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(This release was reissued on Wednesday, August 10, to correct the September 2001 data for workers of Hispanic or Latino ethnicity in table A. No other data were affected.)

COMPUTER AND INTERNET USE AT WORK IN 2003

In October 2003, 77 million persons used a computer at work, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. These workers accounted for 55.5 percent of total employment. About 2 of every 5 employed individuals connected to the Internet or used e-mail while on the job. These proportions were slightly higher than those measured in the prior survey conducted in September 2001. (See table A.)

These findings are from a special supplement to the October 2003 Current Population Survey (CPS). The CPS is a monthly household survey that is one of the main sources of information on the U.S. labor force. The Computer Use Survey also collected data on computer and Internet or e-mail use at home, school, and work as well as use of the Internet for job search. The data presented in this release focus on computer and Internet use at work and on job search methods using the Internet. For additional information about the survey, see the Technical Note. Some of the highlights from the 2003 survey include:

- The proportion of workers who used a computer at work was higher for women (61.8 percent) than for men (49.9 percent).
- Employed women had a greater likelihood of using the Internet at work than employed men (45.1 and 38.7 percent, respectively).
- Asians were more likely than whites, blacks, or Hispanics or Latinos to use a computer and the Internet at work.
- The likelihood of computer and Internet use at work is greater for workers with more education.
- In terms of occupation, there were large variations in the proportions of workers who used a computer at work. The computer-use rate was relatively high for managers and professionals (about 80 percent) and sales and office workers (67 percent). In contrast, about 26 percent of workers in natural resources, construction, and maintenance and production, transportation, and material moving occupations used a computer at work.
- The most commonly reported task for the 77 million workers who used a computer at work was accessing the Internet or using e-mail.

Table A. Computer and Internet use at work by selected characteristics, September 2001 and October 2003

	September 2001 ^r					October 2003				
	Total employed	Used a computer at work		Used the Internet at work		Total employed	Used a computer at work		Used the Internet at work	
		Total	Percent of employed	Total	Percent of employed		Total	Percent of employed	Total	Percent of employed
AGE AND SEX										
Total, 16 years and over	137,050	73,055	53.3	52,463	38.3	138,823	76,986	55.5	57,892	41.7
16 to 24 years	19,901	6,994	35.1	3,916	19.7	19,304	6,991	36.2	4,234	21.9
16 to 19 years	6,499	1,490	22.9	549	8.4	5,788	1,301	22.5	559	9.7
20 to 24 years	13,402	5,504	41.1	3,367	25.1	13,516	5,690	42.1	3,675	27.2
25 years and over	117,149	66,061	56.4	48,547	41.4	119,519	69,995	58.6	53,658	44.9
25 to 34 years	30,847	17,561	56.9	13,109	42.5	30,401	17,641	58.0	13,608	44.8
35 to 44 years	35,669	20,700	58.0	15,239	42.7	34,854	20,797	59.7	16,226	46.6
45 to 54 years	31,205	18,260	58.5	13,518	43.3	32,221	19,607	60.9	15,017	46.6
55 to 64 years	14,916	8,023	53.8	5,739	38.5	17,202	9,930	57.7	7,499	43.6
65 years and over	4,511	1,517	33.6	942	20.9	4,842	2,021	41.7	1,307	27.0
Men	73,511	35,023	47.6	26,298	35.8	74,353	37,124	49.9	28,788	38.7
Women	63,539	38,032	59.9	26,165	41.2	64,470	39,862	61.8	29,104	45.1
RACE AND HISPANIC OR LATINO ETHNICITY										
White	114,426	62,483	54.6	45,002	39.3	115,184	65,193	56.6	49,347	42.8
Black or African American	15,116	6,511	43.1	4,345	28.7	14,754	6,729	45.6	4,553	30.9
Asian	6,159	3,469	56.3	2,696	43.8	5,809	3,523	60.6	2,882	49.6
Hispanic or Latino ethnicity	c16,349	c5,211	c31.9	c3,210	c19.6	17,602	5,478	31.1	3,718	21.1
FULL- OR PART-TIME STATUS										
Usually full time on primary job	103,887	59,563	57.3	44,035	42.4	103,757	61,538	59.3	47,472	45.8
Usually part time on primary job	21,412	8,482	39.6	4,891	22.8	22,487	9,708	43.2	6,255	27.8
Hours vary on primary job	11,751	5,009	42.6	3,537	30.1	12,579	5,740	45.6	4,165	33.1
EDUCATIONAL ATTAINMENT										
Total, 25 years and over	117,149	66,061	56.4	48,547	41.4	119,519	69,995	58.6	53,658	44.9
Less than a high school diploma	11,737	1,875	16.0	876	7.5	11,520	1,810	15.7	899	7.8
High school graduates, no college ¹	35,880	14,440	40.2	8,627	24.0	36,065	15,208	42.2	9,521	26.4
Some college or associate degree	32,858	19,754	60.1	13,507	41.1	32,455	19,907	61.3	14,445	44.5
Bachelor's degree and higher ²	36,675	29,992	81.8	25,537	69.6	39,479	33,071	83.8	28,793	72.9
Advanced degree	12,954	10,893	84.1	9,494	73.3	13,831	11,982	86.6	10,709	77.4

¹ Includes persons with a high school diploma or equivalent.

² Includes persons with bachelor's, master's, professional, and doctoral degrees.

^r = revised. Estimates for September 2001 have been revised to reflect the use of Census 2000-based population controls. See the Technical Note for additional information.

c = corrected.

NOTE: Data refer to computer and Internet use on the sole or primary job. Internet use at work refers to either connecting to the Internet or using e-mail. Estimates for the above race groups (white, black or African American, and Asian) do not sum to totals because data are not presented for all races. In addition, persons whose ethnicity is Hispanic or Latino may be of any race and, therefore, are classified by ethnicity as well as by race.

- Slightly more than 1 in every 10 individuals in the civilian noninstitutional population age 16 and over reported that they had used the Internet between January and October 2003 to search for a job. (The concept of job search used in the survey is different from that used in the basic monthly CPS; see the Technical Note for more information.) Reading on-line ads and researching information on potential employers were the most commonly used Internet jobsearch methods used.

Occupation and Industry

Managers and professionals were most likely to use a computer and the Internet; 79.6 percent reported that they used a computer at work and 67.1 percent used the Internet. Sales and office occupations also had high rates of computer and Internet use—over two-thirds reported using a computer at work and nearly half said they used the Internet. In contrast, computer- and Internet-use rates were lower for service workers (27.5 and 15.9 percent, respectively), for natural resources, construction, and maintenance workers (26.4 and 16.6 percent, respectively), and for production, transportation, and material moving workers (26.0 and 13.9 percent, respectively). (See table 2.)

As with occupations, there was a great deal of variation by industry with regard to the use of computers and the Internet. Among private nonagricultural industries, persons employed in financial activities had the highest rates of computer (82.4 percent) and Internet use (68.9 percent). In contrast, computer- and Internet-use rates were lowest in the leisure and hospitality (30.4 and 17.6 percent, respectively) and construction (28.1 and 21.0 percent, respectively) industries. (See table 2.)

Government workers had an above-average likelihood of using a computer and the Internet on the job. The proportions of workers in the public sector that used a computer and the Internet were 69.1 and 56.0 percent, respectively. By comparison, the computer- and Internet-use rates for private-sector workers were 53.5 and 39.3 percent, respectively. (See table 2.) The high computer- and Internet-use rates among government workers is due, in part, to their occupational concentration. For example, more than half of all workers in the public sector hold management and professional jobs, an occupational category characterized by very high rates of computer and Internet use. In contrast, the proportion of private-sector wage and salary workers employed as managers and professionals is much lower (30.9 percent).

Demographics

The youngest and oldest workers were least likely to use a computer and the Internet on the job. Among workers ages 16 to 24 and 65 years and over, about one-third used a computer at work and only about 1 in every 5 said that they used the Internet. In contrast, about 60 percent of workers ages 25 to 64 used a computer on the job and almost half used the Internet. (See table 1.)

As was the case in the prior survey, women were more likely than men to use a computer and the Internet. Computer-use rates for women and men were 61.8 and 49.9 percent, respectively; the Internet-use rate for women was 45.1 percent, compared with 38.7 percent for men. (See table 1.) Although computer- and Internet-use rates for men and women are fairly similar within occupations, the greater likelihood of women to use a computer at work is due largely to their concentration in occupations in which computer use is most prevalent. For instance, nearly three-fourths of employed women are in management and professional and sales and office occupations; the computer-use rate for women in these two occupations combined was very high (74.8 percent). In contrast, nearly two-fifths of men hold natural resources, construction, and maintenance and production, transportation, and material moving jobs. For men, the combined computer-use rate in these two occupational categories was 26.0 percent—30 percentage points lower than the rate for all workers.

Computer use at work was more common among Asian workers (60.6 percent) and whites (56.6 percent) than among black (45.6 percent) or Hispanic or Latino workers (31.1 percent). In terms of Internet use, 49.6 percent of Asians used the Internet at work, compared with 42.8 percent of whites, 30.9 percent of blacks, and 21.1 percent of Hispanics or Latinos. (See table 1.)

With regard to educational attainment, workers with more years of schooling were much more likely than those with less education to use a computer and the Internet at work. For example, computer- and Internet-use rates for workers with advanced degrees were 86.6 and 77.4 percent, respectively. At the other end of the educational spectrum, only 15.7 percent of workers with less than a high school diploma used a computer on the job, and 7.8 percent used the Internet. (See table 1.)

Computer Activity at Work

As was the case in the 2001 survey, the most common use for a computer at work was to access the Internet or to use e-mail. Of the 77 million workers who used a computer on the job, 75.2 percent reported that they used the computer to connect to the Internet or to use e-mail. Other common tasks included word processing (67.6 percent), working with spreadsheets or databases (64.2 percent), and calendar or scheduling (56.8 percent). Less common uses were graphics or design (29.7 percent) and programming (16.4 percent). (See table 3.)

In terms of occupation, workers in management and professional occupations, who were most likely to use a computer at work, also reported some of the highest proportions for specific uses of a computer. For instance, 84.4 percent used a computer to use the Internet or e-mail, 76.9 percent used word processing, and 70.7 percent used spreadsheets or databases. (See table 4.)

Job Search Activity Using the Internet

In addition to questions concerning computer and Internet use on the job, the survey also collected information on Internet job search. (The concept of job search using the Internet differs from the concept of job search in the basic monthly CPS; see the Technical Note for more information.) Respondents were asked if they had used the Internet (at any location) to search for a job “that year”—from January to October 2003. Over this period, about 25.5 million individuals, or 11.5 percent of the civilian noninstitutional population age 16 and over, said that they had used the Internet to search for a job. Internet job search rates were highest for individuals in the 20-to-24 (21.2 percent), 25-to-34 (19.3 percent), and 35-to-44 year-old (14.3 percent) age groups. (See table 5.)

Men and women were about equally likely to have used the Internet to search for a job. Also, individuals with more years of schooling were much more likely than those with the lowest level of education to have used the Internet to search for a job. The Internet job search rate for college graduates was 17.6 percent, in contrast to only 2.2 percent for those with less than a high school diploma. (See table 5.)

Data on Internet job search activity by occupation and industry are shown in table 6. The estimates given are limited to the experienced labor force, that is, the sum of the employed and the unemployed whose last job was in one of the occupations or industries shown. Of the 146.5 million persons in this group in October 2003, 21.9 million, or 14.9 percent of the total, reported that they used the Internet to look for a job at some point between January and October 2003. Individuals in management and professional occupations had the highest rate of Internet job search—19.3 percent. Among the other major occupational categories, Internet jobsearch rates ranged from a low of 8.6 percent for natural resources, construction, and maintenance occupations to a high of 17.2 percent for sales and office occupations.

The most common job search methods reported by Internet jobseekers were reading on-line ads or job listings (92.6 percent) and researching information on potential employers (70.2 percent). Less common methods were submitting a resume or application (57.0 percent) and posting a resume on a job listing site or with a service (41.0 percent). This pattern of Internet job searching was similar, regardless of demographic characteristic, occupation, or industry. (See tables 5 and 6.)

Technical Note

These data and other information on computer and Internet use were obtained from a supplement to the October 2003 Current Population Survey (CPS). The CPS is a monthly sample survey of about 60,000 households conducted by the U.S. Census Bureau for the Bureau of Labor Statistics (BLS), principally to gather information on employment and unemployment. Respondents to the October 2003 supplement answered questions about computer and Internet use at home, school, and work in addition to other information. In the survey, respondents were asked if they “connected to the Internet or used e-mail or instant messaging.” In this release, these tasks are collectively referred to as “Internet use.” In addition, the data in this release cover the incidence of computer and Internet use at work and job search activity using the Internet. Since 1984, surveys of computer and, later, Internet use have been conducted periodically by the Census Bureau.

Data presented in this release incorporate changes associated with the introduction of the 2002 Census Bureau industry and occupational classification systems into the CPS and changes to the race and ethnicity categories. In addition, the data for 2003 reflect revised CPS population controls introduced in January 2003. For a discussion of the impact that these changes had on CPS data, see “Revisions to the Current Population Survey Effective in January 2003” in the February 2003 issue of *Employment and Earnings* and available at <http://www.bls.gov/cps/rvcps03.pdf> on the BLS Web site. The estimates from the September 2001 survey have been recalculated using the new Census 2000-based population controls. (See table A.) The revised population controls raised the overall levels, but had little or no impact on the rates.

Data on Internet job search are not directly comparable between the September 2001 and October 2003 surveys because the reference periods for job search differ. In the September 2001 survey, respondents were asked if they had used the Internet to search for a job “that year”—from January to September 2001. In the October 2003 survey, the reference period for job search was from January to October 2003.

Information in this release will be made available to sensory impaired individuals upon request. Voice phone: 202-691-5200; TDD message referral phone: 1-800-877-8339.

Reliability of the estimates

Statistics based on the CPS are subject to both sampling and nonsampling error. When a sample, rather than the entire population, is surveyed, there is a chance that the sample estimates may differ from the “true” population values they represent. The exact difference, or *sampling error*, varies

depending on the particular sample selected, and this variability is measured by the standard error of the estimate. There is about a 90-percent chance, or level of confidence, that an estimate based on a sample will differ by no more than 1.6 standard errors from the “true” population value because of sampling error. BLS analyses are generally conducted at the 90-percent level of confidence.

The CPS data also are affected by *nonsampling error*. Nonsampling error can occur for many reasons, including the failure to sample a segment of the population, inability to obtain information for all respondents in the sample, inability or unwillingness of respondents to provide correct information, and errors made in the collection or processing of the data.

For a full discussion of the reliability of data from the CPS and for information on estimating standard errors, see the “Explanatory Notes and Estimates of Error” section of *Employment and Earnings*.

Survey questions and concepts

Data discussed in this release on computer and Internet use at work and job search using the Internet were obtained from the following questions:

Do you use a computer at your main job?

1. Yes
2. No

At your main job, what do you do on the computer?

Do you do word processing or desktop publishing?

1. Yes
2. No

Do you connect to the Internet or use e-mail or instant messaging?

1. Yes
2. No

(Respondents who answer “yes” to this question are considered to be Internet users at work.)

Do you use a calendar or do scheduling on the computer?

1. Yes
2. No

Do you use spreadsheets or databases?

1. Yes
2. No

Do you do graphics and design?

1. Yes
2. No

Do you do programming?

1. Yes
2. No

The following questions on job search using the Internet were asked of *all* individuals in the survey who used the Internet.

This year, have you used the Internet to search for a job?

1. Yes
2. No

(“This year” refers to January to October 2003.)

How did you use the Internet to search for a job?

Did you read on-line job ads or search on-line job listings?

1. Yes
2. No

Did you research information about potential employers?

1. Yes
2. No

Did you submit a resume or application to an employer on-line?

1. Yes
2. No

Did you post a resume on a job listing site or with a service on-line?

1. Yes
2. No

Internet job search

The above questions on job search were asked of all Internet users in October 2003. The Internet job search questions in the supplement are different from the job search questions that are asked in the basic labor force section of the CPS and that are used in the classification of unemployment. The supplement questions on Internet job search cannot be used to determine the official classification of unemployment for several reasons. In the basic CPS, job search questions are not asked of persons with jobs, while in the October 2003 supplement, Internet job search questions were asked of all Internet users, including employed persons. Also, in the basic CPS, job search among the unemployed must have occurred within the 4 weeks prior to the survey collection; by contrast, the Internet job search activity recorded in the supplement could have occurred at any time from January to October 2003. Moreover, there is no information gathered in the supplement about respondents’ labor force status during this longer reference period. Finally, in the basic CPS, job search methods are divided into active and passive; only active methods—those that can lead to a job offer—classify a person as unemployed. The Internet job search methods in the supplement are not restricted to active methods. For example, reading job ads or listings online and researching information on potential employers are not considered to be active job search methods in the basic CPS. However, tables 5 and 6 showing Internet job search activity display both passive as well as active job search methods. Job search activity as measured in the basic CPS may or may not have involved the Internet.

Table 1. Employed persons who used a computer and the Internet at work by selected characteristics, October 2003

(Numbers in thousands)

Characteristic	Total employed	Used a computer at work		Used the Internet at work	
		Total	Percent of employed	Total	Percent of employed
AGE AND SEX					
Total, 16 years and over	138,823	76,986	55.5	57,892	41.7
16 to 24 years	19,304	6,991	36.2	4,234	21.9
16 to 19 years	5,788	1,301	22.5	559	9.7
20 to 24 years	13,516	5,690	42.1	3,675	27.2
25 years and over	119,519	69,995	58.6	53,658	44.9
25 to 34 years	30,401	17,641	58.0	13,608	44.8
35 to 44 years	34,854	20,797	59.7	16,226	46.6
45 to 54 years	32,221	19,607	60.9	15,017	46.6
55 to 64 years	17,202	9,930	57.7	7,499	43.6
65 years and over	4,842	2,021	41.7	1,307	27.0
Men	74,353	37,124	49.9	28,788	38.7
Women	64,470	39,862	61.8	29,104	45.1
RACE AND HISPANIC OR LATINO ETHNICITY					
White	115,184	65,193	56.6	49,347	42.8
Black or African American	14,754	6,729	45.6	4,553	30.9
Asian	5,809	3,523	60.6	2,882	49.6
Hispanic or Latino ethnicity	17,602	5,478	31.1	3,718	21.1
FULL- OR PART-TIME STATUS					
Usually full time on primary job	103,757	61,538	59.3	47,472	45.8
Usually part time on primary job	22,487	9,708	43.2	6,255	27.8
Hours vary on primary job	12,579	5,740	45.6	4,165	33.1
EDUCATIONAL ATTAINMENT					
Total, 25 years and over	119,519	69,995	58.6	53,658	44.9
Less than a high school diploma	11,520	1,810	15.7	899	7.8
High school graduates, no college ¹	36,065	15,208	42.2	9,521	26.4
Some college or associate degree	32,455	19,907	61.3	14,445	44.5
Bachelor's degree and higher ²	39,479	33,071	83.8	28,793	72.9
Advanced degree	13,831	11,982	86.6	10,709	77.4

¹ Includes persons with a high school diploma or equivalent.

² Includes persons with bachelor's, master's, professional, and doctoral degrees.

NOTE: Data refer to computer and Internet use on the sole or primary job. Internet use at work refers to either connecting to the Internet or using e-mail.

Estimates for the above race groups (white, black or African American, and Asian) do not sum to totals because data are not presented for all races. In addition, persons whose ethnicity is Hispanic or Latino may be of any race and, therefore, are classified by ethnicity as well as by race.

Table 2. Employed persons who used a computer and the Internet at work by occupation and industry, October 2003

(Numbers in thousands)

Occupation and industry	Total employed	Used a computer at work		Used the Internet at work	
		Total	Percent of employed	Total	Percent of employed
OCCUPATION					
Total, 16 years and over	138,823	76,986	55.5	57,892	41.7
Management, professional, and related occupations	48,252	38,398	79.6	32,391	67.1
Management, business, and financial operations occupations	19,600	15,842	80.8	13,938	71.1
Professional and related occupations	28,652	22,556	78.7	18,452	64.4
Service occupations	21,887	6,025	27.5	3,490	15.9
Sales and office occupations	35,492	23,874	67.3	16,990	47.9
Sales and related occupations	16,051	9,577	59.7	6,949	43.3
Office and administrative support occupations	19,441	14,297	73.5	10,041	51.6
Natural resources, construction, and maintenance occupations	15,003	3,965	26.4	2,497	16.6
Farming, fishing, and forestry occupations	1,270	140	11.0	79	6.3
Construction and extraction occupations	8,392	1,589	18.9	1,046	12.5
Installation, maintenance, and repair occupations	5,341	2,237	41.9	1,371	25.7
Production, transportation, and material moving occupations	18,189	4,723	26.0	2,525	13.9
Production occupations	9,736	2,878	29.6	1,577	16.2
Transportation and material moving occupations	8,454	1,845	21.8	948	11.2
INDUSTRY					
Total, 16 years and over	138,823	76,986	55.5	57,892	41.7
Private wage and salary workers	108,135	57,855	53.5	42,505	39.3
Agriculture and related industries	1,475	299	20.2	187	12.7
Nonagricultural industries	106,660	57,557	54.0	42,317	39.7
Mining	519	221	42.5	165	31.8
Construction	8,198	2,304	28.1	1,719	21.0
Manufacturing	16,420	8,521	51.9	6,416	39.1
Durable goods	10,179	5,540	54.4	4,192	41.2
Nondurable goods	6,241	2,981	47.8	2,224	35.6
Wholesale and retail trade	19,571	9,998	51.1	6,406	32.7
Transportation and utilities	5,167	2,462	47.6	1,741	33.7
Information	3,217	2,493	77.5	2,170	67.5
Financial activities	8,888	7,328	82.4	6,127	68.9
Professional and business services	11,485	7,850	68.4	6,554	57.1
Education and health services	17,063	10,620	62.2	7,297	42.8
Leisure and hospitality	10,288	3,126	30.4	1,815	17.6
Other services	5,844	2,635	45.1	1,907	32.6
Government workers	19,937	13,773	69.1	11,158	56.0
Federal	3,258	2,198	67.5	1,757	53.9
State	5,759	4,234	73.5	3,664	63.6
Local	10,920	7,341	67.2	5,737	52.5
Self-employed and unpaid family workers	10,751	5,357	49.8	4,229	39.3

NOTE: Data refer to computer and Internet use on the sole or primary job. Internet use at work refers to either connecting to the Internet or using e-mail.

Table 3. Type of computer activity at work by selected characteristics, October 2003

Characteristic	Employed persons who used a computer at work (in thousands)	Percent who used a computer for:					
		Word processing or desktop publishing	Internet or e-mail	Calendar or scheduling	Spreadsheets or databases	Graphics or design	Programming
AGE AND SEX							
Total, 16 years and over	76,986	67.6	75.2	56.8	64.2	29.7	16.4
16 to 24 years	6,991	57.2	60.6	47.8	54.8	21.6	12.4
16 to 19 years	1,301	44.8	43.0	41.3	43.9	18.3	12.5
20 to 24 years	5,690	60.1	64.6	49.3	57.3	22.3	12.4
25 years and over	69,995	68.7	76.7	57.7	65.1	30.5	16.8
25 to 34 years	17,641	68.9	77.1	59.9	67.0	31.0	18.4
35 to 44 years	20,797	69.9	78.0	60.8	68.4	32.3	18.4
45 to 54 years	19,607	69.2	76.6	57.2	64.5	30.5	16.1
55 to 64 years	9,930	66.2	75.5	52.3	59.5	28.0	13.8
65 years and over	2,021	60.3	64.7	39.2	48.9	19.8	8.2
Men	37,124	65.5	77.5	58.5	67.1	33.8	21.4
Women	39,862	69.6	73.0	55.3	61.5	25.9	11.8
RACE AND HISPANIC OR LATINO ETHNICITY							
White	65,193	68.0	75.7	56.6	64.8	30.1	15.9
Black or African American	6,729	61.6	67.7	56.5	55.2	24.1	16.6
Asian	3,523	73.7	81.8	62.1	69.5	32.0	25.3
Hispanic or Latino ethnicity	5,478	62.8	67.9	56.1	58.7	24.8	15.6
FULL- OR PART-TIME STATUS							
Usually full time on primary job	61,538	68.5	77.1	59.1	66.3	30.3	17.3
Usually part time on primary job	9,708	63.9	64.4	44.2	52.7	24.5	11.1
Hours vary on primary job	5,740	65.0	72.6	54.2	61.5	32.1	16.3
EDUCATIONAL ATTAINMENT							
Total, 25 years and over	69,995	68.7	76.7	57.7	65.1	30.5	16.8
Less than a high school diploma	1,810	43.7	49.7	40.4	45.0	15.8	11.4
High school graduates, no college ¹	15,208	53.1	62.6	47.6	53.8	19.1	12.0
Some college or associate degree	19,907	63.5	72.6	55.0	62.3	26.0	15.2
Bachelor's degree and higher ²	33,071	80.3	87.1	65.0	73.1	39.3	20.3
Advanced degree	11,982	84.5	89.4	65.3	72.3	41.5	20.0

¹ Includes persons with a high school diploma or equivalent.

² Includes persons with bachelor's, master's, professional, and doctoral degrees.

NOTE: Data refer to computer use on the sole or primary job. The percentage of persons who used computers for various activities may exceed 100 percent as persons may report multiple

activities. Estimates for the above race groups (white, black or African American, and Asian) do not sum to totals because data are not presented for all races. In addition, persons whose ethnicity is Hispanic or Latino may be of any race and, therefore, are classified by ethnicity as well as by race.

Table 4. Type of computer activity at work by occupation and industry, October 2003

Occupation and industry	Employed persons who used a computer at work (in thousands)	Percent who used a computer for:					
		Word processing or desktop publishing	Internet or e-mail	Calendar or scheduling	Spreadsheets or databases	Graphics or design	Programming
OCCUPATION							
Total, 16 years and over	76,986	67.6	75.2	56.8	64.2	29.7	16.4
Management, professional, and related occupations	38,398	76.9	84.4	63.0	70.7	37.6	20.6
Management, business, and financial operations occupations	15,842	79.9	88.0	69.1	79.8	35.8	18.4
Professional and related occupations	22,556	74.8	81.8	58.7	64.4	38.9	22.1
Service occupations	6,025	55.0	57.9	48.5	48.5	19.9	11.9
Sales and office occupations	23,874	63.8	71.2	53.9	62.3	22.1	11.6
Sales and related occupations	9,577	60.6	72.6	53.3	61.0	26.2	11.6
Office and administrative support occupations ..	14,297	66.0	70.2	54.3	63.1	19.4	11.6
Natural resources, construction, and maintenance occupations	3,965	51.4	63.0	44.0	53.3	23.0	15.7
Farming, fishing, and forestry occupations	140	54.6	56.9	39.7	54.8	19.5	6.1
Construction and extraction occupations	1,589	60.9	65.8	43.9	56.6	25.9	12.8
Installation, maintenance, and repair occupations	2,237	44.4	61.3	44.3	50.8	21.1	18.3
Production, transportation, and material moving occupations	4,723	41.3	53.5	43.1	49.9	21.4	13.4
Production occupations	2,878	42.0	54.8	43.0	52.4	25.9	14.9
Transportation and material moving occupations	1,845	40.3	51.4	43.3	46.0	14.4	11.1
INDUSTRY							
Total, 16 years and over	76,986	67.6	75.2	56.8	64.2	29.7	16.4
Private wage and salary workers	57,855	65.0	73.5	57.5	64.4	27.8	16.8
Agriculture and related industries	299	64.4	62.7	38.5	57.6	14.2	9.2
Nonagricultural industries	57,557	65.0	73.5	57.6	64.4	27.9	16.8
Mining	221	66.4	75.0	55.1	76.9	35.7	12.7
Construction	2,304	70.8	74.6	52.6	67.0	30.6	15.2
Manufacturing	8,521	63.2	75.3	60.2	70.5	35.2	22.0
Durable goods	5,540	64.1	75.7	61.4	71.5	36.5	24.4
Nondurable goods	2,981	61.5	74.6	57.7	68.6	32.6	17.5
Wholesale and retail trade	9,998	52.8	64.1	49.6	58.8	20.4	12.5
Transportation and utilities	2,462	54.4	70.7	56.8	60.1	24.4	15.1
Information	2,493	73.2	87.0	64.2	70.6	38.1	23.9
Financial activities	7,328	71.0	83.6	61.2	72.0	24.3	15.8
Professional and business services	7,850	75.8	83.5	65.6	74.1	36.2	24.1
Education and health services	10,620	66.1	68.7	56.1	54.8	23.4	13.1
Leisure and hospitality	3,126	56.3	58.0	53.4	54.2	21.7	10.9
Other services	2,635	71.0	72.4	56.8	61.9	34.1	16.1
Government workers	13,773	76.2	81.0	56.2	64.0	33.8	15.1
Federal	2,198	70.8	79.9	57.0	68.5	31.6	17.0
State	4,234	79.4	86.5	60.2	68.3	35.6	17.5
Local	7,341	75.9	78.2	53.7	60.1	33.4	13.1
Self-employed and unpaid family workers	5,357	74.3	79.0	50.9	62.8	39.4	16.1

NOTE: Data refer to computer use on the sole or primary job. The percentage of persons who use computers for various activities may exceed 100 percent as persons may report multiple activities.

Table 5. Job search activity¹ using the Internet by selected characteristics, October 2003

(Numbers in thousands)

Characteristic	Total civilian noninstitutional population			Job search activity of persons who used the Internet to search for a job (percent)			
	Total	Total who used the Internet to search for a job	Percent of total	Read on-line ads or searched on-line job listings	Researched information on potential employers	Submitted a resume or application	Posted a resume on a job listing site or with a service
AGE AND SEX							
Total, 16 years and over	222,039	25,459	11.5	92.6	70.2	57.0	41.0
16 to 24 years	36,017	5,676	15.8	92.0	63.4	55.1	39.2
16 to 19 years	16,145	1,470	9.1	88.9	51.1	46.3	27.9
20 to 24 years	19,872	4,206	21.2	93.1	67.7	58.2	43.1
25 years and over	186,022	19,784	10.6	92.8	72.2	57.5	41.6
25 to 34 years	39,094	7,538	19.3	93.7	74.9	60.0	42.6
35 to 44 years	43,670	6,228	14.3	92.8	71.3	57.3	41.4
45 to 54 years	40,760	4,163	10.2	91.9	70.5	55.6	41.7
55 to 64 years	28,112	1,595	5.7	91.1	68.0	53.1	38.1
65 years and over	34,385	260	.8	91.4	68.4	47.4	35.3
Men	106,879	12,460	11.7	92.4	73.5	59.8	42.8
Women	115,160	12,999	11.3	92.9	67.1	54.3	39.4
RACE AND HISPANIC OR LATINO ETHNICITY							
White	181,871	20,310	11.2	92.3	70.1	56.1	39.5
Black or African American	25,825	3,120	12.1	93.7	70.8	62.3	49.2
Asian	9,328	1,297	13.9	93.5	73.5	60.0	45.2
Hispanic or Latino ethnicity	27,913	2,304	8.3	92.1	68.5	55.9	42.2
EDUCATIONAL ATTAINMENT							
Total, 25 years and over	186,022	19,784	10.6	92.8	72.2	57.5	41.6
Less than a high school diploma	27,757	619	2.2	92.9	60.0	52.9	35.0
High school graduates, no college ²	59,569	3,846	6.5	93.3	63.7	51.7	39.4
Some college or associate degree	46,741	6,200	13.3	93.2	69.1	55.5	40.6
Bachelor's degree and higher ³	51,954	9,119	17.6	92.3	78.8	61.6	43.6
Advanced degree	17,846	2,868	16.1	90.8	80.9	60.6	41.8

¹ Refers to use of the Internet to search for a job "this year," that is, from January to October 2003.

² Includes persons with a high school diploma or equivalent.

³ Includes persons with bachelor's, master's, professional, and doctoral degrees.

NOTE: The percentage of persons performing each activity

may exceed 100 percent as persons may perform more than one activity. Estimates for the above race groups (white, black or African American, and Asian) do not sum to totals because data are not presented for all races. In addition, persons whose ethnicity is Hispanic or Latino may be of any race and, therefore, are classified by ethnicity as well as by race.

Table 6. Job search activity¹ using the Internet by occupation and industry, October 2003

(Numbers in thousands)

Occupation and industry	Experienced labor force			Job search activity of persons who used the Internet to search for a job (percent)			
	Total	Total who used the Internet to search for a job	Percent of total	Read on-line ads or searched on-line job listings	Researched information on potential employers	Submitted a resume or application	Posted a resume on a job listing site or with a service
OCCUPATION							
Total, 16 years and over	146,532	21,877	14.9	92.9	71.6	58.2	42.2
Management, professional, and related occupations	49,744	9,620	19.3	92.7	76.3	59.8	43.7
Management, business, and financial operations occupations	20,225	3,648	18.0	93.8	80.8	64.0	47.1
Professional and related occupations	29,519	5,972	20.2	92.1	73.5	57.3	41.6
Service occupations	23,616	2,591	11.0	91.3	65.1	52.9	35.6
Sales and office occupations	37,536	6,456	17.2	93.2	69.9	59.0	43.4
Sales and related occupations	17,080	2,762	16.2	92.1	72.2	59.3	43.6
Office and administrative support occupations ..	20,456	3,694	18.1	94.0	68.2	58.8	43.2
Natural resources, construction, and maintenance occupations	16,084	1,386	8.6	93.6	65.4	57.3	40.3
Farming, fishing, and forestry occupations	1,387	61	4.4	99.0	76.1	71.0	35.4
Construction and extraction occupations	9,046	715	7.9	93.0	64.0	55.6	37.0
Installation, maintenance, and repair occupations	5,652	610	10.8	93.9	66.0	57.8	44.6
Production, transportation, and material moving occupations	19,522	1,803	9.2	94.8	66.1	55.2	40.9
Production occupations	10,429	878	8.4	95.1	65.8	54.9	43.1
Transportation and material moving occupations	9,094	925	10.2	94.4	66.3	55.5	38.7
INDUSTRY							
Total, 16 years and over	146,532	21,877	14.9	92.9	71.6	58.2	42.2
Private wage and salary workers	114,995	17,710	15.4	93.3	72.0	59.5	43.5
Agriculture and related industries	1,613	85	5.3	94.7	67.1	55.3	36.4
Nonagricultural industries	113,382	17,625	15.5	93.3	72.0	59.5	43.5
Mining	551	61	11.0	90.2	62.8	53.7	36.1
Construction	8,852	813	9.2	93.0	66.4	55.4	39.5
Manufacturing	17,478	2,367	13.5	94.8	72.3	59.7	46.3
Durable goods	10,875	1,603	14.7	95.1	71.4	59.0	47.3
Nondurable goods	6,604	764	11.6	94.1	74.2	61.2	44.0
Wholesale and retail trade	20,778	3,087	14.9	93.5	69.0	58.9	42.3
Transportation and utilities	5,429	702	12.9	93.9	76.7	61.1	39.1
Information	3,400	788	23.2	94.7	81.9	63.3	45.0
Financial activities	9,198	1,774	19.3	94.1	75.9	64.2	48.0
Professional and business services	12,517	2,803	22.4	94.6	76.5	66.7	51.2
Education and health services	17,713	2,945	16.6	91.6	69.6	54.9	39.2
Leisure and hospitality	11,236	1,572	14.0	90.4	66.9	51.7	35.8
Other services	6,229	711	11.4	91.7	68.9	57.2	41.2
Government workers	20,445	3,114	15.2	92.0	69.1	51.3	34.7
Federal	3,402	661	19.4	90.7	70.8	55.4	40.4
State	5,869	1,009	17.2	92.4	65.2	43.8	29.3
Local	11,174	1,445	12.9	92.3	70.9	54.6	35.8
Self-employed and unpaid family workers	11,092	1,053	9.5	89.5	72.4	57.5	42.1

¹ Refers to use of the Internet to search for a job "this year," that is, from January to October 2003.

NOTE: Data refer to computer and Internet use on the sole or primary job.