



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

## Computer and Internet Use in the United States: 2003

**Citation for published version:**

Day, JC, Janus, A & Davis, J 2005, *Computer and Internet Use in the United States: 2003*. October 2015 edn, US Department of Commerce, Washington, DC. <<https://www.census.gov/prod/2005pubs/p23-208.pdf>>

**Link:**

[Link to publication record in Edinburgh Research Explorer](#)

**Document Version:**

Publisher's PDF, also known as Version of record

**Publisher Rights Statement:**

© Day, J. C., Janus, A., & Davis, J. (2005). *Computer and Internet Use in the United States: 2003*. Washington, DC: US Department of Commerce.

**General rights**

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

**Take down policy**

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact [openaccess@ed.ac.uk](mailto:openaccess@ed.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.



# Computer and Internet Use in the United States: 2003

Issued October 2005

*Special Studies*

P23-208

## Current Population Reports

By  
Jennifer Cheeseman Day,  
Alex Janus, and  
Jessica Davis

### Introduction

This report provides information about the characteristics of households and people who have and have not adopted use of computers and the Internet. The findings in this report are based on data collected in a supplement to the October 2003 Current Population Survey that included questions about computer and Internet use at home, school, and work.<sup>1</sup> The U.S. Census Bureau has asked questions in the Current Population Survey to assess computer use since 1984 and Internet use since 1997.

The first part of this report examines computer and Internet use in households. The

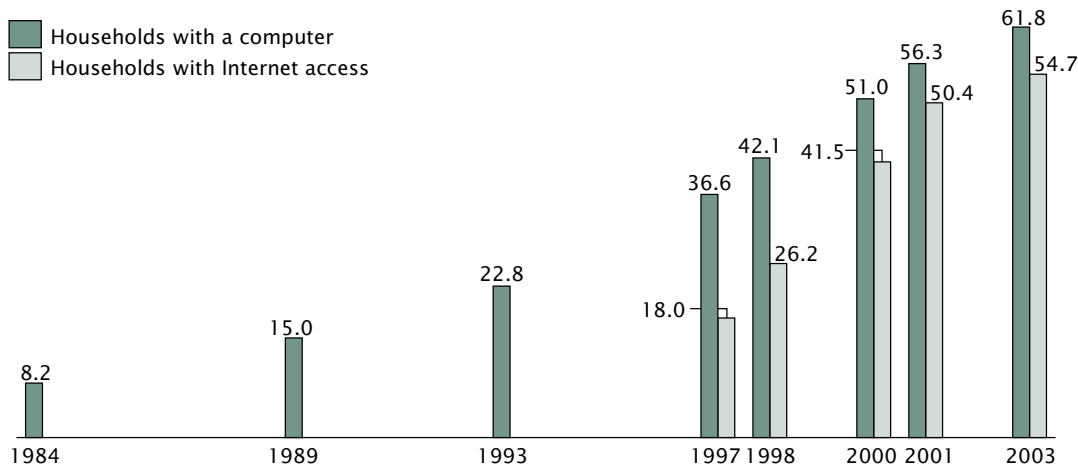
second and third parts of the report deal with computer and Internet use among children and adults, respectively.

### COMPUTERS AND INTERNET ACCESS IN HOUSEHOLDS

#### Prevalence of Personal Computers and Internet Access

The majority of households have personal computers and Internet access. In 2003, 70 million American households, or 62 percent, had one or more computers, up from 56 percent in 2001 (Figure 1).<sup>2</sup> In 1984, the proportion of households with a computer was 8 percent.

Figure 1.  
**Households With a Computer and Internet Access: 1984 to 2003**  
(In percent)



Source: U.S. Census Bureau, Current Population Survey, 1984, 1989, 1993, 1997, 1998, 2000, 2001, 2003.

<sup>1</sup> The data in this report are from the Computer and Internet Use Supplement to the October 2003 Current Population Survey. The population represented (the population universe) is the civilian noninstitutionalized population living in the United States.

<sup>2</sup> The estimates in this report (which may be shown in text, figures, and tables) are based on responses from a sample of the population and may differ from actual values because of sampling variability or other factors. As a result, apparent differences between the estimates for two or more groups may not be statistically significant. All comparative statements have undergone statistical testing and are significant at the 90-percent confidence level unless otherwise noted.

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

*Helping You Make Informed Decisions*

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

Table A.  
**Households With a Computer and Internet Access by Selected Characteristics: 2003**

(Numbers in thousands)

Characteristic	Total households	Computer in household			Internet access		
		Number	Percent		Number	Percent	
			Estimate	90-percent confidence interval		Estimate	90-percent confidence interval
<b>Total</b> .....	<b>113,126</b>	<b>69,912</b>	<b>61.8</b>	<b>61.5–62.1</b>	<b>61,852</b>	<b>54.7</b>	<b>54.4–55.0</b>
<b>AGE OF HOUSEHOLDER</b>							
15 to 24 years .....	7,115	4,034	56.7	55.4–58.0	3,350	47.1	45.8–48.4
25 to 34 years .....	19,718	13,543	68.7	68.0–69.4	11,901	60.4	59.6–61.2
35 to 44 years .....	23,856	17,482	73.3	72.7–73.9	15,572	65.3	64.6–66.0
45 to 54 years .....	22,905	16,464	71.9	71.2–72.6	14,922	65.1	64.4–65.8
55 to 64 years .....	16,488	10,405	63.1	62.3–63.9	9,335	56.6	55.7–57.5
65 years and over .....	23,044	8,005	34.7	34.0–35.4	6,773	29.4	28.7–30.1
<b>RACE/HISPANIC ORIGIN OF HOUSEHOLDER</b>							
White alone .....	93,014	59,482	63.9	63.5–64.3	53,038	57.0	56.6–57.4
White alone, non-Hispanic .....	81,857	54,541	66.6	66.2–67.0	49,017	59.9	59.5–60.3
Black alone .....	13,746	6,136	44.6	43.7–45.5	4,951	36.0	35.1–36.9
Asian alone .....	4,009	2,923	72.9	71.4–74.4	2,674	66.7	65.1–68.3
Hispanic (any race) .....	12,023	5,321	44.3	43.0–45.6	4,326	36.0	34.8–37.2
<b>HOUSEHOLD TYPE</b>							
Family household .....	76,617	53,292	69.6	69.2–70.0	47,536	62.0	61.6–62.4
Married-couple family .....	58,433	43,152	73.8	73.4–74.2	39,176	67.0	66.6–67.4
Male householder, no wife present ..	4,824	2,701	56.0	54.4–57.6	2,310	47.9	46.3–49.5
Female householder, no husband present .....	13,360	7,438	55.7	54.7–56.7	6,049	45.3	44.3–46.3
Nonfamily household .....	36,509	16,644	45.6	45.0–46.2	14,316	39.2	38.6–39.8
<b>PRESENCE OF SCHOOL-AGED CHILDREN IN HOUSEHOLD</b>							
With children 6 to 17 years .....	30,271	23,054	76.2	75.7–76.7	20,293	67.0	66.4–67.6
Without children 6 to 17 years .....	82,854	46,881	56.6	56.2–57.0	41,559	50.2	49.8–50.6
<b>HOUSEHOLD SIZE</b>							
1 person .....	29,926	12,318	41.2	40.6–41.8	10,434	34.9	34.3–35.5
2 people .....	38,034	23,963	63.0	62.4–63.6	21,430	56.3	55.7–56.9
3 or more people .....	45,165	33,655	74.5	74.0–75.0	29,988	66.4	65.9–66.9
<b>EDUCATIONAL ATTAINMENT OF HOUSEHOLDER</b>							
Less than high school graduate .....	16,972	4,740	27.9	27.1–28.7	3,434	20.2	19.5–20.9
High school graduate/GED <sup>1</sup> .....	34,377	17,567	51.1	50.5–51.7	14,813	43.1	42.5–43.7
Some college or associate's degree ..	30,320	21,439	70.7	70.1–71.3	18,967	62.6	62.0–63.2
Bachelor's degree .....	20,464	16,753	81.9	81.3–82.5	15,720	76.8	76.1–77.5
Advanced degree .....	10,993	9,437	85.8	85.1–86.5	8,918	81.1	80.3–81.9
<b>FAMILY INCOME (annual)</b>							
<b>Total families</b> .....	<b>76,617</b>	<b>53,292</b>	<b>69.6</b>	<b>69.2–70.0</b>	<b>47,536</b>	<b>62.0</b>	<b>61.6–62.4</b>
Less than \$25,000 .....	13,905	5,706	41.0	40.0–42.0	4,276	30.7	29.8–31.6
\$25,000–\$49,999 .....	18,281	12,232	66.9	66.1–67.7	10,468	57.3	56.4–58.2
\$50,000–\$74,999 .....	12,979	10,858	83.7	82.9–84.5	10,117	77.9	77.0–78.8
\$75,000–\$99,999 .....	7,918	7,112	89.8	89.0–90.6	6,796	85.8	84.9–86.7
\$100,000 or more .....	9,292	8,795	94.7	94.2–95.2	8,564	92.2	91.6–92.8
Not reported .....	14,242	8,589	60.3	59.3–61.3	7,315	51.4	50.4–52.4
<b>REGION</b>							
Northeast .....	21,570	13,474	62.5	61.8–63.2	12,155	56.4	55.7–57.1
Midwest .....	26,139	16,029	61.3	60.7–62.0	14,010	53.6	52.9–54.3
South .....	40,746	23,974	58.8	58.2–59.4	21,082	51.7	51.1–52.3
West .....	24,671	16,459	66.7	66.0–67.4	14,605	59.2	58.5–60.0

<sup>1</sup> General equivalency diploma.

Source: U.S. Census Bureau, Current Population Survey, October 2003.

Sixty-two million households, or 55 percent, had Internet access, up from 50 percent in 2001, and more than triple the proportion of households with Internet access in 1997 (18 percent). Most households with a computer also had Internet access (88 percent).<sup>3</sup> In 1997, less than half of households with computers had someone using the Internet.

While computer ownership and home Internet access have been adopted widely, some groups had lower adoption rates. For instance, 35 percent of households with householders aged 65 and older, about 45 percent of households with Black or Hispanic householders, and 28 percent of households with householders who had less than a high school education had a computer (Table A).<sup>4</sup> In addition, 41 percent of one-person households and 46 percent of nonfamily households owned a computer.<sup>5</sup> Differences among households in Internet access mirror those for computer ownership.

<sup>3</sup> Twelve percent of households with a computer did not have Internet access, and another one-half million (less than 1 percent) without a computer accessed the Internet using some other device.

The presence of a school-aged child also influenced whether a household had a computer or Internet access. More than three-quarters of households with a school-aged child (6 to 17 years) had a computer, and 67 percent had Internet access. In comparison, 57 percent of households without a school-aged child had a computer, and 50 percent had Internet access.

High-income households were more likely to have a computer or Internet access. Among family households with incomes of \$100,000 or more during the 12 months prior to the survey, 95 percent had at least one computer and 92 percent had Internet access at home. Among family households with incomes below \$25,000, 41 percent had a com-

<sup>4</sup> Hereafter, this report uses the term non-Hispanic White to refer to people who reported they are White only and not Hispanic or Latino. The term Black is used to refer to people who reported the single race Black or African American, the term Asian refers to people who reported the single race Asian, and the term Hispanic refers to people who are Hispanic or Latino. Because Hispanics may be any race, data in this report for Hispanics overlap slightly with data for the Black population and for the Asian population. Based on the October 2003 Current Population Survey, 3.6 percent of the single-race Black population 3 years and older and 1.0 percent of the single-race Asian population 3 years and older were Hispanic.

puter and 31 percent had Internet access.

### Households Without Internet Access

Forty-five percent of households did not have Internet access at home in 2003.<sup>6</sup> The three most common reasons were “don’t need it, not interested” (39 percent), “costs are too high,” and “no computer or computer inadequate” (each at 23 percent, Table B). A few households had “access elsewhere” (2 percent). “Language barriers,” “concern that children will access inappropriate sites,” and “privacy and security concerns” were rarely given as reasons (each 1 percent).<sup>7</sup>

Among households without the Internet, more than 4 out of 5 also did

<sup>5</sup> The percent of households with computers with either Black or Hispanic householders is not significantly different from the percent of nonfamily households with computers.

<sup>6</sup> The Current Population Survey asked why respondents did not have Internet access. It did not ask reasons for not having a home computer.

<sup>7</sup> The value for “language barriers” is statistically different from the values for “concern that children will access inappropriate sites” and “privacy and security concerns.”

Table B.  
**Reasons for Not Using the Internet at Home by Presence of a Computer in the Household: 2003**

(Numbers in thousands)

Characteristic	Total		Computer in household		No computer in household	
	Number	Percent	Number	Percent	Number	Percent
<b>INTERNET ACCESS</b>						
<b>Total households</b> .....	<b>113,126</b>	<b>100.0</b>	<b>69,912</b>	<b>100.0</b>	<b>43,214</b>	<b>100.0</b>
Internet access .....	61,852	54.7	61,258	87.6	594	1.4
No Internet access .....	51,274	45.3	8,654	12.4	42,620	98.6
<b>REASONS FOR NO INTERNET ACCESS</b>						
<b>Total households</b> .....	<b>51,274</b>	<b>100.0</b>	<b>8,654</b>	<b>100.0</b>	<b>42,620</b>	<b>100.0</b>
Don't need it, not interested .....	20,185	39.4	2,649	30.6	17,537	41.1
Costs are too high .....	11,950	23.3	2,694	31.1	9,256	21.7
No computer or computer inadequate .....	11,777	23.0	717	8.3	11,060	26.0
Lack of confidence or skills .....	2,282	4.5	375	4.3	1,907	4.5
Lack of time to use the Internet .....	1,177	2.3	521	6.0	656	1.5
Have access to Internet elsewhere .....	1,064	2.1	445	5.1	619	1.5
Concern that children will access inappropriate sites .....	451	0.9	284	3.3	166	0.4
Privacy and security concerns .....	402	0.8	184	2.1	217	0.5
Language barriers .....	266	0.5	7	0.1	259	0.6
Other reason .....	1,720	3.4	778	9.0	942	2.2

Source: U.S. Census Bureau, Current Population Survey, October 2003.

not have a computer (83 percent). For 41 percent of these computer-less households, “don’t need it, not interested” was the primary reason for not having Internet access. For about one-fourth of these households, the lack of a computer was the primary reason.

As shown in Figure 2, disinterest in the Internet is related to the age of the householder. Of the 20 million householders who stated they were not interested in the Internet, over 60 percent (12.7 million) were aged 55 and older. Householders aged 15 to 44 without Internet access most frequently cited “costs are too high” as the reason.

### Regional and State Rates of Computer and Internet Access

While households in the West had the highest rates of access to these technologies, households in the Northeast, Midwest, and South were close behind (Table A). In 2003, 67 percent of households in the West had at least one computer in the home, and 59 percent of house-

holds had Internet access. Southern households had the lowest rates of access: 59 percent had a computer and 52 percent had an Internet connection.

Since 2000, rates of computer use have become more uniform across the country, narrowing the technology gap between the West and the South. The difference between the two regions decreased from 10 percentage points in 2000 (57 percent in the West and 47 percent in the South) to 8 percentage points in 2003.

Households in Utah, Alaska, New Hampshire, and Washington were among those with the highest rates of computer ownership (about 72 percent, Figure 3), while the rates in Mississippi, Arkansas, and Louisiana were among the lowest (about 50 percent). Alaska and New Hampshire were also among the states with the highest proportions of households with access to the Internet (about 65 percent). Households in Mississippi and Arkansas were among those with the lowest

proportions of Internet access in the home: about 40 percent.<sup>8</sup>

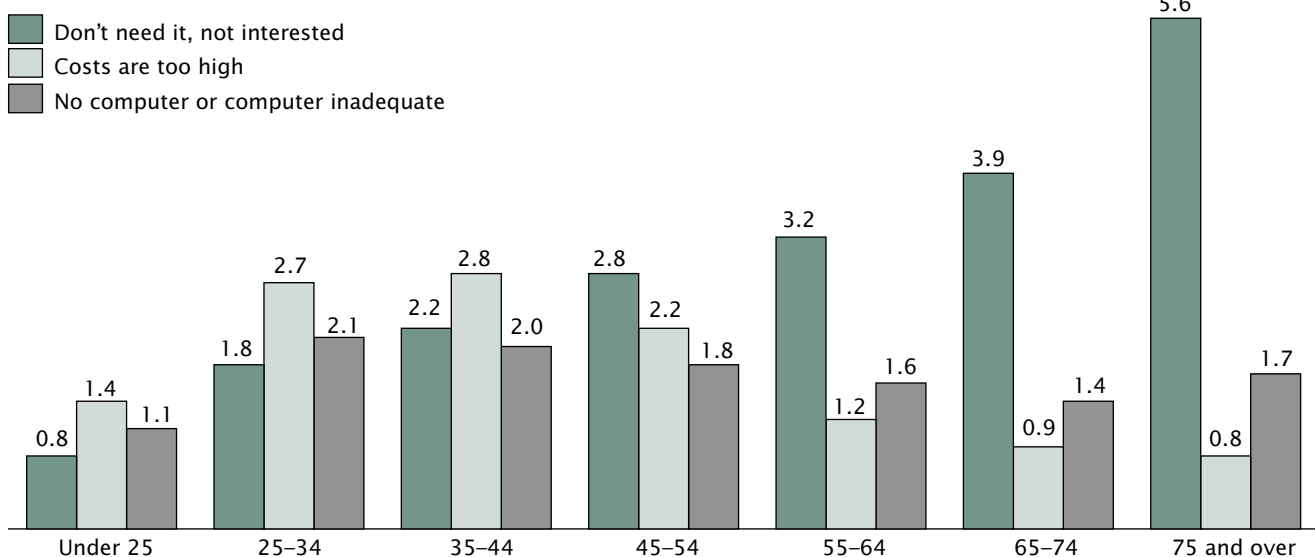
### COMPUTER AND INTERNET USE AMONG CHILDREN

Historically, access to computer and Internet technology has been discussed separately from its actual use. Since almost 9 in 10 children living in a household with a computer used it in 2003, the difference between access and use is minimal (Table C). The percentage of children living in a household with a computer who used it increased from 75 percent in 1993 to 86 percent in 2003.<sup>9</sup>

<sup>8</sup> Utah’s rate of computer ownership was higher than that of other states except for Alaska, New Hampshire, and Washington. Mississippi’s rate of computer ownership was lower than that of other states except for Arkansas and Louisiana. Alaska’s rate of Internet access was higher than that of other states except for New Hampshire. Mississippi’s rate of Internet access was lower than that of other states except for Arkansas.

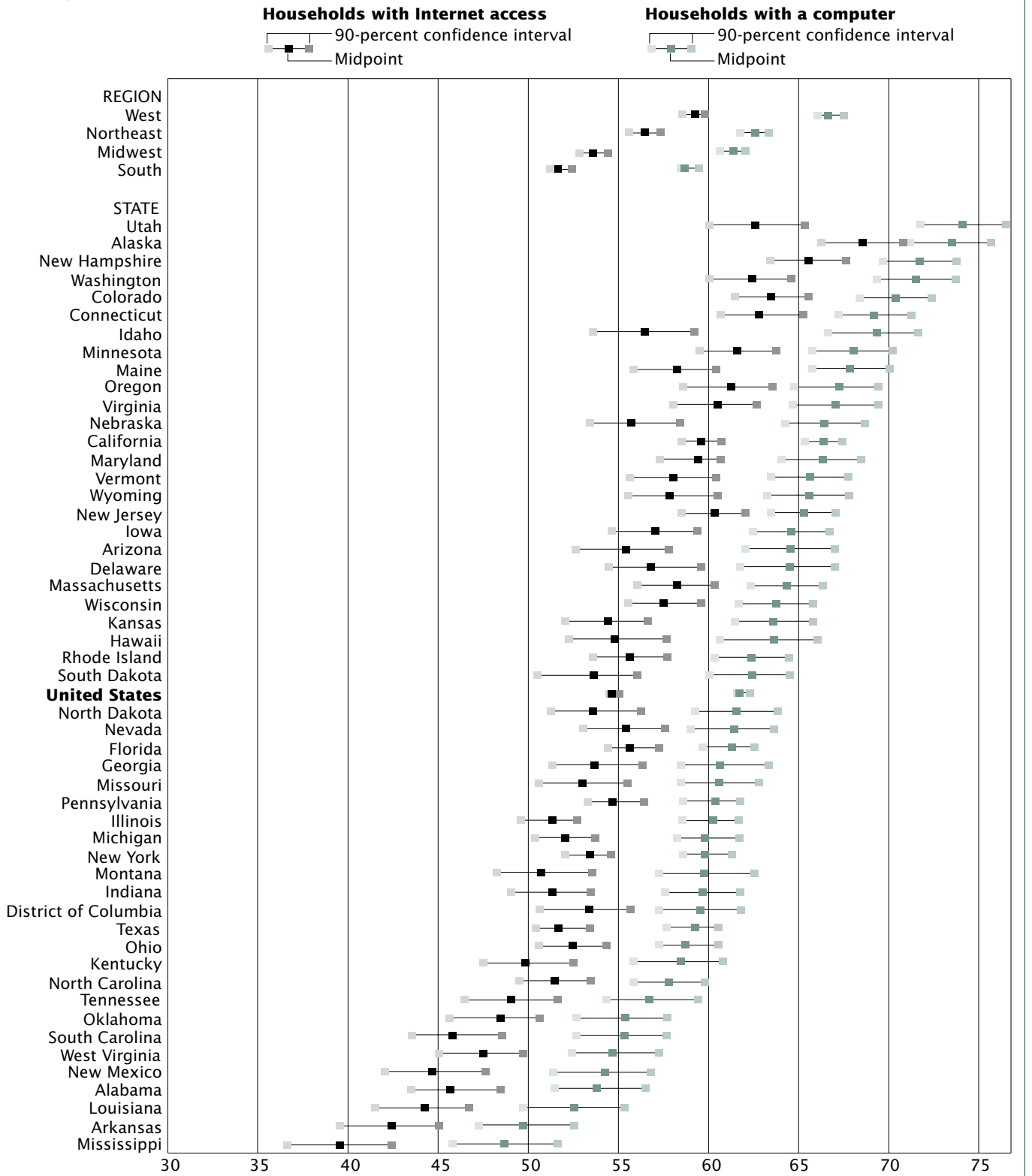
<sup>9</sup> For more information on computer use in 1993, see the detailed tables at <[www.census.gov/population/www/socdemo/computer/computer93.html](http://www.census.gov/population/www/socdemo/computer/computer93.html)>.

Figure 2.  
**Selected Reasons for No Internet Access in Household by Age of Householder: 2003**  
(In millions)



Source: U.S. Census Bureau, Current Population Survey, October 2003.

Figure 3.  
**Households With a Computer and Internet Access by Region and State: 2003**  
(In percent)



Source: U.S. Census Bureau, Current Population Survey, October 2003.

Table C.  
**Computer and Internet Use for Children 3 to 17 Years: 2003**

(Numbers in thousands)

Characteristic	Total	Computer at home			Internet at home			Enrolled in school			Percent <sup>1</sup> using a computer anywhere	Percent <sup>1</sup> using Internet anywhere
		Number	Percent <sup>1</sup>	Percent <sup>2</sup> using home computer	Number	Percent <sup>1</sup>	Percent <sup>3</sup> using Internet	Number enrolled	Percent <sup>4</sup> using computer at school	Percent <sup>4</sup> using Internet at school		
<b>Total</b> .....	<b>61,897</b>	<b>46,746</b>	<b>75.5</b>	<b>86.3</b>	<b>40,923</b>	<b>66.1</b>	<b>63.5</b>	<b>56,588</b>	<b>83.4</b>	<b>43.1</b>	<b>86.1</b>	<b>56.1</b>
<b>AGE</b>												
3 to 5 years .....	12,204	8,565	70.2	67.1	7,512	61.6	24.6	8,144	52.5	10.8	59.2	23.4
6 to 9 years .....	15,793	11,584	73.3	86.0	9,981	63.2	47.5	15,461	83.6	28.7	88.9	44.8
10 to 14 years .....	21,147	16,496	78.0	91.3	14,407	68.1	77.3	20,788	90.3	53.4	94.2	68.9
15 to 17 years .....	12,753	10,101	79.2	94.7	9,023	70.8	91.5	12,195	92.0	65.5	94.9	80.0
<b>SEX</b>												
Male .....	31,778	23,886	75.2	86.0	20,900	65.8	62.4	29,046	83.2	42.0	86.0	55.1
Female .....	30,119	22,860	75.9	86.6	20,023	66.5	64.6	27,542	83.6	44.3	86.2	57.0
<b>RACE/HISPANIC ORIGIN</b>												
White alone .....	47,410	37,732	79.6	87.1	33,583	70.8	64.5	43,336	83.8	44.9	87.3	58.8
White alone, non-Hispanic .....	37,164	32,140	86.5	88.2	29,321	78.9	65.4	34,309	84.9	48.5	90.1	63.9
Black alone .....	9,705	5,238	54.0	81.9	4,098	42.2	58.8	8,885	82.3	35.5	80.8	43.5
Asian alone .....	2,273	1,901	83.7	83.9	1,685	74.2	59.1	2,099	77.8	39.5	85.3	53.9
Hispanic (any race) .....	11,167	6,129	54.9	80.9	4,672	41.8	57.6	9,845	79.9	31.0	77.5	40.6
<b>HOUSEHOLD TYPE</b>												
Family household .....	61,237	46,339	75.7	86.4	40,564	66.2	63.5	56,016	83.4	43.1	86.1	56.1
Married-couple family .....	43,602	35,897	82.3	86.8	32,400	74.3	62.5	39,953	83.3	44.2	87.5	58.6
Male householder, no wife present .....	3,364	2,161	64.2	84.0	1,739	51.7	67.8	3,008	83.6	41.7	83.4	51.0
Female householder, no husband present .....	14,271	8,281	58.0	85.2	6,425	45.0	67.5	13,055	83.8	40.1	82.8	49.6
Nonfamily household .....	660	407	61.7	76.8	360	54.5	61.8	572	82.9	41.2	80.9	51.6
<b>GRADE IN SCHOOL</b>												
Less than 1st grade .....	8,647	6,439	74.5	73.2	5,713	66.1	26.7	8,647	53.3	10.9	72.4	27.0
1st to 4th grade .....	15,947	11,619	72.9	85.9	9,997	62.7	49.0	15,947	84.3	29.7	90.1	46.0
5th to 8th grade .....	16,580	12,890	77.7	91.4	11,262	67.9	76.6	16,580	90.5	53.1	94.9	68.6
9th to 12th grade or higher .....	15,413	12,508	81.1	95.1	11,154	72.4	91.1	15,413	91.7	64.3	97.0	80.9
Not enrolled in school .....	5,309	3,290	62.0	59.6	2,798	52.7	27.8	0	0.0	0.0	37.2	22.0
<b>EDUCATIONAL ATTAINMENT OF HOUSEHOLDER</b>												
Less than high school graduate .....	9,746	4,539	46.6	81.9	3,129	32.1	62.0	8,569	79.2	31.4	75.6	37.9
High school graduate/GED <sup>5</sup> .....	18,082	12,363	68.4	84.2	10,358	57.3	62.2	16,497	83.5	41.9	84.7	52.2
Some college or associate's degree .....	17,465	14,311	81.9	86.4	12,613	72.2	64.1	15,977	85.1	45.2	88.4	59.6
Bachelor's degree .....	11,131	10,319	92.7	88.7	9,824	88.3	63.6	10,369	84.2	47.9	91.0	66.1
Advanced degree .....	5,474	5,214	95.3	89.7	4,999	91.3	65.3	5,176	83.1	50.7	92.1	69.3
<b>FAMILY INCOME (annual)</b>												
<b>Total families</b> .....	<b>61,237</b>	<b>46,339</b>	<b>75.7</b>	<b>86.4</b>	<b>40,564</b>	<b>66.2</b>	<b>63.5</b>	<b>56,016</b>	<b>83.4</b>	<b>43.1</b>	<b>86.1</b>	<b>56.1</b>
Less than \$25,000 .....	12,611	5,949	47.2	80.3	4,158	33.0	58.3	11,103	80.3	32.2	77.1	38.4
\$25,000-\$49,999 .....	14,805	10,997	74.3	84.8	9,196	62.1	60.6	13,409	84.0	42.2	85.6	54.1
\$50,000-\$74,999 .....	10,327	9,098	88.1	87.2	8,491	82.2	61.8	9,511	83.9	46.6	89.4	62.2
\$75,000-\$99,999 .....	6,293	5,891	93.6	90.4	5,686	90.4	68.9	5,920	85.8	51.9	92.0	71.1
\$100,000 or more .....	7,798	7,575	97.1	90.1	7,395	94.8	67.8	7,493	86.3	52.2	93.2	72.7
Not reported .....	9,403	6,830	72.6	85.6	5,639	60.0	63.7	8,579	82.6	41.0	85.7	52.5
<b>REGION</b>												
Northeast .....	11,009	8,928	81.1	88.3	8,154	74.1	66.4	10,212	83.1	45.0	87.9	60.8
Midwest .....	14,025	10,885	77.6	88.5	9,569	68.2	65.6	12,890	85.6	47.5	88.8	59.9
South .....	21,969	15,682	71.4	85.5	13,527	61.6	62.8	19,986	84.3	41.8	85.1	53.6
West .....	14,894	11,252	75.5	83.7	9,675	65.0	59.9	13,501	80.1	39.5	83.7	52.5

<sup>1</sup> Percent based on all children.

<sup>2</sup> Percent based on children with a computer at home.

<sup>3</sup> Percent based on children with Internet access at home.

<sup>4</sup> Percent based on children enrolled in school.

<sup>5</sup> General equivalency diploma.

Source: U.S. Census Bureau, Current Population Survey, October 2003.

Children's access to a computer at home and at school has increased in recent years. In 1993, 32 percent of children had access to a computer at home and 61 percent used a computer at school. In 2003, about three-quarters (76 percent) of all children 3 to 17 years lived in a household with a computer, and 83 percent of the 57 million enrolled children used a computer at school, giving this generation more exposure to technology than their predecessors.

Despite these increases, rates of access to and use of computers continued to vary among groups (Table C). In 2003, the percentage of children living in homes with a computer ranged from 70 percent for young children (aged 3 to 5) to 79 percent for older teenagers (aged 15 to 17). Among children who lived in a home with a computer, older children were more likely than younger children to use the computer—usage was nearly universal among older children, 95 percent, compared with 67 percent of younger children.

Rates of children's home computer access and use varied by race and Hispanic origin. Non-Hispanic White or Asian children (each about 85 percent) were more likely to have a computer at home than Black or Hispanic children (each about 54 percent). Among those who lived in households with a computer, the differences in usage rates within those households were 88 percent for non-Hispanic Whites and about 82 percent each for Blacks, Asians, and Hispanics.

Educational attainment of the householder continued to show a relationship to the presence of a computer in the household. While 47 percent of children living with a householder who had less than a high school education had a computer, 94 percent of the children in households where the householder had a bachelor's degree or more education had a computer available to them at home. The difference in

computer use rates between these groups with access to a computer was 82 percent and 89 percent, respectively.

Children's family income had a similar relationship to computer presence in the household. Forty-seven percent of children with family incomes under \$25,000 lived in a household with a computer, compared with 97 percent of those with family incomes of at least \$100,000. Eighty percent of children in families with lower incomes used the computer if one was in the household, compared with 90 percent of children from families with higher incomes.

### Computer Use at School and at Home

School affects children's access to and use of computers. Among schoolchildren enrolled in kindergarten through 12th grade (K–12), about 8 in 10 used a computer at home, and about 9 in 10 used a computer at school in 2003 (Figure 4).

More than half (64 percent) of schoolchildren used computers both

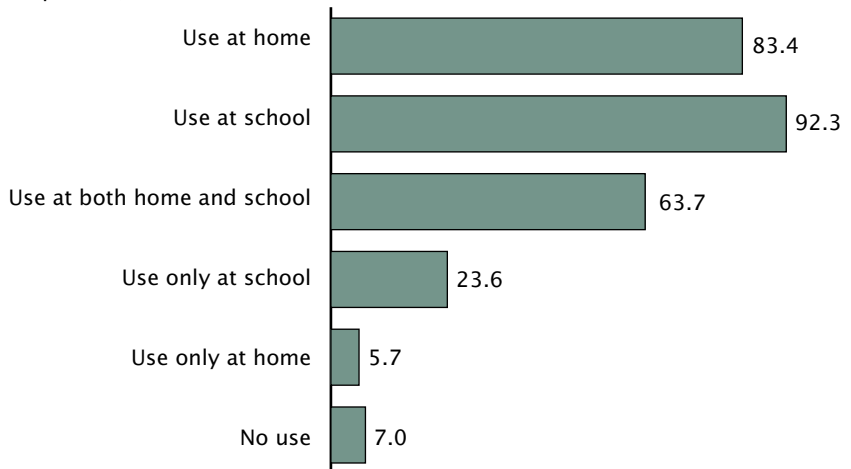
at home and at school. Among children who used a computer in one location, more used a computer at school than at home, 24 percent compared with 6 percent. Adding all three groups (at home, at school, in both locations) together, more than 9 in 10 schoolchildren used a computer somewhere, leaving 7 percent who did not use a computer in any location.

Schools give computer access to children who do not have it at home. As illustrated in Figure 5, schools provided computer access to all groups regardless of family income, race, and Hispanic origin.

Children from family households with incomes of \$100,000 or more enrolled in kindergarten through 12th grade had the highest rates of home computer use, 92 percent, compared with 41 percent of children from households with incomes below \$25,000, a difference of about 50 percentage points. At school, 91 percent of children from families with the highest incomes used a computer, compared with 84 percent of those with the lowest incomes, a difference of 6 percentage points.

Figure 4.  
**Use of Computers Among Children Enrolled in Grades K–12: 2003\***

(In percent)



\* The percentages for home and school computer use differ from the corresponding percentages in Table C because this figure excludes children who were not enrolled in grades K–12.

Source: U.S. Census Bureau, Current Population Survey, October 2003.



Figure 5 illustrates a similar effect among children by race and Hispanic origin. The highest and lowest rates for computer use at home differed by 33 percentage points, with

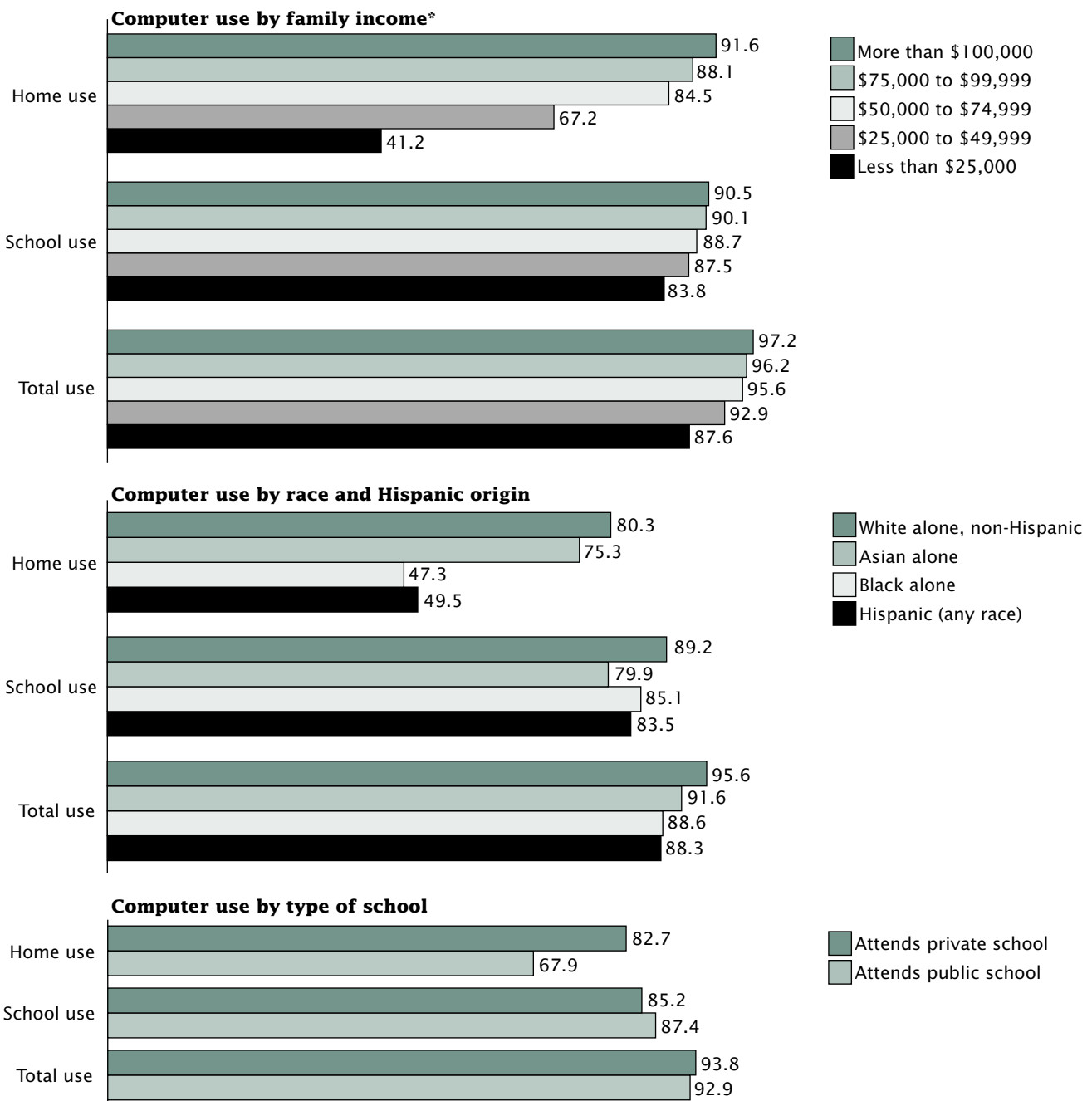
80 percent of non-Hispanic White children using a computer at home, compared with about 48 percent each of Black children and Hispanic children. At school, the differences

diminished, with 89 percent of non-Hispanic White children and about 85 percent of Black and Hispanic children using computers there.

Figure 5.

**Computer Use at Home and School Among Children Enrolled in Grades K-12 by Family Income, Race and Hispanic Origin, and Type of School: 2003**

(In percent)



\*Among children in families.

Source: U.S. Census Bureau, Current Population Survey, October 2003.

The 15-percentage-point difference between public and private school-children in home computer-use rates disappeared when the children were at school. The percentage of students who used a computer at public school was marginally higher than that of children who used a computer at private school (87 percent compared with 85 percent), reversing a historical trend.<sup>10</sup>

Eighty-three percent of children aged 3 to 17 with a computer at home used it to play games, the most common single use, followed by school assignments (66 percent) and connecting to the Internet (64 percent, Figure 6). Children used a broader range of computer applications as they aged. Playing games was the most frequent activity among the youngest children (85 percent). For the oldest children, school assignments and accessing the Internet were more common activities (91 percent and 86 percent, respectively).

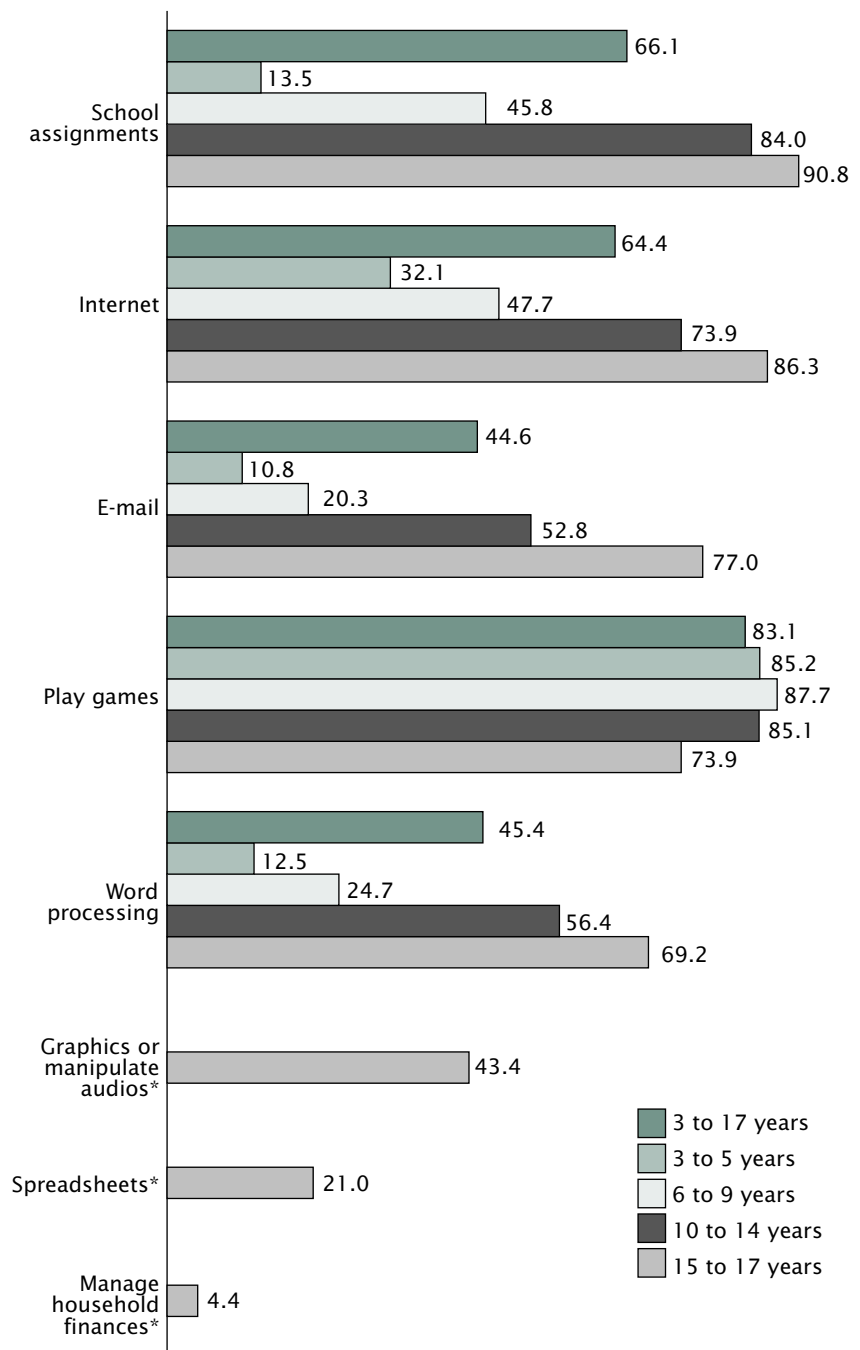
Children who accessed the Internet, whether at home, school, or elsewhere, most often used online connectivity to complete school assignments (75 percent). The next most common Internet use among children was playing games (65 percent), followed by e-mail or instant messaging (60 percent).<sup>11</sup>

### COMPUTER AND INTERNET USE AMONG ADULTS

Overall, use of computers by adults (people 18 years and older) was less prevalent than use by children. Sixty-four percent of adults used a computer at some location (home, school, or work) in 2003, compared with 86 percent of children (Tables C and D). Due to the large proportion of very young children who

Figure 6.  
**Types of Computer Use at Home for Children 3 to 17 Years by Age: 2003**

(Percentage of children who use a computer at home)



\*Asked only of children aged 15 to 17.

Source: U.S. Census Bureau, Current Population Survey, October 2003.

used a computer and did not use the Internet, a larger proportion of adults than children used the Internet at some location (60 percent compared with 56 percent).

Over the past two decades, the proportion of adults (people 18 years and over) using a computer anywhere has grown, from 18 percent in 1984, to 36 percent in 1993, to

<sup>10</sup> For more information on computer use in earlier years, see <[www.census.gov/population/www/socdemo/computer.html](http://www.census.gov/population/www/socdemo/computer.html)>.

<sup>11</sup> For more information on children's activities on the Internet, see the 2003 Detailed Table 9A at <[www.census.gov/population/www/socdemo/computer.html](http://www.census.gov/population/www/socdemo/computer.html)>.

Table D.  
**Computer and Internet Use for the Population 18 Years and Older: 2003**

(Numbers in thousands)

Characteristic	Total	Computer at home			Internet at home			Employed			Enrolled in school			Percent <sup>1</sup> using a computer anywhere	Percent <sup>1</sup> using Internet anywhere
		Number	Percent <sup>1</sup>	Percent <sup>2</sup> using home computer	Number	Percent <sup>1</sup>	Percent <sup>3</sup> using Internet	Number	Percent <sup>4</sup> using computer at work	Percent <sup>4</sup> using Internet at work	Number enrolled	Percent <sup>5</sup> using computer at school	Percent <sup>5</sup> using Internet at school		
<b>Total</b> .....	<b>213,426</b>	<b>141,022</b>	<b>66.1</b>	<b>82.5</b>	<b>125,756</b>	<b>58.9</b>	<b>82.4</b>	<b>136,606</b>	<b>56.1</b>	<b>42.3</b>	<b>18,323</b>	<b>84.9</b>	<b>66.4</b>	<b>63.7</b>	<b>59.5</b>
<b>AGE</b>															
18 to 24 years .....	27,404	18,719	68.3	90.5	16,438	60.0	89.2	17,086	38.5	23.9	11,937	89.4	70.9	75.4	70.6
25 to 34 years .....	39,094	27,066	69.2	89.0	23,951	61.3	89.7	30,401	58.0	44.8	3,589	80.3	63.4	72.1	68.5
35 to 44 years .....	43,670	32,838	75.2	84.3	29,391	67.3	84.5	34,854	59.7	46.6	1,635	74.8	50.6	73.0	68.2
45 to 54 years .....	40,760	30,213	74.1	81.5	27,563	67.6	80.7	32,221	60.9	46.6	879	69.5	51.9	70.5	65.7
55 to 64 years .....	28,112	18,387	65.4	77.6	16,587	59.0	77.7	17,202	57.7	43.6	218	62.7	53.0	60.7	55.7
65 years and over .....	34,385	13,799	40.1	63.9	11,826	34.4	63.7	4,842	41.7	27.0	65	61.1	40.6	27.7	25.1
<b>SEX</b>															
Men .....	102,460	68,970	67.3	81.5	61,724	60.2	81.4	73,251	50.5	39.2	8,277	85.7	67.9	63.3	59.1
Women .....	110,966	72,052	64.9	83.5	64,032	57.7	83.4	63,355	62.5	45.8	10,046	84.3	65.2	64.1	59.8
<b>RACE/HISPANIC ORIGIN</b>															
White alone .....	175,230	119,072	68.0	83.2	107,015	61.1	83.0	113,241	57.2	43.5	14,056	84.7	67.2	65.2	61.2
White alone, non-Hispanic .....	150,508	107,539	71.5	84.8	97,684	64.9	84.3	97,083	61.6	47.2	12,131	85.1	69.5	69.2	65.5
Black alone .....	24,482	12,128	49.5	78.9	9,880	40.4	79.8	14,570	45.9	31.1	2,523	84.5	57.6	51.4	45.3
Asian alone .....	9,023	6,905	76.5	78.6	6,373	70.6	77.0	5,776	61.0	49.9	1,214	89.1	75.0	69.1	65.3
Hispanic (any race) .....	26,565	12,412	46.7	68.8	10,091	38.0	70.2	17,366	31.2	21.3	2,085	82.3	53.1	41.1	35.8
<b>HOUSEHOLD TYPE</b>															
Family household .....	169,340	119,475	70.6	81.1	107,033	63.2	80.8	110,262	55.3	41.4	14,662	84.7	65.0	65.8	61.2
Married-couple family .....	134,584	99,856	74.2	82.2	90,639	67.3	81.6	88,570	57.8	43.9	10,524	84.6	66.5	68.6	64.0
Male householder, no wife present .....	10,323	5,782	56.0	75.2	4,983	48.3	75.6	6,877	37.7	26.0	1,080	83.5	64.8	51.9	48.3
Female householder, no husband present .....	24,434	13,837	56.6	75.6	11,411	46.7	76.7	14,815	48.7	33.5	3,058	85.4	60.2	55.8	50.7
Nonfamily household .....	44,086	21,547	48.9	90.4	18,723	42.5	91.7	26,344	59.2	45.8	3,661	85.8	71.8	55.9	53.0
<b>ENROLLED IN SCHOOL</b>															
Enrolled in school															
Less than college .....	1,836	1,225	66.7	90.5	1,042	56.8	85.2	631	23.8	11.7	1,836	85.9	51.5	92.8	67.6
College .....	13,222	11,214	84.8	94.4	10,270	27.7	92.4	7,575	49.1	31.4	13,222	85.3	67.2	97.3	87.7
Graduate school .....	3,265	2,967	90.9	96.9	2,808	86.0	95.8	2,345	85.4	74.0	3,265	82.7	71.4	98.6	95.0
Not enrolled in school .....	195,103	125,616	64.4	81.1	111,636	57.2	81.1	126,054	56.1	42.3	0	0.0	0.0	62.8	58.8
<b>EDUCATIONAL ATTAINMENT</b>															
Less than high school graduate .....	32,558	11,244	34.5	55.2	8,511	26.1	54.3	13,816	15.6	7.7	1,788	87.3	52.7	23.9	19.6
High school graduate or GED <sup>6</sup> .....	68,720	39,469	57.4	74.4	33,863	49.3	73.7	41,888	40.4	24.8	2,739	82.4	58.2	52.4	46.7
Some college or associate's degree .....	57,601	43,659	75.8	86.6	39,240	68.1	86.1	39,445	58.0	41.0	10,282	85.9	69.0	76.6	71.8
Bachelor's degree .....	36,528	30,791	84.3	92.0	29,069	79.6	91.0	27,491	82.0	70.2	2,656	83.0	70.0	87.4	85.5
Advanced degree .....	18,019	15,859	88.0	92.8	15,084	83.7	91.7	13,966	86.6	77.4	858	82.5	78.1	89.7	88.0
<b>FAMILY INCOME (annual)</b>															
<b>Total families</b> .....	<b>169,340</b>	<b>119,475</b>	<b>70.6</b>	<b>81.1</b>	<b>107,033</b>	<b>63.2</b>	<b>80.8</b>	<b>110,262</b>	<b>55.3</b>	<b>41.4</b>	<b>14,662</b>	<b>84.7</b>	<b>65.0</b>	<b>65.8</b>	<b>61.2</b>
Less than \$25,000 .....	27,310	11,374	41.6	70.0	8,599	31.5	71.1	12,121	27.6	15.9	2,193	84.4	57.1	36.2	31.9
\$25,000-\$49,999 .....	39,457	26,163	66.3	76.6	22,316	56.6	77.0	24,896	43.7	28.6	2,993	82.1	90.9	60.0	54.1
\$50,000-\$74,999 .....	29,673	24,713	83.3	82.6	23,037	77.6	81.5	22,216	60.2	44.1	2,628	83.4	68.0	77.9	73.5
\$75,000-\$99,999 .....	18,578	16,649	89.6	86.6	15,933	85.8	85.5	14,568	69.1	55.4	1,948	87.4	72.9	85.1	82.0
\$100,000 or more .....	22,304	21,124	94.7	89.9	20,571	92.2	88.2	17,673	78.6	67.9	2,401	85.9	74.2	91.1	89.6
Not reported .....	32,018	19,453	60.8	77.6	16,576	51.8	76.3	18,789	50.0	36.1	2,500	86.3	58.9	58.1	51.5
<b>REGION</b>															
Northeast .....	41,252	27,884	67.6	81.8	25,451	61.7	81.1	25,766	56.8	43.0	3,501	87.4	68.9	64.2	60.1
Midwest .....	48,404	32,030	66.2	83.5	28,312	58.5	83.1	31,906	57.0	42.0	4,199	86.5	72.0	65.2	61.0
South .....	75,678	47,484	62.7	82.6	41,961	55.4	83.1	47,668	54.2	40.5	6,024	85.7	65.3	61.2	56.5
West .....	48,092	33,624	69.9	82.1	30,032	62.4	82.0	31,266	57.4	44.6	4,599	80.7	60.8	65.8	62.1

<sup>1</sup> Percent based on all adults.

<sup>2</sup> Percent based on adults with a computer at home.

<sup>3</sup> Percent based on adults with Internet access at home.

<sup>4</sup> Percent based on employed adults.

<sup>5</sup> Percent based on adults enrolled in school.

<sup>6</sup> General equivalency diploma.

Source: U.S. Census Bureau, Current Population Survey, October 2003.

64 percent in 2003. From 1997 (the first year in which the CPS collected information on Internet use) to 2003, use of the Internet among adults jumped from 22 percent to 60 percent.

Among adults, two-thirds (66 percent) had a computer at home, and among those, 83 percent used the computer. Fifty-nine percent of adults had Internet access at home, and 82 percent of them used it. More than half of working adults used a computer at work (56 percent), and 42 percent used the Internet on the job. Among adult students, 85 percent said they used a computer at school, and 66 percent used the Internet there.

As was the case for children, adults' use of these technologies varied with their socioeconomic and demographic characteristics. Adults with an advanced degree, for example, had the highest rates of computer use anywhere. Asian or non-Hispanic White adults (about 69 percent each) were more likely to use a computer than Blacks or Hispanics (51 percent and 41 percent, respectively).

People 65 and older had lower rates of computer use (28 percent) and Internet use (25 percent) than was the case for other age groups. Adults 18 to 24 years of age were most likely to use a computer or the Internet someplace (75 percent and 71 percent, respectively).

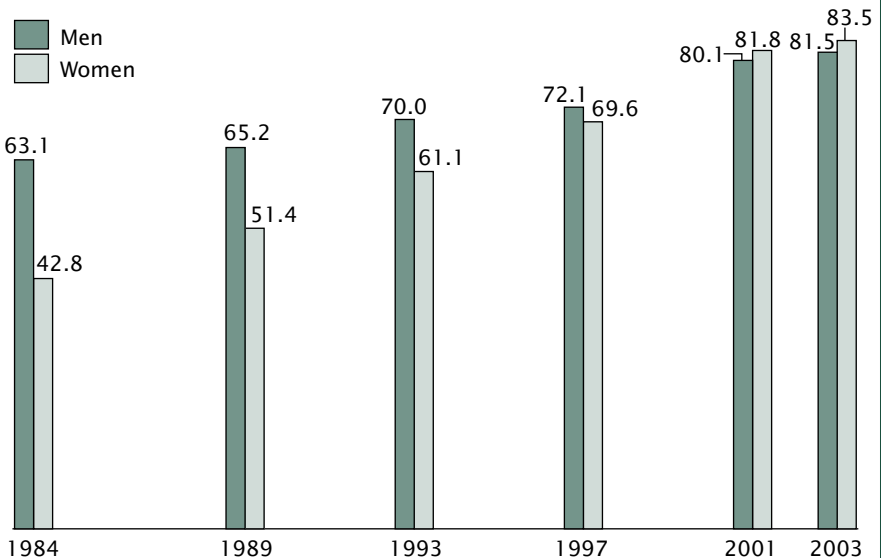
### Computer Use by Sex

In 2003, more women than men used a computer at home by a small margin, reversing the computer use "gender gap" exhibited during the 1980s and 1990s.<sup>12</sup> In 1984, men's home computer use was 20 percentage points higher than that of women (Figure 7). This gap decreased to 3 percentage points in

<sup>12</sup> For more information on computer use by sex in the 1980s and 1990s, see *Computer Use in the United States: 1984, Computer Use in the United States: 1989, and Computer Use in the United States: 1997*, at <[www.census.gov/population/www/socdemo/computer.html](http://www.census.gov/population/www/socdemo/computer.html)>.

Figure 7.  
**Population 18 Years and Older Using a Computer at Home by Sex: 1984 to 2003**

(In percent)



Source: U.S. Census Bureau, Current Population Survey, October 2003.

1997 and reversed in 2001, favoring women by 2 percentage points. Similarly, women's Internet use at home exceeded men's in 2003.

At work, women have had higher rates of computer use than men since the CPS first collected data on computer use in 1984, when 29 percent of working women used a computer on the job, compared with 21 percent of working men. In 2003, 63 percent of women and 51 percent of men used a computer at work. Forty-seven percent of women and 39 percent of men used the Internet on the job in 2003 (Table E).

Some of the historically higher rates of women's computer use at work may derive in part from the type of jobs they have held. In 2003, the technology use-intensive office and administrative support occupations accounted for 23 percent of all working women and 6 percent of working men. While office and administrative support occupations accounted for 7 percent of men using computers on the job, this cat-

egory accounted for 29 percent of all women using computers at work.

The percentages of women and men who use computers at work also differ by occupation group. Among men, the group with the highest percentage of workers using a computer was professional occupations. For women, the most computer users were in the management, business, and financial occupations.

### Internet Use for Communication and Commerce

Over the last few years, computer and Internet technologies have merged into a communications device for both home and work life. By 2003, more adult computer users accessed the Internet than performed any other computing task: 89 percent of home users and 75 percent of those at work (Table F). Nearly 9 in 10 adult Internet users (88 percent) used the Internet to send or receive e-mail, and nearly 8 in 10 (78 percent) used the Internet to get information on products or services.

Table E.  
**Computer and Internet Use at Work for the Employed Population 18 Years and Older by Sex: 2003**

(Numbers in thousands)

Characteristic	Employed		Use computer at work			Use Internet at work		
	Number	Percent	Number	Percent	Percent distribution	Number	Percent	Percent distribution
<b>OCCUPATION OF HOUSEHOLDER</b>								
<b>Men</b> .....	<b>73,250</b>	<b>100.0</b>	<b>36,976</b>	<b>50.5</b>	<b>100.0</b>	<b>28,733</b>	<b>39.2</b>	<b>100.0</b>
Management, business, and financial .....	11,402	15.6	8,813	77.3	23.8	7,868	69.0	27.4
Professional .....	12,513	17.1	10,460	83.6	28.3	9,102	72.7	31.7
Service .....	8,880	12.1	2,539	28.6	6.9	1,595	18.0	5.6
Sales .....	7,975	10.9	5,296	66.4	14.3	4,094	51.3	14.2
Office and administrative support .....	4,675	6.4	2,611	55.9	7.1	1,803	38.6	6.3
Farming, fishing, and forestry .....	947	1.3	86	9.1	0.2	52	5.5	0.2
Construction and extraction .....	8,108	11.1	1,518	18.7	4.1	996	12.3	3.5
Installation, maintenance, and repair .....	5,092	7.0	2,098	41.2	5.7	1,278	25.1	4.4
Production .....	6,675	9.1	2,059	30.8	5.6	1,152	17.3	4.0
Transportation and material moving .....	6,983	9.5	1,496	21.4	4.0	793	11.4	2.8
<b>Women</b> .....	<b>63,353</b>	<b>100.0</b>	<b>39,594</b>	<b>62.5</b>	<b>100.0</b>	<b>30,009</b>	<b>47.4</b>	<b>100.0</b>
Management, business, and financial .....	8,190	12.9	7,027	85.8	17.7	6,068	74.1	20.2
Professional .....	16,052	25.3	12,057	75.1	30.5	9,344	58.2	31.1
Service .....	12,002	18.9	3,359	28.0	8.5	1,850	15.4	6.2
Sales .....	7,526	11.9	4,169	55.4	10.5	2,819	37.5	9.4
Office and administrative support .....	14,536	22.9	11,595	79.8	29.3	9,192	63.2	30.6
Farming, fishing, and forestry .....	273	0.4	46	16.8	0.1	24	8.8	0.1
Construction and extraction .....	238	0.4	67	28.2	0.2	50	21.0	0.2
Installation, maintenance, and repair .....	219	0.3	130	59.4	0.3	90	41.1	0.3
Production .....	3,010	4.8	810	26.9	2.0	422	14.0	1.4
Transportation and material moving .....	1,307	2.1	334	25.6	0.8	150	11.5	0.5

Source: U.S. Census Bureau, Current Population Survey, October 2003.

Table F.  
**Uses of the Computer at Home and Work and of the Internet Anywhere by the Population 18 Years and Older: 2003**

(Numbers in thousands)

Computer users			Internet users	
Specific use	At home	At work	Specific use	Anywhere
<b>Total</b> .....	<b>116,410</b>	<b>76,570</b>	<b>Total</b> .....	<b>126,937</b>
Percent using:			Percent using:	
Internet and e-mail .....	89.0	75.4	E-mail .....	88.3
Word processing .....	55.8	67.8	Information on products or services .....	78.1
Spreadsheets .....	32.9	64.4	News, weather, or sports information .....	67.4
Scheduling .....	(NA)	57.0	Purchase products or services .....	54.2
Graphics and design .....	(NA)	29.7	Playing games .....	36.1
Programming .....	(NA)	16.4	Viewing TV, movies, listening to radio .....	21.0
Playing games .....	49.9	(NA)	School assignments .....	11.5
Graphics or manipulate audios .....	37.2	(NA)	Take a course online .....	6.6
Manage household finances .....	33.0	(NA)		
School assignments .....	11.6	(NA)		

(NA) Not available. Some categories not included on the questionnaire for both home and work.

Source: U.S. Census Bureau, Current Population Survey, October 2003.

The proportions of the population performing tasks online, and the activities they choose, demonstrate some of the ways the technology is affecting society:

- The Internet has become a major venue for the dissemination of news. In 6 years, the proportion of adults who used the Internet to find information on “news, weather, or sports” increased from 7 percent in 1997 to 40 percent in 2003 (Figure 8), and the proportion using the Internet to find information on government or health services increased from 12 percent to 33 percent.<sup>13</sup>
- The Internet is also changing interpersonal communication. More than half (55 percent) of all adults used e-mail or instant messaging in 2003, compared with 12 percent of adults in 1997.
- The Internet has become an integral part of the economy. Eighteen percent of adults conducted banking online in 2003. Twelve percent of adults used the Internet to search for a job. Nearly half of adults (47 percent) used the Internet to find information on products or services. About one-third of adults (32 percent) actually purchased a product or service online, compared with 2.1 percent of adults who used the Internet for “shopping” in 1997.

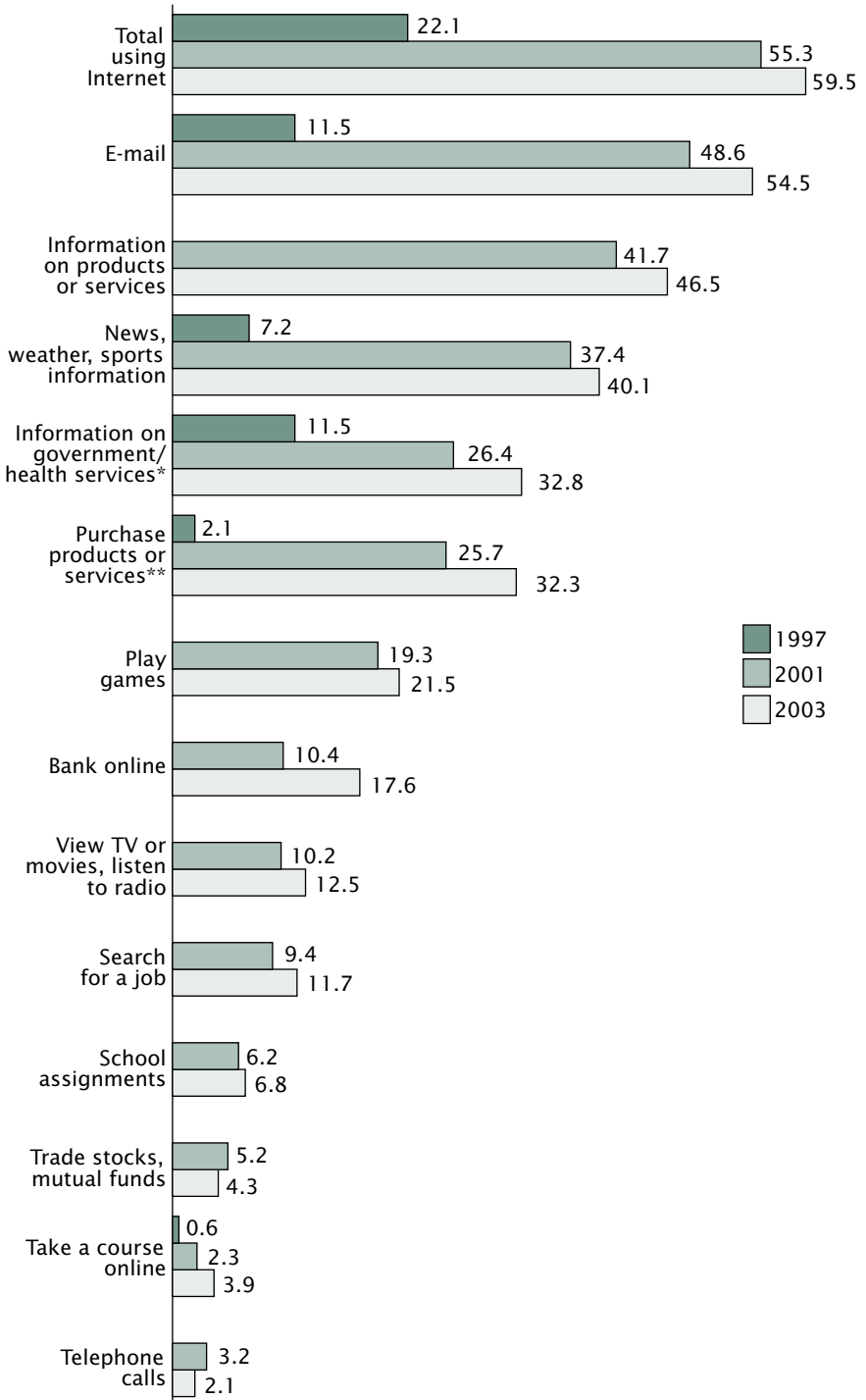
### SOURCE OF THE DATA

The population represented (the population universe) in the Computer and Internet Use Supplement to the October 2003 Current Population Survey is the civilian noninstitutionalized population living in the United States. The institutionalized population, which is excluded from the population universe, is com-

<sup>13</sup> Data from 1997 derive from the answer “Search for information such as government, business, health, education” to the question “What do you use the Internet for at home?” In 2001 and 2003, household members were asked about specific uses of the Internet anywhere, not at home.

Figure 8.  
**Population 18 Years and Older Using the Internet for a Specific Task: 1997, 2001, and 2003**

(In percent)



\*Data from 1997 derive from the answer “Search for information such as government, business, health, education.”

\*\*Data from 1997 derive from the answer “Shopping.”

Note: Data from 1997 derive from the question “What do you use the Internet for at home?”

Source: U.S. Census Bureau, Current Population Survey, October 1997, September 2001, and October 2003.

---

posed primarily of the population in correctional institutions and nursing homes (91 percent of the 4.1 million institutionalized people in Census 2000).

Most estimates in this report come from data obtained in October 2003 from the Current Population Survey (CPS). Some estimates are based on data obtained from the CPS in earlier years, including October 1984, October 1989, October 1993, October 1997, December 1998, August 2000, and September 2001. The U.S. Census Bureau conducts this survey every month.

### **ACCURACY OF THE ESTIMATES**

Statistics from surveys are subject to sampling error and nonsampling error. All comparisons presented in this report have taken sampling error into account and are significant at the 90-percent confidence level. This means the 90-percent confidence level for the difference between estimates being compared does not include zero. Nonsampling error in surveys may be attributed to a variety of sources, such as how the survey was designed, how respondents interpret questions,

how able and willing respondents are to provide correct answers, and how accurately answers are coded and classified. To minimize these errors, the Census Bureau employs quality control procedures in sample selection, the wording of questions, interviewing, coding, data processing, and data analysis.

The Current Population Survey weighting procedure uses ratio estimation whereby sample estimates are added to independent estimates of the national population by age, race, sex, and Hispanic origin. This weighting partially corrects for bias due to undercoverage, but biases may still be present when people who are missed by the survey differ from those interviewed in ways other than age, race, sex, and Hispanic origin. How this weighting procedure affects other variables in the survey is not precisely known. All of these considerations affect comparisons across different surveys or data sources.

For further information on the source of the data and accuracy of the estimates, including standard errors and confidence intervals, contact Jana Shepherd of the Demographic Statistical Methods Division via e-mail at <dsmd.source.and.accuracy@census.gov>.

### **MORE INFORMATION**

Detailed tabulations with characteristics of households, children, and adults by computer presence in the home, computer use, Internet use, and other variables are available on the Internet at the Census Bureau's Web site <www.census.gov>. Once on the site, in the "Subjects A-Z" area, click on "C," and then on "Computer Use and Ownership."

### **CONTACT**

For additional information on these topics, contact Jessica Davis, Education and Social Stratification Branch, 301-763-2464 or via e-mail at <Jessica.W.Davis@census.gov>.

### **USER COMMENTS**

The Census Bureau welcomes the comments and advice of data and report users. If you have any suggestions or comments, please write to:

Chief, Population Division  
U.S. Census Bureau  
Washington, DC 20233-8800

or send e-mail to:  
pop@census.gov

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

---

**OFFICIAL BUSINESS**

Penalty for Private Use \$300

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