# Financing the Future Postsecondary Students, Costs, and Financial Aid: 1996-1997 

Household Economic Studies

## INTRODUCTION

Since 1980, as the U.S. economy has grown and continued to evolve from a manufacturing-based to a service-based economy, it has become increasingly important for workers to possess a postsecondary degree. In 1980, among fulltime, year-round workers 25 to 34 years old, male college graduates earned 1.2 times as much as male high school graduates while female college graduates earned 1.3 times as much as female high school graduates.' By 1997, male college graduates were earning 1.6 times as much as male high school graduates and female college graduates were earning 1.7 times as much as female high school graduates. ${ }^{2}$ Not surprisingly, there has also been a dramatic increase in college enrollment, from 11.4 million students in 1980 to 15.4 million students in 1997, an increase of 35 percent. ${ }^{3}$ Among the groups experiencing the largest percentage increases in enrollment over this period were women (44 percent), Blacks (64 percent), and those 35 years old and over (139 percent). As a result, the last 20 years have borne witness to notable changes in the characteristics of postsecondary students.

Unfortunately, while the importance of obtaining a postsecondary degree has

[^0]increased, it has also become increasingly difficult for individuals and families to afford postsecondary schooling (that is, schooling beyond high school). According to data from the U.S. Department of Education, the average cost of in-state tuition, fees, and room and board for full-time undergraduate students was $\$ 9,206$ during the 1996-97 academic year, compared with $\$ 2,809$ during the 1979-80 academic year, an increase of 228 percent ( 68 percent after inflation). ${ }^{4}$ By comparison, over this same period, median family income increased by just 112 percent ( 9 percent after inflation), from $\$ 21,023$ in 1980 to $\$ 44,568$ in $1997 .{ }^{5}$ As a result, for many students, the decision to enroll or to remain enrolled in postsecondary schooling depends heavily upon their ability to obtain one or more sources of financial aid.

This report discusses postsecondary students, the characteristics of the schools they attend, and the costs and financing associated with their schooling. The first section examines the economic and demographic characteristics of postsecondary students during the academic year 1996-97. Part two discusses the characteristics of postsecondary students' educational institutions in 1997. Part three presents the schooling costs faced by postsecondary students in

[^1]
## Current Population Reports

## By

Scott Boggess Camille Ryan

1996-97 and examines how these costs vary by the economic and demographic characteristics discussed in the first section. Finally, part four describes postsecondary students' patterns of financial aid receipt and investigates whether financial aid receipt varies by either student or institutional characteristics.

Data for this report come from two different sources: the 1996 Survey of Income and Program Participation (SIPP) and the 1997 Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics Survey. The two data sets are merged or linked by their common variable, the name of the respondent's postsecondary institution. The linking of the two data files allows, for the first time, an examination of student characteristics and financial aid receipt by institutional characteristics (e.g., type of school, enrollment level, and racial and ethnic makeup of the institution's student body) and an assessment of bias and reliability of respondent reports on certain aspects of enrollment.

## The Survey of Income and Program Participation (SIPP)

The SIPP is a longitudinal survey of the U.S. civilian, noninstitutionalized population, conducted at 4-month intervals by the Census Bureau. The main focus of SIPP is to collect information on labor force participation, jobs, income, and participation in federal assistance programs. Information on other topics is collected in topical modules on a rotating basis. Data shown in this report are from the School Enrollment and Financing topical module collected in the 4-month period from August 1997 through November 1997 as part of the 1996 panel of SIPP (also referred to as the "Wave 5" interview). The School Enrollment and Financing topical module included questions on enrollment status, level of enrollment, major field of study, schooling costs, and educational assistance.
All of the 5,557 Wave 5 SIPP respondents who were enrolled at the level of college or higher (representing 20.9 million students) were asked to identify the state in which they attended school. After identifying their state, the respondents were then presented with a list of all postsecondary institutions in that state enrolling at least 1,000 students and asked to name their particular postsecondary institution. In cases where the respondents attended a school not on the list, the name of the school was recorded. Of the 5,557 respondents enrolled in postsecondary schools, 4,706 (85 percent) had their institutions identified using this procedure. Institutions for the remaining 851 students were imputed based on sex, grade level, race, and region.

While the SIPP collects information on both full-time and part-time students, this report focuses largely on full-time students (students who were usually enrolled full time throughout the academic year).

## The Integrated Postsecondary Education Data System (IPEDS)

The IPEDS is the National Center for Education Statistics' (NCES) core program for the collection of postsecondary education data. The IPEDS Institutional Characteristics Survey is designed to collect data from all currently-operating postsecondary institutions, approximately 10,000 institutions in 1996-97. The IPEDS file provides extensive information about educational offerings, organization and accreditation, calendar and admissions, student charges, enrollment, and financial aid. Eleven variables were selected for inclusion on the public use file: (1) level and control, (2) Carnegie classification of institution type, (3) accreditation, (4) admissions policy, (5) existence of occupational programs, (6) enrollment, (7) basis for charging fulltime students, (8) local resident tuition, (9) percent Black students enrolled, (10) percent Hispanic students enrolled, and (11) percent minority students (all groups) enrolled. A twelfth variable, total room and board costs, was also included on the Census Bureau's internal data file.

Part-time students (those who took less than a full-time course load or did not attend the full year) are excluded from most analysis because they are not eligible for many types of financial aid or for most on-campus housing. In addition, because there is no information regarding how many hours or credits part-time students are taking, calculations of average tuition and financial aid received become much less meaningful and potentially misleading when compared with corresponding figures for fulltime students. (Additional information on part-time students is contained in the detailed table package that accompanies the report on the Internet at www.census.gov/population/www/ socdemo/school/p70-83tabs.html.) In addition, the report excludes a small number of full-time postsecondary students who reported having not yet completed high school.

## DEMOGRAPHIC CHARACTERISTICS

## Nearly half of all postsecondary students were enrolled in their first 2 years of college.

Of the 11.4 million full-time postsecondary students enrolled during the 1996-97 academic year, approximately 5.0 million, or 44 percent, were enrolled as college freshmen or sophomores (termed underclassmen)-including both 2 - and 4 -year institutions (Figure 1). ${ }^{6.7}$ Fewer students, 3.7 million, or 32 percent, were enrolled as college juniors and seniors. The smaller number of upperclass students is due, at least in part, to students leaving school

[^2]after completing 2 -year degrees or dropping out prior to achieving third-year standing. The remaining 24 percent of postsecondary students were divided equally between graduate school (college years 5 or higher) and vocational, technical, and business school.

## Postsecondary students were predominantly young, White non-Hispanic, and female.

The age distribution of postsecondary students indicates that the vast majority enrolled in postsecondary schooling shortly after completing high school: 69 percent of full-time students were 17 to 24 years old, including 86 percent of college underclassmen and 73 percent of college upperclassmen (Figure 2). Students 25 to 34 years old comprised 20 percent of full-time postsecondary students during the 1996-97 academic year. These students were most likely to be enrolled as college upperclassmen or graduate students. The oldest postsecondary students, those ages 35 and over, represented only 11 percent of all full-time students but 29 percent of all
vocational, technical, and business school students, and 22 percent of all graduate students.

Women outnumbered men among full-time students, 6.2 million compared with 5.3 million. The distributions of women and men by enrollment level were similar.

Seventy-two percent of full-time postsecondary students were White non-Hispanic, 13 percent were Black, 7 percent were Asian and Pacific Islander, and 8 percent were Hispanic (of any race)
(Table A). ${ }^{8,9}$ For the population as a whole, 73 percent were White non-Hispanic, 13 percent were Black, 4 percent were Asian and Pacific Islander, and 11 percent
${ }^{8}$ The percent of full-time postsecondary students who identified themselves as Asian and Pacific Islander is not significantly different from the percent of full-time postsecondary students who identified themselves as Hispanic.
${ }^{9}$ Because Hispanics may be of any race, data in this report for Hispanics overlap slightly with data for the Black population and for the Asian and Pacific Islander population. Based on the 1996 Survey of Income and Program Participation, 4 percent of the Black population 15 years and over and 3 percent of the Asian and Pacific Islander population 15 years and over are also of Hispanic origin. Data for the American Indian and Alaska Native population are not shown in this report because of small sample size in the 1996 Survey of Income and Program Participation.

Figure 1.
Full-Time Postsecondary Students by Enrollment Level: 1996-1997
(Number and percentage of full-time postsecondary students)


[^3]Figure 2.

(Percent distribution)


Source: U.S. Census Bureau, Survey of Income and Program Participation (SIPP), 1996 Panel Wave 5.
were Hispanic. ${ }^{10}$ The racial and ethnic distribution of students differed significantly by enrollment level. Black students were more likely to be enrolled in vocational, technical, or business school and less likely to be enrolled in graduate school than either White nonHispanic or Asian and Pacific Islander students. Hispanic students were more likely to be enrolled in vocational, technical, or business school than either White non-Hispanic or Asian and Pacific Islander students. Asians and Pacific Islanders were more likely to be enrolled in graduate school than students in any of the other race or ethnic groups.

[^4]
## About 70 percent of college undergraduates were financially dependent on their parents.

Among younger full-time students, those under 25 years old, 71 percent were claimed as a dependent on their parents' income taxes. Rates of financial dependence were highest among college undergraduates (77 percent among first- and second-year students and 69 percent among third- and fourth-year students) and lowest among graduate students (41 percent). This is not surprising given that financial
dependence on one's parents tends to diminish with age and that graduate students are generally older than college undergraduates.

Over half of all full-time postsecondary students (57 percent) belonged to families with an annual family income of less than \$50,000 (family income represents the sum of the annual incomes of all family members) (Figure 3). College undergraduates were significantly more likely to live in high-income families than either graduate students or vocational, technical, and business school

Table A.
Race and Ethnic Distribution of Full-Time Postsecondary Students by Enrollment Level: 1996-1997
(Percentage of full-time postsecondary students)

| Race/Hispanic origin | $\begin{array}{r} \text { All } \\ \text { full-time } \\ \text { students } \end{array}$ | Enrollment level |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | College years 1 to 2 | College years 3 to 4 | College years 5 or highe | Vocational technical business schoo |
| White . | 79 | 79 | 81 | 80 | 76 |
| White non-Hispanic. | 72 | 71 | 76 | 74 | 66 |
| Black | 13 | 13 | 12 | 9 | 17 |
| Asian and Pacific Islander | 7 | 7 | 6 | 11 | 5 |
| Hispanic (of any race) | 8 | 8 | 6 | 6 | 11 |

Source: U.S. Census Bureau, Survey of Income and Program Participation (SIPP), 1996 Panel Wave 5.

Figure 3.


Source: U.S. Census Bureau, Survey of Income and Program Participation (SIPP), 1996 Panel Wave 5.
students. Half of all full-time firstyear and second-year college students came from families with annual incomes of $\$ 50,000$ or more, compared with 44 percent of third- and fourth-year students, 34 percent of graduate students, and 30 percent of vocational, technical, and business school students. ${ }^{11}$ These differences probably stem from the fact that college undergraduates are more likely to
be financially dependent on their parents than graduate students or vocational, technical, and business school students and, as a result, are more likely to have their parent's income included as part of their family income.

[^5]Nearly three-fourths of all full-time students worked during the last 4 months.
In addition to receiving financial assistance from their parents, students can also help cover their school-related expenses by working or obtaining financial aid. Seventy-two percent of all full-time postsecondary students worked either full time or part time during

Figure 4.
Labor Force Status in Last 4 Months of Full-Time Postsecondary Students by Enrollment Level: 1996-1997


Source: U.S. Census Bureau, Survey of Income and Program Participation (SIPP), 1996 Panel Wave 5.
the previous 4 months (Figure 4). ${ }^{12}$ Third- and fourth-year college students and graduate students were more likely to have worked than first- and second-year students or vocational, technical, and business school students. Graduate students had the highest incidence of full-time work (48 percent), followed by vocational, technical, and business school students (43 percent), third- and fourth-year college students (40 percent), and first- and second-year college students (32 percent). ${ }^{13}$

[^6]
## INSTITUTIONAL CHARACTERISTICS

## Most full-time postsecondary students were enrolled in public institutions.

The IPEDS data provide us with information on school level (2-year or 4-year) and control (public or private). The vast majority of fulltime postsecondary students, 75 percent, were enrolled in public institutions, 46 percent in public schools with curriculums of 4 years or more (4-year schools) and 29 percent in public schools with curriculums of 2 years or less (2-year schools). Twenty percent of students were enrolled at private, nonprofit institutions, nearly all of these at 4-year schools (Figure 5). Although there were roughly equal numbers of public and private, nonprofit institutions in 1996, public institutions represented 112 of the 120 largest nonprofit postsecondary institutions. ${ }^{14}$ Only 5 percent of all full-time postsecondary students were enrolled

[^7]at private, for-profit (proprietary) institutions, primarily at 2-year schools.

The differences in the distribution of students 17 to 24 years old and 25 to 34 years old by institutional control and level were generally quite small. The most notable difference was a higher likelihood of enrollment in private, for-profit institutions among those 25 to 34 years old, 6 percent compared with 4 percent (Table B). Students 25 to 34 years old were also slightly less likely than students 17 to 24 years old to be enrolled in public schools, 73 percent compared with 77 percent. Students 35 years and over were more likely than younger students to be enrolled in public 2-year institutions, 41 percent compared with 28 percent, and in private institutions, 30 percent compared with 23 percent.

Hispanics were more likely to be enrolled at public postsecondary schools (81 percent) than were White non-Hispanics (74 percent). In addition, Hispanic students were approximately equally likely to be

Figure 5.
Distribution of Full-Time Postsecondary Students by Institutional Control and Level: 1996-1997
(Percentage of full-time postsecondary students)


[^8]Table B.
Demographic Characteristics of Full-Time Postsecondary Students by Institutional Control and Level: 1996-1997
(Numbers in thousands)

| Characteristic | Total ${ }^{1}$ | Institutional control and level |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Public |  |  |  | Private, nonprofit |  |  |  | Private, for profit |  |  |  |
|  |  | 2-year or less |  | 4-year or more |  | 2-year or less |  | 4-year or more |  | 2-year or less |  | 4-year or more |  |
|  |  | Number | Per- <br> cent | Number | Percent | Number | Percent | Number | Per- <br> cent | Number | Per- <br> cent | Number | Percent |
| Total, 17 years and older | 11,380 | 3,291 | 29 | 5,289 | 46 | 82 | 1 | 2,122 | 19 | 466 | 4 | 130 | 1 |
| AGE |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 to 24 years . . . . . . . . . . . | 7,881 | 2,197 | 28 | 3,853 | 49 | 55 | 1 | 1,441 | 18 | 266 | 3 | 70 | 1 |
| 25 to 34 years . . . . . . . . . . . . | 2,286 | 599 | 26 | 1,081 | 47 | 6 | 0 | 456 | 20 | 104 | 5 | 39 | 2 |
| 35 years and older | 1,213 | 495 | 41 | 355 | 29 | 21 | 2 | 225 | 19 | 96 | 8 | 21 | 2 |
| SEX |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 5,244 | 1,530 | 29 | 2,476 | 47 | 40 | 1 | 968 | 18 | 161 | 3 | 67 | 1 |
| Women | 6,137 | 1,761 | 29 | 2,813 | 46 | 41 | 1 | 1,153 | 19 | 305 | 5 | 63 | 1 |
| RACE/HISPANIC ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 9,040 | 2,506 | 28 | 4,277 | 47 | 69 | 1 | 1,733 | 19 | 379 | 4 | 75 | 1 |
| White non-Hispanic. . . . . . | 8,227 | 2,186 | 27 | 3,933 | 48 | 63 | 1 | 1,665 | 20 | 309 | 4 | 71 | 1 |
| Black | 1,481 | 489 | 33 | 623 | 42 | 4 | 0 | 243 | 16 | 79 | 5 | 43 | 3 |
| Asian and Pacific Islander... | 760 | 246 | 32 | 358 | 47 | 4 | 1 | 139 | 18 | 1 | 0 | 12 | 2 |
| Hispanic (of any race) | 877 | 342 | 39 | 365 | 42 | 8 | 1 | 80 | 9 | 74 | 8 | 9 | 1 |

${ }^{1}$ Students attending school outside of the United States are excluded from this total.
Source: U.S. Census Bureau, Survey of Income Program Participation (SIPP), 1996 Panel Wave 5 and National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 1997 Institutional Characteristics Survey.
attending a public 2-year institution (39 percent) as a public 4-year institution (42 percent). Hispanic students were also less likely to be attending a private, nonprofit school (10 percent) than students from any race group. The likelihood of proprietary school enrollment was highest among Hispanics (9 percent) and Blacks (8 percent) and lowest among Asians and Pacific Islanders (2 percent). ${ }^{15}$

Compared with students from families with an annual income of less than $\$ 25,000$, students living in families with an annual income of $\$ 50,000$ or more were more likely to have been enrolled at a private,

[^9]nonprofit institution (22 percent compared with 16 percent) and less likely to have been enrolled at a private, proprietary institution (3 percent compared with 7 percent) (Table C). This is not surprising given that private, nonprofit institutions are generally more expensive to attend than either public or proprietary institutions. Annual family income was also directly related to the likelihood of enrollment in a 4-year institution. Students from families with an annual income of $\$ 50,000$ or more were more likely to be enrolled at a 4-year school (70 percent) than were students from families earning less than $\$ 25,000$ (62 percent).

Institutional level also differed significantly by student's dependency status and labor force status. Dependent students were more
likely than independent students to be enrolled at 4-year institutions, 71 percent compared with 60 percent, and at private, nonprofit institutions, 21 percent compared with 15 percent, while independent students were more likely to be enrolled in proprietary schools, 7 percent compared with 3 percent. Students who worked, either full time or part time, were more likely to be enrolled at a 4 -year institution than students who did not work, 69 percent compared with 60 percent.

## Nearly half of all full-time students attended postsecondary institutions with enrollments of no more than $\mathbf{1 0 , 0 0 0}$ students.

The IPEDS data also give us information about the size of the

Table C.

## Economic Characteristics of Full-Time Postsecondary Students by Institutional Control and Level: 1996-1997

(Numbers in thousands)

| Characteristic | Total ${ }^{1}$ | Institutional control and level |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Public |  |  |  | Private, nonprofit |  |  |  | Private, for profit |  |  |  |
|  |  | 2-year or less |  | 4-year or more |  | 2-year or less |  | 4-year or more |  | 2-year or less |  | 4-year or more |  |
|  |  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Total, 17 years and older $\qquad$ | 11,380 | 3,291 | 29 | 5,289 | 46 | 82 | 1 | 2,122 | 19 | 466 | 4 | 130 | 1 |
| DEPENDENCY STATUS ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dependent student | 5,571 | 1,419 | 25 | 2,825 | 51 | 42 | 1 | 1,115 | 20 | 131 | 2 | 39 | 1 |
| Independent student | 2,310 | 777 | 34 | 1,028 | 45 | 12 | 1 | 326 | 14 | 134 | 6 | 32 | 1 |
| ANNUAL FAMILY INCOME |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than \$25,000. | 3,623 | 1,160 | 32 | 1,634 | 45 | 14 | 0 | 567 | 16 | 191 | 5 | 57 | 2 |
| \$25,000 to \$49,999. | 2,812 | 804 | 29 | 1,292 | 46 | 28 | 1 | 502 | 18 | 144 | 5 | 43 | 2 |
| \$50,000 or more | 4,946 | 1,327 | 27 | 2,364 | 48 | 40 | 1 | 1,053 | 21 | 131 | 3 | 30 | 1 |
| LABOR FORCE STATUS (last 4 months) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Did not work. | 3,197 | 1,104 | 35 | 1,362 | 43 | 19 | 1 | 548 | 17 | 145 | 5 | 19 | 1 |
| Worked part time.......... . . | 3,849 | 1,084 | 28 | 1,891 | 49 | 34 | 1 | 677 | 18 | 128 | 3 | 36 | 1 |
| Worked full time. | 4,334 | 1,103 | 25 | 2,037 | 47 | 29 | 1 | 896 | 21 | 194 | 4 | 75 | 2 |

${ }_{2}^{1}$ Students attending school outside of the United States are excluded from this total.
${ }^{2}$ Declared as a dependent on one or both parents' income tax return. Universe consists of students under 25 years old.
Source: U.S. Census Bureau, Survey of Income Program Participation (SIPP), 1996 Panel Wave 5 and National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 1997 Institutional Characteristics Survey.
enrolled population at the student's school. Full-time postsecondary students were more likely to attend small institutions (no more than 10,000 students) than either moderately sized ( 10,001 to 20,000 students) or large (more than 20,000 students) institutions (Table D). In 1996-97, 48 percent of students attended institutions with no more than 10,000 students, and the majority of these students attended small institutions with an enrollment of no more than 5,000 students. The remaining 52 percent of students were split evenly between moderately sized and large institutions.

Students 35 years and older were significantly more likely than younger students to be enrolled at a very small institution (no more than 5,000 students), 43 percent compared with 28 percent. This is
consistent with the earlier result that older students were more likely than younger students to be enrolled in private, for-profit, 2 -year institutions.

Black students were more likely than students from other race and ethnic groups to attend very small institutions ( 36 percent), while Asians and Pacific Islanders were least likely to be enrolled at very small schools (16 percent). Asians and Pacific Islanders were significantly more likely than those from other race and ethnic groups to be enrolled at large institutions, 35 percent, compared with 26 percent for both White non-Hispanics and Hispanics and 21 percent for Blacks. There were also slight differences in institutional size by sex. Women were more likely than men to have attended an institution with an enrollment of no more
than 5,000 students, while men were more likely to have attended an institution with an enrollment of over 20,000 students.

## White non-Hispanic students tended to enroll in schools with relatively low levels of racial and ethnic diversity.

From the IPEDS data, it is possible to determine the overall racial and ethnic composition of the school, the percent Black non-Hispanic and the percent Hispanic. Nearly half (46 percent) of all full-time students attended institutions where the student body was no more than 5 percent Black non-Hispanic (Figure 6). ${ }^{16}$ Only 11 percent of full-time students attended institu-

[^10]Table D.
Full-Time Postsecondary Students by Institutional Enrollment: 1996-1997
(Number in thousands and percent distribution)

| Characteristic | Total number of students ${ }^{1}$ (thousands) | Total enrollment in institution |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1-5,000 | $\begin{aligned} & 5,001- \\ & 10,000 \end{aligned}$ | $\begin{array}{r} 10,001- \\ 20,000 \end{array}$ | $\begin{array}{r} 20,001- \\ 60,000 \end{array}$ |
| Total, 17 years and older . | 11,380 | 30 | 19 | 26 | 26 |
| AGE |  |  |  |  |  |
| 17 to 24 years | 7,881 | 28 | 19 | 26 | 26 |
| 25 to 34 years. | 2,286 | 27 | 17 | 28 | 28 |
| 35 years and older | 1,213 | 43 | 19 | 19 | 19 |
| SEX |  |  |  |  |  |
| Men. | 5,244 | 28 | 18 | 26 | 28 |
| Women | 6,137 | 31 | 20 | 25 | 24 |
| RACE/HISPANIC ORIGIN |  |  |  |  |  |
| White. | 9,040 | 29 | 19 | 26 | 26 |
| White non-Hispanic | 8,227 | 30 | 20 | 24 | 26 |
| Black . | 1,481 | 36 | 21 | 22 | 21 |
| Asian and Pacific Islander. | 760 | 16 | 14 | 34 | 35 |
| Hispanic (of any race) . | 877 | 23 | 12 | 39 | 26 |
| DEPENDENCY STATUS ${ }^{2}$ |  |  |  |  |  |
| Dependent student. | 5,571 | 26 | 19 | 28 | 27 |
| Independent student. | 2,310 | 32 | 21 | 23 | 24 |
| ANNUAL FAMILY INCOME |  |  |  |  |  |
| Less than \$25,000 | 3,623 | 31 | 18 | 25 | 26 |
| \$25,000 to \$49,999 | 2,812 | 30 | 18 | 29 | 22 |
| \$50,000 and over . . | 4,946 | 28 | 20 | 25 | 28 |
| LABOR FORCE STATUS (last 4 months) |  |  |  |  |  |
| Did not work. | 3,197 | 30 | 16 | 28 | 26 |
| Worked part time | 3,849 | 27 | 19 | 26 | 28 |
| Worked full time . | 4,334 | 32 | 21 | 24 | 24 |

[^11]tions that were more than 20 percent Black non-Hispanic.
Approximately two-thirds (65 percent) of all students attended schools where the enrollment was no more than 5 percent Hispanic, while fewer than 1 -in-10 attended schools that were more than 20 percent Hispanic (Figure 7).

Not surprisingly, Black and Hispanic students were more likely to attend schools with larger percentages of Black non-Hispanic students and Hispanic students,
respectively. Among full-time students, 67 percent of Black students attended schools that were more than 10 percent Black nonHispanic, compared with only 20 percent of White non-Hispanic students and 18 percent of Asian and Pacific Islander students. ${ }^{17}$ In

[^12]addition, while 61 percent of fulltime Hispanic students attended schools that were more than 10 percent Hispanic, only 15 percent of White non-Hispanic students and 23 percent of Black students did so.

## AVERAGE ANNUAL SCHOOLING COSTS

## Average annual tuition cost among full-time students who paid tuition was \$6,616.

During the 1996-97 school year, full-time postsecondary students paid an average of $\$ 8,667$ for tuition and fees, books and supplies, and room and board (Table E). ${ }^{18}$ The single largest component of schooling costs was tuition and fees. Tuition and fees were paid by 96 percent of full-time postsecondary students and averaged \$6,616 among these students. The second largest component of schooling costs was the cost of room and board, paid by 56 percent of full-time postsecondary students. Average room and board expenses, among students who paid room and board, equaled $\$ 4,882$. The final component of schooling costs, books and supplies, averaged $\$ 675$ per student, for the 94 percent of postsecondary students who reported book and supply costs.

[^13]Figure 6.


Source: U.S. Census Bureau, Survey of Income and Program Participation (SIPP), 1996 Panel Wave 5 and
National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 1997 Institutional Characteristics Survey.

## Graduate students faced higher schooling costs than other postsecondary students.

Annual schooling costs varied considerably by level of enrollment. Among full-time students, graduate students had the highest total costs ( $\$ 13,518$ ), followed by thirdand fourth-year college students (\$9,562), first- and second-year
college students (\$7,780), and vocational, technical, and business school students $(\$ 4,283)$. The differences in average total costs were the result of differences in average costs for the three cost components and differences in the likelihood of incurring the different cost components. Graduate students faced higher costs for the two largest cost components,
tuition and fees and room and board, while vocational, technical, and business students faced the lowest tuition costs. In addition, traditional college students were significantly more likely than vocational, technical, and business school students to report having paid each of the three components of postsecondary costs.

Figure 7.

Ethnic Composition of Full-Time Students' Postsecondary Institutions: 1996-1997
(Percent distribution of students in each race and ethnicity category)



Source: U.S. Census Bureau, Survey of Income and Program Participation (SIPP), 1996 Panel Wave 5 and
National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 1997 Institutional Characteristics Survey.

Table E.
Average Postsecondary Schooling Costs and Percent of Students Paying Each Cost for Full-Time Students: 1996-1997

| Characteristic | Total cost $^{2}$ | Tuition and fees ${ }^{3}$ | Percent of students paying \$1 or more for tuition and fees | Books and supplies ${ }^{4}$ | Percent of students paying \$1 or more for books and supplies | Room and board ${ }^{5}$ | Percent of students paying \$1 or more for room and board |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total. | \$8,667 | \$6,616 | 96 | \$675 | 94 | \$4,882 | 56 |
| ENROLLMENT LEVEL |  |  |  |  |  |  |  |
| College years 1 to 2 | 7,780 | 5,946 | 97 | 637 | 97 | 4,430 | 60 |
| College years 3 to 4 | 9,562 | 7,080 | 98 | 629 | 97 | 4,736 | 64 |
| College years 5 or higher. | 13,518 | 9,658 | 99 | 868 | 96 | 6,509 | 58 |
| Vocational, technical, business school. . . | 4,283 | 4,095 | 82 | 759 | 72 | 3,647 | 17 |
| AGE |  |  |  |  |  |  |  |
| 17 to 24 years | 8,954 | 6,886 | 97 | 653 | 96 | 4,522 | 68 |
| 25 to 34 years | 8,715 | 6,378 | 95 | 701 | 92 | 5,701 | 45 |
| 35 years and older. | 6,706 | 5,222 | 91 | 776 | 86 | 6,511 | 24 |
| SEX |  |  |  |  |  |  |  |
| Men. | 9,342 | 7,019 | 95 | 700 | 94 | 5,187 | 62 |
| Women. | 8,090 | 6,271 | 96 | 653 | 94 | 4,575 | 51 |
| RACE/HISPANIC ORIGIN |  |  |  |  |  |  |  |
| White | 8,906 | 6,733 | 96 | 678 | 94 | 4,830 | 58 |
| White non-Hispanic | 9,166 | 6,870 | 97 | 691 | 94 | 4,854 | 58 |
| Black. | 6,815 | 5,486 | 91 | 616 | 94 | 5,299 | 42 |
| Asian and Pacific Islander | 9,857 | 7,510 | 97 | 757 | 94 | 5,050 | 66 |
| Hispanic (of any race). . . . . . . . . . . . . . . | 6,272 | 5,240 | 92 | 546 | 90 | 4,448 | 53 |
| DEPENDENCY STATUS ${ }^{1}$ |  |  |  |  |  |  |  |
| Dependent student . . . . . . . . . . . . . . . . . | 9,523 | 7,374 | 97 | 650 | 97 | 4,463 | 75 |
| Independent student . . . . . . . . . . . . . . . . | 7,582 | 5,700 | 96 | 662 | 93 | 4,700 | 54 |
| ANNUAL FAMILY INCOME |  |  |  |  |  |  |  |
| Less than \$25,000 . . . . . . . . . . . . . . . . . . | 8,490 | 6,289 | 95 | 652 | 93 | 4,879 | 52 |
| \$25,000 to \$49,999 | 7,598 | 5,933 | 94 | 705 | 92 | 4,975 | 47 |
| \$50,000 and over. | 9,402 | 7,221 | 97 | 674 | 95 | 4,844 | 65 |
| LABOR FORCE STATUS (last 4 months) |  |  |  |  |  |  |  |
| Did not work | 8,568 | 6,876 | 94 | 681 | 94 | 5,136 | 48 |
| Worked part time | 8,301 | 6,342 | 96 | 653 | 96 | 4,535 | 63 |
| Worked full time . . . . . . . . . . . . . . . . . . . . | 9,065 | 6,669 | 97 | 689 | 92 | 5,020 | 56 |

[^14]Younger students reported higher schooling costs than older students and men reported higher costs than women. Students under 35 years old tended to have higher educational expenses than students 35 years and over because they were more likely to be enrolled in college, as opposed
to vocational, technical, or business school. Differences in enrollment levels cannot, however, explain the cost differences between men and women. Men reported higher average postsecondary schooling costs than women, $\$ 9,342$, compared with $\$ 8,090$, the result of higher costs
for both tuition and room and board.

Average schooling costs differed markedly by students' race and ethnicity. Asians and Pacific Islanders $(\$ 9,708)$ and Whites $(\$ 8,886)$ reported the highest costs while Blacks $(\$ 6,728)$ and Hispanics $(\$ 6,172)$ reported the
lowest costs. ${ }^{19}$ Most of the race and ethnic differences in schooling costs were attributable to differences in average tuition costs. Once again, these differences can be explained, at least in part, by differences in levels of enrollment. Among full-time students, Asians and Pacific Islanders were more likely than those of other race and ethnic groups to be enrolled in relatively high-cost graduate programs, while Blacks and Hispanics were more likely to be enrolled in relatively low-cost vocational, technical, or business programs. ${ }^{20}$
Asian and Pacific Islander students were more likely to report positive room and board expenses (66 percent) than White non-Hispanic (58 percent), Hispanic (53 percent), or Black students (42 percent). ${ }^{21}$

## Dependent students faced higher schooling costs than independent students.

Since student's schooling decisions are frequently constrained by their economic resources, it is not surprising that student's postsecondary schooling costs were directly related to their economic status. Full-time dependent students under 25 years of age reported higher schooling costs than their independent counterparts, \$9,523 compared with $\$ 7,582$. The difference in costs

[^15]between dependent and independent students resulted from a combination of higher tuition costs and an increased likelihood of incurring room and board expenses, 75 percent compared with 54 percent. In addition, schooling costs were much higher for full-time students from families earning at least $\$ 50,000$ per year $(\$ 9,402)$ than for students from families earning $\$ 25,000$ to $\$ 49,999$ per year $(\$ 7,598)$ or from those earning less than $\$ 25,000$ per year $(\$ 8,490)$, again due to higher tuition costs and more frequent payment of room and board expenses. ${ }^{22}$

## FINANCIAL AID RECEIPT

## Most full-time postsecondary students received financial aid during the 1996-97 academic year.

The majority of full-time postsecondary students, 62 percent, received some form of financial aid during the 1996-97 academic year. Financial aid includes student loans, Pell Grants, fellowships, scholarships, work study, Veterans Assistance, employer assistance, and other aid sources. Among these students, the average amount of financial aid received was $\$ 6,022$, covering an average of 62 percent of their total costs (Table F).

College upperclassmen and graduate students were slightly more likely to have reported receiving aid than first- and second-year college students. As a percentage of their schooling costs, graduate students and vocational, technical,

[^16]and business school students received the largest aid packages, covering an average of 71 percent of their schooling expenses.

The likelihood of financial aid receipt and the amount of aid varied by sex and age. Women (65 percent) were more likely to report having received financial aid than men (59 percent) and tended, on average, to have aid packages that covered a larger percentage of their total costs (64 percent compared with 60 percent). Full-time students 25 to 34 years old were more likely to report having received financial aid (68 percent) than either younger students (60 percent) or older students (62 percent), in part because 25- to 34-year olds are more likely to be enrolled in graduate school than younger students. ${ }^{23}$ In addition, among those who received aid, 17 to 24 year olds had a lower proportion of their schooling costs covered (59 percent) than did students 25 to 34 years old ( 69 percent) or 35 and over ( 67 percent). ${ }^{24}$

## Blacks were more likely to have received financial aid than White non-Hispanics.

Among full-time postsecondary students, Blacks (74 percent) and Hispanics (69 percent) reported higher rates of financial aid receipt than White non-Hispanics (60 percent), and Asians and Pacific Islanders (56 percent). ${ }^{25}$ However,

[^17]Table F.
Full-Time Postsecondary Students Who Received Financial Aid and Average Amount of Aid Received: 1996-1997

| Characteristic | Total students (thousands) | Number of recipients | Percent of all students |  |  | Average amount of aid received ${ }^{3}$ | Average percent of costs covered |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Estimate | Standard error | 90-percent confidence interval |  |  |
| Total . . . . . . . . . . . . . . . . . . . . . . . . . . | 11,415 | 7,098 | 62 | 0.92 | 60.5-63.5 | \$6,022 | 62 |
| ENROLLMENT LEVEL |  |  |  |  |  |  |  |
| College years 1 to 2 | 4,982 | 2,977 | 60 | 1.41 | 57.7-62.3 | 5,339 | 61 |
| College years 3 to 4 | 3,683 | 2,391 | 65 | 1.60 | 62.4-67.6 | 5,553 | 57 |
| College years 5 or higher | 1,427 | 938 | 66 | 2.55 | 61.8-70.2 | 11,668 | 71 |
| Vocational, technical, business school.. | 1,323 | 792 | 60 | 2.74 | 55.5-64.5 | 3,326 | 71 |
| AGE |  |  |  |  |  |  |  |
| 17 to 24 years. | 7,904 | 4,777 | 60 | 1.12 | 58.2-61.8 | 5,815 | 59 |
| 25 to 34 years. | 2,293 | 1,570 | 68 | 1.98 | 64.7-71.3 | 6,964 | 69 |
| 35 years and older. | 1,217 | 752 | 62 | 2.83 | 57.4-66.6 | 5,374 | 67 |
| SEX |  |  |  |  |  |  |  |
| Men. | 5,261 | 3,078 | 59 | 1.38 | 56.7-61.3 | 6,134 | 60 |
| Women | 6,153 | 4,020 | 65 | 1.23 | 63.0-67.0 | 5,937 | 64 |
| RACE/HISPANIC ORIGIN |  |  |  |  |  |  |  |
| White. | 9,066 | 5,505 | 61 | 1.04 | 59.3-62.7 | 6,079 | 61 |
| White non-Hispanic | 8,253 | 4,953 | 60 | 1.10 | 58.2-61.8 | 6,281 | 61 |
| Black. | 1,481 | 1,090 | 74 | 2.31 | 70.2-77.8 | 5,027 | 64 |
| Asian and Pacific Islander | 769 | 428 | 56 | 3.64 | 50.0-62.0 | 8,257 | 67 |
| Hispanic (of any race) | 877 | 606 | 69 | 3.17 | 63.8-74.2 | 4,249 | 63 |
| DEPENDENCY STATUS ${ }^{1}$ |  |  |  |  |  |  |  |
| Dependent student. | 5,590 | 3,393 | 61 | 1.32 | 58.8-63.2 | 5,856 | 57 |
| Independent student | 2,315 | 1,384 | 60 | 2.07 | 56.6-63.4 | 5,714 | 65 |
| ANNUAL FAMILY INCOME |  |  |  |  |  |  |  |
| Less than \$25,000 . . . . . . . . . . . . . . . . . . . . . | 3,623 | 2,610 | 72 | 1.51 | 69.5-74.5 | 6,078 | 66 |
| \$25,000 to \$49,999 | 2,822 | 1,874 | 66 | 1.81 | 63.0-69.0 | 5,760 | 64 |
| \$50,000 or more.. | 4,970 | 2,614 | 53 | 1.44 | 50.6-55.4 | 6,154 | 58 |
| LABOR FORCE STATUS (last 4 months) |  |  |  |  |  |  |  |
| Did not work | 3,218 | 1,898 | 59 | 1.76 | 56.1-61.9 | 5,767 | 62 |
| Worked part time . . . . . . . . . . . . . . . . . . . . . . | 3,854 | 2,525 | 66 | 1.55 | 63.5-68.5 | 6,038 | 63 |
| Worked full time | 4,342 | 2,675 | 62 | 1.50 | 59.5-64.5 | 6,188 | 62 |
| ANNUAL RESIDENT TUITION ${ }^{2}$ |  |  |  |  |  |  |  |
| \$1,500 or less. | 2,292 | 1,168 | 51 | 2.12 | 47.5-54.5 | 3,731 | 69 |
| \$1,501 to \$8,000 . . . . . . . . . . . . . . . . . . . . . . | 7,025 | 4,395 | 63 | 1.17 | 61.1-64.9 | 5,607 | 62 |
| \$8,001 or more. | 2,063 | 1,529 | 74 | 1.96 | 70.8-77.2 | 8,977 | 57 |

${ }^{1}$ Claimed as a dependent on one or both parents' income tax return. Universe consists of students under 25 years old.
${ }^{2}$ Students attending school outside of the United States are excluded from the resident tuition figures.
${ }^{3}$ Average amount based on students who received financial aid.
Source: U.S. Census Bureau, Survey of Income Program Participation (SIPP), 1996 Panel Wave 5 and National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 1997 Institutional Characteristics Survey.

Blacks (64 percent), Hispanics (63 percent) and White nonHispanics (61 percent) had similar percentages of their schooling costs covered by financial aid.

Independent students tended to receive larger aid packages than dependent students. While 60 percent of full-time students under 25 years old received some
financial aid, regardless of dependency status, independent students were more likely than dependent students to have at least 50 percent of their total costs covered by

Figure 8.


Source: U.S. Census Bureau, Survey of Income and Program Participation (SIPP), 1996 Panel Wave 5.
financial aid, 39 percent compared with 33 percent (Figure 8). On average, independent students had 65 percent of their total costs covered by financial aid, compared with 57 percent for dependent students. ${ }^{26}$

The likelihood of financial aid receipt and the proportion of total costs covered by financial aid declined as family income rose. Among students from families with annual incomes of less than $\$ 25,000,72$ percent received financial aid and 47 percent had at least half of their total costs covered. By contrast, only 53 percent of students from families with annual incomes of at least \$50,000 received aid, and only 29 percent of these students had at least half of their total costs covered.

[^18]The likelihood of financial aid receipt was highest for students attending the most expensive schools.

The IPEDS Institutional Characteristics Survey collects information on each institution's resident tuition. While this does not represent the tuition actually charged to all students at the institution, it does allow for a general ranking of institutions by tuition cost. This, in turn, enables us to compare the likelihood of financial aid receipt by school cost. Students attending more expensive schools (as defined by resident tuition) were more likely to receive financial aid than those attending less expensive schools. Nearly three-quarters (74 percent) of students attending postsecondary institutions with an annual resident undergraduate tuition (the undergraduate tuition cost for instate residents) of over $\$ 8,000$ received some form of financial aid, compared with 51 percent of students attending institutions with tuition of $\$ 1,500$ per year or less. However, students at the
least expensive schools (annual tuition $\$ 1,500$ or less) had, on average, a larger share of their total costs covered by financial aid than students at the most expensive schools (annual tuition over $\$ 8,000$ ), 69 percent compared with 57 percent.

## Private school students were more likely to receive financial aid than public school students.

IPEDS data also allow for the comparison of financial aid receipt by other institutional characteristics such as level, control, and enrollment, and the likelihood of financial aid receipt differed by institutional characteristics. Students were more likely to receive aid if the schools they attended were private, had 4-year curriculums, had requirements for admission, or had very small enrollments (Table G). In addition, students who attended institutions with minority enrollments of no more than 5 percent were more likely to report having received financial aid

Table G.
Postsecondary Student Financial Aid Receipt for Full-Time Students by Institutional Characteristics: 1996-1997

| Characteristic | Total students (thousands) | Full-time students who received financial aid |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number of recipients (thousands) | Percent of students | Average amount of aid received | Average percent of costs covered |
| Total ${ }^{1}$. | 11,380 | 7,092 | 62 | 6,025 | 62 |
| CONTROL |  |  |  |  |  |
| Public. | 8,580 | 5,035 | 59 | 5,259 | 64 |
| Private, nonprofit | 2,203 | 1,613 | 73 | 8,719 | 57 |
| Private, for profit | 597 | 444 | 74 | 4,915 | 68 |
| LEVEL |  |  |  |  |  |
| 2-year or less | 3,839 | 2,184 | 57 | 4,283 | 69 |
| 4-year or more | 7,541 | 4,908 | 65 | 6,799 | 59 |
| ACCREDITATION STATUS |  |  |  |  |  |
| Accredited. | 10,175 | 6,373 | 63 | 6,116 | 62 |
| Not accredited | 1,206 | 720 | 60 | 5,215 | 63 |
| ADMISSIONS REQUIREMENTS |  |  |  |  |  |
| Open | 2,905 | 1,594 | 55 | 4,863 | 68 |
| Test scores or class standing | 8,476 | 5,498 | 65 | 6,362 | 61 |
| ENROLLMENT |  |  |  |  |  |
| 1 to 5,000 | 3,360 | 2,256 | 67 | 5,961 | 64 |
| 5,001 to 10,000 | 2,138 | 1,286 | 60 | 5,652 | 63 |
| 10,001 to 20,000 | 2,935 | 1,782 | 61 | 6,061 | 62 |
| 20,001 to 60,000 | 2,947 | 1,768 | 60 | 6,340 | 59 |
| PERCENT MINORITY ${ }^{2}$ |  |  |  |  |  |
| 0 to 5 | 1,218 | 833 | 68 | 6,261 | 63 |
| 6 to 10 | 2,185 | 1,388 | 64 | 6,193 | 59 |
| 11 to 20 | 3,336 | 2,007 | 60 | 5,998 | 58 |
| 21 to 100. | 4,641 | 2,863 | 62 | 5,893 | 67 |

${ }^{1}$ Students attending school outside of the United States are excluded from this total.
${ }^{2}$ Other than White non-Hispanic.
Source: U.S. Census Bureau, Survey of Income Program Participation (SIPP), 1996 Panel Wave 5 and National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 1997 Institutional Characteristics Survey.
than students who attended institutions with a minority enrollment of 11 percent or more.

Among full-time students attending institutions under private control, either nonprofit or for-profit, approximately 74 percent received some form of financial aid, compared with 59 percent among public school students. Students attending private, nonprofit institutions received larger aid packages in absolute dollars but had a lower percentage of their total costs covered (57 percent) than did students in public institutions
(64 percent) or in private, for-profit institutions (68 percent).

Students at 2-year institutions were less likely to receive financial aid than students attending 4-year institutions, 57 percent compared with 65 percent, but those who received aid had a larger percentage of their costs covered, 68 percent compared with 59 percent. Likewise, students attending schools with no requirements for admission were less likely to receive aid, but among those who did receive aid, their aid packages covered a greater share of their
total costs than did the aid packages of students attending postsecondary institutions with some admissions requirements, such as test scores or class standing.

## Financial aid receipt was

 more likely among students at small schools.Interestingly, students attending very small institutions, those with enrollments no greater than 5,000 students, were more likely than students attending larger institutions to receive financial aid. In addition, students attending very small institutions had a higher share of costs covered (64 percent) than those attending very large institutions (59 percent).

Finally, full-time students who attended institutions where the student body was at least 95 percent White non-Hispanic were more likely than students attending more racially and ethnically diverse institutions to report receiving financial aid; however, students attending postsecondary institutions that were less than 80 percent White non-Hispanic had a larger percentage of their total costs covered than did students attending schools that were between 80 and 94 percent White non-Hispanic.

## Student loans were the most common source of financial aid.

The most common source of aid for full-time students was student loans. Nearly 4 million students, or one-third of all full-time students, received some aid in the form of student loans during 1996-97 (Figure 9). The average annual loan amount was $\$ 5,495$, the largest of the various forms of

Figure 9.
Full-Time Postsecondary Student Recipients of Financial Aid and Average Amount Received From Each Source: 1996-1997


Source: U.S. Census Bureau, Survey of Income and Program Participation (SIPP), 1996 Panel Wave 5.
financial aid. The next largest aid sources were scholarships and fellowships (received by 27 percent of full-time students) and Pell Grants (received by 23 percent of full-time students). Students received an average of $\$ 4,630$ from scholarships and fellowships and \$1,811 from Pell Grants. Veterans Assistance and employer assistance, although much smaller programs, represented sizable components of the financial aid package of students who received these forms of aid-the average amount of aid received by full-time students from each of these programs was approximately $\$ 3,300$.

## Nearly half of financial aid recipients received aid from more than one source.

A little over one-half of the fulltime students who received aid obtained it from a single source, with the remaining 48 percent (or 3.4 million students) having more
than one source. Dependent students were more likely to have multiple sources of aid than were independent students-51 percent compared with 45 percent. Work study students were most likely to have received aid from multiple sources ( 90 percent) while students that received employer assistance were least likely to have received a second type of aid (38 percent).

Among students who received financial aid from multiple sources, the most common aid combination was, not surprisingly, student loans and fellowships or scholarships (Figure 10), 41 percent of student loan recipients also reported receiving either a fellowship or scholarship. The other common aid combinations all involved combinations of the four most common types of aid: student loans, fellowships and scholarships, Pell Grants, and work study.

## SUMMARY

This report examined the characteristics of full-time postsecondary students and their institutions, the costs of their schooling, and their patterns of financial aid receipt for the academic year 1996-97. According to the SIPP data, the most typical full-time postsecondary student was White nonHispanic, female, under 25 years of age, and enrolled as a college undergraduate. She was also employed, financially dependent on her parents, and from a family earning less than $\$ 50,000$ per year. Her college was likely to be a public institution with a 4-year curriculum, a Black enrollment of no more than 10 percent, and a Hispanic enrollment of no more than 5 percent.
Nearly all full-time students paid at least \$1 toward tuition and fees (96 percent) and books and supplies (94 percent), while just over half of all students ( 56 percent) incurred costs for room and board.

Figure 10
Full-Time Postsecondary Student Recipients of the Most Common Financial Aid
Combinations: 1996-1997
(In thousands)


Source: U.S. Census Bureau, Survey of Income and Program Participation (SIPP), 1996 Panel Wave 5.

Average total costs for these three components totaled \$8,667 in 1996-97.

Most students (62 percent) received some form of financial aid. The average aid amount totaled \$6,022 and covered an average of 62 percent of the students' postsecondary costs, although only 38 percent of students received aid packages that covered at least half of their total costs.

The most common source of financial assistance was student loans, followed by fellowships and scholarships, Pell Grants, and work study. Nearly half of all students received aid from more than one source.

## SOURCES OF THE DATA

The estimates in this report come from an innovative project that merged data from the Survey of Income and Program Participation (SIPP) with data from the Integrated Postsecondary Education Data System (IPEDS). The resulting data set is richer and allows for new analysis not
possible with only one of the two data sets.

The SIPP is a longitudinal survey of the U.S. civilian, noninstitutionalized population, conducted at 4-month intervals by the Census Bureau. The main focus of SIPP is to collect information on labor force participation, jobs, income, and participation in federal assistance programs. Information on other topics is collected in topical modules on a rotating basis. Data shown in this report are from the School Enrollment and Financing topical module collected in the 4month period from August 1997 through November 1997 as part of the 1996 panel of SIPP. The School Enrollment and Financing topical module included questions on enrollment status, level of enrollment, major field of study, schooling costs, and educational assistance. In addition, for the first time, the School Enrollment and Financing topical module asked students the name and, if necessary, the location of the school that they attended. This information allowed the SIPP data to then be linked to the IPEDS data, which is collected on an institutional
basis about the schools themselves.

The IPEDS annually surveys approximately 10,000 postsecondary institutions and consists of eight integrated components. The data in this report are from the 1997 Institutional Characteristics Survey, a census of 2- and 4-year colleges. The two data sets were merged by institution name. The twelve institutional variables selected for inclusion on the merged file include institution level and control, Carnegie classification, admission policy, enrollment, tuition costs, room and board costs, and race and ethnic composition.

## DEFINITIONS AND EXPLANATIONS

Enrollment level. Enrollment level is based on the respondent's academic standing and not the number of years they have been enrolled in postsecondary school. College year 1 signifies freshman class standing, college year 2 signifies sophomore class standing, college year 3 signifies junior class
standing, college year 4 signifies senior class standing, and college years 5 or higher signifies graduate or professional students.

Labor force status. Labor force status was divided into three categories: did not work, worked part time, and worked full time. Respondents who did not work during the weeks of the 4-month reference period were categorized as did not work. Respondents who worked at least 1 week during the reference period and who worked 35 hours or more for at least half of the total number of weeks worked were categorized as worked full time. Respondents who worked at least 1 week during the reference period, but did not work 35 hours or more for at least half of the total number of weeks worked, were categorized as worked part time.

Dependency status. Students were classified as dependent if they were claimed as a dependent on their parents' income tax return. Dependency status was asked only of students under 25 years old.

## Financial aid recipiency.

Respondents who indicated that they had received financial aid for school were then asked whether they received aid from one or more of the following eleven sources: (1) Pell Grant, (2) Veterans Assistance, (3) College (or Federal) Work Study, (4) any other federal grant or program, (5) loans, (6) grants, scholarships, or tuition remission from the school, (7) assistantship from the school, (8) grant or scholarship from the state, (9) grant or scholarship from some other source, (10) employer assistance, and (11) other aid excluding parents. For this report, source of financial aid was reclassified into the following seven
categories: (1) Pell Grant, (2) Veterans Assistance, (3) College (or Federal) Work Study and any other federal grant or program, (4) loans,
(5) grants, scholarships, assistantships, or tuition remission from the school, state, or some other source, (6) employer assistance, and (7) other aid excluding parents.

## Annual family income.

Annual family income is calculated by multiplying the average monthly family income by twelve, where average monthly family income is the sum of the family income during the reference months, divided by the number of months in which income was reported. A student's family includes all family members at the student's usual place of residence.

## COMPARISONS WITH 1993-94 DATA

Similar data were collected in the 1993 panel of the Survey of Income and Program Participation for the 1993-94 academic year. These data were published in U.S. Census Bureau, Current Population Reports, P70-60, Financing the Future: Postsecondary Students, Costs, and Financial Aid: 19931994, 1999. Because of numerous changes in question wording between the 1993 and 1996 SIPP panels and several changes in variable definitions between the 1993-94 report and the 1996-97 report, the data in the two reports are not directly comparable. For example, in the 1993 SIPP, a student was classified as independent if they were either married, age 24 or older, a military veteran, the householder, the spouse of the householder, or if they had health insurance in their own name. In the 1996 SIPP dependency status
was coded directly from a question asking whether students under age 25 were listed as dependents on their parent's or guardian's 1996 income tax return.

## ACCURACY OF THE ESTIMATES

All statistics from sample surveys are subject to sampling error and nonsampling error. All comparisons presented in this report have taken sampling error into account and meet the Census Bureau's standards for statistical significance. 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. The Census Bureau employs quality control procedures throughout the production process-including the overall design of surveys, testing the wording of questions, review of the work of interviewers and coders, and statistical review of reports.

The SIPP employs ratio estimation, whereby sample estimates are adjusted to independent estimates of the national population by age, race, sex, and Hispanic origin. This weighting partially corrects for bias due to undercoverage, but how it affects different variables is the survey is not precisely known. Moreover, biases may also be present when people who are missed in the survey differ from those interviewed in ways other than the categories used in weighting (age, race, sex, and Hispanic origin). All of these considerations affect comparisons across different surveys or data sources.

Please contact Jeffrey Stratton of the Demographic Statistical Method Division via e-mail at dsmd_s\&a@census.gov for information on the source of the data, the accuracy of the estimates, the use of standard errors, and the computation of standard errors.

## MORE INFORMATION

The report, as well as a detailed package of tables showing postsecondary school enrollment, costs, and financing by various social and demographic characteristics, are available on the Internet (www.census.gov); search for this report by clicking on the letter $S$ in the "Subjects A-Z" section of the Web page and selecting "School: Postsecondary Students, Costs and Financial Aid."

## CONTACTS

Statistical Information Office
Population Division
pop@census.gov
301-763-2422
Scott Boggess
Education and Social Stratification Branch

Population Division
Scott.Boggess@census.gov
301-763-2464
Camille Ryan
Education and Social Stratification Branch
Population Division
Camille.L.Ryan@census.gov
301-763-2464

## 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
or send e-mail to:
pop@census.gov
U.S. Department of Commerce

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[^0]:    'U.S. Census Bureau, Current Population Reports, P60-132, Money Income of Households, Families, and Persons in the United States: 1980, U.S. Government Printing Office, Washington, DC, 1982.
    ${ }^{2}$ U.S. Census Bureau, Current Population Reports, P60-200, Money Income in the United States: 1997 (With Separate Data on Valuation of Noncash Benefits), U.S. Government Printing Office, Washington, DC, 1998.
    ${ }^{3}$ U.S. Census Bureau, Current Population Reports, P20-516; and earlier reports.

[^1]:    ${ }^{4}$ U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1998, U.S. Government Printing Office, Washington, DC, 1999.
    ${ }^{5}$ U.S. Census Bureau, Current Population Reports, P60-200, Money Income in the United States: 1997 (With Separate Data on the Valuation of Noncash Benefits), U.S. Government Printing Office, Washington, DC, 1998.

[^2]:    ${ }^{6}$ The estimates in this report are based on responses from a sample of the population. As with all surveys, estimates may vary from the actual values for the entire population because of sampling variation, or other factors. All statements made in this report have undergone statistical testing and meet Census Bureau standards for statistical accuracy.
    ${ }^{7}$ Throughout this report, the term "college year 1 " is used to denote students of freshman class standing-regardless of how many years of college the student has attended. Likewise, "college year 2 " denotes sophomore class standing, "college year 3" denotes junior class standing, "college year 4" denotes senior class standing, and "college year 5 or higher" denotes students in graduate or professional school.

[^3]:    Source: U.S. Census Bureau, Survey of Income and Program Participation (SIPP), 1996 Panel Wave 5.

[^4]:    ${ }^{10}$ U.S. Census Bureau; Resident Population Estimates of the United States by Sex, Race, and Hispanic Origin: April 1, 1990 to July 1, 1999, With Short-Term Projection to November 1, 2000; Internet release date January 2, 2001 ; http://eire.census.gov/popest/archives/ national/nation3/intfile3-1.txt

[^5]:    ${ }^{11}$ The percent of graduate students from families with annual incomes of $\$ 50,000$ or more is not significantly different from the percent of vocational, technical, and business school students from families with annual incomes of $\$ 50,000$ or more.

[^6]:    ${ }^{12}$ Labor force status was classified into three categories: did not work, worked part time, and worked full time. If the respondent did not work during any weeks of the 4 -month reference period, then they were classified as did not work. If the respondent worked at least 1 week during the reference period and worked 35 hours or more for at least half of the total number of weeks worked, then they were classified as worked full time, otherwise, they were classified as worked part time.
    ${ }^{13}$ The percent of graduate students that worked full time is not significantly different from the percent of vocational, technical, and business school students that worked full time. The percent of vocational, technical, and business school students that worked full time is not significantly different from the percent of third- and fourth-year college students that worked full time.

[^7]:    ${ }^{14}$ U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment, 1996" survey.

[^8]:    Source: U.S. Census Bureau, Survey of Income and Program Participation (SIPP), 1996 Panel Wave 5 and National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 1997 Institutional Characteristics Survey.

[^9]:    ${ }^{15}$ The percent of Hispanic full-time postsecondary students enrolled in proprietary schools is not significantly different from the percent of Black full-time postsecondary students enrolled in proprietary schools.

[^10]:    ${ }^{16}$ The IPEDS data only include an institution's percent Black non-Hispanic rather than an institution's percent Black.

[^11]:    ${ }_{2}^{1}$ Students attending school outside of the United States are excluded from this total.
    ${ }^{2}$ Declared as a dependent on one or both parents' income tax return. Universe consists of students under 25 years old.

    Source: U.S. Census Bureau, Survey of Income Program Participation (SIPP), 1996 Panel Wave 5 and National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 1997 Institutional Characteristics Survey.

[^12]:    ${ }^{17}$ The percent Asian and Pacific Islander students attending schools that were more than 10 percent Black is not significantly different from the percent of White non-Hispanic students attending institutions that were more than 10 percent Black. Data on percent Asian by institution were not available for further analysis.

[^13]:    ${ }^{18}$ Average total costs are the total cost of tuition and fees, books and supplies, and room and board, and are computed before financial aid is taken into account. The average cost is for all students, including those who have no costs in one or more of the components. In contrast, the average cost for each component is the average cost for those students who had expenses in that category. It is possible that students who had costs of a component completely covered by aid reported zero expenses, leading to a lower estimate than if they had reported correctly. Those not responding to a particular question typically had a non-zero value assigned.

[^14]:    ${ }^{1}$ Claimed as a dependent on one or both parents' income tax return. Universe consists of students under 25 years old.
    ${ }^{2}$ Total cost includes costs for students with and without room and board costs.
    ${ }^{3}$ Tuition and fees include only those students with these costs.
    ${ }^{4}$ Books and supplies include only those students with these costs.
    ${ }^{5}$ Room and board costs include only those students with these costs.
    Source: U.S. Census Bureau, Survey of Income Program Participation (SIPP), 1996 Panel Wave 5.

[^15]:    ${ }^{19}$ The average postsecondary schooling costs of full-time White students is not significantly different from the average postsecondary schooling costs of full-time Asian and Pacific Islander students. The average postsecondary schooling costs of full-time Black students is not significantly different from the average postsecondary schooling costs of full-time Hispanic students.
    ${ }^{20}$ The percent of Hispanic full-time postsecondary students enrolled in vocational, technical, and business schools is not significantly different from the percent of Black full-time postsecondary students enrolled in vocational, technical, and business schools.
    ${ }^{21}$ The percent of White non-Hispanic students reporting positive room and board expenses is not significantly different from the percent of Hispanic students reporting positive room and board expenses.

[^16]:    ${ }^{22}$ The average tuition costs of full-time students from families earning $\$ 25,000$ to $\$ 49,999$ per year is not significantly different from the average tuition costs of full-time students from families earning less than $\$ 25,000$ per year.

[^17]:    ${ }^{23}$ The percent of students 17 to 24 years old that received financial aid is not significantly different from the percent of students 35 and over that received financial aid.
    ${ }^{24}$ The proportion of schooling costs covered for 25 to 34 year olds is not significantly different from the proportion of schooling costs covered for students 35 and over.
    ${ }^{25}$ The percent of Asians and Pacific Islanders that received financial aid is not significantly different from the percent of White nonHispanics that received financial aid. The percent of Blacks that received financial aid is not significantly different from the percent of Hispanics that received financial aid.

[^18]:    ${ }^{26}$ Students are asked separately about college costs and the amount of financial aid received. Since tuition and fees, room and board, and book and supply costs do not represent all postsecondary expenses, some students will report aid amounts that exceed the total cost of these three components.

