 115 workers. Other high paying industries include mining and quarrying — nonmetallic, construction other than building, and transportation equipment. Only one of the two industries that employed 500 or more workers 65 years and older — industrial and commercial machinery — was relatively high paying, with average earnings of \$2,829 a month.

### Summary

This report provides answers to several key questions related to the aging of Iowa's workforce:

- What is the age composition of the workforce and what are the changes over time?
- Which industries are likely to be affected by the aging of the workforce?
- Which industries have the lowest turnover rates of older workers?
- In which industries are older workers most likely to be employed?
- How much do older workers earn?

Table 2.  
**Top Ten Employers in Iowa Employing Workers 65 and Older by Rank: 1999 and 2002**

1999 rank	2002 rank	Industry	Number of workers 65 and older		Percent change, 1999-2002	Number of workers 14 and older, 2002
			1999	2002		
1	1	Health services.....	3,751	4,529	20.7	122,687
2	2	Business services .....	2,433	2,658	9.2	73,796
4	3	Wholesale trade—nondurables .	1,837	1,979	7.7	43,087
3	4	Eating and drinking places . . . .	1,920	1,947	1.4	85,786
5	5	Car dealers and gas stations. . .	1,561	1,837	17.7	38,664
6	6	Social services .....	1,526	1,799	17.9	36,555
8	7	Miscellaneous retail. ....	1,486	1,613	8.5	28,560
9	8	Food stores.....	1,371	1,526	11.3	39,561
11	9	Motor freight transportation . . . .	1,227	1,265	3.1	33,495
13	10	Real estate .....	947	1,026	8.3	10,171

Source: U.S. Census Bureau and the Iowa Workforce Development, Local Employment Dynamics program, 2002, Appendix Tables A1 and A3. See Web site: <http://lehd.dsd.census.gov>.

Table 3.  
**Job Gains and Losses Among Industry Groups in Iowa by Industry: 2002**

(Average number of jobs a quarter)

Top ten industries that created jobs for workers 65 and over	Jobs created <sup>1</sup>	Jobs destroyed <sup>1</sup>	Net change <sup>2</sup>	Total employment	
				65 and older	Workers 14 and older
Wholesale trade—nondurables. .	227	258	-31	1,979	43,087
Amusement and recreation . . . .	211	224	-14	1,015	19,265
Business services .....	206	395	-189	2,658	73,796
Eating and drinking places . . . .	166	254	-88	1,947	85,786
Health services .....	153	294	-141	4,529	122,687
Miscellaneous retail. ....	120	165	-45	1,613	28,560
Car dealers and gas stations . . .	118	156	-38	1,837	38,664
Motor freight transportation . . . .	112	154	-42	1,265	33,495
Construction—special trade. . . .	103	135	-32	876	39,465
Personal services .....	103	107	-4	896	13,220

<sup>1</sup> Averages are rounded to whole numbers.

<sup>2</sup> Computed from actual averages, not from the rounded whole numbers as shown in this table.

Source: U.S. Census Bureau and the Iowa Workforce Development, Local Employment Dynamics program, 2002, Appendix Tables A1, A4, and A5. See Web site: <http://lehd.dsd.census.gov>.

#### Full-Quarter Employment

Total number of workers who were employed by the same employer in the reference, previous, and subsequent quarters.

#### Average Earnings for Full-Quarter Employees

Total earnings of all workers employed the full quarter divided by the number of such workers.

In Iowa in 2002, the industries that employed the highest proportions of workers 55-64 years old, and hence were likely to be affected by retirements in the coming decade were: mining and quarrying — non-metallic, local and suburban transit, and real estate.

The local/suburban transit and real estate industries had relatively high proportions of workers 65 years and older. In terms of pay, older workers tended to fare best in industries with relatively few older workers and, as for all workers, in industries with many highly trained, professional employees, such as in financial firms.

## SOURCES AND ACCURACY OF THE DATA

### Background

The U.S. Census Bureau and partner states produce Quarterly Workforce Indicators (QWIs) for each state, metropolitan area, county, and Workforce Investment Board area. QWIs for other geographic areas are available through the state partners.

The QWIs are updated each quarter and annual averages are available at <http://lehd.dsd.census.gov>.

### Overview

The QWIs are key economic indicators selected jointly by the Census Bureau and its partner states. Each QWI provides a critical measure of an area's economy and is a tool to understand changes in the core performance of local economies.

The QWIs are updated 7 months after the end of a quarter, which makes them a current and a historical time series to monitor economic

change. They serve as early indicators to states and local areas of emerging trends and help to identify turning points in the dynamics of the workforce and specific industries.

The database covers about 98 percent of the labor force.<sup>9</sup> The QWIs are derived from state administrative records and basic demographic information from other existing sources. Some information about the workforce is not now available in this database, including hours and weeks worked, educational attainment, occupation, and whether workers worked for an entire quarter or a part of the quarter. The Census Bureau is working on long-term plans to include information of this type, particularly educational and occupational information. There are other types of errors in administrative data, including coding errors in personal identifiers, coding errors in business identifiers, and errors in wage records (see the technical documentation on <http://lehd.dsd.census.gov>).

Because the QWIs come from a mixture of sources, they are not directly comparable with statistics from worker-based surveys, such as the decennial census, the American Community Survey, and the Current Population Survey. Industries are based on the Standard Industrial Classification (SIC) system. The LED program will convert from the SIC

<sup>9</sup> The database for each state covers about 98 percent of nonagricultural, private wage and salaried employment. Most state, and local government employees are included, but many federal workers are not (depending on the state). The remaining 2 percent are railroad workers and workers for some non-profit organizations. Self-employed workers and independent contractors are not in the covered universe. See: U.S. Census Bureau, David W. Stevens and Julia Lane, "Employment That Is Not Covered By State Unemployment," Technical Paper No. TP-2002-16, January 2002, available on <http://lehd.dsd.census.gov>.

Table 4.  
**Average Monthly Earnings Among Top Ten Industries in Iowa by Age: 2002**

(Full-quarter earnings)

Industry	Average monthly earnings for workers 65 and older (dollars)	Average monthly earnings 14 and older total workers (dollars)	Workers 65 and older (number)	Workers 14 and older (number)
<b>Total.....</b>	<b>1,474</b>	<b>2,544</b>	<b>40,380</b>	<b>1,181,682</b>
Health services .....	1,569	2,828	4,529	122,687
Business services .....	1,068	2,251	2,658	73,796
Wholesale trade—nondurables..	1,500	3,205	1,979	43,087
Eating and drinking places .....	755	859	1,947	85,786
Car dealers and gas stations ...	1,271	2,216	1,837	38,664
Social services.....	885	1,460	1,799	36,555
Miscellaneous retail.....	875	1,586	1,613	28,560
Food stores.....	807	1,171	1,526	39,561
Motor freight transportation .....	2,039	2,802	1,265	33,495
Real estate .....	1,537	2,307	1,026	10,171

Source: U.S. Census Bureau and the Iowa Workforce Development, Local Employment Dynamics program, 2002, Appendix Table A6. See Web site: <http://lehd.dsd.census.gov>.

Table 5.  
**Average Monthly Earnings of Workers in Iowa by Age: 2002**

(Includes only industries that employed 100 or more workers 65 and older in Iowa)

Industry	Average monthly earnings for workers 65 and older (dollars)	Average monthly earnings 14 and older total workers (dollars)	Workers 65 and older (number)	Workers 14 and older (number)
Security and commodity brokers .....	4,305	5,474	115	2,877
Mining and quarrying—nonmetallic .....	3,810	3,512	128	2,127
Construction other than building.....	3,476	3,409	291	8,262
Transportation equipment .....	3,142	2,889	206	14,677
Legal services .....	2,833	3,599	335	6,654
Industrial and commercial machinery ..	2,829	3,835	593	37,456
Miscellaneous manufacturing .....	2,743	2,789	113	3,856
Building construction—general contractors.....	2,654	2,955	370	15,053
Fabricated metal products.....	2,560	2,986	330	20,691
Food and kindred products .....	2,441	2,910	665	50,556

Source: U.S. Census Bureau and the Iowa Workforce Development, Local Employment Dynamics program, 2002, Appendix Tables A1 and A6. See Web site: <http://lehd.dsd.census.gov>.

system to the North American Industry Classification System (NAICS) in early 2004. Some classification titles appear to be similar but the detailed industry groups that compose the categories may differ between the SIC and NAICS systems.

Enhanced Unemployment Insurance (UI) wage records are the basic data source for the QWIs. Administrative records and the surveys differ in coverage, the timing of data collection, and concept definitions. The QWIs are not exactly comparable with establishment



---

surveys either, such as those from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW) program, which capture employment at an establishment on the 12th of the month.

The LED database can respond to a wide variety of questions about the workforce because it allows multiple definitions of "employment." That is because the QWIs are job-based statistics and different from the worker-based statistics familiar to many researchers.<sup>10</sup> The LED database includes all jobs held:

1. In a quarter, regardless of length of time the job is held.
- 2. At the beginning of a quarter (the measure used in this report).**
3. At the end of a quarter.
4. For a full quarter.

The measure that is closest to the QCEW definition of employment is the second one, jobs held at the beginning of a quarter. This second measure has the additional advantage that the trends are similar to those shown by worker-based surveys such as the decennial census, although the levels differ.

Another difference among datasets is measurement of earnings. According to the *BLS Handbook of Methods* (1997), UI wage records measure "gross wages and salaries, bonuses, stock options, tips, and other gratuities, and the value of meals and lodging, where supplied." They do not include Old Age Survivor and Disability Insurance (OASDI), health insurance, workers' compensation,

---

<sup>10</sup> For the QWIs, a "job" is defined as equivalent records for an employer and employee.

unemployment insurance, private pensions, and welfare funds. The LED database does not include the number of hours or weeks an employee worked. Thus, what appears for an industry such as retail trade to be low average earnings in a given year or quarter may be the result of relatively low hourly wages, not working many hours in the time period, or both. In retail trade, much of the work is part-time and this affects the LED measure of average earnings.

### **The confidentiality of the statistics is protected**

The Census Bureau and the state partners are committed to protecting the confidentiality of the data in the LED files. Technically, the approach to avoid disclosure of individual information is to combine cell suppression methodology with the addition of statistical noise, controlling key measures to county employment levels as reported by the Bureau of Labor Statistics. In plainer English, the statistical techniques the Census Bureau uses mean that the actual statistics are not shown if the numbers in a cell are small. Rather, the statistics that are shown are "fuzzy," that is, close to the actual information but not exact.

Only Census Bureau employees or individuals who have Special Sworn Status are permitted to work with the data. Everyone who has access to Title 13 data must have an official security clearance based on a background check, including fingerprinting. Additionally, they are subject to a fine of up to \$250,000, up to five years in jail, or both, if confidential information is disclosed. The Census Bureau and state data custodians review all projects before release to avoid disclosure of confidential information.

More detailed information about the confidentiality protection system is available under the "Confidentiality" menu at <http://lehd.dsd.census.gov/>.

### **Why the Census Bureau produces the LED statistics**

The Census Bureau and the state partners are committed to protecting the integrity of information and producing the highest quality statistics. We accomplish this by ensuring that the LED program is consistent with the Census Bureau's legal authority and mission, that the methodologies used are the best alternatives, and that the LED program produces demonstrated benefits.

The state partners and the Census Bureau both benefit from the LED program. The state partners fulfill their mandate to provide high-quality regional labor market information and the Census Bureau improves the economic and demographic survey estimates and intercensal population estimates. Specifically, the LED program supports Census Bureau research on improving the quality, use, and analysis of its census, survey, and estimation-based data products.

Estimates of the employed population by demographic, geographic, and industrial detail enhance the Census Bureau's existing agency-wide programs. In particular, estimates of workers in each county and industry, in conjunction with statistical information about employers, will provide long-needed and critical but previously unavailable information for key programs such as the demographic survey estimates and the intercensal population estimates program. Census Bureau programs will benefit from new information

---

on turnover, job creation, and job destruction by age and sex, and information on the employment of individuals in each county.

More information about the benefits of the LED program may be

found on the LED Web site at <http://lehd.dsd.census.gov/>.

### **ACKNOWLEDGMENT**

Research for and production of this report were supported under an interagency agreement with the

Behavioral and Social Research Program, National Institute on Aging, Agreement No. Y1-AG-9415-01.

## APPENDIX TABLES

Table A1.  
**Iowa Employment by Industry and Age: 2002**

(Beginning-of-quarter employment)

Industry	14-44 years	45-54 years	55-64 years	65 years and older	14 years and older
<b>Total, age group</b> .....	<b>770,913</b>	<b>247,932</b>	<b>122,459</b>	<b>40,380</b>	<b>1,181,682</b>
<b>Agriculture</b>					
Agricultural production—crops .....	1,493	548	373	257	2,670
Agricultural production—livestock.....	5,438	1,145	553	268	7,404
Agricultural services .....	6,628	1,382	634	304	8,947
Forestry .....	60	14	*9	-	83
Fishing, hunting, and trapping.....	-	-	-	-	-
<b>Mining</b>					
Metal mining.....	-	-	-	-	-
Coal mining.....	-	-	-	-	-
Oil/gas extraction.....	-	-	-	-	-
Mining/quarrying—nonmetallic .....	1,070	562	367	128	2,127
<b>Construction</b>					
Building construction—general contractors .....	10,119	3,319	1,245	370	15,053
Construction other than building.....	5,247	1,796	929	291	8,262
Construction—special trade.....	28,282	7,252	3,055	876	39,465
<b>Manufacturing</b>					
Food/kindred products .....	33,495	11,644	4,752	665	50,556
Tobacco products .....	-	-	-	-	-
Textile mill products.....	207	*83	*53	9	352
Apparel from fabrics .....	1,797	797	449	114	3,158
Lumber and wood products.....	10,791	3,114	1,016	187	15,108
Furniture/fixtures .....	3,939	1,455	556	85	6,035
Paper/allied products .....	3,071	1,525	611	40	5,245
Printing/publishing .....	11,627	4,619	2,251	733	19,230
Chemicals .....	4,237	1,960	778	119	7,094
Petroleum refining .....	274	123	62	25	483
Rubber and plastics .....	9,166	3,748	1,594	188	14,696
Leather and leather products .....	560	233	107	*21	920
Stone, clay, and glass .....	4,932	2,061	925	194	8,112
Primary metal industries.....	3,960	2,267	1,010	96	7,331
Fabricated metal products.....	12,121	5,691	2,549	330	20,691
Industrial/commercial machinery .....	18,429	13,056	5,378	593	37,456
Electronic/electric equipment.....	8,018	3,933	1,783	171	13,904
Transportation equipment .....	8,796	3,956	1,720	206	14,677
Measuring/analyzing instruments.....	2,854	*1,624	*649	86	5,213
Miscellaneous manufacturing .....	2,073	1,104	567	113	3,856
<b>Transportation, Communication, and Utilities</b>					
Railroad transport .....	-	-	-	-	-
Local/suburban transit .....	1,197	506	423	331	2,457
Motor freight transportation.....	18,834	8,610	4,787	1,265	33,495
Water transportation .....	428	167	77	26	698
Transportation by air.....	4,012	*1,262	367	36	5,676
Pipelines, except natural gas .....	84	*46	*23	*2	154
Transportation services .....	1,167	411	241	94	1,912
Communications services .....	9,290	3,083	1,259	192	13,824
Electrical, gas, and sanitary services .....	4,414	3,145	1,433	131	9,122
<b>Wholesale Trade</b>					
Wholesale trade—durables.....	22,922	9,159	4,424	1,344	37,848
Wholesale trade—nondurables.....	25,682	10,275	5,151	1,979	43,087

Table A1.  
**Iowa Employment by Industry and Age: 2002—Con.**

(Beginning-of-quarter employment)

Industry	14-44 years	45-54 years	55-64 years	65 years and older	14 years and older
<b>Retail Trade</b>					
Building materials, hardware .....	8,860	2,553	1,439	653	13,504
General merchandise store .....	25,087	6,166	4,016	1,830	37,097
Food stores .....	30,235	4,955	2,845	1,526	39,561
Car dealers, gas stations .....	26,050	6,924	3,854	1,837	38,664
Apparel and accessory stores .....	7,338	1,147	758	410	9,653
Home furniture stores .....	8,026	2,050	1,082	451	11,608
Eating and drinking places .....	73,305	7,142	3,392	1,947	85,786
Miscellaneous retail .....	18,633	5,232	3,081	1,613	28,560
<b>Finance, Insurance, and Real Estate</b>					
Depository institutions .....	14,384	5,755	3,262	887	24,288
Nondepository institutions .....	8,989	1,990	719	91	11,789
Security and commodity brokers .....	1,632	755	376	115	2,877
Insurance carriers .....	19,015	5,918	2,545	352	27,830
Insurance agents/brokers .....	7,172	2,814	1,585	439	12,010
Real estate .....	5,060	2,459	1,627	1,026	10,171
Holding/other investment offices .....	794	330	188	91	1,402
<b>Services</b>					
Hotels/other lodging places .....	10,557	2,322	1,439	716	15,035
Personal services .....	8,668	2,296	1,360	896	13,220
Business services .....	52,215	12,499	6,424	2,658	73,796
Car repair, services, and parking .....	8,273	2,033	1,065	601	11,971
Miscellaneous repair services .....	2,418	918	473	148	3,956
Motion pictures .....	2,926	276	115	57	3,374
Amusement and recreation services .....	13,363	2,961	1,926	1,015	19,265
Health services .....	72,258	30,994	14,906	4,529	122,687
Legal services .....	3,690	1,719	912	335	6,654
Educational services .....	10,200	5,517	3,095	913	19,725
Social services .....	23,937	6,936	3,884	1,799	36,555
Museums, galleries, and gardens .....	433	154	*112	96	794
Membership organizations .....	6,747	2,517	1,343	619	11,225
Engineering, accounting, and research .....	13,002	4,526	2,194	644	20,365
Private households .....	764	350	269	224	1,607
Services, not classified .....	128	45	18	*3	196

- Represents zero.

\* The value has been significantly distorted to protect confidentiality. A description of the confidentiality protection system is available at <http://www.lehd-test.net/factsheets/index.php>.

Source: U.S. Census Bureau and the Iowa Workforce Development, Local Employment Dynamics program, 2002, Web site: <http://lehd.dsd.census.gov>.

Table A2.  
**Average Quarterly Turnover Rates in Iowa by Industry and Age: 2002**

(In percent)

Industry	14-44 years	45-54 years	55-64 years	65 years and older	14 years and older
<b>Total.....</b>	<b>18.6</b>	<b>6.9</b>	<b>7.1</b>	<b>9.4</b>	<b>10.8</b>
<b>Agriculture</b>					
Agricultural production—crops .....	20.0	*7.7	8.2	*11.5	10.6
Agricultural production—livestock.....	17.2	9.4	8.0	*10.7	12.5
Agricultural services .....	22.1	11.2	11.4	*16.1	16.1
Forestry .....	20.9	-	-	-	13.4
Fishing, hunting, and trapping.....	-	-	-	-	-
<b>Mining</b>					
Metal mining.....	-	-	-	-	-
Coal mining.....	-	-	-	-	-
Oil/gas extraction.....	-	-	-	-	-
Mining/quarrying—nonmetallic .....	17.5	*6.8	*6.2	*9.5	8.2
<b>Construction</b>					
Building construction—general contractors .....	21.7	9.4	9.6	13.6	13.0
Construction other than building.....	24.8	14.3	16.3	21.5	17.3
Construction—special trade.....	19.0	9.9	9.5	12.8	12.8
<b>Manufacturing</b>					
Food/kindred products .....	21.4	*6.5	*6.9	*11.8	10.4
Tobacco products .....	-	-	-	-	-
Textile mill products.....	20.0	*6.1	*5.0	-	4.7
Apparel from fabrics .....	19.9	*10.4	*7.8	*9.1	11.3
Lumber and wood products.....	20.3	4.7	*5.2	*9.6	7.3
Furniture/fixtures .....	19.2	*4.7	*5.5	*10.8	6.3
Paper/allied products .....	28.6	*3.4	*3.3	9.0	4.8
Printing/publishing .....	18.3	*6.0	7.2	6.9	7.7
Chemicals .....	19.6	*4.6	*5.4	*10.2	6.5
Petroleum refining .....	14.1	*8.8	*15.1	*25.9	11.2
Rubber and plastics .....	19.7	*9.6	*9.6	10.0	10.6
Leather and leather products .....	11.8	*5.6	*10.1	-	7.9
Stone, clay, and glass .....	20.9	*6.9	7.4	*16.3	9.1
Primary metal industries.....	20.0	*3.6	*5.0	8.4	5.2
Fabricated metal products.....	21.2	3.4	3.9	*7.9	5.4
Industrial/commercial machinery .....	16.5	3.0	4.2	7.6	4.7
Electronic and electrical equipment.....	*27.5	*7.6	*9.1	*11.4	*9.7
Transportation equipment .....	18.1	*5.3	*5.9	*8.1	7.1
Measuring/analyzing instruments.....	*17.9	*9.2	*8.3	*7.7	*9.8
Miscellaneous manufacturing .....	20.8	*5.1	*5.0	*7.3	6.8
<b>Transportation, Communication, and Utilities</b>					
Railroad transportation .....	-	-	-	-	-
Local/suburban transit .....	17.2	9.6	10.2	*11.7	11.2
Motor freight transportation.....	20.0	11.6	10.2	10.5	13.5
Water transportation .....	21.4	*12.3	*11.3	12.3	14.0
Transportation by air.....	19.6	*2.3	4.2	*18.6	5.6
Pipelines, except natural gas .....	-	-	*9.1	-	4.8
Transportation services .....	17.9	8.6	*8.6	*11.3	9.5
Communications .....	18.4	*6.4	*6.4	*6.9	8.6
Electrical, gas, and sanitary services .....	20.2	*4.2	*4.8	*9.5	5.2



Table A2.  
**Average Quarterly Turnover Rates in Iowa by Industry and Age: 2002—Con.**

(In percent)

Industry	14-44 years	45-54 years	55-64 years	65 years and older	14 years and older
<b>Wholesale Trade</b>					
Wholesale trade—durables . . . . .	16.7	5.7	5.7	7.7	7.6
Wholesale trade—nondurables . . . . .	17.1	5.3	6.3	10.3	7.6
<b>Retail Trade</b>					
Building materials, hardware . . . . .	16.0	6.1	5.6	7.7	9.8
General merchandise stores . . . . .	17.0	7.3	6.9	*7.0	11.7
Food stores . . . . .	14.0	*6.8	6.4	6.8	11.6
Car dealers, gas stations . . . . .	18.8	7.8	7.6	8.8	12.2
Apparel and accessory stores . . . . .	22.0	7.4	7.4	7.1	16.4
Home furniture stores . . . . .	18.6	7.5	7.1	7.3	11.7
Eating and drinking places . . . . .	21.9	11.8	10.2	11.5	19.6
Miscellaneous retail . . . . .	18.8	8.3	8.3	8.4	12.9
<b>Finance, Insurance, and Real Estate</b>					
Depository institutions . . . . .	15.4	3.5	3.5	4.9	6.0
Nondepository institutions . . . . .	20.7	*8.5	*8.7	*9.9	10.4
Security and commodity brokers . . . . .	22.4	5.8	*5.9	*8.6	8.2
Insurance carriers . . . . .	20.0	3.4	3.9	*8.9	4.6
Insurance agents/brokers . . . . .	19.4	6.4	6.3	8.8	8.6
Real estate . . . . .	20.2	8.2	7.6	8.1	10.6
Holding/other investment offices . . . . .	21.6	*4.9	*4.5	5.2	7.8
<b>Services</b>					
Hotels/other lodging places . . . . .	22.2	11.3	10.0	11.0	16.3
Personal services . . . . .	21.1	9.4	9.5	10.8	13.6
Business services . . . . .	27.6	13.0	12.0	14.5	17.4
Car repair, services, and parking . . . . .	18.7	7.0	6.8	8.5	11.2
Miscellaneous repair services . . . . .	17.8	8.0	7.7	9.1	10.0
Motion pictures . . . . .	21.4	*11.7	*10.2	16.8	19.9
Amusement and recreation services . . . . .	24.4	13.0	15.3	22.0	19.0
Health services . . . . .	15.7	5.6	5.0	6.1	8.1
Legal services . . . . .	19.1	5.2	5.1	*5.8	7.7
Educational services . . . . .	27.3	4.8	5.6	8.6	8.2
Social services . . . . .	19.5	7.5	7.0	8.0	11.5
Museums, galleries, and gardens . . . . .	*23.2	*6.9	*7.3	*7.2	*13.3
Membership organizations . . . . .	22.6	8.4	8.0	9.9	12.9
Engineering, accounting, and research . . . . .	21.1	7.3	7.3	10.4	9.5
Private households . . . . .	26.2	*16.9	*16.8	16.0	19.4
Services, not classified . . . . .	28.2	7.5	13.0	-	10.5

- Represents zero.

\* The value has been significantly distorted to protect confidentiality. A description of the confidentiality protection system is available at <http://www.lehd-test.net/factsheets/index.php>.

Source: U.S. Census Bureau and the Iowa Workforce Development, Local Employment Dynamics program, 2002, Web site: <http://lehd.dsd.census.gov>.

Table A3.  
**Iowa Employment by Industry and Age: 1999 and 2002**

(Beginning-of-quarter employment)

Industry	Under 65		65 and older	
	1999	2002	1999	2002
<b>Total</b> .....	<b>1,167,976</b>	<b>1,141,303</b>	<b>36,749</b>	<b>40,380</b>
<b>Agriculture</b>				
Agricultural production—crops .....	2,406	2,413	218	257
Agricultural production—livestock.....	6,172	7,136	223	268
Agricultural services .....	7,660	8,644	250	304
Forestry .....	52	82	-	-
Fishing, hunting, and trapping.....	11	-	-	-
<b>Mining</b>				
Metal mining.....	-	-	-	-
Coal mining.....	-	-	-	-
Oil/gas extraction.....	-	-	-	-
Mining/quarrying—nonmetallic .....	2,070	1,999	109	128
<b>Construction</b>				
Building construction—general contractors .....	15,558	14,684	324	370
Construction other than building.....	8,850	7,972	289	291
Construction—special trade.....	37,458	38,589	758	876
<b>Manufacturing</b>				
Food/kindred products .....	51,173	49,890	570	665
Tobacco product .....	-	-	-	-
Textile mill products.....	436	343	9	9
Apparel from fabrics .....	4,266	3,043	103	114
Lumber and wood products.....	14,130	14,922	142	187
Furniture/fixtures .....	6,951	5,950	87	85
Paper/allied products .....	6,181	5,206	54	40
Printing/publishing .....	20,678	18,497	725	733
Chemicals.....	7,711	6,974	109	119
Petroleum refining .....	476	458	16	25
Rubber and plastics .....	15,579	14,509	167	188
Leather and leather products .....	1,103	900	*27	*21
Stone, clay, and glass .....	7,830	7,919	159	194
Primary metal industries.....	8,081	7,236	82	96
Fabricated metal products.....	20,370	20,361	296	330
Industrial/commercial machinery .....	45,080	36,863	614	593
Electronic/electrical equipment.....	18,531	13,733	214	171
Transportation equipment .....	16,875	14,471	220	206
Measuring/analyzing instruments.....	9,086	5,127	101	86
Miscellaneous manufacturing .....	5,003	3,744	116	113
<b>Transportation, Communication, and Utilities</b>				
Railroad transport .....	-	-	-	-
Local/suburban transit .....	2,412	2,126	311	331
Motor freight transportation.....	30,295	32,230	1,227	1,265
Water transportation .....	748	672	22	26
Transportation by air.....	6,805	5,641	52	36
Pipelines, except natural gas .....	134	152	-	-
Transportation services .....	2,179	1,819	106	94
Communications .....	15,289	13,632	187	192
Electrical, gas, and sanitary services .....	8,948	8,991	132	131
<b>Wholesale Trade</b>				
Wholesale trade—durables.....	38,801	36,505	1,268	1,344
Wholesale trade—nondurables .....	42,766	41,108	1,837	1,979

Table A3.  
**Iowa Employment by Industry and Age: 1999 and 2002—Con.**

(Beginning-of-quarter employment)

Industry	Under 65		65 and older	
	1999	2002	1999	2002
<b>Retail Trade</b>				
Building materials, hardware .....	13,619	12,851	685	653
General merchandise stores .....	34,663	35,268	1,489	1,830
Food stores .....	40,521	38,035	1,371	1,526
Car dealers, gas stations .....	36,473	36,827	1,561	1,837
Apparel and accessory stores.....	9,638	9,243	412	410
Home furniture stores .....	10,881	11,158	436	451
Eating and drinking places .....	83,757	83,840	1,920	1,947
Miscellaneous retail.....	28,454	26,946	1,486	1,613
<b>Finance, Insurance, and Real Estate</b>				
Depository institutions.....	22,428	23,401	765	887
Nondepository institutions .....	8,856	11,698	56	91
Security/commodity brokers .....	2,716	2,762	96	115
Insurance carriers .....	25,134	27,478	370	352
Insurance agents/brokers.....	11,637	11,571	397	439
Real estate .....	8,561	9,145	947	1,026
Holding/other investment offices.....	1,239	1,312	92	91
<b>Services</b>				
Hotels/other lodging places.....	13,116	14,318	608	716
Personal services .....	12,175	12,324	831	896
Business services .....	78,104	71,138	2,433	2,658
Car repair, services, and parking .....	11,333	11,371	535	601
Miscellaneous repair services.....	4,074	3,808	134	148
Motion pictures.....	3,667	3,317	59	57
Amusement and recreation services .....	22,798	18,250	955	1,015
Health services .....	111,213	118,158	3,751	4,529
Legal services .....	6,155	6,320	280	335
Educational services.....	16,987	18,812	836	913
Social services.....	31,883	34,756	1,526	1,799
Museums, galleries, and gardens .....	548	698	*61	96
Membership organizations.....	10,030	10,607	647	619
Engineering, accounting, and research.....	17,521	19,721	583	644
Private households .....	1,414	1,383	311	224
Services, not elsewhere classified.....	227	191	4	*3

- Represents zero.

\* The value has been significantly dislotted to protect confidentiality. A description of the confidentiality protection system is available at <http://www.lehd-test.net/factsheets/index.php>.

Source: U.S. Census Bureau and the Iowa Workforce Development, Local Employment Dynamics program, 2002, Web site: <http://lehd.dsd.census.gov>.

Table A4.

**Composition of Job Creation in Iowa by Industry and Age: 2002**

Industry	14-44 years	45-54 years	55-64 years	65 years and older
<b>Total.....</b>	<b>67,135</b>	<b>12,105</b>	<b>5,958</b>	<b>2,864</b>
<b>Agriculture</b>				
Agricultural production—crops .....	290	61	47	47
Agricultural production—livestock.....	588	87	37	28
Agricultural services .....	1,276	160	72	44
Forestry .....	12	1	*1	-
Fishing, hunting, and trapping.....	-	-	-	-
<b>Mining</b>				
Metal mining.....	-	-	-	-
Coal mining.....	-	-	-	-
Oil/gas extraction.....	-	-	-	-
Mining/quarrying—nonmetallic .....	96	38	20	12
<b>Construction</b>				
Building construction—general contractors .....	1,618	273	91	38
Construction other than building.....	1,010	254	144	59
Construction—special trade.....	4,052	687	282	103
<b>Manufacturing</b>				
Food/kindred products .....	1,302	163	63	33
Tobacco products .....	-	-	-	-
Textile mill products.....	14	*4	*1	1
Apparel from fabrics .....	90	20	9	5
Lumber and wood products.....	468	66	19	12
Furniture/fixtures .....	130	33	9	3
Paper/allied products .....	99	22	5	1
Printing/publishing .....	567	109	60	29
Chemicals .....	160	30	15	9
Petroleum refining .....	*29	10	5	3
Rubber and plastics .....	549	102	37	10
Leather and leather products .....	20	6	2	-
Stone, clay, and glass .....	418	104	46	24
Primary metal industries.....	180	96	13	4
Fabricated metal products.....	524	101	37	13
Industrial/commercial machinery .....	929	233	94	22
Electronic/electrical equipment.....	167	31	13	5
Transportation equipment .....	517	137	43	9
Measuring/analyzing instruments.....	1,654	*1,018	*371	11
Miscellaneous manufacturing .....	130	25	12	9
<b>Transportation, Communication, and Utilities</b>				
Railroad transport .....	-	-	-	-
Local/suburban transit .....	117	34	28	22
Motor freight transportation .....	1,825	547	306	112
Water transportation .....	87	10	8	7
Transportation by air.....	154	*21	9	3
Pipelines, except natural gas .....	5	*1	1	-
Transportation services .....	101	27	17	8
Communications .....	379	58	21	8
Electrical, gas, and sanitary services .....	179	61	18	5
<b>Wholesale Trade</b>				
Wholesale trade—durables.....	1,763	392	191	74
Wholesale trade—nondurables.....	1,872	384	234	227

Table A4.

**Composition of Job Creation in Iowa by Industry and Age: 2002—Con.**

Industry	14-44 years	45-54 years	55-64 years	65 years and older
<b>Retail Trade</b>				
Building materials, hardware .....	801	125	72	45
General merchandise stores .....	1,427	184	103	39
Food stores .....	1,571	182	90	52
Car dealers, gas stations .....	2,376	349	216	118
Apparel and accessory stores .....	903	84	56	34
Home furniture stores .....	879	124	56	25
Eating and drinking places .....	8,487	641	264	166
Miscellaneous retail .....	2,212	368	217	120
<b>Finance, Insurance, and Real Estate</b>				
Depository institutions .....	834	142	76	31
Nondepository institutions .....	489	50	25	3
Security and commodity brokers .....	137	33	17	6
Insurance carriers .....	516	91	42	23
Insurance agents/brokers .....	542	134	78	30
Real estate .....	687	170	109	67
Holding/other investment offices .....	49	15	9	2
<b>Services</b>				
Hotels/other investment offices .....	1,300	159	95	51
Personal services .....	1,257	230	156	103
Business services .....	4,827	877	458	206
Car repair, services, and parking .....	950	139	63	38
Miscellaneous repair services .....	277	57	35	10
Motion pictures .....	328	22	10	6
Amusement and recreation services .....	2,843	349	267	211
Health services .....	4,533	1,134	463	153
Legal services .....	421	96	55	26
Educational services .....	1,017	177	108	50
Social services .....	2,005	338	182	96
Museums, galleries, and gardens .....	66	14	*11	15
Membership organizations .....	957	185	101	54
Engineering, accounting, and research .....	1,218	282	159	78
Private households .....	187	50	34	26
Services, not classified .....	14	3	2	-

- Represents zero.

\* The value has been significantly distorted to protect confidentiality. A description of the confidentiality protection system is available at <http://www.lehd-test.net/factsheets/index.php>.

Source: U.S. Census Bureau and the Iowa Workforce Development, Local Employment Dynamics program, 2002, Web site: <http://lehd.dsd.census.gov>.



Table A5.

**Composition of Job Destruction in Iowa by Industry and Age: 2002**

Industry	14-44 years	45-54 years	55-64 years	65 years and older
<b>Total.....</b>	<b>69,226</b>	<b>14,302</b>	<b>8,406</b>	<b>4,249</b>
<b>Agriculture</b>				
Agricultural production—crops .....	277	57	51	46
Agricultural production—livestock.....	560	87	45	30
Agricultural services .....	1,208	163	83	58
Forestry .....	11	1	*1	*1
Fishing, hunting, and trapping.....	2	-	-	-
<b>Mining</b>				
Metal mining.....	-	-	-	-
Coal mining.....	-	-	-	-
Oil/gas extraction.....	-	-	-	-
Mining/quarrying—nonmetallic .....	67	27	17	20
<b>Construction</b>				
Building construction—general contractors .....	1,642	314	135	60
Construction other than building.....	952	265	158	66
Construction—special trade.....	4,033	754	348	135
<b>Manufacturing</b>				
Food/kindred products .....	1,169	275	192	64
Tobacco products .....	-	-	-	-
Textile mill products.....	13	*2	*1	2
Apparel from fabrics .....	228	94	46	13
Lumber and wood products.....	741	136	63	20
Furniture/fixtures .....	270	80	43	11
Paper/allied products .....	109	32	22	4
Printing/publishing .....	641	221	170	60
Chemicals .....	221	69	48	21
Petroleum refining .....	30	11	7	6
Rubber and plastics .....	463	132	76	18
Leather and leather products .....	52	17	11	*4
Stone, clay, and glass .....	445	127	71	32
Primary metal industries.....	153	46	47	12
Fabricated metal products.....	714	209	136	34
Industrial/commercial machinery .....	922	388	281	62
Electronic/electrical equipment.....	701	229	141	21
Transportation equipment .....	522	185	104	21
Measuring/analyzing instruments.....	1,077	*662	*269	10
Miscellaneous manufacturing .....	192	77	40	11
<b>Transportation, Communication, and Utilities</b>				
Railroad transport .....	-	-	-	-
Local/suburban transit .....	120	37	30	32
Motor freight transportation .....	1,633	577	370	154
Water transportation .....	89	22	11	8
Transportation by air.....	189	*27	19	6
Pipelines, except natural gas .....	3	*1	2	*1
Transportation services .....	112	35	23	12
Communications .....	793	237	110	20
Electrical, gas, and sanitary services .....	133	67	52	15
<b>Wholesale Trade</b>				
Wholesale trade—durables.....	1,707	476	243	119
Wholesale trade—nondurables.....	1,901	492	333	258

Table A5.

**Composition of Job Destruction in Iowa by Industry and Age: 2002—Con.**

Industry	14-44 years	45-54 years	55-64 years	65 years and older
<b>Retail Trade</b>				
Building materials, hardware .....	762	129	79	63
General merchandise stores .....	1,197	166	107	78
Food stores .....	1,783	236	150	96
Car dealers, gas stations .....	2,578	436	262	156
Apparel and accessory stores .....	845	78	56	37
Home furniture stores .....	856	137	80	38
Eating and drinking places .....	9,679	836	388	254
Miscellaneous retail .....	2,402	430	260	165
<b>Finance, Insurance, and Real Estate</b>				
Depository institutions .....	677	152	117	58
Nondepository institutions .....	358	78	39	8
Security/commodity brokers .....	122	40	24	12
Insurance carriers .....	488	149	102	39
Insurance agents/brokers .....	622	177	111	43
Real estate .....	588	184	122	99
Holding/other investment offices .....	65	19	10	5
<b>Services</b>				
Hotels/other lodging places .....	1,208	187	109	78
Personal services .....	1,195	245	162	107
Business services .....	6,227	1,131	661	395
Car repair, services, and parking .....	979	144	77	49
Miscellaneous repair services .....	258	144	35	15
Motion pictures .....	380	61	13	8
Amusement and recreation services .....	2,825	36	309	224
Health services .....	3,563	1,029	593	294
Legal services .....	351	102	57	29
Educational services .....	885	206	139	75
Social services .....	2,198	409	246	153
Museums, galleries, and gardens .....	60	10	*8	14
Membership organizations .....	900	203	119	75
Engineering, accounting, and research .....	1,133	288	168	85
Private households .....	144	40	32	38
Services, not classified .....	14	4	1	1

- Represents zero.

\* The value has been significantly distorted to protect confidentiality. A description of the confidentiality protection system is available at <http://www.lehd-test.net/factsheets/index.php>.

Source: U.S. Census Bureau and the Iowa Workforce Development, Local Employment Dynamics program, 2002, Web site: <http://lehd.dsd.census.gov>.

Table A6.  
**Average Monthly Earnings in Iowa by Industry and Age: 2002**

(Full-quarter earnings, in dollars)

Industry	45-54 years	55-64 years	65 years and older	14 years and older
<b>Total.....</b>	<b>3,236</b>	<b>2,885</b>	<b>1,474</b>	<b>2,544</b>
<b>Agriculture</b>				
Agricultural production—crops .....	2,439	2,237	1,590	2,080
Agricultural production—livestock.....	2,467	2,371	1,569	2,125
Agricultural services .....	2,478	2,179	1,434	1,923
Forestry .....	2,387	*1,784	*700	1,789
Fishing, hunting, and trapping.....	*1,846	-	-	1,535
<b>Mining</b>				
Metal mining .....	-	-	-	-
Coal mining .....	-	-	-	-
Oil/gas extraction .....	-	*5,866	-	5,866
Mining/quarrying—nonmetallic .....	3,626	3,806	3,810	3,512
<b>Construction</b>				
Building construction—general contractors .....	3,675	3,600	2,654	2,955
Construction other than building .....	3,664	3,720	3,476	3,409
Construction—special trade .....	3,535	3,418	2,099	2,921
<b>Manufacturing</b>				
Food/kindred products .....	3,365	3,289	2,441	2,910
Tobacco products .....	-	-	-	-
Textile mill products .....	*2,739	*2,738	*1,453	2,540
Apparel from fabrics .....	2,228	2,121	1,262	2,022
Lumber and wood products .....	3,183	*3,388	1,947	2,881
Furniture/fixtures .....	3,707	3,756	*2,844	3,388
Paper/allied products .....	3,622	3,522	2,090	3,414
Printing/publishing .....	3,300	2,885	1,500	2,829
Chemicals .....	4,268	4,042	2,360	3,774
Petroleum refining .....	3,642	3,204	*1,910	3,213
Rubber and plastics .....	3,272	3,324	2,338	3,007
Leather and leather products .....	2,501	2,065	*1,260	2,361
Stone, clay, and glass .....	3,512	3,456	2,459	3,191
Primary metal industries .....	*3,729	3,799	2,882	3,439
Fabricated metal products .....	3,329	3,346	2,560	2,986
Industrial/commercial machinery .....	4,399	4,051	2,829	3,835
Electronic/electrical equipment .....	3,395	*3,251	2,169	3,130
Transportation equipment .....	3,203	3,175	3,142	2,889
Measuring/analyzing instruments .....	*4,376	*4,495	2,775	3,996
Miscellaneous manufacturing .....	3,121	2,756	2,743	2,789
<b>Transportation, Communication, and Utilities</b>				
Railroad transport .....	*2,470	*2,320	-	2,352
Local/suburban transit .....	1,327	1,330	866	1,218
Motor freight transportation .....	3,087	2,920	2,039	2,802
Water transportation .....	3,940	3,677	3,097	3,301
Transportation by air .....	*4,132	3,714	1,543	3,028
Pipelines, except natural gas .....	*6,032	5,468	*637	5,405
Transportation services .....	2,604	2,550	1,579	2,435
Communications .....	4,106	3,950	2,105	3,338
Electrical, gas, and sanitary services .....	*4,738	*4,463	1,178	4,351
<b>Wholesale Trade</b>				
Wholesale trade—durables .....	3,691	3,424	1,871	3,175
Wholesale trade—nondurables .....	3,826	3,169	1,500	3,205

Table A6.  
**Average Monthly Earnings in Iowa by Industry and Age: 2002—Con.**

(Full-quarter earnings, in dollars)

Industry	45-54 years	55-64 years	65 years and older	14 years and older
<b>Retail Trade</b>				
Building materials, hardware .....	2,562	2,299	1,148	2,111
General merchandise stores .....	1,822	1,626	*1,015	1,493
Food stores .....	*1,912	1,577	807	1,171
Car dealers, gas stations .....	2,759	2,368	1,271	2,216
Apparel and accessory stores .....	1,554	1,302	937	1,184
Home furniture stores .....	2,808	2,505	1,288	2,334
Eating and drinking places .....	1,246	1,180	755	859
Miscellaneous retail .....	2,070	1,687	875	1,586
<b>Finance, Insurance, and Real Estate</b>				
Depository institutions .....	3,490	3,254	2,177	2,906
Nondepository institutions .....	5,239	3,919	2,265	3,798
Security/commodity brokers .....	6,920	6,576	4,305	5,474
Insurance carriers .....	4,580	4,333	2,229	3,897
Insurance agents/brokers .....	4,019	3,515	2,409	3,376
Real estate .....	2,767	2,355	1,537	2,307
Holding/other investment offices .....	6,845	5,214	*3,018	4,662
<b>Services</b>				
Hotels/other lodging places .....	1,605	1,433	927	1,348
Personal services .....	2,061	1,648	723	1,572
Business services .....	2,639	2,127	1,068	2,251
Car repair, services, and parking .....	2,584	2,212	1,099	2,131
Miscellaneous repair services .....	2,948	2,413	1,363	2,586
Motion pictures .....	1,613	1,902	1,074	984
Amusement and recreation services .....	1,830	1,627	1,019	1,430
Health services .....	3,503	3,125	1,569	2,828
Legal services .....	4,736	4,333	2,833	3,599
Educational services .....	2,406	2,534	1,397	2,128
Social services .....	1,779	1,644	885	1,460
Museums, galleries, and gardens .....	2,129	*1,902	719	1,539
Membership organizations .....	2,167	2,059	776	1,618
Engineering, accounting, and research .....	4,369	4,110	2,345	3,555
Private households .....	1,417	1,493	834	1,288
Services, not classified .....	4,201	3,983	*6,218	3,155

- Represents zero.

\* The value has been significantly distorted to protect confidentiality. A description of the confidentiality protection system is available at <http://www.lehd-test.net/factsheets/index.php>.

Note: Earnings for workers 65 and older may reflect lump sum distributions.

Source: U.S. Census Bureau and the Iowa Workforce Development, Local Employment Dynamics program, 2002, Web site: <http://lehd.dsd.census.gov>.





U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU  
Washington, DC 20233

**OFFICIAL BUSINESS**

Penalty for Private Use \$300

FIRST-CLASS MAIL  
POSTAGE & FEES PAID  
U.S. Census Bureau  
Permit No. G-58