

# A Profile Of Older Workers In Virginia

Issued July 2004

## Local Employment Dynamics

LED/OW-VA

### Executive Summary

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

- The workforce is aging. From 1998 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 slightly.
- Industries in which more than 1-in-5 workers were 55 years and older in 2002 include: museums, galleries, and gardens; apparel from fabrics; and local/suburban transit. These three industries had many older workers, employing more than 1,200 older workers.
- An example of an industry with a high turnover rate for workers 55 years and older is the agricultural services industry.
- An example of an industry with a low turnover rate for older workers is the legal services industry.
- Industries where workers 65 years and over are most likely to be employed include the industries of business services, health services, and eating and drinking places. Construction—special trade is also an important source of work for the oldest workers.
- On average, in 2002, for workers 65 years and over, 6,104 jobs were gained and 9,544 jobs were lost.

- Of the industries that employed more than 500 workers 65 years and older, the highest paying was engineering, accounting, and research (\$4,820 a month). The industry with the highest average monthly earnings in 2002 for workers 65 years and older was security/commodity brokers (\$8,666), but the number of such workers was only 282.

### 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 repli-

<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.

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cate 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, 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 Virginia 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 Virginia 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) pro-

<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.

gram, 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. 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 Virginia 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.

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

<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.

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?*

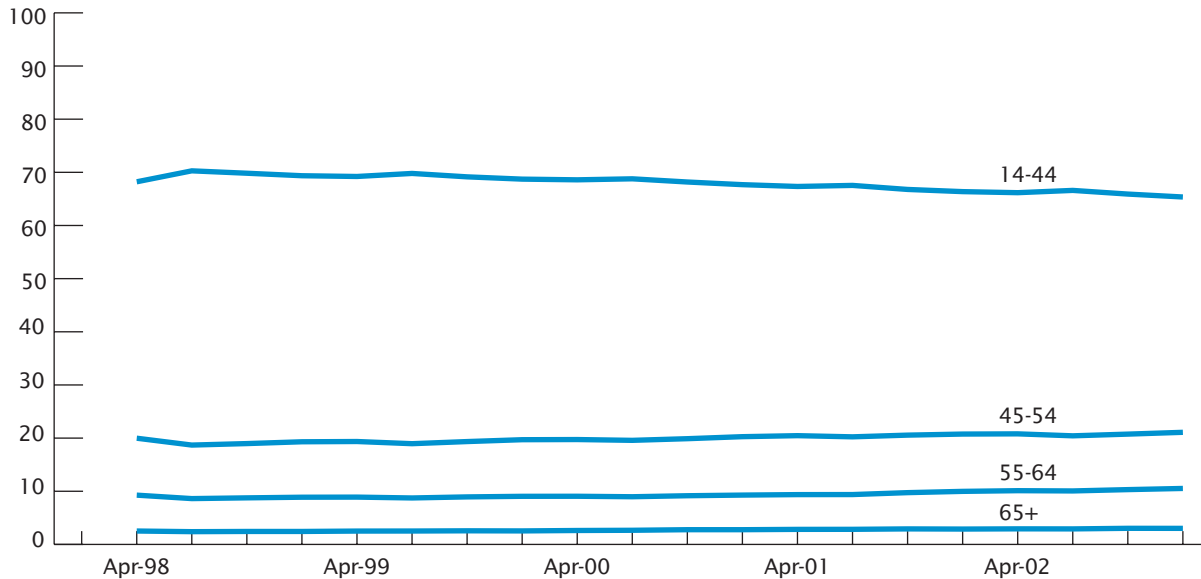
*Which industries have the lowest job turnover rates for older workers?*

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

As the LED statistics in this report show, older workers in Virginia 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 firms with relatively few older workers. We do not know yet whether Virginia 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 Virginia. We do know that both have the potential to affect the age

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

Figure 1.  
**Virginia Workforce by Age Group: 1998 to 2002**  
 [Percent of beginning-of-quarter employment]



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

distribution of the workforce significantly. Planners in Virginia 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 Virginia changing?

The aging of Baby Boom workers led to an increase in the proportion of the workforce 45 years and older from 1998 to 2002 in Virginia. Many planners anticipate this proportion will grow even more rapidly over the next two

#### Skill Level

Quarters of work experience

decades unless a large influx of younger workers comes into Virginia. In 1998, about 70 percent of Virginia workers were 14-to-44 years old (Figure 1). By 2002, that figure had dropped to about 66 percent of workers. Nineteen percent of Virginia workers were 45-to-54 years old in 1998 and 21 percent were in that age group in 2002.

The falling share of younger workers occurred across the economy of Virginia. The share of workers in Virginia who are 65 and older, the traditional age when most workers leave the labor force permanently, increased slightly, from about 2.5 percent to 2.9 percent, from 1998 to 2002.

#### Beginning-of-Quarter Employment

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

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

Unless there is an infusion of new workers from outside Virginia, or from other Virginia industries, the industries identified in Figure 2<sup>5</sup> are those likely to be most affected by the aging of the workforce.<sup>6</sup> If older workers seek either more flexibility in hours or leave these

<sup>5</sup> Workers in private households are not shown in the text because the coverage of private households is low relative to other industries.

<sup>6</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. In addition, since the QWIs are updated quarterly, the numbers in this report may differ slightly from those on the current Web site.

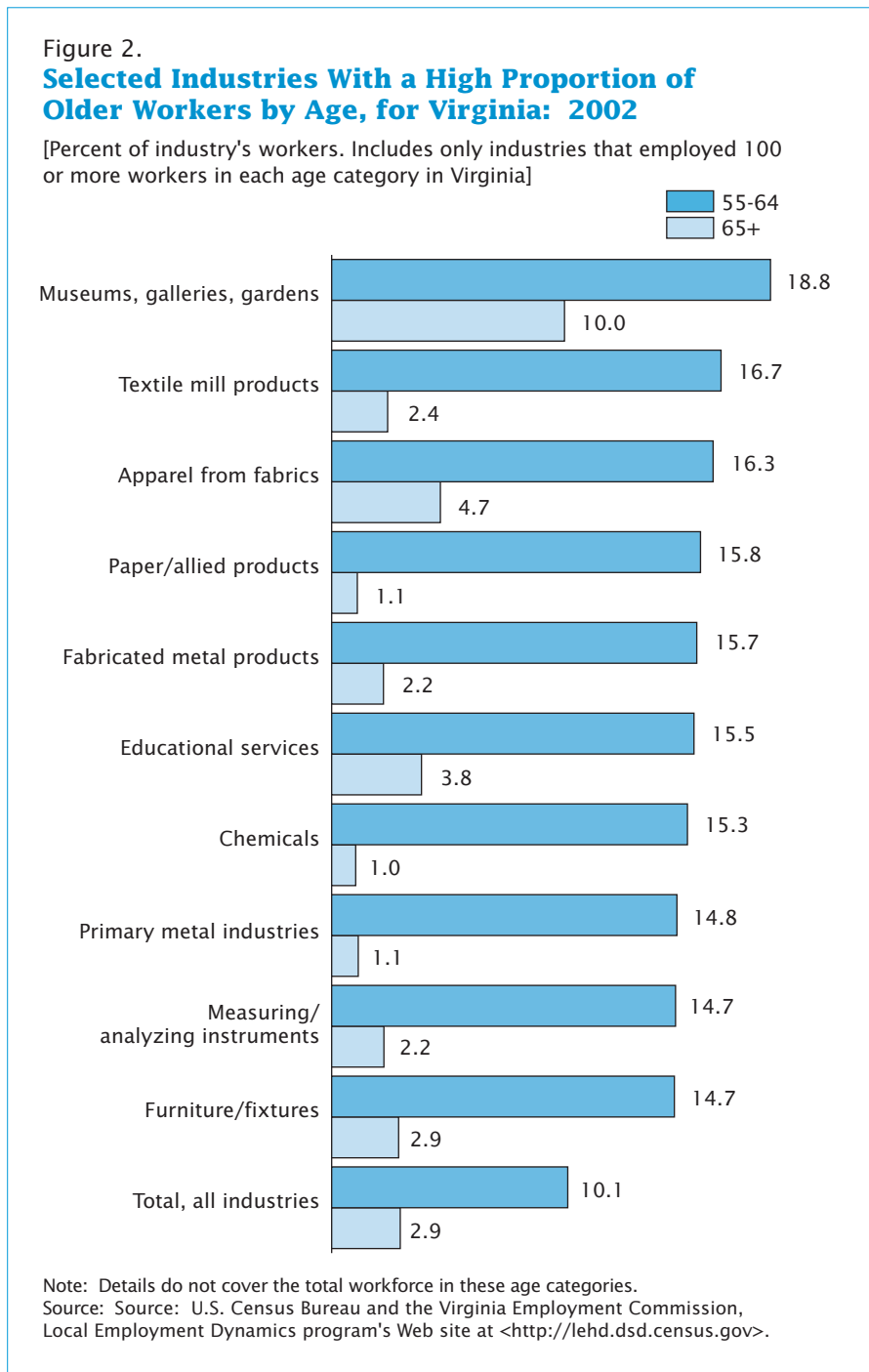
industries completely, companies may suffer a considerable loss of skills and knowledge. Thus, industries with a high proportion of workers near retirement might need, for example, to plan for increased training to respond to the loss of older workers and their institutional knowledge.

Figure 2 shows that the museums, galleries, and gardens industry in Virginia had a high proportion of older workers—about 19 percent were 55–64 years old and about 10 percent were 65 years and older. Other industries with a relatively high proportion of workers 55 years and older included textile mill products (19 percent), apparel from fabrics (21 percent), and paper/allied products (17 percent). These three industries have a large number of 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.

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



new jobs. The average quarterly turnover rate for all workers in Virginia was 13.2 percent in 2002 (although this includes the relatively high turnover rates of teenagers and young adults).<sup>7</sup> For workers 65 years and older, it was 10.4

<sup>7</sup> This is a simple average of four quarters in a calendar year.

percent; for those 55 years and older, 9.8 percent.

Of the top ten industries in Virginia employing workers 65 years and older in 2002 (Table 1 and Figure 3), the eating and drinking places (15.2 percent) and business services (14.9 percent) industries had the highest average quarterly

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

[Top 10 industries statewide employing workers 65 and older]

Industry	Workers 65 and older (number)	Average quarterly turnover rate for workers 65 and older (percent)	Average quarterly turnover rate for workers 14 and older (percent)	Workers 14 and older (number)
Business services .....	7,396	14.9	16.6	304,909
Health services .....	6,305	9.4	11.2	236,316
Eating and drinking places .....	4,655	15.2	20.6	211,625
Construction—special trade .....	3,741	14.1	15.0	131,337
Engineering, accounting, and research .....	3,723	8.8	11.3	144,856
Miscellaneous retail .....	3,430	8.4	14.3	82,385
Food stores .....	3,207	7.4	13.1	93,350
Wholesale trade—durables .....	2,834	7.0	9.7	87,775
Social services .....	2,701	9.9	14.1	61,143
Car dealers and gas stations .....	2,664	9.7	14.0	64,679

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

*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.)

turnover rates; the lowest was the wholesale trade—durables (7.0 percent) industry.

### 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 Virginia in 2002 were business services, health services, and eating and drinking places (employing 5 percent to 9 percent of the workforce 65 years and older, over 4,000 workers each), and construction—special trade (4.6 percent). Almost half of workers 65 years and older in Virginia were employed in the ten industries shown in Figure 3, compared with 50.9 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 1998 and 2002, there were few changes in the top ten industries that employed the largest number of workers 65 and older (Table 2).<sup>8</sup> Despite the shuffling in rank, service industries have long been the major employers of the oldest workers in Virginia.

<sup>8</sup> Historical statistics are consistent in the LED program, so it is possible to make comparisons of statistics over time.

### 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 gain" and "job loss." 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 Virginia in 2002, LED program data reveal more detail. LED indicators also tally the number of jobs gained and lost by older workers in the Virginia economy.<sup>9</sup>

The LED statistics reveal that, on average in Virginia in 2002, for workers 65 years and older, 6,104 jobs were created a quarter (Appendix Table A4) and 9,544 were lost (Appendix Table A5)—on

<sup>9</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.

average, a net decrease of 3,439 such workers employed a quarter. The industries that created the most jobs for workers 65 years and older (Table 3) were business services, with 642 jobs created on average a quarter, followed by eating and drinking places (504 jobs). The industries that lost the most jobs for the oldest workers were business services (1,028 jobs a quarter lost on average), eating and drinking places (677 jobs), and health services (650 jobs). These changes represented, in Virginia in 2002, an average net loss of 386 jobs in business services, 173 jobs in eating and drinking places, and 261 jobs in health services.

### What do older workers earn?

On average, full-quarter workers 65 years and older in 2002 earned \$2,196 a month in Virginia, and workers of all ages averaged \$3,217 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 business services industry, which employed 9.0 percent of all workers 65 years and older in Virginia in 2002, the average monthly earnings were \$2,591. Workers 14 and older in that industry had average monthly earnings of \$4,303. About 8 percent of the oldest workers in Virginia were employed by the health services industry, and they had average monthly earnings of \$2,598. Of the top ten industries of older workers in Virginia in 2002, the industry with the highest average monthly earnings was engineering, accounting, and research, with an average of \$4,820 a month; the lowest was car dealers and gas stations, with an average of \$1,031 a month.

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

[Percent of workers aged 65+ years]



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

Among all industry groups, security/commodity brokers had the highest average monthly earnings in 2002 for workers 65 years and older—\$8,666—compared with \$8,130 for all workers in this indus-

try (Table 5). The number of workers 65 years and older in this industry is relatively small—282 workers. Other high paying industries include holding/other investment offices, nondepository institutions, and engineering, accounting, and research. Three industries that employed 500 or more workers 65 years and older—engineering, accounting and research, legal services, and transportation equipment—were relatively high paying, with earnings of \$4,820, \$4,309 and \$4,181 a month, respectively.

**Job Gain** — New jobs created either by new businesses opening or by existing firms adding new jobs

**Job Loss** — Jobs 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

Table 2.  
**Top Ten Employers in Virginia Employing Workers 65 and Older by Rank: 1998 and 2002**

1998 rank	2002 rank	Industry	Number of workers 65 and older		Percent change, 1998-2002	Number of workers 14 and older, 2002
			1998	2002		
1	1	Business services .....	5,974	7,396	23.8	304,909
2	2	Health services .....	4,697	6,305	34.2	236,316
3	3	Eating and drinking places .....	3,107	4,655	49.8	211,625
7	4	Construction—special trade .....	2,555	3,741	46.4	131,337
5	5	Engineering, accounting, and research ...	2,757	3,723	35.0	144,856
4	6	Miscellaneous retail .....	2,764	3,430	24.1	82,385
6	7	Food stores .....	2,599	3,207	23.4	93,350
8	8	Wholesale trade—durables .....	2,413	2,834	17.4	87,775
13	9	Social services .....	2,072	2,701	30.3	61,143
10	10	Car dealers and gas stations .....	2,309	2,664	15.4	64,679

Source: U.S. Census Bureau and the Virginia Employment Commission, Local Employment Dynamics program, 1998 and 2002, Appendix Tables A1 and A3. See Web site at <<http://lehd.dsd.census.gov>>.

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

[Average number of jobs per quarter]

Top ten industries that created jobs for workers 65 and over	Jobs created <sup>1</sup>	Jobs lost <sup>1</sup>	Net change <sup>2</sup>	Total employment	
				65 and older	14 and older
Business services .....	642	1,028	-386	7,396	304,909
Eating and drinking places .....	504	677	-173	4,655	211,625
Construction—special trade .....	471	604	-134	3,741	131,337
Health services .....	390	650	-261	6,305	236,316
Personal services .....	275	322	-48	2,600	38,406
Engineering, accounting, and research .....	261	391	-130	3,723	144,856
Car dealers and gas stations .....	215	310	-95	2,664	64,679
Miscellaneous retail .....	212	362	-150	3,430	82,385
Food stores .....	194	299	-106	3,207	93,350
Amusement/recreation services .....	179	245	-66	1,681	41,177

<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 Virginia Employment Commission, Local Employment Dynamics program, 2002, Appendix Tables A1, A4, and A5. See Web site at <<http://lehd.dsd.census.gov>>.

### Summary

This report provides answers to several key questions related to the aging of Virginia'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?

In Virginia 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 museums, galleries,

#### 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

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

[Full-quarter earnings]

Industry	Average monthly earnings for workers 65 and older (dollars)	Average monthly earnings for workers 14 and older (dollars)	Workers 65 and older (number)	Workers 14 and older (number)
<b>Total</b> .....	<b>2,196</b>	<b>3,217</b>	<b>81,995</b>	<b>2,788,457</b>
Business services .....	2,591	4,303	7,396	304,909
Health services .....	2,598	3,323	6,305	236,316
Eating and drinking places .....	1,112	1,189	4,655	211,625
Construction—special trade .....	2,450	2,933	3,741	131,337
Engineering, accounting, and research .....	4,820	5,393	3,723	144,856
Miscellaneous retail .....	1,300	1,799	3,430	82,385
Food stores .....	1,123	1,574	3,207	93,350
Wholesale trade—durables .....	2,593	4,508	2,834	87,775
Social services .....	1,286	1,855	2,701	61,143
Car dealers and gas stations .....	1,031	3,010	2,664	64,679

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

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

[Full-quarter earnings. Includes only industries that employed 100 or more workers 65 and older in Virginia]

Industry	Average monthly earnings of workers 65 and older (dollars)	Average monthly earnings of workers 14 and older (dollars)	Workers 65 and older (number)	Workers 14 and older (number)
Security/commodity brokers .....	8,666	8,130	282	11,199
Holding/other investment offices .....	8,346	7,344	167	4,314
Nondepository institutions .....	5,731	6,597	250	37,820
Engineering, accounting, and research .....	4,820	5,393	3,723	144,856
Primary metal industries .....	4,793	3,504	106	9,280
Legal services .....	4,309	5,114	702	24,028
Transportation equipment .....	4,181	4,189	595	40,765
Rubber and plastics .....	4,113	3,262	247	23,686
Chemicals .....	3,984	4,451	191	18,544
Electronic/electrical equipment .....	3,826	3,818	311	21,326

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

and gardens; textile mill products; and apparel from fabrics.

Museums, galleries, and gardens and apparel from fabrics had 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>10</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 system to the North American Industry Classification System (NAICS) in early 2004. Some classification titles appear to be similar but the

<sup>10</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>>.

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>11</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

<sup>11</sup> For the QWIs, a "job" is defined as equivalent records for an employer and employee.

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, 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

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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 inter-censal 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 inter-censal population estimates program. Census Bureau programs will benefit from new information on turnover, job gain, and job loss 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>.

### **ACKNOWLEDGEMENT**

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## APPENDIX TABLES

Table A1.  
**Employment in Virginia 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>1,847,671</b>	<b>576,728</b>	<b>282,064</b>	<b>81,995</b>	<b>2,788,457</b>
<b>Agriculture</b>					
Agricultural production—crops .....	3,398	1,140	649	504	5,690
Agricultural production—livestock .....	2,089	805	422	252	3,568
Agricultural services .....	21,869	4,285	1,568	821	28,542
Forestry .....	282	109	46	16	453
Fishing, hunting, and trapping .....	111	32	*21	*7	171
<b>Mining</b>					
Metal mining .....	96	*28	4	-	127
Coal mining .....	2,511	2,400	609	33	5,554
Oil and gas extraction .....	488	140	36	4	666
Mining/quarrying—nonmetallic .....	2,018	931	480	100	3,529
<b>Construction</b>					
Building construction—general contractors .....	28,689	10,515	4,581	1,220	45,004
Construction other than building .....	18,826	6,186	3,345	1,048	29,404
Construction—special trade .....	92,686	24,477	10,433	3,741	131,337
<b>Manufacturing</b>					
Food and kindred products .....	24,694	8,908	3,841	813	38,255
Tobacco products .....	*2,362	*2,749	*674	*125	*5,910
Textile mill products .....	11,959	6,060	3,716	534	22,269
Apparel from fabrics .....	4,563	2,128	1,385	395	8,471
Lumber and wood products .....	16,639	6,241	3,179	985	27,043
Furniture and fixtures .....	9,760	4,325	2,510	490	17,084
Paper and allied products .....	8,531	4,348	2,451	171	15,500
Printing and publishing .....	22,030	8,263	3,901	939	35,131
Chemicals .....	9,385	6,141	2,828	191	18,544
Petroleum refining .....	339	226	76	*16	657
Rubber and plastics .....	14,551	6,039	2,850	247	23,686
Leather and leather products .....	*192	*111	*58	*10	*370
Stone, clay, and glass .....	6,882	2,820	1,393	396	11,492
Primary metal industries .....	4,933	2,867	1,373	106	9,280
Fabricated metal products .....	9,285	4,711	2,668	378	17,042
Industrial and commercial machinery .....	15,663	6,543	3,161	462	25,828
Electronic and electrical equipment .....	12,465	5,728	2,823	311	21,326
Transportation equipment .....	22,465	11,867	5,838	595	40,765
Measuring and analyzing instruments .....	6,239	*3,224	*1,680	255	11,398
Miscellaneous manufacturing .....	2,690	1,067	536	162	4,454
<b>Transportation, Communication, and Utilities</b>					
Railroad transportation .....	-	-	-	-	-
Local/suburban transit .....	4,624	2,062	1,219	498	8,402
Motor freight transportation .....	24,866	10,142	5,191	1,419	41,617
Water transportation .....	3,763	1,720	786	119	6,388
Transportation by air .....	21,330	7,511	2,943	272	32,055
Pipelines, except natural gas .....	32	*29	*8	-	69
Transportation services .....	6,561	1,985	1,043	305	9,894
Communications .....	36,715	10,903	3,774	430	51,822
Electrical, gas, and sanitary services .....	10,310	6,608	1,889	156	18,963
<b>Wholesale Trade</b>					
Wholesale trade—durables .....	54,529	20,548	9,865	2,834	87,775
Wholesale trade—nondurables .....	34,823	12,400	5,843	1,724	54,789
<b>Retail Trade</b>					
Building materials, hardware .....	16,537	4,944	2,842	1,069	25,391
General merchandise stores .....	60,982	15,784	8,568	3,394	88,728
Food stores .....	66,527	15,520	8,097	3,207	93,350
Car dealers, gas stations .....	42,640	12,583	6,793	2,664	64,679
Apparel and accessory stores .....	23,236	2,921	1,658	736	28,551
Home furniture stores .....	25,937	5,872	3,005	1,000	35,814
Eating and drinking places .....	176,420	21,782	8,768	4,655	211,625
Miscellaneous retail .....	55,626	14,926	8,404	3,430	82,385

Table A1.  
**Employment in Virginia 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>Finance, Insurance, and Real Estate</b>					
Depository institutions .....	34,243	11,032	5,087	889	51,251
Nondepository institutions .....	29,207	6,161	2,202	250	37,820
Security and commodity brokers .....	7,412	2,326	1,179	282	11,199
Insurance carriers .....	23,605	8,539	3,165	361	35,669
Insurance agents and brokers .....	8,382	3,443	1,957	558	14,338
Real estate .....	27,252	9,982	5,910	2,573	45,717
Holding/other investment offices .....	2,556	1,021	570	167	4,314
<b>Services</b>					
Hotels/other lodging places .....	31,305	8,852	4,417	1,732	46,306
Personal services .....	23,498	7,455	4,853	2,600	38,406
Business services .....	213,448	57,132	26,933	7,396	304,909
Car repair, services, and parking .....	21,490	5,464	2,848	1,348	31,150
Miscellaneous repair services .....	5,901	2,182	1,172	400	9,654
Motion pictures .....	8,562	1,021	394	139	10,116
Amusement and recreation .....	31,336	5,320	2,841	1,681	41,177
Health services .....	141,974	60,560	27,477	6,305	236,316
Legal services .....	14,996	5,593	2,738	702	24,028
Educational services .....	20,072	9,710	5,735	1,421	36,937
Social services .....	38,855	12,795	6,793	2,701	61,143
Museums, galleries, and gardens .....	2,119	1,083	846	449	4,498
Membership organizations .....	21,135	8,020	4,835	1,453	35,444
Engineering, accounting, and research .....	91,051	32,312	17,771	3,723	144,856
Private households .....	4,572	2,866	2,413	1,616	11,465
Services, not classified .....	560	206	105	16	887

- Represents zero.

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

Source: U.S. Census Bureau and the Virginia Employment Commission, Local Employment Dynamics program, 2002. See Web site at <<http://lehd.dsd.census.gov>>.

Table A2.  
**Average Quarterly Turnover Rates in Virginia 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, age group</b> .....	<b>21.8</b>	<b>9.9</b>	<b>9.1</b>	<b>10.4</b>	<b>13.2</b>
<b>Agriculture</b>					
Agricultural production—crops .....	22.9	13.0	12.3	*15.9	16.2
Agricultural production—livestock .....	17.4	7.0	7.3	7.6	9.8
Agricultural services .....	20.3	11.4	11.4	16.8	15.7
Forestry .....	15.8	*9.1	*13.3	-	12.2
Fishing, hunting, and trapping .....	25.8	*9.5	12.8	-	15.4
<b>Mining</b>					
Metal mining .....	21.5	-	-	-	673.0
Coal mining .....	17.6	8.3	10.1	12.4	10.3
Oil/gas extraction .....	17.9	*11.5	*13.5	-	13.9
Mining/quarrying—nonmetallic .....	15.0	4.2	*4.2	*8.8	6.4
<b>Construction</b>					
Building construction—general contractors .....	22.0	10.9	10.5	12.9	13.7
Construction other than building .....	24.9	14.4	12.1	14.2	16.7
Construction—special trade .....	21.6	11.6	10.7	14.1	15.0
<b>Manufacturing</b>					
Food and kindred products .....	21.3	*8.5	*8.6	*11.3	11.9
Tobacco products .....	*70.9	*118.1	*48.4	*25.3	*77.1
Textile mill products .....	22.3	10.3	10.4	10.6	11.6
Apparel from fabrics .....	19.0	9.1	8.0	*11.6	11.1
Lumber and wood products .....	20.5	7.9	6.7	10.2	10.1
Furniture and fixtures .....	20.1	*6.6	*6.5	8.7	8.4
Paper and allied products .....	15.1	*7.5	*7.2	12.3	8.1
Printing and publishing .....	18.9	6.3	6.4	8.2	8.1
Chemicals .....	18.3	*7.4	8.8	*7.9	7.8
Petroleum refining .....	16.4	*15.5	*10.2	*13.4	15.4
Rubber and plastics .....	17.8	*7.7	*8.3	*8.6	8.8
Leather and leather products .....	18.2	*11.4	*13.7	-	13.2
Stone, clay, and glass .....	23.0	11.4	10.5	11.0	13.1
Primary metal industries .....	15.1	*4.0	*4.7	*9.2	6.2
Fabricated metal products .....	20.2	4.8	4.4	8.5	6.9
Industrial and commercial machinery .....	16.5	6.5	*6.3	8.9	7.6
Electronic and electrical equipment .....	*18.4	*6.3	*7.0	*9.6	*7.9
Transportation equipment .....	*32.1	*15.5	*17.0	*10.7	*17.1
Measuring and analyzing instruments .....	32.3	*16.4	*17.2	*14.8	17.0
Miscellaneous manufacturing .....	20.3	7.4	*7.5	*10.0	9.8
<b>Transportation, Communication, and Utilities</b>					
Railroad transportation .....	-	-	-	-	-
Local/suburban transit .....	27.2	13.0	13.2	12.9	15.5
Motor freight transportation .....	22.6	10.4	9.1	10.8	12.8
Water transportation .....	28.6	*17.4	*19.0	*15.9	20.0
Transportation by air .....	*20.9	*8.1	*9.2	*11.4	*10.4
Pipelines, except natural gas .....	20.1	*9.7	-	-	11.1
Transportation services .....	19.8	8.2	7.5	*8.8	10.6
Communications .....	23.5	16.7	14.6	*10.7	16.8
Electrical, gas, and sanitary services .....	18.0	2.8	*4.6	*10.2	4.6
<b>Wholesale Trade</b>					
Wholesale trade—durables .....	18.4	7.6	7.2	7.0	9.7
Wholesale trade—nondurables .....	19.6	9.3	8.5	8.4	11.1
<b>Retail Trade</b>					
Building materials, hardware .....	21.2	*10.6	*9.1	8.0	13.6
General merchandise stores .....	20.9	*8.6	7.2	*7.4	13.0
Food stores .....	19.0	7.8	6.9	7.4	13.1
Car dealers and gas stations .....	21.4	10.8	9.6	9.7	14.0
Apparel and accessory stores .....	24.4	10.7	8.4	8.4	19.8
Home furniture stores .....	19.7	8.6	7.5	6.5	12.7
Eating and drinking places .....	24.5	13.3	12.0	15.2	20.6
Miscellaneous retail .....	21.4	9.7	8.3	8.4	14.3

Table A2.  
**Average Quarterly Turnover Rates in Virginia 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>Finance, Insurance, and Real Estate</b>					
Depository institutions .....	17.5	6.7	6.9	8.3	9.0
Nondepository institutions .....	21.6	6.3	6.2	*7.4	7.3
Security and commodity brokers .....	21.0	7.1	6.9	*7.0	8.8
Insurance carriers .....	16.9	7.7	8.0	9.4	9.1
Insurance agents and brokers .....	17.4	6.9	6.4	6.7	9.1
Real estate .....	22.6	9.5	8.1	7.7	12.2
Holding/other investment offices .....	23.4	8.1	*6.3	6.8	9.6
<b>Services</b>					
Hotels/other lodging places .....	24.1	12.5	11.0	13.1	16.1
Personal services .....	22.3	12.2	11.3	10.7	14.9
Business services .....	27.6	13.9	12.5	14.9	16.6
Car repair, services, and parking .....	22.2	9.7	9.1	10.4	13.5
Miscellaneous repair services .....	18.3	8.7	8.2	8.4	11.1
Motion pictures .....	29.4	13.9	11.2	16.8	23.3
Amusement and recreation .....	25.5	12.4	11.9	12.5	19.0
Health services .....	19.4	8.7	8.1	9.4	11.2
Legal services .....	19.8	6.0	5.5	6.2	8.5
Educational services .....	25.3	10.8	9.9	13.2	13.4
Social services .....	22.3	10.7	10.1	9.9	14.1
Museums, galleries, and gardens .....	15.6	4.8	*5.3	*8.4	7.7
Membership organizations .....	21.0	8.0	7.2	9.1	10.4
Engineering, accounting, and research .....	22.3	9.1	8.3	8.8	11.3
Private households .....	22.3	10.4	10.2	9.5	11.9
Services, not classified .....	17.9	11.0	*8.8	*17.7	12.3

- Represents zero.

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

Source: U.S. Census Bureau and the Virginia Employment Commission, Local Employment Dynamics program, 2002. See Web site at <<http://lehd.dsd.census.gov>>.

Table A3.  
**Virginia Employment by Industry and Age: 1998 and 2002**

[Beginning-of-quarter employment]

Industry	Under 65		65 and older	
	1998	2002	1998	2002
<b>Total</b> .....	<b>2,619,621</b>	<b>2,706,463</b>	<b>65,926</b>	<b>81,995</b>
<b>Agriculture</b>				
Agricultural production—crops .....	5,736	5,186	499	504
Agricultural production—livestock .....	3,227	3,316	176	252
Agricultural services .....	22,472	27,722	593	821
Forestry .....	340	436	17	16
Fishing, hunting, and trapping .....	135	164	*6	*7
<b>Mining</b>				
Metal mining .....	131	128	-	-
Coal mining .....	6,333	5,520	32	33
Oil/gas extraction .....	696	664	-	4
Mining/quarrying—nonmetallic .....	3,301	3,429	105	100
<b>Construction</b>				
Building construction—general contractors .....	40,269	43,784	1,000	1,220
Construction other than building .....	29,754	28,357	775	1,048
Construction—special trade .....	111,438	127,596	2,555	3,741
<b>Manufacturing</b>				
Food and kindred products .....	42,082	37,443	777	813
Tobacco products .....	*10,356	*5,785	*136	*125
Textile mill products .....	36,243	21,735	512	534
Apparel from fabrics .....	15,313	8,076	470	395
Lumber and wood products .....	27,194	26,058	849	985
Furniture and fixtures .....	22,459	16,594	621	490
Paper and allied products .....	18,377	15,330	150	171
Printing and publishing .....	37,717	34,193	816	939
Chemicals .....	21,175	18,354	158	191
Petroleum refining .....	487	640	*8	*16
Rubber and plastics .....	22,317	23,440	163	247
Leather and leather products .....	423	*360	17	*10
Stone, clay, and glass .....	11,975	11,096	295	396
Primary metal industries .....	9,714	9,174	88	106
Fabricated metal products .....	19,861	16,664	265	378
Industrial and commercial machinery .....	31,148	25,366	420	462
Electronic and electrical equipment .....	31,720	21,015	361	311
Transportation equipment .....	43,178	40,170	308	595
Measuring and analyzing instruments .....	12,169	11,143	204	255
Miscellaneous manufacturing .....	4,116	4,292	110	162
<b>Transportation, Communication, and Utilities</b>				
Railroad transportation .....	-	-	-	-
Local/suburban transit .....	7,672	7,904	403	498
Motor freight transportation .....	41,175	40,198	1,130	1,419
Water transportation .....	6,990	6,269	129	119
Transportation by air .....	32,647	31,783	275	272
Pipelines, except natural gas .....	80	68	-	-
Transportation services .....	9,977	9,589	262	305
Communications .....	52,023	51,392	411	430
Electrical, gas, and sanitary services .....	20,809	18,806	170	156
<b>Wholesale Trade</b>				
Wholesale trade—durables .....	88,501	84,942	2,413	2,834
Wholesale trade—nondurables .....	57,120	53,066	1,637	1,724
<b>Retail Trade</b>				
Building materials, hardware .....	24,265	24,323	981	1,069
General merchandise stores .....	75,839	85,334	2,373	3,394
Food stores .....	93,454	90,144	2,599	3,207
Car dealers and gas stations .....	63,258	62,015	2,309	2,664
Apparel and accessory stores .....	26,456	27,815	741	736
Home furniture stores .....	33,228	34,814	823	1,000
Eating and drinking places .....	182,455	206,970	3,107	4,655
Miscellaneous retail .....	71,870	78,955	2,764	3,430

Table A3.  
**Virginia Employment by Industry and Age: 1998 and 2002** — Con.

[Beginning-of-quarter employment]

Industry	Under 65		65 and older	
	1998	2002	1998	2002
<b>Finance, Insurance and Real Estate</b>				
Depository institutions .....	46,823	50,362	739	889
Nondepository institutions .....	28,395	37,570	170	250
Security and commodity brokers .....	9,230	10,916	230	282
Insurance carriers .....	32,316	35,308	242	361
Insurance agents and brokers .....	12,586	13,781	466	558
Real estate .....	39,934	43,144	2,147	2,573
Holding/other investment offices .....	3,313	4,147	141	167
<b>Services</b>				
Hotels/other lodging places .....	46,080	44,575	1,416	1,732
Personal services .....	33,772	35,806	2,207	2,600
Business services .....	268,619	297,513	5,974	7,396
Car repair, services, and parking .....	26,643	29,802	1,000	1,348
Miscellaneous repair services .....	8,785	9,254	264	400
Motion pictures .....	10,505	9,978	107	139
Amusement and recreation .....	37,012	39,496	1,311	1,681
Health services .....	212,159	230,011	4,697	6,305
Legal services .....	21,062	23,326	550	702
Educational services .....	32,219	35,517	1,196	1,421
Social services .....	51,336	58,442	2,072	2,701
Museums, galleries, and gardens .....	3,764	4,049	352	449
Membership organizations .....	31,560	33,990	1,184	1,453
Engineering, accounting, and research .....	122,154	141,133	2,757	3,723
Private households .....	10,509	9,850	1,658	1,616
Services, not classified .....	1,165	872	27	16

- Represents zero.

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

Source: U.S. Census Bureau and the Virginia Employment Commission, Local Employment Dynamics program, 2002. See Web site at <http://lehd.dsd.census.gov>.



Table A4.

**Composition of Job Gain in Virginia by Industry and Age: 2002**

Industry	14-44 years	45-54 years	55-64 years	65 years and older
<b>Total</b> .....	<b>186,458</b>	<b>37,538</b>	<b>16,934</b>	<b>6,104</b>
<b>Agriculture</b>				
Agricultural production—crops .....	906	209	121	142
Agricultural production—livestock .....	287	58	35	19
Agricultural services .....	3,185	426	176	113
Forestry .....	33	8	4	2
Fishing, hunting, and trapping .....	21	5	*2	*1
<b>Mining</b>				
Metal mining .....	*10	*2	1	-
Coal mining .....	165	70	15	2
Oil and gas extraction .....	42	6	2	-
Mining/quarrying—nonmetallic .....	110	25	14	6
<b>Construction</b>				
Building construction—general contractors .....	4,027	859	382	134
Construction other than building .....	2,446	620	293	120
Construction—special trade .....	12,876	2,344	904	471
<b>Manufacturing</b>				
Food and kindred products .....	2,520	596	255	73
Tobacco products .....	*1,013	*1,533	*281	*15
Textile mill products .....	574	240	147	20
Apparel from fabrics .....	251	66	35	10
Lumber and wood products .....	1,187	251	111	68
Furniture and fixtures .....	378	89	29	8
Paper and allied products .....	482	183	74	9
Printing and publishing .....	1,431	393	199	53
Chemicals .....	270	67	23	5
Petroleum refining .....	23	7	6	1
Rubber and plastics .....	551	138	54	10
Leather and leather products .....	36	*14	*3	-
Stone, clay, and glass .....	663	202	91	28
Primary metal industries .....	230	71	20	5
Fabricated metal products .....	710	177	76	20
Industrial and commercial machinery .....	745	234	95	22
Electronic and electrical equipment .....	494	159	83	16
Transportation equipment .....	1,018	252	100	22
Measuring and analyzing instruments .....	296	*107	*36	9
Miscellaneous manufacturing .....	258	47	29	8
<b>Transportation, Communication, and Utilities</b>				
Railroad transportation .....	-	-	-	-
Local/suburban transit .....	543	183	113	41
Motor freight transportation .....	2,704	718	325	110
Water transportation .....	757	269	91	15
Transportation by air .....	1,044	253	79	10
Pipelines, except natural gas .....	1	-	-	-
Transportation services .....	476	113	57	20
Communications .....	2,293	742	221	22
Electrical, gas, and sanitary services .....	374	118	37	7
<b>Wholesale Trade</b>				
Wholesale trade—durables .....	4,764	1,132	518	140
Wholesale trade—nondurables .....	2,621	584	256	81
<b>Retail Trade</b>				
Building materials, hardware dealers .....	2,710	523	252	78
General merchandise stores .....	4,052	665	310	112
Food stores .....	6,191	1,214	546	194
Car dealers, gas stations .....	5,219	1,112	527	215
Apparel and accessory stores .....	3,504	253	129	54
Home furniture stores .....	2,601	352	168	55
Eating and drinking places .....	22,380	2,047	797	504
Miscellaneous retail .....	6,338	979	518	212

Table A4.

**Composition of Job Gain in Virginia by Industry and Age: 2002** — Con.

Industry	14-44 years	45-54 years	55-64 years	65 years and older
<b>Finance, Insurance, and Real Estate</b>				
Depository institutions .....	2,220	467	236	52
Nondepository institutions .....	1,483	278	108	21
Security and commodity brokers .....	451	92	48	11
Insurance carriers .....	939	198	78	13
Insurance agents/brokers .....	831	222	102	29
Real estate .....	2,903	651	356	148
Holding/other investment offices .....	216	61	28	9
<b>Services</b>				
Hotels/other lodging places .....	3,829	629	311	169
Personal services .....	3,628	819	541	275
Business services .....	21,072	4,130	1,917	642
Car repair, services, and parking .....	2,629	406	195	75
Miscellaneous repair services .....	689	150	70	27
Motion pictures .....	1,189	101	38	18
Amusement and recreation .....	6,619	546	291	179
Health services .....	12,664	3,562	1,535	390
Legal services .....	1,309	254	113	35
Educational services .....	2,232	480	268	85
Social services .....	4,116	886	462	167
Museums, galleries, and gardens .....	140	23	26	24
Membership organizations .....	2,154	459	257	84
Engineering, accounting, and research .....	8,370	2,152	1,088	261
Private households .....	707	284	211	112
Services, not classified .....	69	17	10	2

- Represents zero.

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

Source: U.S. Census Bureau and the Virginia Employment Commission, Local Employment Dynamics program, 2002. See Web site at <<http://lehd.dsd.census.gov>>.

Table A5.

**Composition of Job Loss in Virginia by Industry and Age: 2002**

Industry	14-44 years	45-54 years	55-64 years	65 years and older
<b>Total</b> .....	<b>197,370</b>	<b>48,600</b>	<b>25,480</b>	<b>9,544</b>
<b>Agriculture</b>				
Agricultural production—crops .....	857	213	132	142
Agricultural production—livestock .....	210	52	29	21
Agricultural services .....	3,097	450	187	147
Forestry .....	43	12	5	3
Fishing, hunting, and trapping .....	23	5	1	*1
<b>Mining</b>				
Metal mining .....	30	*9	1	-
Coal mining .....	282	196	69	4
Oil/gas extraction .....	59	9	4	-
Mining/quarrying—nonmetallic .....	101	24	19	8
<b>Construction</b>				
Building construction—general contractors .....	4,093	1,126	526	189
Construction other than building .....	2,987	819	429	161
Construction—special trade .....	13,507	2,807	1,245	604
<b>Manufacturing</b>				
Food and kindred products .....	1,508	468	264	81
Tobacco products .....	*878	*1,133	*220	*36
Textile mill products .....	927	423	293	53
Apparel from fabrics .....	603	234	143	60
Lumber and wood products .....	1,457	385	213	109
Furniture and fixtures .....	773	290	217	59
Paper and allied products .....	461	211	169	26
Printing and publishing .....	1,414	406	237	89
Chemicals .....	726	596	357	22
Petroleum refining .....	34	16	6	2
Rubber and plastics .....	1,008	447	268	24
Leather and leather products .....	24	*6	*3	*1
Stone, clay, and glass .....	821	291	146	49
Primary metal industries .....	326	102	72	11
Fabricated metal products .....	677	204	133	38
Industrial and commercial machinery .....	1,142	384	207	51
Electronic and electrical equipment .....	893	353	260	34
Transportation equipment .....	3,277	1,674	951	77
Measuring and analyzing instruments .....	500	*247	*145	22
Miscellaneous manufacturing .....	254	84	49	21
<b>Transportation, Communication, and Utilities</b>				
Railroad transportation .....	-	-	-	-
Local/suburban transit .....	560	205	130	76
Motor freight transportation .....	2,799	886	466	183
Water transportation .....	629	245	136	21
Transportation by air .....	1,255	274	185	31
Pipelines, except natural gas .....	3	*3	2	-
Transportation services .....	513	137	82	31
Communications .....	4,896	1,643	573	54
Electrical, gas, and sanitary services .....	414	165	106	18
<b>Wholesale Trade</b>				
Wholesale trade—durables .....	4,705	1,369	737	238
Wholesale trade—nondurables .....	3,463	1,184	597	182
<b>Retail Trade</b>				
Building materials, hardware .....	1,332	285	178	84
General merchandise stores .....	3,810	713	389	212
Food stores .....	6,378	1,263	662	299
Car dealers, gas stations .....	5,052	1,216	672	310
Apparel and accessory stores .....	2,787	245	137	77
Home furniture stores .....	2,252	401	207	76
Eating and drinking places .....	22,915	2,373	1,021	677
Miscellaneous retail .....	7,109	1,321	730	362

Table A5.

**Composition of Job Loss in Virginia by Industry and Age: 2002** — Con.

Industry	14-44 years	45-54 years	55-64 years	65 years and older
<b>Finance, Insurance, and Real Estate</b>				
Depository institutions .....	1,584	413	266	83
Nondepository institutions .....	1,208	270	126	20
Security and commodity brokers .....	413	119	74	24
Insurance carriers .....	1,591	600	275	43
Insurance agents and brokers .....	741	219	134	46
Real estate .....	2,912	738	436	214
Holding/other investment offices .....	192	59	37	17
<b>Services</b>				
Hotels/other lodging places .....	4,120	912	487	256
Personal services .....	3,494	908	593	322
Business services .....	24,475	5,723	2,809	1,028
Car repair, services, and parking .....	2,801	534	280	153
Miscellaneous repair services .....	725	188	97	39
Motion pictures .....	1,529	161	61	27
Amusement and recreation .....	6,947	675	369	245
Health services .....	11,522	3,997	2,056	650
Legal services .....	1,231	320	170	60
Educational services .....	2,226	817	519	185
Social services .....	4,255	1,071	644	278
Museums, galleries, and gardens .....	140	32	33	39
Membership organizations .....	2,185	584	373	153
Engineering, accounting, and research .....	8,291	2,347	1,358	391
Private households .....	762	338	286	199
Services, not classified .....	69	22	9	2

- Represents zero.

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

Source: U.S. Census Bureau and the Virginia Employment Commission, Local Employment Dynamics program, 2002. See Web site at <http://lehd.dsd.census.gov>.

Table A6.  
**Average Monthly Earnings in Virginia 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>3,959</b>	<b>3,858</b>	<b>2,196</b>	<b>3,217</b>
<b>Agriculture</b>				
Agricultural production—crops .....	2,035	1,960	1,338	1,775
Agricultural production—livestock .....	2,473	2,316	1,644	2,076
Agricultural services .....	2,750	2,623	1,568	2,143
Forestry .....	2,940	*4,373	1,219	2,753
Fishing, hunting, and trapping .....	2,720	*1,842	*553	2,029
<b>Mining</b>				
Metal mining .....	*7,726	*3,053	-	4,784
Coal mining .....	4,474	4,594	*7,433	4,134
Oil/gas extraction .....	5,145	*4,193	*27,579	4,003
Mining/quarrying—nonmetallic .....	4,065	3,767	2,766	3,613
<b>Construction</b>				
Building construction—general contractors .....	4,365	4,139	3,008	3,585
Construction other than building .....	3,566	3,604	3,062	3,108
Construction—special trade .....	3,462	3,475	2,450	2,933
<b>Manufacturing</b>				
Food and kindred products .....	3,192	3,330	1,900	2,664
Tobacco products .....	*4,845	*4,013	*2,445	*4,104
Textile mill products .....	2,510	2,557	*2,344	2,361
Apparel from fabrics .....	2,002	1,873	1,422	1,876
Lumber and wood products .....	2,906	2,851	2,281	2,541
Furniture and fixtures .....	2,532	2,408	2,019	2,278
Paper and allied products .....	4,517	4,618	2,968	4,047
Printing and publishing .....	3,813	4,141	2,174	3,418
Chemicals .....	4,810	4,982	3,984	4,451
Petroleum refining .....	4,642	4,347	*4,435	4,121
Rubber and plastics .....	3,599	3,640	4,113	3,262
Leather and leather products .....	*1,782	*1,643	*1,098	*1,805
Stone, clay, and glass .....	3,638	3,705	2,402	3,190
Primary metal industries .....	3,713	3,916	4,793	3,504
Fabricated metal products .....	4,110	4,473	3,169	3,659
Industrial and commercial machinery .....	3,699	3,921	3,280	3,357
Electronic and electrical equipment .....	4,066	4,095	3,826	3,818
Transportation equipment .....	4,517	4,931	4,181	4,189
Measuring and analyzing instruments .....	*5,415	*5,693	*4,403	4,943
Miscellaneous manufacturing .....	3,059	3,158	2,532	2,701
<b>Transportation, Communication, and Utilities</b>				
Railroad transportation .....	-	-	-	-
Local/suburban transit .....	2,243	2,005	1,392	1,998
Motor freight transportation .....	3,073	3,037	2,012	2,798
Water transportation .....	3,524	3,971	2,326	3,044
Transportation by air .....	*5,283	*5,692	2,903	4,219
Pipelines, except natural gas .....	*5,585	*5,589	*8,130	5,227
Transportation services .....	3,372	3,046	2,302	2,829
Communications .....	5,851	5,423	3,242	4,926
Electrical, gas, and sanitary services .....	*5,854	5,248	2,845	5,226
<b>Wholesale Trade</b>				
Wholesale trade—durables .....	5,288	4,770	2,593	4,508
Wholesale trade—nondurables .....	4,118	3,898	1,996	3,504
<b>Retail Trade</b>				
Building materials, hardware .....	2,480	2,213	1,530	2,155
General merchandise stores .....	1,940	1,705	1,155	1,661
Food stores .....	2,032	1,837	1,123	1,574
Car dealers and gas stations .....	3,624	3,196	2,031	3,010
Apparel and accessory stores .....	1,920	1,747	1,085	1,280
Home furniture stores .....	3,548	3,025	1,848	2,619
Eating and drinking places .....	1,645	1,525	1,112	1,189
Miscellaneous retail .....	2,201	1,986	1,300	1,799

Table A6.  
**Average Monthly Earnings in Virginia 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>Finance, Insurance, and Real Estate</b>				
Depository institutions .....	3,901	3,818	2,174	3,126
Nondepository institutions .....	8,774	7,475	5,731	6,597
Security and commodity brokers .....	9,683	10,182	8,666	8,130
Insurance carriers .....	5,118	5,408	3,142	4,102
Insurance agents/brokers .....	5,006	4,338	2,618	3,867
Real estate .....	3,981	3,848	2,490	3,340
Holding/other investment offices .....	8,871	10,265	8,346	7,344
<b>Services</b>				
Hotels/other lodging places .....	1,782	1,613	1,260	1,627
Personal services .....	1,948	1,897	1,122	1,732
Business services .....	5,011	5,232	2,591	4,303
Car repair, services, and parking .....	2,957	2,564	1,406	2,550
Miscellaneous repair services .....	3,356	3,056	1,866	2,967
Motion pictures .....	3,485	3,249	2,452	1,897
Amusement and recreation .....	2,021	2,016	1,087	1,581
Health services .....	4,049	4,028	2,598	3,323
Legal services .....	5,929	6,365	4,309	5,114
Educational services .....	2,869	3,200	2,332	2,561
Social services .....	2,241	2,158	1,286	1,855
Museums, galleries, and gardens .....	*2,416	*2,186	1,102	1,937
Membership organizations .....	3,991	4,353	2,249	3,299
Engineering, accounting, and research .....	6,505	6,788	4,820	5,393
Private households .....	1,414	1,244	956	1,298
Services, not classified .....	6,146	4,840	5,611	4,375

- Represents zero.

\* The value has been significantly distorted to protect confidentiality. A description of the confidentiality protection system is available at <<http://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 Virginia Employment Commission, Local Employment Dynamics program, 2002. See Web site at <<http://lehd.dsd.census.gov>>.

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