## Profile of computer owners in the 1990s

The Internet, multimedia use of digital visual effects, creative graphics, and CD-ROMs are some of the popular uses of computers that have increased individuals' awareness of the capability of computers. And greater awareness has brought substantially greater ownership. Between 1990 and 1997, the percentage of households owning computers more than doubled, increasing from 15 percent to 35 percent. ${ }^{1}$ During the same period, the average expenditure of households for computers and associated hardware more than tripled.

This report briefly looks at the demographics of computer owners as reported by households participating in the interview component of the Bureau of Labor Statistics Consumer Expenditure Survey. ${ }^{2}$

Education. A household's level of education significantly affects computer ownership: households in which the reference person had a high level of education also had the greatest percentage of computer ownership. ${ }^{3}$ In 1997, 66 percent of American households whose reference person had attended graduate school reported owning a computer, compared with less than 12 percent of those in which the reference person did not graduate from high school. College graduates had the largest increase in ownership, more than doubling from 24 percent in 1990 to 56 percent in 1997. (See illustration below and on page 42.) High school graduates also showed a significant increase in computer ownership, from 9 percent in 1990 to 23 percent in 1997.

Age. Consumer units in the 45-54 age group were the most likely to own a per-

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sonal computer, with a 46 -percent ownership rate in 1997, up 26 percentage points from 1990. As a result, this group had surpassed the 35-44 age group, which was most likely to own a computer in 1990. In 1997, the 35-44 age group was in second place, with 44 percent of them owning computers. Relatively few households in which the reference person was older than age 65 owned computers in either year. In the 55 and older households, those with reference persons aged 55-64 had the largest increase in computer ownership.

Race. All racial groups increased their ownership of personal computers, however, there was a large disparity in ownership among the different groups in both 1990 and 1997. Among blacks, computer ownership more than doubled, from 7 percent in 1990 to 18 percent in 1997. Asians showed the largest percentage-point change, increasing their ownership from 25 percent in 1990 to 49 percent in 1997. In both years, Asians had the highest ownership rates, and blacks, the lowest. White computer owners increased from 16 percent in 1990 to 36 percent in 1997.

Income. It's almost axiomatic that the
highest income groups will have the largest percentage of computer owners. Almost two-thirds of the households in the top 20-percent income group (quintile 5) now own computers, as do almost half in the second highest income group (quintile 4). ${ }^{4}$ The second highest income group also showed the fastest growth in ownership, more than doubling between 1990 and 1997. Households in the lowest two income groups (quintile 1 and quintile 2 ) also had the lowest rate of computer ownership, with fewer than 1 household in 5 owning personal computers in 1997. But these households also showed significant growth in computer ownership-almost tripling over the 1990-97 period-as computer prices have declined.

Region. More than two-fifths of the households in the West owned computers, more than in any other region. The Midwest and the Northeast mirrored the national average, with about one-third of the households owning computers. At slightly less than 30 percent, the South's share of personal computer ownership was the lowest among the regions, but only marginally so, compared with the Midwest. The regional patttern of ownership in 1997 was the same as in 1990, with

Percent of households owning computers by education level of the reference person, Consumer Expenditure Survey, 1990 and 1997


| Characteristic | 1990 | 1997 | Characteristic | 1990 | 1997 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| All consumer units . | 15.2 | 34.6 | Race |  |  |
| Education |  |  | White ................................... | 16.0 | 36.1 |
| 8th grade or less ....................... | 2.8 | 6.9 | Black ................................... | 6.7 | 17.9 |
| Some high school ........................ | 6.9 | 11.5 | Asian .................................... | 25.0 | 49.1 |
| High school graduate .................. | 8.6 | 22.5 |  |  |  |
| Some college .............................. | 19.4 | 39.9 | Income |  |  |
| College graduate ......................... | 23.7 | 56.2 | Quintile 1 ............................... | 6.9 | 17.1 |
| Graduate school ........................... | 37.2 | 65.6 | Quintile 3 | 11.7 | 28.0 |
| Age |  |  | Quintile 4 .............................. | 17.7 | 44.6 |
| Less than 25 .............................. | 13.4 | 31.6 | Quintile 5 .............................. | 33.2 | 65.4 |
| 25-34 .................................... | 14.8 | 37.6 |  |  |  |
| 35-44. | 24.0 | 44.0 | Region |  |  |
| 45-54 | 20.0 | 45.8 | Northeast. | 15.3 | 36.2 |
| 55-64 ....................................... | 12.3 | 32.2 | Midwest | 13.3 | 32.6 |
| 65-74 ...................................... | 6.3 | 15.7 | South .. | 12.8 | 29.8 |
| 75 or over | 2.3 | 6.6 | West | 21.0 | 41.2 |

similar computer ownership growth rates across all regions.

FOR MORE INFORMATION about the data presented here, contact the author by email at Rubey_T@bls.gov or by telephone at (202) 606-6900.

## Notes

${ }^{1}$ In this report, a "household" is a consumer
unit that includes members of a household related by blood, marriage, adoption or other legal arrangement; a single person living alone or sharing a household with others but who is financially independent; or two or more persons living together who share responsibility for at least two out of three major types of expenses-food, housing, and other expenses. Students living in university-sponsored housing are also included in the sample as separate consumer units.
${ }^{2}$ Inventory of durable goods is collected during the first interview; any purchases of com-
puters after the first interview are not reflected in these data.
${ }^{3}$ The reference person is the first member mentioned by the respondent when asked to "Start with the name of the person or one of the persons who owns or rents the home." It is with respect to this person that the relationship of other household members is determined.
${ }^{4}$ Complete income reporters are ranked in ascending order, according to the level of total before-tax income reported by the household. The ranking is then divided into five equal groups.

