

STATS IN BRIEF

U.S. DEPARTMENT OF EDUCATION

OCTOBER 2019

NCES 2020-460

Profile of Very Low- and Low-Income Undergraduates in 2015–16

AUTHORS

Xianglei Chen
Annaliza Nunnery
RTI International

PROJECT OFFICER

David Richards
National Center for Education Statistics

Statistics in Brief publications present descriptive data in tabular formats to provide useful information to a broad audience, including members of the general public. They address simple and topical issues and questions. They do not investigate more complex hypotheses, account for inter-relationships among variables, or support causal inferences. We encourage readers who are interested in more complex questions and in-depth analysis to explore other NCES resources, including publications, online data tools, and public- and restricted-use datasets. See nces.ed.gov and references noted in the body of this document for more information.

The primary objectives behind postsecondary financial aid programs are to increase access, improve affordability, and promote equal opportunity and college success for postsecondary students (Gillen 2010). Low-income students are frequently a topic of higher education research precisely because they have the greatest need with respect to all three of these objectives (Bellin 2015; Tilak 2010). In order to inform and improve policies and programs designed to assist these students, policymakers and academic scholars seek to understand the characteristics of the low-income student population, how these students fare in college, and the challenges they face in persisting and completing a degree (Choy 2000; Perna 2015; Watson 2017).

Recent research has drawn further attention to the lowest income students, noting that some students struggle to meet their basic needs, let alone pay for a college education. National data indicate that in 2015 about 13 percent of 2-year college students and 11 percent of 4-year college students came from food-insecure families (Blagg et al. 2017). Research examining the relationship between food, housing, and school performance revealed that food insecurity and housing instability negatively affect class attendance,

This Statistics in Brief was prepared for the National Center for Education Statistics under Contract No. ED-IES-16-A-0008/0002 with Insight Policy Research. Mention of trade names, commercial products, or organizations does not imply endorsement by the U.S. Government.

performance, and persistence (Goldrick-Rab 2016; Payne-Sturges et al. 2017; Silva et al. 2015). For example, Goldrick-Rab (2016) studied a sample of 3,000 public college students in Wisconsin who had an average family income under \$25,000 and documented the challenges these students faced: inadequate food and housing, working excessively to make ends meet, and taking time off from school to save money. More than half of these students left college without a degree, and less than 20 percent managed to graduate within 5 years (Goldrick-Rab 2016).

Despite the recent attention paid to extreme poverty on campus, the current literature provides little information about the scope of the problem among U.S. postsecondary students. This Statistics in Brief uses data from a large, nationally representative sample of almost 90,000 undergraduates from the 2015–16 National Postsecondary Student Aid Study (NPSAS:16) to examine the demographics, enrollment, financial aid, and price of attendance of low-income students enrolled in U.S. postsecondary education in 2015–16, with a special focus on the lowest income students. NPSAS, with its large and nationally representative sample of students,

multiple income-related measures, and multiple administrations since 1987, which allow trend analyses, offers a unique opportunity to study low-income undergraduates.

The analyses in this report use students' or their families' incomes relative to the federally established poverty level to identify low-income students. Following the Census Bureau's definition of *extreme or deep poverty* (Center for Poverty Research 2018; Lei 2013), this report defines the lowest income students (hereafter referred to as *very low-income students*) as those whose family incomes fell below

50 percent of the federally established poverty guideline for their family size.¹ To illustrate, in 2014 (the determining year for 2015–16 financial aid eligibility), a family of four living in one of the 48 contiguous states or the District of Columbia with an annual family income below \$11,925 would be a very low-income family (table 1). A very low-income individual living in one of these areas in 2014 would have an annual income below \$5,835.

For comparison purposes, the report also provides estimates for students whose family income fell between 50 and 100 percent of the federal poverty

TABLE 1.

Federal poverty guidelines for families in the 48 contiguous U.S. states and the District of Columbia, Alaska, and Hawaii, by family size: 2014

Family size	48 contiguous U.S. states and the District of Columbia		Alaska		Hawaii	
	Poverty level	50 percent of poverty level	Poverty level	50 percent of poverty level	Poverty level	50 percent of poverty level
1	\$11,670	\$5,835	\$14,580	\$7,290	\$13,420	\$6,710
2	15,730	7,865	19,660	9,830	18,090	9,045
3	19,790	9,895	24,740	12,370	22,760	11,380
4	23,850	11,925	29,820	14,910	27,430	13,715
5	27,910	13,955	34,900	17,450	32,100	16,050
6	31,970	15,985	39,980	19,990	36,770	18,385
7	36,030	18,015	45,060	22,530	41,440	20,720
8	40,090	20,045	50,140	25,070	46,110	23,055

NOTE: For families of more than eight persons, add \$4,060 for each additional person if families are in the 48 contiguous U.S. states and the District of Columbia, \$5,080 in Alaska, and \$4,670 in Hawaii. The poverty guidelines are not defined for Puerto Rico, the U.S. Virgin Islands, American Samoa, Guam, the Republic of the Marshall Islands, the Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, and Palau.

SOURCE: The U.S. Department of Health and Human Services (<https://aspe.hhs.gov/2014-poverty-guidelines>).

¹ The federal government publishes two slightly different versions of the poverty measure every year: poverty thresholds and poverty guidelines. Poverty thresholds are generated annually by the Census Bureau and are used primarily for statistical reporting purposes. Poverty guidelines are a simplification of the poverty thresholds and are generated annually by the Department of Health and Human Services (HHS) for administrative purposes, e.g., determining financial eligibility for such federal programs as Medicaid or the Special Supplemental Nutrition Program for Women, Infants, and Children. This report determines undergraduates' poverty level by comparing their family income to HHS poverty guidelines. Consistent with federal financial need analysis, estimates for 2015–16 are based on 2014 income and federal poverty level thresholds. Family income for independent students consists of the student's income and, if married, the income of his or her spouse. Family income for dependent students consists of their parents' income. HHS establishes three separate poverty guidelines: one for the 48 contiguous U.S. states and the District of Columbia, one for Alaska, and one for Hawaii. HHS does not establish poverty guidelines for overseas U.S. territories, so the analyses in this report exclude students from overseas U.S. territories as well as international students (i.e., non-U.S. residents). More information about federal poverty guidelines is available at <https://aspe.hhs.gov/poverty-guidelines>.

level, a group labeled *low-income students* in the report, and compares both groups with undergraduates whose family incomes were above the federal poverty level. For simplicity, this latter group is frequently referred to as *above-poverty-level students* in the report. To illustrate, in 2014, a family of four living in the 48 contiguous states or District of Columbia with an annual family income between \$11,925 and \$23,850 would be a low-income family (table 1). If this family's annual income was above \$23,850, the family would be an above-poverty-level family.

Applying these definitions of *very low-income*, *low-income*, and *above-poverty-level* to 2015–16 undergraduates in the United States, the vast majority (94 percent) of very low-income students had an annual family income below \$10,000 (table 2). About 59 percent of low-income undergraduate students had an annual family income between \$10,000 and \$19,999, and an additional 23 percent of low-income undergraduates had annual family incomes below \$10,000.

The federal expected family contribution (EFC) is the amount students and families are expected to contribute to the price of attendance at a postsecondary institution. It measures the parents' or the student's ability to pay for a year of postsecondary education expenses. EFC is calculated using federal need analysis methodology and accounts for dependency status,

TABLE 2.

Percentage distribution of undergraduates' family income and federal expected family contribution (EFC), by family income relative to federal poverty level: 2015–16

Family income and EFC	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total	100.0	100.0	100.0	100.0
Family income ¹				
\$9,999 or less	19.1	93.9	22.8	‡
\$10,000–19,999	14.0	5.9	58.6	7.0
\$20,000–29,999	11.6	0.1 !	16.3	13.5
\$30,000–39,999	8.6	‡	1.9	12.0
\$40,000–49,999	6.7	‡	0.3	9.7
\$50,000 or more	40.0	‡	#	57.8
EFC ²				
\$0	38.6	97.1	90.4	13.9
\$1–1,499	9.5	2.5	8.7	11.3
\$1,500–4,999	13.5	0.2	0.6	19.4
\$5,000 or more	38.4	0.2	0.4	55.4

Rounds to zero.

! Interpret data with caution. Estimate is unstable because the standard error is between 30 and 50 percent of the estimate.

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the standard error is greater than 50 percent of the estimate.

¹ Family income for independent students consists of the student's 2014 income and, if married, the 2014 income of his or her spouse. Family income for dependent students consists of parents' 2014 income. The 2014 family income was used because it was reported on the federal financial aid application and used for federal financial need analysis for 2015–16. Independent students include those who are age 24 or over, as well as those who are under age 24 and are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other undergraduates under age 24 are considered to be dependent.

² The federal expected family contribution (EFC) is the amount that students and families are expected to contribute to the price of attendance at a postsecondary institution. It measures the parents' or the student's ability to pay for a year of postsecondary education expenses. EFC is calculated using federal need analysis methodology and accounts for dependency status, income, assets, number of siblings in college, and other related factors. More information about EFC is available at <https://studentaid.ed.gov/sa/fafsa>.

NOTE: Estimates in this table pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This table excludes international students, students from overseas U.S. territories, and students attending institutions in Puerto Rico. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

income, assets, number of family members in college, and other related factors.² Among 2015–16 undergraduates, 97 percent of very low-income students and 90 percent of low-income students had zero EFC to pay for the cost of attending a postsecondary institution, meaning

that they or their families could not afford to contribute to their higher education costs.

To provide context, the percentage of all U.S. undergraduates who are poor has grown since 1999–2000. Seven percent of all 1999–2000 undergraduates were

² More information about EFC is available at <https://studentaid.ed.gov/sa/fafsa>.

very low income, compared with 17 percent of all 2015–16 undergraduates (figure 1). Nine percent of all 1999–2000 undergraduates were low income, compared with 14 percent of all 2015–16 undergraduates. Increases were observed among both dependent and independent students.³ Given the increasing presence of poor students among U.S. undergraduates and concern over these students’ vulnerability with respect to persistence and attainment, college affordability, debt accumulation, and loan repayment, profiles of very low- and low-income students provide

context for extending research on these students’ academic experiences and postsecondary outcomes.

DATA AND STUDY SAMPLE

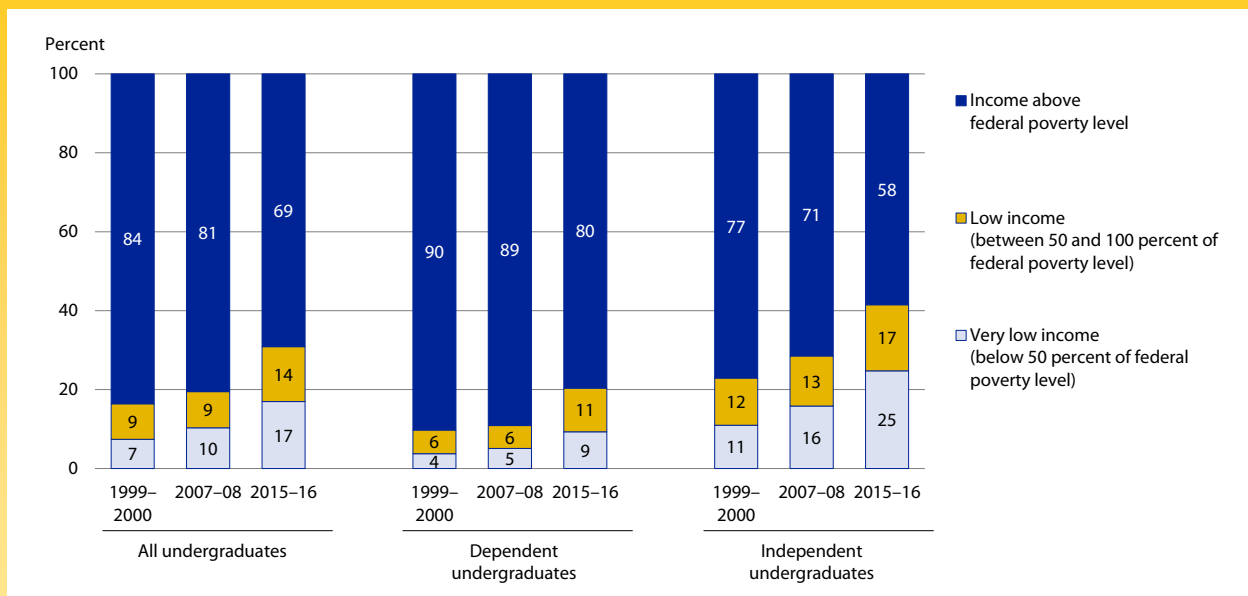
This Statistics in Brief uses data from NPSAS:16, a nationally representative sample survey of undergraduate and graduate students enrolled in U.S. postsecondary institutions that meet the requirements for participation in Title IV financial aid programs. NPSAS was first administered in the 1986–87 academic year. It was administered every 3 years thereafter until 1995–96

and has since been administered every 4 years through 2015–16. NPSAS covers broad topics on student enrollment in postsecondary education and how students and their families finance their education. More information about NPSAS data collection is available at <https://nces.ed.gov/surveys/npsas/>.

The NPSAS:16 undergraduate sample consists of about 90,000 students who represent the approximately 20 million undergraduates enrolled in all Title IV eligible postsecondary institutions⁴ in

FIGURE 1.

Percentage distribution of undergraduates’ family income relative to federal poverty level, by dependency status: 1999–2000, 2007–08, and 2015–16



NOTE: Independent students include those who are age 24 or over, as well as those who are under age 24 and are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other undergraduates under age 24 are considered to be dependent. Family income for independent students consists of the student’s income and, if married, the income of his or her spouse. Family income for dependent students consists of parents’ income. Consistent with federal financial need analysis, estimates for 2015–16 are based on 2014 income and federal poverty level thresholds, 2007–08 estimates are based on 2006 income and poverty level thresholds, and 1999–2000 estimates are based on 1998 income and poverty level thresholds. Estimates in this figure pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This figure excludes international students, students from overseas U.S. territories, and students attending institutions in Puerto Rico. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000, 2007–08, and 2015–16 National Postsecondary Student Aid Study (NPSAS:00, NPSAS:08, and NPSAS:16).

³ In this report, independent students include those who are age 24 or over, as well as those who are under 24 who are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or are determined to be independent by a financial aid officer using professional judgment. Other students under age 24 are dependent.

⁴ “Title IV eligible postsecondary institutions” refers to institutions eligible to participate in federal financial aid programs under Title IV of the Higher Education Act.

the 50 states, the District of Columbia, and Puerto Rico at any time between July 1, 2015, and June 30, 2016 (Wine, Siegel, and Stollberg 2018). The study sample for the analyses in this report included all 2015–16 undergraduates in NPSAS:16 except international students (i.e., those born in foreign countries without U.S. permanent residence status), students from overseas U.S. territories, and students attending institutions in Puerto Rico because of concerns for the reliability of income/poverty level data for these students.⁵ These three excluded groups combined accounted for about 4 percent of all U.S. undergraduates in 2015–16 (table A-1).

Dependent and independent students differ in their enrollment characteristics, family structure, and financial need, all of which have the potential to affect poverty status (Skomsvold 2015). Figure 1 shows that students below the federal poverty level are more prevalent among independent students than among dependent students: 25 percent of independent students in 2015–16 were very low-income students and 17 percent were low-income students, compared with 9 percent and 11 percent of dependent students, respectively. Therefore, the analyses in this report separate dependent and independent students. About half of

undergraduates in the study sample were dependent students (table A-1).

All comparisons of estimates discussed in this report were tested for statistical significance using Student's *t* statistic, and all differences cited are statistically significant at the $p < .05$ level. No adjustments for multiple comparisons were made. This report is descriptive in nature. Many of the variables examined may be related to one another, and complex relationships among variables have not been explored. Readers are cautioned not to draw causal inferences based on the descriptive results presented here.

KEY CONCEPTS

Financial aid includes all types of financial aid from any source except parents, friends, or relatives. Direct PLUS Loans to parents and other types of aid such as employer aid, veterans' benefits, and job training grants are included, but federal tax credits for education are not included.

Grant aid includes grants, scholarships, or tuition waivers from federal, state, institutional, or private sources, including employers.

Need-based aid includes federal Pell Grants, federal Supplemental Educational Opportunity Grants, need-based state and institutional grants, and federal Perkins Loans, Direct Subsidized Loans, and federal work-study. Direct PLUS Loans to parents, Direct Unsubsidized Loans, federal veterans' education benefits, job training grants, or other nonfederal loans, work-study, or private aid are not included.

Federal Pell Grants are need-based grants provided to undergraduates with demonstrated financial need in order to promote access to postsecondary education.

Student loans include only loans to students and may be from federal, state, institutional, or private sources, but exclude other forms of financing such as credit cards, home equity loans, loans from individuals, and Direct PLUS Loans to parents.

Total price of attendance includes tuition and fees, room and board, books and supplies, transportation, and other miscellaneous, or personal expenses.

Net price of attendance is the total price of attendance minus all types of grant aid received. Federal education tax benefits are not included in the calculation of the net price.

Out-of-pocket net price is the total price of attendance minus all types of financial aid received, including Direct PLUS Loans to parents of dependent undergraduates. Federal education tax benefits are not included in the calculation of the out-of-pocket net price.

⁵ For example, international students may not be able to convert foreign income into U.S. dollars accurately and are not eligible for U.S. federal student aid programs. In addition, the federal government does not establish poverty guidelines for families in Puerto Rico and overseas U.S. territories.

STUDY QUESTIONS

1

How do the demographic characteristics of very low- and low-income students differ from those of students with family incomes above the federal poverty level?

2

How do the enrollment characteristics of very low- and low-income students differ from those of students with family incomes above the federal poverty level?

3

How do the financial aid characteristics of very low- and low-income students differ from those of students with family incomes above the federal poverty level?

4

What is the price of attendance for very low- and low-income students, and how much do they actually pay to attend college, in comparison with students with family incomes above the federal poverty level?

KEY FINDINGS

- Compared with above-poverty-level dependent students, higher percentages of very low- and low-income dependent students were female; were Black, Hispanic, or Asian; had parents who had not attended college; were first- or second-generation immigrants;⁶ and first learned to speak a non-English language as children (table 3).
- Among independent students, a higher percentage of low-income students than their above-poverty-level peers were female. In addition, a higher percentage of very low- and low-income independent students than their above-poverty-level peers were Black (table 3).
- Compared with their above-poverty-level peers, very low- and low-income dependent students applied for financial aid at higher rates and received aid at higher rates. Patterns were similar among independent students: very low- and low-income independent students applied for and received financial aid at higher rates than their above-poverty-level peers did (figures 2 and 3).
- Very low- and low-income dependent students took out student loans at lower rates than their above-poverty-level peers did (figure 2). The pattern was reversed among independent students: very low- and low-income independent students took out student loans at higher rates than their above-poverty-level peers did (figure 3).
- In 2015–16, the average out-of-pocket net price faced by full-time, very low-income dependent students at private for-profit 4-year institutions was \$24,200 (table 7). To put this price in context, in 2015, the total family income of very low-income families living in the 48 contiguous states or District of Columbia ranged from below \$7,965 for families of two to below \$20,445 for families of eight (table A-6).
- In 2015–16, the average out-of-pocket net price faced by full-time, very low-income independent students ranged from \$10,100 at public less-than-4-year institutions to \$24,800 at private nonprofit 4-year institutions (table 8). To put these prices in context, in 2015, a very low-income family of two living in the 48 contiguous states or District of Columbia had an annual income below \$7,965, and a very low-income single individual living in the 48 contiguous states or District of Columbia had an annual income below \$5,885 (table A-6).

⁶ This report defines first-generation immigrant students as those who were foreign born to at least one foreign-born parent and second-generation immigrant students as those who were born in the United States to at least one foreign-born parent. Students in the third- or higher-generation immigrant status group are those who were born in the United States to U.S.-born parents.

1

How do the demographic characteristics of very low- and low-income students differ from those of students with family incomes above the federal poverty level?

In general, among dependent students, very low- and low-income undergraduates' demographic characteristics differed from those of their peers with family incomes above the poverty level. Among independent students, however, fewer differences were observed.

Demographic Characteristics: Dependent Undergraduates

Compared with dependent undergraduates whose family incomes were above the poverty level, a higher percentage of very low- and low-income dependent students were women: 59 percent for very low-income students, 56 percent for low-income students, and 53 percent for those with family incomes above the poverty level (table 3).

Whereas 62 percent of dependent students with family incomes above the federal poverty level were White, 36 percent of very low-income and 30 percent of low-income dependent students were White. Conversely, the very low- and low-income dependent student groups included higher

percentages of Black, Hispanic, and Asian students than their above-poverty-level peer group did.

About one-third of very low- and low-income dependent students (33 percent and 35 percent, respectively) came from families where parents had not attended college, compared with 13 percent of above-poverty-level dependent students. In addition, a higher percentage of very low- and low-income dependent students than above-poverty-level dependent students were first- and second-generation immigrant students (10 percent and 14 percent vs. 6 percent, respectively, for first-generation immigrant students; and 29 percent and 34 percent vs. 21 percent, respectively, for second-generation immigrant students).

Finally, a higher percentage of very low- and low-income dependent students than their above-poverty-level peers reported that the first language they learned to speak as children was a non-English language (18 percent and 24 percent vs. 10 percent, respectively).

Demographic Characteristics: Independent Undergraduates

Like dependent students, very low- and low-income independent students differed from their above-poverty-level peers with respect to sex, race/ethnicity, and immigrant generation. They did not differ from their above-poverty-level peers, however, with respect to parents' education or the first language they learned to speak as children.

A higher percentage of low-income independent students than above-poverty-level independent students were female (63 percent vs. 59 percent, respectively). Twenty-one percent of very low-income independent students and 27 percent of low-income independent students were Black, compared with 16 percent of above-poverty-level independent students. Whereas 20 percent of very low-income independent students were second-generation immigrant students, 17 percent of above-poverty-level independent students were.

TABLE 3.

Percentage distribution of dependent and independent undergraduates' selected demographic characteristics, by family income relative to federal poverty level: 2015–16

Demographic characteristics	Dependent students			Independent students		
	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total	100.0	100.0	100.0	100.0	100.0	100.0
Sex						
Male	40.6	43.7	47.2	40.4	36.9	41.4
Female	59.4	56.3	52.8	59.6	63.1	58.6
Race/ethnicity¹						
White	36.3	30.1	62.2	47.7	44.4	56.1
Black	23.4	22.0	9.8	21.2	26.9	16.2
Hispanic	26.9	33.3	17.4	18.8	18.8	18.6
Asian	8.3	10.1	6.1	6.2	4.0	4.9
American Indian	1.0	1.1	0.6	1.2	1.1	1.0
Other	4.2	3.5	3.9	4.8	4.9	3.2
Parents' highest education²						
High school diploma or less	32.5	35.3	12.9	29.8	31.0	30.3
Some college	35.6	34.0	28.6	32.8	33.4	34.5
Bachelor's or higher degree	31.5	30.5	58.4	36.5	34.9	34.7
Immigrant generation³						
First generation	10.4	14.5	6.3	10.7	11.3	11.2
Second generation	28.7	33.8	20.7	20.0	17.0	17.4
Third or higher generation	61.0	51.7	73.0	69.3	71.7	71.4
First language learned to speak as child						
English	72.7	63.4	83.5	80.3	79.9	80.4
English and other language equally	9.2	12.5	6.3	5.3	4.9	4.5
Other language	18.1	24.1	10.3	14.4	15.3	15.1

¹ Black includes African American, Hispanic includes Latino, American Indian includes Alaska Native, and Other includes Native Hawaiian, Other Pacific Islander, and individuals who indicated Two or more races or Other. All race categories exclude persons of Hispanic or Latino origin, unless specified.

² "Parents' highest education" is the highest level of education attained by either parent. "High school diploma or less" means that both parents completed high school at most. "Some college" means that at least one parent attended postsecondary education and may have earned a credential up to an associate's degree but neither earned a bachelor's or advanced degree. "Bachelor's or higher degree" means that at least one parent earned a bachelor's or advanced degree.

³ First-generation students are those who were foreign born to at least one foreign-born parent. Second-generation students are those who were born in the United States to at least one foreign-born parent. Third- or higher-generation students are those who were born in the United States to U.S.-born parents.

NOTE: Independent students include those who are age 24 or over, as well as those who are under age 24 and are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other undergraduates under age 24 are considered to be dependent. Family income for independent students consists of the student's 2014 income and, if married, the 2014 income of his or her spouse. Family income for dependent students consists of parents' 2014 income. The 2014 family income was used because it was reported on the federal financial aid application and used for federal financial need analysis for 2015–16. Estimates in this table pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This table excludes international students, students from overseas U.S. territories, and students attending institutions in Puerto Rico. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

2 How do the enrollment characteristics of very low- and low-income students differ from those of students with family incomes above the federal poverty level?

Enrollment Characteristics:

Dependent Undergraduates

The control and level of the institutions⁷ in which students enrolled varied by income group (table 4). A lower percentage of very low- and low-income dependent students than above-poverty-level dependent students were enrolled in public 4-year institutions (32 percent and 36 percent vs. 42 percent, respectively). In contrast, a higher percentage of very low- and low-income dependent students than above-poverty-level dependent students were enrolled in public less-than-4-year institutions (41 percent and 37 percent vs. 27 percent, respectively).

Very low- and low-income dependent students attended private for-profit institutions (both 4-year and less-than-4-year) at higher rates

than their above-poverty-level peers did: 3 percent of very low- and low-income dependent students attended private for-profit 4-year institutions, compared with 1 percent of above-poverty-level dependent students; and 4 percent of very low- and low-income students attended private for-profit less-than-4-year institutions, compared with 2 percent of above-poverty-level students. In contrast, very low- and low-income dependent students attended private nonprofit 4-year institutions at lower rates than their above-poverty-level peers did (11 percent and 10 percent vs. 17 percent, respectively).

Poverty status was also associated with the degree programs in which dependent undergraduates enrolled.

Very low- and low-income dependent students enrolled in bachelor's degree programs at lower

rates (42 percent and 45 percent, respectively) than their above-poverty-level peers did (62 percent).

Whereas 43 percent of very low-income and 45 percent of low-income dependent students attended school full time for the full 2015–16 academic year, 57 percent of above-poverty-level dependent students did so. Twenty-one percent of very low-income dependent students worked 21–35 hours a week while enrolled, compared with 18 percent of their above-poverty-level peers; and 10 percent of both very low- and low-income dependent students worked more than 35 hours a week while enrolled, compared with 8 percent of their above-poverty-level peers.

⁷ Control of institution is a classification of whether an institution is operated by publicly elected or appointed officials (public control) or by privately elected or appointed officials and derives its major source of funds from private sources (private control), and within the private control, whether individual(s) or agency in control receives no compensation, other than wages, rent, or other expenses for the assumption of risk (private nonprofit) or receives such compensation (private for-profit). Level of institution is a classification of whether an institution's programs are 4-year or higher (4 year), 2-but-less-than 4-year (2 year), or less than 2-year.

TABLE 4.

Percentage distribution of dependent and independent undergraduates' selected enrollment characteristics, by family income relative to federal poverty level: 2015–16

Enrollment characteristics	Dependent students			Independent students		
	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total	100.0	100.0	100.0	100.0	100.0	100.0
Institution control and level ¹						
Public	72.6	73.4	68.9	63.4	63.0	67.2
4-year	32.0	35.9	41.9	23.4	21.2	22.2
Less-than-4-year	40.6	37.5	26.9	39.9	41.8	45.0
Private nonprofit	11.4	10.1	17.3	10.7	10.3	12.5
4-year	11.0	9.7	17.1	9.6	9.4	12.0
Less-than-4-year	0.4	0.4 !	0.2	1.1	1.0	0.5
Private for-profit	7.1	6.3	2.9	16.4	17.1	11.7
4-year	2.8	2.6	1.2	8.5	9.1	8.0
Less-than-4-year	4.3	3.7	1.7	7.9	8.0	3.7
More than one institution	8.9	10.2	11.0	9.5	9.6	8.6
Undergraduate degree program						
No certificate or degree	1.5	1.6	1.8	2.9	3.0	5.3
Certificate	7.6	6.5	4.2	15.0	14.0	12.1
Associate's	48.6	47.0	32.3	47.4	50.7	48.2
Bachelor's degree	42.3	44.9	61.6	34.7	32.3	34.4
Attendance status ²						
Full-time/full-year	42.9	45.4	57.3	25.3	22.8	15.9
Full-time/part-year	16.8	14.9	11.4	21.1	19.3	13.6
Part-time/full-year	19.8	22.6	17.1	22.2	26.1	28.1
Part-time/part-year	20.4	17.1	14.3	31.4	31.8	42.4
Hours worked per week while enrolled						
0 hours	39.9	42.7	39.5	47.0	29.8	24.0
1–20 hours	28.5	27.2	33.9	17.4	18.2	11.8
21–35 hours	21.4	19.7	18.2	14.5	20.8	16.4
36 or more hours	10.1	10.4	8.4	21.1	31.2	47.9

! Interpret data with caution. Estimate is unstable because the standard error is between 30 and 50 percent of the estimate.

¹ Control of institution indicates whether an institution is operated by publicly elected or appointed officials (public control) or by privately elected or appointed officials and derives its major source of funds from private sources (private control), and within the private control, whether individual(s) or agency in control receives no compensation, other than wages, rent, or other expenses for the assumption of risk (private nonprofit) or receives such compensation (private for-profit). Level of institution indicates whether an institution's programs are 4-year or higher (4 year), 2-but-less-than 4-year (2 year), or less than 2-year.

² Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employs a different standard. Students are considered to have attended for a full year if they are enrolled for 9 or more months during the academic year. Months do not have to be contiguous, and students do not have to be enrolled for a full month to be considered enrolled for that month.

NOTE: Independent students include those who are age 24 or over, as well as those who are under age 24 and are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other undergraduates under age 24 are considered to be dependent. Family income for independent students consists of the student's 2014 income and, if married, the 2014 income of his or her spouse. Family income for dependent students consists of parents' 2014 income. The 2014 family income was used because it was reported on the federal financial aid application and used for federal financial need analysis for 2015–16. Estimates in this table pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This table excludes international students, students from overseas U.S. territories, and students attending institutions in Puerto Rico. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Enrollment Characteristics:

Independent Undergraduates

As with dependent students, independent students' poverty status was associated with the control and level of the institutions they attended. Compared with their above-poverty-level peers, very low- and low-income independent students attended private for-profit less-than-4-year institutions at higher rates (8 percent and 8 percent vs. 4 percent, respectively). In contrast, very low- and low-income independent students attended private nonprofit 4-year institutions and public less-than-4-year institutions at lower rates than their above-poverty-level peers did (10 percent and 9 percent vs. 12 percent, respectively, at private nonprofit 4-year institutions; 40 percent and 42 percent vs. 45 percent, respectively, at public less-than-4-year institutions). Nonetheless, at each income level, relatively more independent students attended

public less-than-4-year institutions (40–45 percent) than attended any other category of institution control and level (1–23 percent).

Among dependent students, a lower percentage of very low- and low-income students than students with incomes above the poverty level pursued bachelor's degrees. This pattern was not observed among independent students: across the three income groups, the percentages were not statistically different. In addition, at each income level, relatively fewer independent students were enrolled in a bachelor's degree program than in a less-than-4-year-degree program.

Compared with independent students with incomes above the poverty level, a higher percentage of very low- and low-income independent students attended school full time (either full year or part year). Whereas 16 percent

of above-poverty-level independent students attended full time for the full 2015–16 academic year, 25 percent of very low-income independent students and 23 percent of low-income independent students did so.

Nearly half of very low-income independent students, 47 percent, did not work while enrolled in 2015–16. In contrast, 30 percent of low-income independent students and 24 percent of above-poverty-level independent students did not work while enrolled.

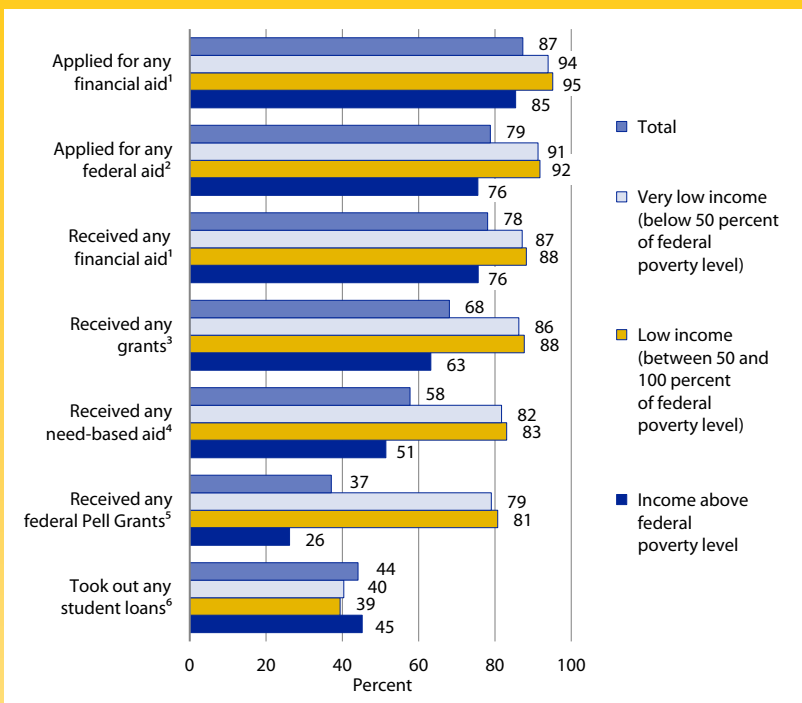
3 How do the financial aid characteristics of very low- and low-income students differ from those of students with family incomes above the federal poverty level?

Applying for and Receiving Financial Aid: Dependent Undergraduates

Most U.S. undergraduates apply for and receive financial aid to pay for their college education (Ifill 2016; Radwin et al. 2018). During their enrollment in 2015–16, 87 percent of dependent students applied for some type of financial aid in 2015–16 and 79 percent applied specifically for federal aid (figure 2). Compared with their above-poverty-level peers, higher percentages of very low- and low-income dependent students applied for and received all types of financial aid, with the exception of student loans: above-poverty-level students took out student loans at a higher rate (45 percent) than their very low- and low-income peers did (40 percent and 39 percent, respectively).

FIGURE 2.

Percentage of dependent undergraduates who applied for and received selected types of financial aid, by family income relative to federal poverty level: 2015–16



¹ “Any financial aid” includes all types of financial aid from any source except parents, friends, or relatives. Direct PLUS Loans to parents and other types of aid such as employer aid, veterans’ benefits, and job training grants are included, but federal tax credits for education are not included.

² “Any federal aid” includes all federal grants, work-study awards, and federal loans including Direct PLUS Loans. It includes aid from programs in Title IV of the Higher Education Act as well as aid from other federal sources, such as Public Health Service Loans, Bureau of Indian Affairs Grants, and District of Columbia Tuition Assistance Grants. It excludes federal veterans’ benefits, education tax credits, and tax deduction benefits.

³ “Any grants” includes grants, scholarships, or tuition waivers from federal, state, institutional, or private sources, including employers.

⁴ “Any need-based aid” includes federal Pell Grants, federal Supplemental Educational Opportunity Grants, need-based state and institutional grants, federal Perkins Loans, Direct Subsidized Loans, and federal work-study. Direct PLUS Loans to parents, Direct Unsubsidized Loans, federal veterans’ education benefits, job training grants, or other nonfederal loans, work-study, or private aid are not included.

⁵ “Federal Pell Grants” are need-based grants provided to undergraduates with demonstrated financial need in order to promote access to postsecondary education.

⁶ “Any student loans” includes only loans to students and may be from federal, state, institutional, or private sources, but excludes other forms of financing such as credit cards, home equity loans, loans from individuals, and Direct PLUS Loans to parents.

NOTE: Dependent students include those who are under age 24 and are not married, have no dependents, are not veterans or on active duty, are not orphans or wards of the courts, are not homeless or at risk of homelessness, and were not determined to be independent by a financial aid officer using professional judgment. Family income for dependent students consists of parents’ 2014 income. The 2014 family income was used because it was reported on the federal financial aid application and used for federal financial need analysis for 2015–16. Estimates in this figure pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This figure excludes international students, students from overseas U.S. territories, and students attending institutions in Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

**Applying for and Receiving Financial Aid:
Independent Undergraduates**

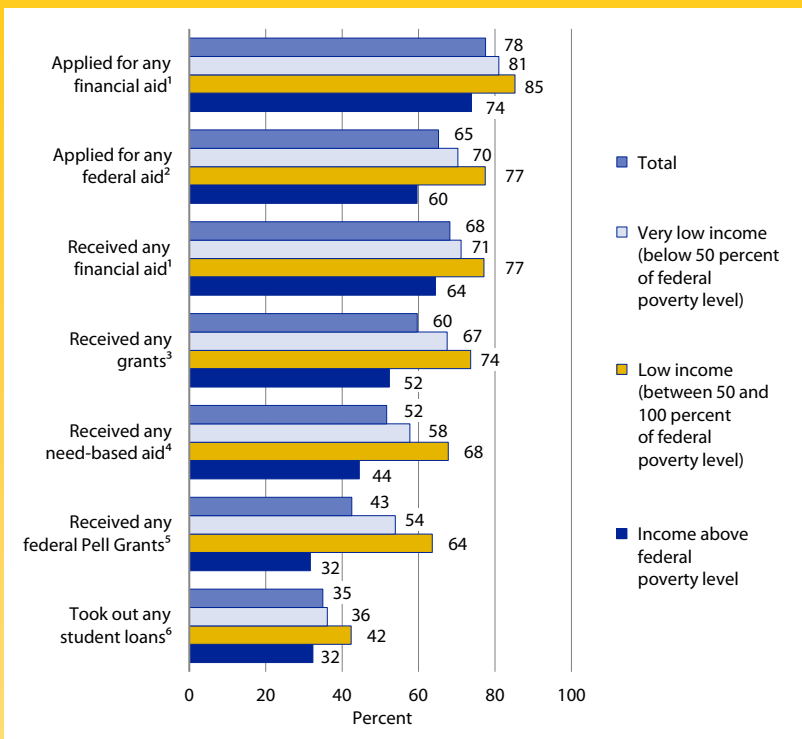
Seventy-eight percent of all independent students applied for some type of financial aid in 2015–16, including 65 percent who applied specifically for federal aid (figure 3). Very low- and low-income independent students both applied for and received financial aid across all types of aid, including student loans, at higher rates than their above-poverty-level peers did. In addition, the rates of applying for and receiving financial aid differed between very low- and low-income independent students. For example, 77 percent of low-income independent students applied for federal financial aid, compared with 70 percent of very low-income independent students. As another example, 42 percent of low-income independent students took out student loans, compared with 36 percent of very low-income independent students.

**Amount of Financial Aid Received:
Dependent Undergraduates**

The amount of financial aid that students receive often depends on their attendance intensity. Generally, full-time students receive more aid than part-time students do (Radwin et al. 2018). To provide a more accurate picture of the amount of financial aid received, this section focuses on students who attended school full time for a full year (i.e., for 9 or more months) at a single institution in 2015–16. These students are referred to as *full time* below. Appendix A presents the amounts of financial aid received by students who attended school part time or part year.

FIGURE 3.

Percentage of independent undergraduates who applied for and received selected types of financial aid, by family income relative to federal poverty level: 2015–16



¹ “Any financial aid” includes all types of financial aid from any source except parents, friends, or relatives. Direct PLUS Loans to parents and other types of aid such as employer aid, veterans’ benefits, and job training grants are included, but federal tax credits for education are not included.

² “Any federal aid” includes all federal grants, work-study awards, and federal loans including Direct PLUS Loans. It includes aid from programs in Title IV of the Higher Education Act as well as aid from other federal sources, such as Public Health Service Loans, Bureau of Indian Affairs Grants, and District of Columbia Tuition Assistance Grants. It excludes federal veterans’ benefits, education tax credits, and tax deduction benefits.

³ “Any grants” includes grants, scholarships, or tuition waivers from federal, state, institutional, or private sources, including employers.

⁴ “Any need-based aid” includes federal Pell Grants, federal Supplemental Educational Opportunity Grants, need-based state and institutional grants, federal Perkins Loans, Direct Subsidized Loans, and federal work-study. Direct PLUS Loans to parents, Direct Unsubsidized Loans, federal veterans’ education benefits, job training grants, or other nonfederal loans, work-study, or private aid are not included.

⁵ “Federal Pell Grants” are need-based grants provided to undergraduates with demonstrated financial need in order to promote access to postsecondary education.

⁶ “Any student loans” includes only loans to students and may be from federal, state, institutional, or private sources, but excludes other forms of financing such as credit cards, home equity loans, loans from individuals, and Direct PLUS Loans to parents.

NOTE: Independent students include those who are age 24 or over, as well as those who are under age 24 and are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Family income for independent students consists of the student’s 2014 income and, if married, the 2014 income of his or her spouse. The 2014 family income was used because it was reported on the federal financial aid application and used for federal financial need analysis for 2015–16. Estimates in this figure pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This figure excludes international students, students from overseas U.S. territories, and students attending institutions in Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Among full-time dependent students who received financial aid, the average total amount of aid received varied with the control and level of the institutions students attended.

Full-time dependent students who attended private institutions generally received more aid on average than those who attended public institutions did (table 5). In addition, regardless of

institution control, full-time dependent students who attended 4-year institutions generally received more aid on average than those who attended less-than-4-year institutions did.

TABLE 5.

Average total amounts of selected types of financial aid received by full-time/full-year dependent undergraduates who received any aid, by family income relative to federal poverty level and control and level of institution: 2015–16

Aid type by control and level of institution ¹	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total financial aid²	\$18,900	\$19,800	\$18,200	\$18,900
Public 4-year	15,200	17,300	17,300	14,800
Private nonprofit 4-year	33,600	39,700	36,500	33,000
Private for-profit 4-year	24,400	24,700	26,200	23,900
Public less-than-4-year	6,400	8,300	7,500	5,800
Private nonprofit less-than-4-year	11,800	‡	‡	12,200
Private for-profit less-than-4-year	16,700	17,900	15,700	16,700
Total grant aid³	12,400	14,000	12,900	12,200
Public 4-year	9,100	11,600	12,100	8,400
Private nonprofit 4-year	22,700	29,000	26,300	21,900
Private for-profit 4-year	9,000	10,800	10,300	8,000
Public less-than-4-year	5,400	7,200	6,600	4,800
Private nonprofit less-than-4-year	5,800	‡	‡	5,700
Private for-profit less-than-4-year	6,600	9,300	6,600	5,700
Total student loans⁴	8,100	7,100	6,700	8,400
Public 4-year	7,600	6,500	6,400	7,800
Private nonprofit 4-year	9,900	8,500	7,600	10,200
Private for-profit 4-year	10,100	9,200	9,800	10,300
Public less-than-4-year	4,700	4,500	4,100	4,800
Private nonprofit less-than-4-year	6,100	‡	‡	6,100
Private for-profit less-than-4-year	8,400	8,400	7,700	8,600

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the standard error is greater than 50 percent of the estimate.

¹ Control of institution indicates whether an institution is operated by publicly elected or appointed officials (public control) or by privately elected or appointed officials and derives its major source of funds from private sources (private control), and within the private control, whether individual(s) or agency in control receives no compensation, other than wages, rent, or other expenses for the assumption of risk (private nonprofit) or receives such compensation (private for-profit). Level of institution indicates whether an institution's programs are 4-year or higher (4 year), 2-but-less-than 4-year (2 year), or less than 2-year.

² "Total financial aid" includes all types of financial aid from any source except parents, friends, or relatives. Direct PLUS Loans to parents and other types of aid such as employer aid, veterans' benefits, and job training grants are included, but federal tax credits for education are not included. The estimates are only for students who received any financial aid.

³ "Total grant aid" includes grants, scholarships, or tuition waivers from federal, state, institutional, or private sources, including employers. The estimates are only for students who received any grant aid.

⁴ "Total student loans" includes only loans to students and may be from federal, state, institutional, or private sources, but excludes other forms of financing such as credit cards, home equity loans, loans from individuals, and Direct PLUS Loans to parents. The estimates are only for students who took out any student loans.

NOTE: Dependent students include those who are under age 24 and are not married, have no dependents, are not veterans or on active duty, are not orphans or wards of the courts, are not homeless or at risk of homelessness, and were not determined to be independent by a financial aid officer using professional judgment. Family income for dependent students consists of parents' 2014 income. The 2014 family income was used because it was reported on the federal financial aid application and used for federal financial need analysis for 2015–16. Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employs a different standard. Students are considered to have attended for a full year if they are enrolled for 9 or more months during the academic year. Months do not have to be contiguous, and students do not have to be enrolled for a full month to be considered enrolled for that month. Estimates in this table pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This table excludes international students, students from overseas U.S. territories, and students attending institutions in Puerto Rico. Students who attended more than one institution are included in the total but not shown separately in the table.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

The amount of financial aid received was also related to poverty status. At public 4-year and less-than-4-year institutions and private nonprofit 4-year institutions, full-time, very low- and low-income dependent students received higher average total amounts of aid than their above-poverty-level peers did. At private for-profit institutions (both 4-year and less-than-4-year), the differences between the average total aid amounts the two low-income groups received and those the above-poverty-level students received were not statistically significant.

Most grants to undergraduates are awarded based on income and financial need (Delisle 2017). Thus, in many cases, the two low-income groups received more grant aid than did students from families with incomes above the poverty level. For example, at public 4-year institutions, full-time, very low- and low-income dependent students with grant aid received averages of \$11,600 and \$12,100, respectively, more than the average of \$8,400 their above-poverty-level peers received. There were some exceptions: for example, among full-time students at private for-profit 4-year institutions, the three income groups' average total grant amounts were not statistically different. Overall, differences between the average grant aid that full-time, very low- and

low-income dependent students received were not statistically significant from each other at any type of institution.

With respect to student loans, at public 4-year institutions and private nonprofit 4-year institutions, the average total amount of student loans taken out by full-time student borrowers in the two low-income groups was lower than that for their above-poverty-level peers (\$6,500 and \$6,400 vs. \$7,800, respectively, at public 4-year institutions; \$8,500 and \$7,600 vs. \$10,200, respectively, at private nonprofit 4-year institutions). At public less-than-4-year institutions and private for-profit 4-year and less-than-4-year institutions, there were no statistically significant differences in the average total amount of student loans taken out by the three income groups.

Amount of Financial Aid Received: Independent Undergraduates

Among full-time independent students who received any financial aid, very low- and low-income students generally received more aid than their above-poverty-level peers did (table 6). There was some variation across institution control and level, however. At public 4-year and private nonprofit 4-year institutions, full-time very low- and low-income independent students received higher average total amounts

of aid than their above-poverty-level peers. At public less-than-4-year institutions and private nonprofit less-than-4-year institutions, there were no statistically significant differences among the average total amounts of financial aid the three income groups received. At private for-profit less-than-4-year institutions, the two low-income groups received lower average amounts of financial aid (\$13,600 and \$14,100, respectively) than their above-poverty-level peers did (\$17,000).

With respect to grant aid, full-time independent students in the two low-income groups with such aid generally received more than their above-poverty-level peers did. There was one exception: among full-time independent students at private nonprofit less-than-4-year institutions, there were no statistically significant differences by poverty status in the average total amounts of grant aid received (\$5,200 to \$6,100).

Within each institution control and level category, full-time independent students in the two low-income groups either borrowed less than above-poverty-level students did or there was no statistically significant difference between the average amounts borrowed.

TABLE 6.**Average total amounts of selected types of financial aid received by full-time/full-year independent undergraduates who received any aid, by family income relative to federal poverty level and control and level of institution: 2015–16**

Aid type by control and level of institution ¹	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total financial aid²	\$16,200	\$16,700	\$17,000	\$15,500
Public 4-year	16,400	17,300	17,500	15,300
Private nonprofit 4-year	22,400	26,400	24,700	19,300
Private for-profit 4-year	20,500	20,900	22,300	19,700
Public less-than-4-year	9,400	8,900	9,700	9,600
Private nonprofit less-than-4-year	13,800	13,600	14,300	13,700
Private for-profit less-than-4-year	15,100	13,600	14,100	17,000
Total grant aid³	7,700	9,300	8,400	6,200
Public 4-year	8,100	9,800	8,500	6,200
Private nonprofit 4-year	12,200	16,300	14,000	8,700
Private for-profit 4-year	6,600	7,200	7,300	6,000
Public less-than-4-year	5,500	6,200	6,400	4,600
Private nonprofit less-than-4-year	5,600	5,700	6,100	5,200
Private for-profit less-than-4-year	5,100	5,300	5,400	4,700
Total student loans⁴	10,200	9,900	10,200	10,400
Public 4-year	10,100	9,900	10,200	10,100
Private nonprofit 4-year	11,400	12,800	11,200	10,900
Private for-profit 4-year	12,400	10,600	12,800	13,100
Public less-than-4-year	7,000	6,900	6,500	7,200
Private nonprofit less-than-4-year	8,600	8,200	8,500	9,100
Private for-profit less-than-4-year	9,700	8,600	9,500	10,800

¹ Control of institution indicates whether an institution is operated by publicly elected or appointed officials (public control) or by privately elected or appointed officials and derives its major source of funds from private sources (private control), and within the private control, whether individual(s) or agency in control receives no compensation, other than wages, rent, or other expenses for the assumption of risk (private nonprofit) or receives such compensation (private for-profit). Level of institution indicates whether an institution's programs are 4-year or higher (4 year), 2-but-less-than 4-year (2 year), or less than 2-year.

² "Total financial aid" includes all types of financial aid from any source except parents, friends, or relatives. Direct PLUS Loans to parents and other types of aid such as employer aid, veterans' benefits, and job training grants are included, but federal tax credits for education are not included. The estimates are only for students who received any financial aid.

³ "Total grant aid" includes grants, scholarships, or tuition waivers from federal, state, institutional, or private sources, including employers. The estimates are only for students who received any grant aid.

⁴ "Total student loans" includes only loans to students and may be from federal, state, institutional, or private sources, but excludes other forms of financing such as credit cards, home equity loans, loans from individuals, and Direct PLUS Loans to parents. The estimates are only for students who took out any student loans.

NOTE: Independent students include those who are age 24 or over, as well as those who are under 24 and are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Family income for independent students consists of the student's 2014 income and, if married, the 2014 income of his or her spouse. The 2014 family income was used because it was reported on the federal financial aid application and used for federal financial need analysis for 2015–16. Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employs a different standard. Students are considered to have attended for a full year if they are enrolled for 9 or more months during the academic year. Months do not have to be contiguous, and students do not have to be enrolled for a full month to be considered enrolled for that month. Estimates in this table pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This table excludes international students, students from overseas U.S. territories, and students attending institutions in Puerto Rico. Students who attended more than one institution are included in the total but not shown separately in the table.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

4 What is the price of attendance for very low- and low-income students, and how much do they actually pay to attend college, in comparison with students with family incomes above the federal poverty level?

This section examines three measures of undergraduates' price of attendance: the total price, net price, and out-of-pocket net price. The total price is typically used by institutions to develop a student's financial aid package. The net price represents the actual amount that students and their families are responsible for both immediately and in the long term (through the use of student loans). The out-of-pocket net price of attendance reflects the immediate amount that students and their families need to pay to attend college (Simone et al. 2013). Full-time and full-year students face higher tuition and a higher price of attendance than do students enrolled in school part time or for part of the academic year (Paslov and Skomsvold 2014). For ease of presentation, the analysis in this section is restricted to students who enrolled full time for a full year. Appendix A presents the corresponding statistics for dependent and independent students who attended school part time and/or part year.

Price of Attendance: Dependent Undergraduates

The average total price of attendance for full-time dependent students varied with the control and level of the institutions students attended, generally ranging from the lowest at public less-than-4-year institutions (\$15,100) to the highest at private

nonprofit 4-year institutions (\$51,100) (table 7). Within each institution control and level category, the differences in the average total price of attendance across the three income groups generally were about \$4,000 or less, although the very low-income group tended to attend higher priced private for-profit 4-year institutions than their above-poverty-level peers did.

The majority of dependent students received some grants (figure 2). After all grants were subtracted from the total price of attendance, all three income groups faced the lowest average net price at public less-than-4-year institutions and the highest average net price at private for-profit 4-year institutions (table 7). For the most part, the two low-income groups faced a lower average net price of attendance than their above-poverty-level peers did, except at private for-profit 4-year institutions.

In addition to grants, many dependent students received student loans (figure 2). After subtracting all financial aid from the total price of attendance, the remaining amount reflects the immediate out-of-pocket price that students and their families need to pay to attend college. The 2015–16 average out-of-pocket net price for the two low-income groups was generally

lowest at public less-than-4-year institutions and highest at private for-profit 4-year institutions (table 7). The two low-income groups generally faced lower average out-of-pocket net prices than their above-poverty-level peers did, except at private for-profit 4-year institutions.

The average out-of-pocket net price for full-time very low-income dependent students at private for-profit 4-year institutions was \$24,200, an amount that exceeded these students' families' total income in 2015. The 2015 total family income of very low-income families living in the 48 contiguous states or District of Columbia ranged from below \$7,965 for families of two to below \$20,445 for families of eight (table A-6).

Price of Attendance: Independent Undergraduates

Among full-time independent students, the average total price of attendance ranged from \$17,500 at public less-than-4-year institutions to \$37,300 at private nonprofit 4-year institutions (table 8). Independent students with very low incomes tended to attend higher priced public 4-year institutions than their peers with incomes above the poverty level did. In addition, both very low- and low-income independent students tended to attend higher priced private nonprofit 4-year institutions than their above-poverty-level peers did.

TABLE 7.**Average total price, net price, and out-of-pocket net price of attendance for full-time/full-year dependent undergraduates, by family income relative to federal poverty level and control and level of institution: 2015–16**

Total price, net price, and out-of-pocket net price of attendance by control and level of institution ¹	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total price of attendance²	\$31,400	\$29,200	\$27,400	\$32,000
Public 4-year	26,800	26,100	25,600	27,000
Private nonprofit 4-year	51,100	49,500	47,100	51,500
Private for-profit 4-year	43,600	48,800	47,400	41,500
Public less-than-4-year	15,100	16,000	15,400	14,900
Private nonprofit less-than-4-year	29,700	‡	‡	30,300
Private for-profit less-than-4-year	31,000	31,200	29,500	31,200
Net price of attendance³	21,500	15,300	14,800	22,800
Public 4-year	20,100	14,800	13,900	21,100
Private nonprofit 4-year	30,400	20,700	21,800	31,700
Private for-profit 4-year	36,200	38,100	37,300	35,500
Public less-than-4-year	11,100	9,000	9,100	11,700
Private nonprofit less-than-4-year	25,800	‡	‡	27,200
Private for-profit less-than-4-year	26,100	22,200	23,000	27,700
Out-of-pocket net price of attendance⁴	14,500	9,500	9,600	15,500
Public 4-year	13,400	9,200	8,900	14,200
Private nonprofit 4-year	19,400	9,900	11,600	20,600
Private for-profit 4-year	20,300	24,200	21,700	19,100
Public less-than-4-year	10,000	8,000	8,300	10,600
Private nonprofit less-than-4-year	19,700	‡	‡	20,400
Private for-profit less-than-4-year	15,800	13,900	13,900	16,600

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the standard error is greater than 50 percent of the estimate.

¹ Control of institution indicates whether an institution is operated by publicly elected or appointed officials (public control) or by privately elected or appointed officials and derives its major source of funds from private sources (private control), and within the private control, whether individual(s) or agency in control receives no compensation, other than wages, rent, or other expenses for the assumption of risk (private nonprofit) or receives such compensation (private for-profit). Level of institution indicates whether an institution's programs are 4-year or higher (4 year), 2-but-less-than-4-year (2 year), or less than 2-year.

² "Total price of attendance" includes tuition and fees, room and board, books and supplies, transportation, and other miscellaneous, or personal expenses.

³ "Net price of attendance" is the total price of attendance minus all grant aid. Federal education tax benefits are not included in the calculation of the net price.

⁴ "Out-of-pocket net price of attendance" is the total price of attendance minus all financial aid, including Direct PLUS Loans to parents of dependent undergraduates. Federal education tax benefits are not included in the calculation of the out-of-pocket net price.

NOTE: Dependent students include those who are under age 24 and are not married, have no dependents, are not veterans or on active duty, are not orphans or wards of the courts, are not homeless or at risk of homelessness, and were not determined to be independent by a financial aid officer using professional judgment. Family income for dependent students consists of parents' 2014 income. The 2014 family income was used because it was reported on the federal financial aid application and used for federal financial need analysis for 2015–16. Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employs a different standard. Students are considered to have attended for a full year if they are enrolled for 9 or more months during the academic year. Months do not have to be contiguous, and students do not have to be enrolled for a full month to be considered enrolled for that month. Estimates in this table pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This table excludes international students, students from overseas U.S. territories, students attending institutions in Puerto Rico, and students attending more than one institution.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

TABLE 8.**Average total price, net price, and out-of-pocket net price of attendance for full-time/full-year independent undergraduates, by family income relative to federal poverty level and control and level of institution: 2015–16**

Total price, net price, and out-of-pocket net price of attendance by control and level of institution ¹	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total price of attendance²	\$27,300	\$29,000	\$27,800	\$25,800
Public 4-year	25,500	26,400	25,500	24,700
Private nonprofit 4-year	37,300	45,700	39,200	31,100
Private for-profit 4-year	34,000	33,800	36,200	33,400
Public less-than-4-year	17,500	17,500	17,800	17,500
Private nonprofit less-than-4-year	34,600	34,200	34,500	35,100
Private for-profit less-than-4-year	31,700	31,500	31,100	32,300
Net price of attendance³	21,100	21,200	20,300	21,400
Public 4-year	19,000	18,200	17,900	20,200
Private nonprofit 4-year	27,600	32,900	26,700	24,700
Private for-profit 4-year	28,400	27,300	29,300	28,600
Public less-than-4-year	13,400	12,300	12,500	14,400
Private nonprofit less-than-4-year	29,900	29,100	29,300	31,200
Private for-profit less-than-4-year	27,400	26,600	26,100	28,800
Out-of-pocket net price of attendance⁴	13,600	14,900	12,600	13,100
Public 4-year	11,400	11,900	9,700	11,800
Private nonprofit 4-year	18,200	24,800	16,800	14,500
Private for-profit 4-year	15,800	15,300	15,800	16,000
Public less-than-4-year	10,100	10,100	9,600	10,400
Private nonprofit less-than-4-year	22,800	22,100	22,200	23,800
Private for-profit less-than-4-year	18,200	19,100	17,900	17,800

¹ Control of institution indicates whether an institution is operated by publicly elected or appointed officials (public control) or by privately elected or appointed officials and derives its major source of funds from private sources (private control), and within the private control, whether individual(s) or agency in control receives no compensation, other than wages, rent, or other expenses for the assumption of risk (private nonprofit) or receives such compensation (private for-profit). Level of institution indicates whether an institution's programs are 4-year or higher (4 year), 2-but-less-than 4-year (2 year), or less than 2-year.

² "Total price of attendance" includes tuition and fees, room and board, books and supplies, transportation, and other miscellaneous, or personal expenses.

³ "Net price of attendance" is the total price of attendance minus all grant aid. Federal education tax benefits are not included in the calculation of the net price.

⁴ "Out-of-pocket net price of attendance" is the total price of attendance minus all financial aid, including Direct PLUS Loans to parents of dependent undergraduates. Federal education tax benefits are not included in the calculation of the out-of-pocket net price.

NOTE: Independent students include those who are age 24 or over, as well as those who are under 24 and are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Family income for independent students consists of the student's 2014 income and, if married, the 2014 income of his or her spouse. The 2014 family income was used because it was reported on the federal financial aid application and used for federal financial need analysis for 2015–16. Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employs a different standard. Students are considered to have attended for a full year if they are enrolled for 9 or more months during the academic year. Months do not have to be contiguous, and students do not have to be enrolled for a full month to be considered enrolled for that month. Estimates in this table pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This table excludes international students, students from overseas U.S. territories, students attending institutions in Puerto Rico, and students attending more than one institution.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

The average net price of attendance for full-time independent students, which ranged from \$13,400 to \$29,900, was lowest at public less-than-4-year institutions. Full-time, very low- and low-income independent students generally faced a lower average net price than that faced by their above-poverty-level counterparts or there was no statistically significant difference by poverty status. One exception was at private nonprofit 4-year institutions, where full-time, very low-income independent students faced a higher average net price of attendance than their above-poverty-level peers did.

The average out-of-pocket net prices faced by the two low-income groups were generally not different from those faced by their above-poverty-level peers, except at public 4-year and private nonprofit 4-year institutions. At public 4-year institutions, the low-income group faced a lower average out-of-pocket net price (\$9,700) than the above-poverty-level group did (\$11,800). At private nonprofit 4-year institutions, the very low-income group faced a higher average out-of-pocket net price (\$24,800) than the above-poverty-level group did (\$14,500).

Full-time, very low-income independent students' average out-of-pocket net price ranged from \$10,100 at public less-than-4-year institutions to \$24,800 at private nonprofit 4-year institutions. To put these prices in context, in 2015, a very low-income single individual living in one of the 48 contiguous states or District of Columbia had an annual income below \$5,885, a very low-income family of two had an annual income below \$7,965, and a very low-income family of four had an annual income below \$12,125 (table A-6). Thus, regardless of their institutions' control and level, many full-time, very low-income independent students faced an average out-of-pocket net price that was higher than their total family income in 2015.

FIND OUT MORE

For questions about content, to download this Statistics in Brief, or to view it online, go to

<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2020460>

Readers may be interested in the following NCES products related to topics covered in this Statistics in Brief:

2015–16 National Postsecondary Student Aid Study (NPSAS:16): Student Financial Aid Estimates for 2015–16 (NCES 2018–466).

<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2018466>

Trends in Pell Grant Receipt and the Characteristics of Pell Grant Recipients: Selected Years, 1999–2000 to 2011–12 (NCES 2015–601).

<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2015601>

How Families of Low- and Middle-Income Undergraduates Pay for College: Full-Time Dependent Students in 1999–2000 (NCES 2003–162).

<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2003162>

Low-Income Students: Who They Are and How They Pay for Their Education (NCES 2000–169).

<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2000169>

TECHNICAL NOTES

Survey Methodology

The estimates provided in this Statistics in Brief are based on data collected through the 2015–16 National Postsecondary Student Aid Study (NPSAS:16). Developed by the U.S. Department of Education, National Center for Education Statistics (NCES), NPSAS:16 includes a cross-sectional, nationally representative sample of undergraduate and graduate students enrolled any time between July 1, 2015, and June 30, 2016, in institutions eligible to participate in federal financial aid programs (Wine, Siegel, and Stollberg 2018). The primary purpose of NPSAS:16 is to measure how students and their families pay for postsecondary education at Title IV eligible institutions. NPSAS:16 used a two-stage sampling design. The first stage involved the selection of institutions. The second stage involved the selection of students from the sampled institutions. The resulting sample consists of about 89,000 undergraduate and 24,000 graduate students attending approximately 1,800 Title IV eligible postsecondary institutions in the 50 states, the District of Columbia, and Puerto Rico. These sample members represent approximately 20 million undergraduate and 4 million graduate students enrolled in postsecondary education at Title IV eligible institutions at any time between July 1, 2015, and June 30, 2016.

Information for NPSAS:16 came from multiple sources. Students provided data through a self-administered web survey or a computer-assisted telephone interview. Institutions provided student information from financial aid records and other institutional sources. Data were also collected from other sources, including the U.S. Department of Education’s Central Processing System and National Student Loan Data System (financial aid data), Integrated Postsecondary Education Data System (institutional data), the College Board and ACT (postsecondary entrance exam scores), National Student Clearinghouse (enrollment and completion data), and Veterans Benefits Administration (data on veterans and military service).

For more information on NPSAS:16, see *2015–16 National Postsecondary Student Aid Study (NPSAS:16) Data File Documentation* (NCES 2018-482) at <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2018482>.

Identifying Very Low- and Low-Income Students

Prior research has used several proxy measures to identify low-income students, including Pell Grant receipt, expected family contribution (EFC), and family income (Janice and Voight 2016; Rosinger and Ford 2019). Each measure has limitations. Although Pell Grant receipt is one of the most

frequently used proxies for low-income status (Delisle 2017), its utility for this analysis is limited for two reasons. First, it tends to undercount low-income students, particularly at institutions where many low-income students do not apply for federal financial aid due to lack of information, low costs of attendance, and difficulty in understanding application forms (Janice and Voight 2016; Romano and Millard 2006). Second, this measure is not particularly useful for this analysis because the indicator of Pell Grant receipt does not differentiate various levels of need among Pell Grant recipients (Rosinger and Ford 2019).

Researchers have argued that EFC is a better measure than Pell Grant receipt because it identifies some low-income students who do not receive Pell Grants,⁸ and it can also capture more accurate financial information about students and their families⁹ (Cody 2013, 2015; Delisle 2017). Zero is the lowest possible value for EFC under current federal rules, and therefore zero EFC has been suggested as an indicator for the lowest income students with the greatest need (Cody 2015). Nevertheless, zero EFC has flaws. Family resources and financial need vary widely even among students with zero EFC; for example, a sizeable percentage of students with zero EFC would qualify for a larger Pell Grant award than they currently receive if negative EFCs were allowed (Kelchen 2015; 2017). Furthermore, like Pell Grant

⁸ For example, EFC could identify low-income students among those who already earned a bachelor’s degree; these students are typically not eligible for Pell Grants.

⁹ Delisle (2017) found that some students with family incomes of \$30,000 or less had significant assets despite their low incomes. The EFC formula can capture that information and disqualify them for a Pell Grant.

receipt, EFC relies on parents’ or students’ knowledge, ability, and willingness to file a Free Application for Federal Student Aid form and therefore may undercount low-income students.

Finally, although family income does provide a simple indicator of a family’s general economic well-being, it does not take into account family size and the number of family members in college, which are important factors in determining college students’ actual financial need (Semega, Fontenot, and Kollar 2017).

In light of these concerns, the analyses in this report use students’ or their families’ incomes relative to the federally established poverty level to identify low-income students. This measure accounts for family size, is adjusted yearly for inflation, captures low-income students who do not apply for federal financial aid or who do apply but do not receive it for a variety of reasons, and also provides information about family income, which is helpful in making comparisons between income and price of attendance. This measure does not, however, take into account the wide variability in the cost of living within the continental United States. The federal government establishes only one poverty guideline for the 48 contiguous U.S. states and the District of Columbia. Students who live in parts of the country with a higher cost of living (e.g., San Francisco, New York City) and are classified as

VARIABLES USED

The variables used in this Statistics in Brief are listed below. Visit the NCES DataLab website <https://nces.ed.gov/datalab> to view detailed information on question wording for variables coming directly from an interview and how variables were constructed, including the sources used to construct them. The program files that generated the statistics presented in this Statistics in Brief can be found at <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2020460>.

Label	Name
Applied for any financial aid	AIDAPP
Applied for any federal aid	FEDAPP
Attendance status	ATTNSTAT
Control and level of institution	AIDSECT
Dependency status	DEPEND
Expected family contribution	EFC
Family income	CINCOME
Family income relative to federal poverty level	PCTPOV
First language student learned to speak as child	PRIMLANG
Hours worked per week (including work-study) while enrolled	JOBHOUR2
Immigrant generation	IMMIGEN
Net price of attendance	NETCST3
Out-of-pocket net price of attendance	NETCST1
Parents’ highest education	PAREduc
Race/ethnicity	RACE
Received any federal Pell Grants	PELLAMT
Received any financial aid/Total amount of financial aid	TOTAID
Received any grants/Total amount of grants	TOTGRT
Received any need-based aid	NEEDAID1
Sex	GENDER
State of legal residence	STUSTATE
Took out any student loans/Total amount of student loans	TOTLOAN
Total price of attendance	BUDGETAJ
Undergraduate degree program	UGDEG

above poverty level based on the federal poverty guidelines might be very poor in reality given the cost of living where they live. As a result, the number of very low- and low-income students in this report might be undercounted.

Response Rates and Nonresponse Bias Analysis

NCES Statistical Standard 4-4-1 states that “[a]ny survey stage of data collection with a unit or item response rate less than 85 percent must be evaluated for the potential magnitude of nonresponse bias before the data or

any analysis using the data may be released” (Seastrom 2014). Nonresponse causes bias in survey estimates when the outcomes of respondents and nonrespondents are different. In NPSAS, nonresponse bias analysis may be required at any of three levels: institutions, study respondents, or items. In NPSAS:16, the institution and study respondent response rates were 90 percent and 93 percent, respectively (Wine, Siegel, and Stollberg 2018). Therefore,

nonresponse bias analysis was not conducted at either of these two levels. Sixteen of the 24 variables used in this report had response rates below 85 percent and required nonresponse bias analysis (exhibit 1): NETCST1 (30 percent), NETCST3 (31 percent), TOTAID (45 percent), TOTGRT (45 percent), JOBHOUR2 (56 percent), IMMIGEN (57 percent), PRIMLANG (57 percent), AIDAPP (57 percent), BUDGETAJ (60 percent), TOTLOAN (61 percent),

PAREduc (61 percent), EFC (73 percent), PCTPOV (75 percent), CINCOME (76 percent), FEDAPP (80 percent), and NEEDAID1 (80 percent). For each of these variables, nonresponse bias analysis was conducted to determine whether respondents and nonrespondents differed on the following characteristics: institution control, region, and total enrollment; whether students received federal aid, institutional aid, state aid, Pell Grant, or Stafford Loans; the total amount students received in Pell Grants,

Exhibit 1. Bias analysis results

Variable name	Variable label	Response rate	Pre-imputation			Percent difference in means or average percent difference across all categories pre- and post-imputation
			Median percent relative bias across characteristics	Percent of characteristics with significant bias	Characteristic with greatest significant bias	
NETCST1	Out-of-pocket net price of attendance	30.3	11.3	69.0	Received federal aid	13.5 *
NETCST3	Net price of attendance	30.6	11.0	68.1	Received federal aid	16.1 *
TOTAID	Total amount of financial aid	44.8	8.7	61.1	Did not receive state aid	15.2 *
TOTGRT	Total amount of grants	45.3	7.7	61.9	Did not receive state aid	18.6 *
JOBHOUR2	Hours worked per week (including work-study) while enrolled	56.4	6.1	72.2	Received federal aid	1.2
IMMIGEN	Immigrant generation	56.7	6.5	71.3	Received federal aid	6.3 *
PRIMLANG	First language learned to speak as child	56.9	6.5	73.0	Received federal aid	3.1 *
AIDAPP	Applied for any financial aid	57.2	5.5	60.3	Unknown institutional aid status	2.6 *
BUDGETAJ	Total price of attendance	59.5	6.9	59.5	Unknown state aid status	12.0 *
TOTLOAN	Total amount of student loans	61.2	5.6	66.4	Unknown state aid status	2.4 *
PAREduc	Parents’ highest education	61.2	5.2	70.4	Received federal aid	9.8 *
EFC	Expected family contribution	72.9	6.1	74.3	Received federal aid	14.4 *
PCTPOV	Family income relative to federal poverty level	74.8	6.1	70.8	Received federal aid	11.0 *
CINCOME	Family income	75.8	5.3	68.5	Received federal aid	10.1 *
FEDAPP	Applied for any federal aid	79.8	4.4	49.6	Unknown institutional aid status	1.9 *
NEEDAID1	Received any need-based aid	80.5	4.6	49.1	Unknown institutional aid status	0.6

* Indicates statistically significant difference at $p < .05$.

NOTE: Relative bias is computed by dividing a variable’s estimated bias for a given characteristic by the variable’s mean. Bias is defined as significant if its difference from zero is statistically significant at $p < .05$. A complete list of variables used in this report is available on page 23. Visit the NCES DataLab website <https://nces.ed.gov/datalab> to view detailed information on question wording for variables coming directly from an interview, how variables were constructed, and their sources.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Stafford Loans, and grant and scholarship aid; the institution-level percentage of first-time/full-time (FT/FT) degree/certificate-seeking undergraduate students who received any grant aid, number of FT/FT undergraduate students with incomes up to \$30,000 who received Title IV aid, and number of FT/FT undergraduates living on campus; parents' highest education; student age, sex, race/ethnicity, marital status, family income, major field, degree program, and veteran status; whether the student had any dependent children; and whether the sampled institution considered the student a baccalaureate student at the time of sampling. Differences between respondents and nonrespondents on these variables—comparing means for continuous variables and comparing percentages in each category of categorical variables—were tested for statistical significance at the .05 level.

Across these 16 variables, respondents differed from nonrespondents on 49 percent to 74 percent of the characteristics listed above, indicating that there are biases in estimates based on these variables. Any bias due to nonresponse, however, is measured prior to stochastic imputation, in which missing data are replaced with valid data from the records of donor cases that match the recipient cases (i.e., those with missing data) on selected demographic, enrollment, institution,

and financial aid-related variables (Krotki, Black, and Creel 2005). The potential for bias in estimates may be reduced through imputation, because imputation procedures are designed to identify donor respondents whose characteristics are similar to the respondents with missing data. Although the amount of item-level bias before imputation is measurable, the same measurement cannot be made after imputation, and therefore the magnitude of any change in item-level bias due to imputation cannot be determined. Therefore, the item estimates before and after imputation were compared to determine whether imputation changed the biased pre-imputation estimates. If so, imputation may have reduced bias.

For continuous variables, the pre- and post-imputation differences were computed by subtracting the mean after imputation from the mean before imputation. For categorical variables, the pre- and post-imputation differences were computed by subtracting the percentage of students in each category after imputation from the percentage of students in that category before imputation. Statistical tests of these pre- and post-imputation differences were significant for 14 of these variables (NETCST1, NETCST3, TOTAID, TOTGRT, IMMIGEN, PRIMLANG, AIDAPP, BUDGETAJ, TOTLOAN, PAREduc, EFC, PCTPOV, CINCOME, and FEDAPP),

indicating that nonresponse bias may have been reduced through imputation. For the remaining two variables (JOBHOUR2 and NEEDAID1), the differences between estimates before and after imputation were not statistically significant, suggesting that for these two variables, imputation may not have reduced bias, the sample size was too small to detect a significant difference, or there was little bias to be reduced.

The low response rates observed for the composite variables TOTAID, TOTGRT, NETCST1, and NETCST3 are due largely to the low response rate of some component variables (e.g., employer aid and private loans) that apply to relatively few students. For example, TOTGRT was constructed from multiple aid components (e.g., grants, scholarships, employer aid, etc.), many of which were obtained from federal databases and institutional records and have very high response rates. Some aid (e.g., employer aid [EMPLYAM3]), however, is disbursed directly to students and not through institutional financial offices. Because the primary source of information about such aid is the student interview, EMPLYAM3 was missing for interview nonrespondents and had a low response rate, 59 percent (Wine, Siegel, and Stollberg 2018). Its low response rate, in turn, contributed to the low response rate of TOTGRT, to which it contributed information; TOTAID,

which depends upon TOTGRT; as well as NETCST1 and NETCST3, which depend upon TOTAID. EMPLYAM3's contribution to TOTGRT's nonresponse bias is limited, however, because few students receive this aid. In 2015–16, for example, 6 percent of undergraduates received employer aid, whereas 63 percent of all undergraduates received any grants (TOTGRT). Thus, the relatively low response rates of certain components reduce the response rate of the composites considerably but have limited effects on bias.

For more detailed information on nonresponse bias analysis and an overview of the survey methodology, see the *2015–16 National Postsecondary Student Aid Study (NPSAS:16) Data File Documentation* (NCES 2018-482) (<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2018482>).

Statistical Procedures

Comparisons made in the text were tested for statistical significance at the $p < .05$ level to ensure that the differences were larger than might be expected due to sampling variation. Consistent with widely accepted statistical standards, only those findings that are statistically significant at the .05 level are reported. That is, there is less than a 5 percent chance that the difference occurred by chance. When comparing estimates between categorical groups (e.g., sex, race/ethnicity), t statistics were calculated.

The following formula was used to compute the t statistic:

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2}}$$

where E_1 and E_2 are the estimates to be compared (e.g., the means of sample members in two groups), and se_1 and se_2 are their corresponding standard errors.

The coefficient of variation (CV) represents the ratio of the standard error to the estimate. The CV is an important measure of the reliability and accuracy of an estimate. In this report, the CV was calculated for all estimates. If any standard errors were between 30 and 50 percent of the estimate, estimates were noted with a “!” symbol (interpret with caution) in tables and figures; estimates with a standard error greater than 50 percent were suppressed and noted as “reporting standards not met.”

Sources of Error in Estimates

Two broad categories of error occur in estimates generated from surveys: sampling and nonsampling errors. Sampling errors occur when observations are based on samples rather than on entire populations. The standard error of a sample statistic is a measure of the variation due to sampling and indicates the precision of the statistic. The complex sampling design used in NPSAS:16 must be taken

into account when calculating variance estimates such as standard errors. The standard errors for the estimates in this report were generated using the balanced repeated replication method to adjust variance estimation for the complex sample design used for NPSAS:16. Nonsampling errors can be attributed to several sources: incomplete information about all respondents (e.g., some students or institutions refused to participate, or students participated but answered only certain items); differences among respondents in question interpretation; inability or unwillingness to give correct information; mistakes in recording or coding data; and other errors of collecting, processing, and imputing missing data. Efforts were made to prevent such errors from occurring and to compensate for them where possible. For example, data collection instruments were field tested, the survey questions included in the instruments had been tested and used in previous surveys, interviewers were trained to administer the surveys in a standardized manner, and interviewer performance and field data quality were monitored throughout the collection period. More information on sampling and nonsampling errors is available in the NPSAS:16 data file documentation report available at <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2018482>.

REFERENCES

- Bellin, J. (2015). A Higher-Education Agenda for the Poor. *National Affairs*, 22: 124–137. Retrieved October 22, 2017, from <https://www.nationalaffairs.com/publications/detail/a-higher-education-agenda-for-the-poor> ↗.
- Blagg, K., Gundersen, C., Schanzenbach, D.W., and Ziliak, J.P. (2017). *Assessing Food Insecurity on Campus: A National Look at Food Insecurity Among America's College Students*. Washington, DC: Urban Institute. Retrieved September 22, 2017, from https://www.urban.org/sites/default/files/publication/92331/assessing_food_insecurity_on_campus_0.pdf ↗.
- Center for Poverty Research. (2018). *What is "Deep Poverty"?* The University of California at Davis, CA. Retrieved October 22, 2017, from <https://poverty.ucdavis.edu/faq/what-deep-poverty> ↗.
- Choy, S. (2000). *Low-Income Students: Who They Are and How They Pay for Their Education* (NCES 2000-169). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved October 22, 2017, from <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2000169>.
- Cody, D.J. (2013). Why Community College Students Are So Poor, but Only 16.9% Received Federal Pell Grants. *Community College Journal of Research and Practice*, 37(7): 503–513.
- Cody, D.J. (2015). Examining Zero Expected Family Contribution as a New Criterion for "Low Income": Comparing the Impact on Student Persistence at Two- and Four-Year Institutions. *Community College Journal of Research and Practice*, 39(5): 442–460.
- Delisle, J. (2017). The Pell Grant Proxy: A Ubiquitous but Flawed Measure of Low-Income Student Enrollment. *Evidence Speaks Reports*, 2(26). Retrieved October 22, 2017, from <https://www.brookings.edu/wp-content/uploads/2017/10/pell-grants-report1.pdf> ↗.
- Gillen, A. (2010). Financial Aid in Theory and Practice. In J. Hall (Ed.), *Doing More With Less: Making Colleges Work Better* (pp. 15–51). New York, NY: Springer.
- Goldrick-Rab, S. (2016). *Paying the Price: College Costs, Financial Aid, and the Betrayal of the American Dream*. Chicago, IL: University of Chicago Press.
- Ifill, N. (2016). *Undergraduates Who Do Not Apply for Financial Aid* (NCES 2016-406). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved on July 19, 2019, from <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2016406>.
- Janice, A., and Voight, M. (2016). *Toward Convergence: A Technical Guide for the Postsecondary Metrics Framework*. Washington, DC: Institute for Higher Education Policy. Retrieved December 15, 2017, from http://www.ihep.org/sites/default/files/uploads/docs/pubs/ihep_toward_convergence.pdf ↗.
- Kelchen, R. (2015). Financial Need and Income Volatility Among Students With Zero Expected Family Contribution. *Journal of Student Financial Aid*, 44(3): 179–201.
- Kelchen, R. (2017). The Distributional and Cost Implications of Negative Expected Family Contributions. *Journal of Student Financial Aid*, 47(1): 4–24.
- Krotki, K., Black, S., and Creel, D. (2005). Mass Imputation. In *Proceedings of the Section on Survey Research Methods, American Statistical Association*. Retrieved July 26, 2018, from <http://www.asasrms.org/Proceedings/y2005/files/JSM2005-000931.pdf> ↗.
- Lei, S. (2013). *The Unwaged War on Deep Poverty*. Washington, DC: Urban Institute. Retrieved October 22, 2017, from <https://www.urban.org/features/unwaged-war-deep-poverty> ↗.
- Paslov, J., and Skomsvold, P. (2014). *Student Financing of Undergraduate Education: 2011–12* (NCES 2015-173). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved October 22, 2017, from <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2015173>.
- Payne-Sturges, D.C., Tjaden, A., Caldeira, K.M., Vincent, K.B., and Arria, A.M. (2017). Student Hunger on Campus: Food Insecurity Among College Students and Implications for Academic Institutions. *American Journal of Health Promotion*, 32(2): 349–354.

- Perna, L.W. (2015). *Improving College Access and Completion for Low-Income and First-Generation Students: The Role of College Access and Success Programs*. University of Pennsylvania. Retrieved on October 15, 2017, from https://repository.upenn.edu/gse_pubs/301.
- Radwin, D., Conzelmann, J.G., Nunnery, A., Lacy, T.A., Wu, J., Lew, S., Wine, J., and Siegel, P. (2018). *2015–16 National Postsecondary Student Aid Study (NPSAS:16): Student Financial Aid Estimates for 2015–16* (NCES 2018-466). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved on February 5, 2019, from <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2018466>.
- Romano, R.M., and Millard, T. (2006). *If Community College Students Are So Poor Why Do Only 16.9% of Them Receive Pell Grants?* Ithaca, NY: The Cornell Higher Education Research Institute, Cornell University. Retrieved December 13, 2017, from <https://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1025&context=cheri>.
- Rosinger, K.O., and Ford, K.S. (2019). Pell Grant Versus Income Data in Postsecondary Research. *Educational Researcher*, 48(5): 309–315.
- Seastrom, M. (2014). *NCES Statistical Standards* (NCES 2014-097). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved June 1, 2018, from <https://nces.ed.gov/statprog/2012/>.
- Semega, J.L., Fontenot, K.R., and Kollar, M.A. (2017). *Income and Poverty in the United States: 2016*. Washington, DC: U.S. Census Bureau. Retrieved October 22, 2017, from <https://www.census.gov/content/dam/Census/library/publications/2017/demo/P60-259.pdf>.
- Silva, M.R., Kleinert, W.L., Sheppard, V.A., Cantrell, K.A., Freeman-Coppadge, D.J., Tsoy, E., Roberts, T., and Pearrow, M. (2015). The Relationship Between Food Security, Housing Stability, and School Performance Among College Students in an Urban University. *Journal of College Student Retention: Research, Theory & Practice*, 12(3): 284–299.
- Simone, S., Radwin, D., Wine, J., Siegel, P., and Bryan, M. (2013). *2011–12 National Postsecondary Student Aid Study (NPSAS:12): Price Estimates for Attending Postsecondary Education Institutions* (NCES 2014-166). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved October 22, 2017, from <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2014166>.
- Skomsvold, P. (2015). *Profile of Undergraduate Students: 2011–12* (NCES 2015-167). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved October 22, 2017, from <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2015167>.
- Tilak, J.B.G. (2010). Higher Education, Poverty and Development. *Higher Education Review*, 42(2): 23–45.
- Watson, C.E. (2017). *The Future of Lower-Income Students in Higher Education: Rethinking the Pell Program and Federal Tax Incentives*. University of Georgia School of Law Legal Studies Research Paper Series. Retrieved October 22, 2017, from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2962549.
- Wine, J., Siegel, P., and Stollberg, R. (2018). *2015–16 National Postsecondary Student Aid Study (NPSAS:16) Data File Documentation* (NCES 2018-482). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved May 25, 2018, from <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2018482>.

APPENDIX A. TABLES

Table A-1. Percentage distribution of undergraduates by whether they were included in the analysis, and among those included, percentage distribution by dependency status: 2015–16

Whether included in the analysis and dependency status	Total
Total	100.0
Whether included in the analysis	
Yes	96.0
No ¹	4.0
Dependency status of included students ²	
Dependent	50.4
Independent	49.6

¹ International students, students from overseas U.S. territories, and students attending institutions in Puerto Rico were excluded.

² Independent students include those who are age 24 or over, as well as those who are under age 24 and are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other undergraduates under age 24 are considered to be dependent.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table A-2. Average total amounts of selected types of financial aid received by full-time/part-year and part-time/full-year dependent and independent undergraduates who received any aid, by family income relative to federal poverty level and control and level of institution: 2015–16

Aid type by control and level of institution ¹	Dependent students				Independent students			
	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total financial aid²	\$8,900	\$8,100	\$8,500	\$9,200	\$8,700	\$8,900	\$9,200	\$8,500
Public 4-year	9,800	10,300	10,400	9,600	9,800	10,600	9,900	9,400
Private nonprofit 4-year	20,800	18,300	19,800	21,100	11,400	12,500	13,800	10,700
Private for-profit 4-year	14,600	14,600	12,200	15,400	12,700	12,800	13,100	12,400
Public less-than-4-year	4,200	4,900	5,000	3,800	5,400	5,500	5,900	5,200
Private nonprofit less-than-4-year	9,900	‡	‡	11,500	11,000	10,500	9,300	12,100
Private for-profit less-than-4-year	10,000	10,300	9,100	10,300	10,900	9,500	10,700	12,300
Total grant aid³	6,000	5,800	6,100	6,000	4,100	4,500	4,600	3,600
Public 4-year	6,300	7,600	7,500	5,800	4,700	5,600	5,000	4,100
Private nonprofit 4-year	13,600	11,600	13,100	13,900	5,300	6,700	6,700	4,600
Private for-profit 4-year	6,600	7,100	6,700	6,400	4,700	4,800	5,500	4,400
Public less-than-4-year	3,600	4,300	4,500	3,100	3,200	3,700	3,800	2,800
Private nonprofit less-than-4-year	3,900	‡	‡	4,300	4,700	4,800	4,500	4,800
Private for-profit less-than-4-year	4,600	5,000	4,600	4,300	3,800	4,000	4,100	3,500
Total student loans⁴	6,000	5,300	5,300	6,200	7,700	7,300	7,400	8,000
Public 4-year	6,100	4,600	5,200	6,300	8,200	7,900	7,600	8,500
Private nonprofit 4-year	7,900	6,900	6,300	8,200	8,500	8,200	8,200	8,600
Private for-profit 4-year	7,100	6,200	6,500	7,500	8,800	8,300	8,500	9,300
Public less-than-4-year	3,800	3,500	3,500	3,800	5,600	5,400	5,700	5,700
Private nonprofit less-than-4-year	6,100	‡	‡	6,200	6,900	7,200	‡	7,000
Private for-profit less-than-4-year	6,400	6,000	6,300	6,500	7,700	7,100	7,600	8,400

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the standard error is greater than 50 percent of the estimate.

¹ Control of institution indicates whether an institution is operated by publicly elected or appointed officials (public control) or by privately elected or appointed officials and derives its major source of funds from private sources (private control), and within the private control, whether individual(s) or agency in control receives no compensation, other than wages, rent, or other expenses for the assumption of risk (private nonprofit) or receives such compensation (private for-profit). Level of institution indicates whether an institution's programs are 4-year or higher (4 year), 2-but-less-than 4-year (2 year), or less-than-2-year.

² "Total financial aid" includes all types of financial aid from any source except parents, friends, or relatives. Direct PLUS Loans to parents and other types of aid such as employer aid, veterans' benefits, and job training grants are included, but federal tax credits for education are not included. The estimates are only for students who received any financial aid.

³ "Total grant aid" includes grants, scholarships, or tuition waivers from federal, state, institutional, or private sources, including employers. The estimates are only for students who received any grant aid.

⁴ "Total student loans" includes only loans to students and may be from federal, state, institutional, or private sources, but excludes other forms of financing such as credit cards, home equity loans, loans from individuals, and Direct PLUS Loans to parents. The estimates are only for students who took out any student loans.

NOTE: Independent students include those who are age 24 or over, as well as those who are under 24 and are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other undergraduates under age 24 are considered to be dependent. Family income for independent students consists of the student's 2014 income and, if married, the 2014 income of his or her spouse. Family income for dependent students consists of parents' 2014 income. The 2014 family income was used because it was reported on the federal financial aid application and used for federal financial need analysis for 2015–16. Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employs a different standard. Students are considered to have attended for a full year if they are enrolled for 9 or more months during the academic year. Months do not have to be contiguous, and students do not have to be enrolled for a full month to be considered enrolled for that month. Estimates in this table pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This table excludes international students, students from overseas U.S. territories, and students attending institutions in Puerto Rico. Students who attended more than one institution are included in the total but not shown separately in the table.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table A-3. Average total amounts of selected types of financial aid received by part-time/part-year dependent and independent undergraduates who received any aid, by family income relative to federal poverty level and control and level of institution: 2015–16

Aid type by control and level of institution ¹	Dependent students				Independent students			
	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total financial aid²	\$5,400	\$5,100	\$5,400	\$5,500	\$4,800	\$5,400	\$5,200	\$4,500
Public 4-year	7,200	7,000	8,600	6,900	5,500	6,100	6,500	5,100
Private nonprofit 4-year	10,600	‡	‡	11,700	6,100	9,300	5,300	5,600
Private for-profit 4-year	11,300	11,400	11,500	11,300	8,300	8,900	9,000	7,800
Public less-than-4-year	2,500	3,100	2,700	2,300	2,700	2,900	2,900	2,600
Private nonprofit less-than-4-year	‡	‡	‡	‡	‡	‡	‡	‡
Private for-profit less-than-4-year	7,900	8,000	‡	8,300	7,100	6,200	7,500	7,600
Total grant aid³	3,700	3,600	3,900	3,700	2,400	2,900	2,600	2,200
Public 4-year	5,200	4,800	6,400	5,000	2,900	3,500	3,600	2,500
Private nonprofit 4-year	7,200	‡	‡	8,200	3,000	5,300	2,300	2,700
Private for-profit 4-year	4,900	5,400	5,700	4,500	3,300	3,500	3,700	3,000
Public less-than-4-year	2,200	2,800	2,400	1,900	1,700	2,000	1,900	1,500
Private nonprofit less-than-4-year	‡	‡	‡	‡	‡	‡	‡	‡
Private for-profit less-than-4-year	3,500	‡	‡	3,300	2,900	2,700	3,100	3,100
Total student loans⁴	4,300	4,300	4,400	4,300	5,500	5,600	5,500	5,500
Public 4-year	4,400	‡	5,700	4,300	5,700	5,600	5,600	5,800
Private nonprofit 4-year	5,400	‡	‡	6,300	5,900	6,700	4,800	5,900
Private for-profit 4-year	5,800	6,200	6,200	5,600	6,600	6,100	6,200	7,000
Public less-than-4-year	2,700	‡	‡	2,700	3,700	4,000	4,100	3,500
Private nonprofit less-than-4-year	‡	‡	‡	‡	‡	‡	‡	‡
Private for-profit less-than-4-year	4,800	‡	‡	4,600	5,900	5,100	5,900	6,500

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the standard error is greater than 50 percent of the estimate.

¹ Control of institution indicates whether an institution is operated by publicly elected or appointed officials (public control) or by privately elected or appointed officials and derives its major source of funds from private sources (private control), and within the private control, whether individual(s) or agency in control receives no compensation, other than wages, rent, or other expenses for the assumption of risk (private nonprofit) or receives such compensation (private for-profit). Level of institution indicates whether an institution's programs are 4-year or higher (4 year), 2-but-less-than 4-year (2 year), or less-than-2-year.

² "Total financial aid" includes all types of financial aid from any source except parents, friends, or relatives. Direct PLUS Loans to parents and other types of aid such as employer aid, veterans' benefits, and job training grants are included, but federal tax credits for education are not included. The estimates are only for students who received any financial aid.

³ "Total grant aid" includes grants, scholarships, or tuition waivers from federal, state, institutional, or private sources, including employers. The estimates are only for students who received any grant aid.

⁴ "Total student loans" includes only loans to students and may be from federal, state, institutional, or private sources, but excludes other forms of financing such as credit cards, home equity loans, loans from individuals, and Direct PLUS Loans to parents. The estimates are only for students who took out any student loans.

NOTE: Independent students include those who are age 24 or over, as well as those who are under 24 and are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other undergraduates under age 24 are considered to be dependent. Family income for independent students consists of the student's 2014 income and, if married, the 2014 income of his or her spouse. Family income for dependent students consists of parents' 2014 income. The 2014 family income was used because it was reported on the federal financial aid application and used for federal financial need analysis for 2015–16. Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employs a different standard. Students are considered to have attended for a full year if they are enrolled for 9 or more months during the academic year. Months do not have to be contiguous, and students do not have to be enrolled for a full month to be considered enrolled for that month. Estimates in this table pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This table excludes international students, students from overseas U.S. territories, and students attending institutions in Puerto Rico. Students who attended more than one institution are included in the total but not shown separately in the table.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table A-4. Average total price, net price, and out-of-pocket net price of attendance for full-time/part-year and part-time/full-year dependent and independent undergraduates, by family income relative to federal poverty level and control and level of institution: 2015–16

Total price, net price, and out-of-pocket net price of attendance by control and level of institution ¹	Dependent students				Independent students			
	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total price of attendance²	\$15,300	\$13,900	\$13,700	\$15,800	\$14,900	\$14,800	\$15,200	\$14,900
Public 4-year	16,400	15,600	15,200	16,600	16,200	16,300	15,700	16,300
Private nonprofit 4-year	30,900	23,100	23,900	32,500	18,300	19,700	20,400	17,600
Private for-profit 4-year	21,900	21,100	20,900	22,500	18,200	17,300	18,200	18,600
Public less-than-4-year	10,400	10,600	10,600	10,300	11,600	11,300	11,900	11,600
Private nonprofit less-than-4-year	20,300	‡	‡	21,300	20,700	19,300	19,200	22,700
Private for-profit less-than-4-year	19,100	19,600	17,900	19,400	19,900	19,100	20,000	20,600
Net price of attendance³	11,500	8,900	8,500	12,400	12,300	11,600	11,700	12,800
Public 4-year	12,400	9,100	8,600	13,300	13,200	12,300	11,800	14,000
Private nonprofit 4-year	19,600	13,500	11,800	21,100	14,500	14,500	14,800	14,500
Private for-profit 4-year	16,400	14,400	14,600	17,600	14,500	13,300	13,300	15,400
Public less-than-4-year	8,300	6,900	6,900	8,900	9,700	8,800	9,200	10,100
Private nonprofit less-than-4-year	17,400	‡	‡	18,500	17,500	16,000	16,000	19,500
Private for-profit less-than-4-year	16,100	15,300	13,700	17,200	17,300	16,200	16,700	18,500
Out-of-pocket net price of attendance⁴	8,800	6,900	6,500	9,500	8,700	8,400	8,100	9,000
Public 4-year	8,800	6,700	5,800	9,500	9,000	8,300	7,800	9,600
Private nonprofit 4-year	12,700	7,600	5,100	14,100	9,000	9,600	8,500	8,900
Private for-profit 4-year	8,800	7,300	9,500	9,000	7,500	6,900	6,600	8,200
Public less-than-4-year	7,600	6,300	6,500	8,100	8,100	7,500	7,700	8,500
Private nonprofit less-than-4-year	11,600	‡	‡	11,300	12,700	12,400	12,100	13,200
Private for-profit less-than-4-year	11,100	10,900	9,500	11,700	11,700	12,100	11,200	11,600

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the standard error is greater than 50 percent of the estimate.

¹ Control of institution indicates whether an institution is operated by publicly elected or appointed officials (public control) or by privately elected or appointed officials and derives its major source of funds from private sources (private control), and within the private control, whether individual(s) or agency in control receives no compensation, other than wages, rent, or other expenses for the assumption of risk (private nonprofit) or receives such compensation (private for-profit). Level of institution indicates whether an institution's programs are 4-year or higher (4 year), 2-but-less-than 4-year (2 year), or less than 2-year.

² "Total price of attendance" includes tuition and fees, room and board, books and supplies, transportation, and other miscellaneous, or personal expenses.

³ "Net price of attendance" is the total price of attendance minus all grant aid. Federal education tax benefits are not included in the calculation of the net price.

⁴ "Out-of-pocket net price of attendance" is the total price of attendance minus all financial aid, including Direct PLUS Loans to parents of dependent undergraduates. Federal education tax benefits are not included in the calculation of the out-of-pocket net price.

NOTE: Independent students include those who are age 24 or over, as well as those who are under 24 and are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other undergraduates under age 24 are considered to be dependent. Family income for independent students consists of the student's 2014 income and, if married, the 2014 income of his or her spouse. Family income for dependent students consists of parents' 2014 income. The 2014 family income was used because it was reported on the federal financial aid application and used for federal financial need analysis for 2015–16. Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employs a different standard. Students are considered to have attended for a full year if they are enrolled for 9 or more months during the academic year. Months do not have to be contiguous, and students do not have to be enrolled for a full month to be considered enrolled for that month. Estimates in this table pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This table excludes international students, students from overseas U.S. territories, students attending institutions in Puerto Rico, and students attending more than one institution.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table A-5. Average total price, net price, and out-of-pocket net price of attendance for part-time/part-year dependent and independent undergraduates, by family income relative to federal poverty level and control and level of institution: 2015–16

Total price, net price, and out-of-pocket net price of attendance by control and level of institution ¹	Dependent students				Independent students			
	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
		\$	\$	\$		\$	\$	\$
Total price of attendance²	\$6,900	\$6,600	\$6,900	\$7,000	\$6,600	\$7,000	\$7,200	\$6,300
Public 4-year	9,200	8,500	8,900	9,300	7,800	8,400	8,600	7,500
Private nonprofit 4-year	14,300	12,300	‡	15,000	8,600	10,200	9,100	8,100
Private for-profit 4-year	15,000	14,800	15,000	15,100	11,400	11,500	12,700	11,100
Public less-than-4-year	4,900	5,100	4,900	4,800	5,000	5,000	5,300	4,900
Private nonprofit less-than-4-year	‡	‡	‡	‡	10,600	‡	‡	‡
Private for-profit less-than-4-year	14,000	12,200	14,000	14,600	14,100	13,800	14,000	14,300
Net price of attendance³	5,400	4,500	4,400	5,700	5,500	5,700	5,700	5,500
Public 4-year	6,900	5,000	4,800	7,400	6,600	6,900	6,600	6,500
Private nonprofit 4-year	9,700	8,500	‡	10,200	6,900	7,900	7,400	6,500
Private for-profit 4-year	11,100	9,800	10,200	11,800	8,900	8,500	9,400	8,900
Public less-than-4-year	4,100	3,600	3,400	4,300	4,300	4,100	4,300	4,400
Private nonprofit less-than-4-year	‡	‡	‡	‡	9,400	‡	‡	‡
Private for-profit less-than-4-year	11,900	8,900	11,900	13,000	12,100	11,900	11,700	12,600
Out-of-pocket net price of attendance⁴	4,400	3,600	3,400	4,700	4,400	4,500	4,300	4,300
Public 4-year	5,200	3,400	3,200	5,700	5,100	5,500	4,600	5,100
Private nonprofit 4-year	6,600	6,100	‡	7,000	4,500	5,400	5,000	4,200
Private for-profit 4-year	5,200	4,200	5,200	5,500	4,400	4,000	4,500	4,600
Public less-than-4-year	3,800	3,300	3,100	4,000	3,900	3,700	3,800	4,000
Private nonprofit less-than-4-year	‡	‡	‡	‡	6,200	‡	‡	‡
Private for-profit less-than-4-year	8,300	5,600	9,700	8,900	8,900	9,500	8,000	9,200

¹ Interpret data with caution. Estimate is unstable because the standard error is between 30 and 50 percent of the estimate.

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the standard error is greater than 50 percent of the estimate.

² Control of institution indicates whether an institution is operated by publicly elected or appointed officials (public control) or by privately elected or appointed officials and derives its major source of funds from private sources (private control), and within the private control, whether individual(s) or agency in control receives no compensation, other than wages, rent, or other expenses for the assumption of risk (private nonprofit) or receives such compensation (private for-profit). Level of institution indicates whether an institution's programs are 4-year or higher (4 year), 2-but-less-than 4-year (2 year), or less than 2-year.

³ "Total price of attendance" includes tuition and fees, room and board, books and supplies, transportation, and other miscellaneous, or personal expenses.

⁴ "Net price of attendance" is the total price of attendance minus all grant aid. Federal education tax benefits are not included in the calculation of the net price.

⁵ "Out-of-pocket net price of attendance" is the total price of attendance minus all financial aid, including Direct PLUS Loans to parents of dependent undergraduates. Federal education tax benefits are not included in the calculation of the out-of-pocket net price.

NOTE: Independent students include those who are age 24 or over, as well as those who are under 24 and are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other undergraduates under age 24 are considered to be dependent. Family income for independent students consists of the student's 2014 income and, if married, the 2014 income of his or her spouse. Family income for dependent students consists of parents' 2014 income. The 2014 family income was used because it was reported on the federal financial aid application and used for federal financial need analysis for 2015–16. Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employs a different standard. Students are considered to have attended for a full year if they are enrolled for 9 or more months during the academic year. Months do not have to be contiguous, and students do not have to be enrolled for a full month to be considered enrolled for that month. Estimates in this table pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This table excludes international students, students from overseas U.S. territories, students attending institutions in Puerto Rico, and students attending more than one institution.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table A-6. Federal poverty guidelines for families in the 48 contiguous U.S. states and the District of Columbia, Alaska, and Hawaii, by family size: 2015

Family size	48 contiguous U.S. states and the District of Columbia		Alaska		Hawaii	
	Poverty level	50 percent of poverty level	Poverty level	50 percent of poverty level	Poverty level	50 percent of poverty level
1	\$11,770	\$5,885	\$14,720	\$7,360	\$13,550	\$6,775
2	15,930	7,965	19,920	9,960	18,330	9,165
3	20,090	10,045	25,120	12,560	23,110	11,555
4	24,250	12,125	30,320	15,160	27,890	13,945
5	28,410	14,205	35,520	17,760	32,670	16,335
6	32,570	16,285	40,720	20,360	37,450	18,725
7	36,730	18,365	45,920	22,960	42,230	21,115
8	40,890	20,445	51,120	25,560	47,010	23,505

NOTE: For families of more than eight persons, add \$4,160 for each additional person if families are in the 48 contiguous U.S. states and the District of Columbia, \$5,200 in Alaska, and \$4,780 in Hawaii. The poverty guidelines are not defined for Puerto Rico, the U.S. Virgin Islands, American Samoa, Guam, the Republic of the Marshall Islands, the Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, and Palau.

SOURCE: The U.S. Department of Health and Human Services (<https://aspe.hhs.gov/2015-poverty-guidelines>).

APPENDIX B. ESTIMATE AND STANDARD ERROR TABLES

Table B-1. Estimates and standard errors for figure 1. Percentage distribution of undergraduates' family income relative to federal poverty level, by dependency status: 1999–2000, 2007–08, and 2015–16

	All undergraduates			Dependent undergraduates			Independent undergraduates		
	1999–2000	2007–08	2015–16	1999–2000	2007–08	2015–16	1999–2000	2007–08	2015–16
Estimates									
Income above federal poverty level	7.4	10.3	17.0	3.7	5.1	9.3	11.0	15.8	24.7
Low income (between 50 and 100 percent of federal poverty level)	9.0	9.2	13.9	6.0	5.8	11.1	11.9	12.7	16.8
Very low income (below 50 percent of federal poverty level)	83.6	80.5	69.1	90.3	89.1	79.6	77.1	71.5	58.5
Standard errors									
Income above federal poverty level	0.16	0.15	0.20	0.15	0.15	0.21	0.32	0.26	0.35
Low income (between 50 and 100 percent of federal poverty level)	0.20	0.13	0.18	0.24	0.14	0.23	0.33	0.22	0.31
Very low income (below 50 percent of federal poverty level)	0.24	0.20	0.23	0.27	0.20	0.30	0.45	0.34	0.40

NOTE: Independent students include those who are age 24 or over, as well as those who are under age 24 and are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other undergraduates under age 24 are considered to be dependent. Family income for independent students consists of the student's income and, if married, the income of his or her spouse. Family income for dependent students consists of parents' income. Consistent with federal financial need analysis, estimates for 2015–16 are based on 2014 income and federal poverty level thresholds, 2007–08 estimates are based on 2006 income and poverty level thresholds, and 1999–2000 estimates are based on 1998 income and poverty level thresholds. Estimates in this table pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This table excludes international students, students from overseas U.S. territories, and students attending institutions in Puerto Rico. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000, 2007–08, and 2015–16 National Postsecondary Student Aid Study (NPSAS:00, NPSAS:08, and NPSAS:16).

Table B-2. Estimates and standard errors for figure 2. Percentage of dependent undergraduates who applied for and received selected types of financial aid, by family income relative to federal poverty level: 2015–16

Aid type	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Estimates				
Applied for any financial aid ¹	87.3	94.0	95.2	85.4
Applied for any federal aid ²	78.8	91.3	91.8	75.5
Received any financial aid ¹	78.1	87.1	88.2	75.6
Received any grants ³	68.1	86.3	87.7	63.2
Received any need-based aid ⁴	57.8	81.7	83.1	51.4
Received any federal Pell Grants ⁵	37.1	79.0	80.7	26.1
Took out any student loans ⁶	44.1	40.4	39.4	45.2
Standard errors				
Applied for any financial aid	0.30	0.74	0.55	0.35
Applied for any federal aid	0.32	0.81	0.78	0.38
Received any financial aid	0.35	0.92	0.91	0.40
Received any grants	0.35	0.96	0.93	0.42
Received any need-based aid	0.33	1.03	0.93	0.36
Received any federal Pell Grants	0.25	1.09	0.93	0.27
Took out any student loans	0.25	1.28	1.07	0.29

¹“Any financial aid” includes all types of financial aid from any source except parents, friends, or relatives. Direct PLUS Loans to parents and other types of aid such as employer aid, veterans’ benefits, and job training grants are included, but federal tax credits for education are not included.

²“Any federal aid” includes all federal grants, work-study awards, and federal loans including Direct PLUS Loans. It includes aid from programs in Title IV of the Higher Education Act as well as aid from other federal sources, such as Public Health Service Loans, Bureau of Indian Affairs Grants, and District of Columbia Tuition Assistance Grants. It excludes federal veterans’ benefits, education tax credits, and tax deduction benefits.

³“Any grants” includes grants, scholarships, or tuition waivers from federal, state, institutional, or private sources, including employers.

⁴“Any need-based aid” includes federal Pell Grants, federal Supplemental Educational Opportunity Grants, need-based state and institutional grants, federal Perkins Loans, Direct Subsidized Loans, and federal work-study. Direct PLUS Loans to parents, Direct Unsubsidized Loans, federal veterans’ education benefits, job training grants, or other nonfederal loans, work-study, or private aid are not included.

⁵“Federal Pell Grants” are need-based grants provided to undergraduates with demonstrated financial need in order to promote access to postsecondary education.

⁶“Any student loans” includes only loans to students and may be from federal, state, institutional, or private sources, but excludes other forms of financing such as credit cards, home equity loans, loans from individuals, and Direct PLUS Loans to parents.

NOTE: Dependent students include those who are under age 24 and are not married, have no dependents, are not veterans or on active duty, are not orphans or wards of the courts, are not homeless or at risk of homelessness, and were not determined to be independent by a financial aid officer using professional judgment. Family income for dependent students consists of parents’ 2014 income. The 2014 family income was used because it was reported on the federal financial aid application and used for federal financial need analysis for 2015–16. Estimates in this table pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This table excludes international students, students from overseas U.S. territories, and students attending institutions in Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table B-3. Estimates and standard errors for figure 3. Percentage of independent undergraduates who applied for and received selected types of financial aid, by family income relative to federal poverty level: 2015–16

Aid type	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Estimates				
Applied for any financial aid ¹	77.5	81.0	85.2	73.8
Applied for any federal aid ²	65.2	70.3	77.4	59.6
Received any financial aid ¹	68.2	71.1	77.1	64.4
Received any grants ³	59.7	67.5	73.6	52.3
Received any need-based aid ⁴	51.7	57.7	67.8	44.5
Received any federal Pell Grants ⁵	42.5	53.9	63.6	31.7
Took out any student loans ⁶	35.0	36.1	42.4	32.4
Standard errors				
Applied for any financial aid	0.38	0.75	0.76	0.51
Applied for any federal aid	0.39	0.75	0.83	0.55
Received any financial aid	0.37	0.71	0.91	0.50
Received any grants	0.35	0.76	0.89	0.47
Received any need-based aid	0.31	0.72	1.01	0.45
Received any federal Pell Grants	0.26	0.75	1.05	0.37
Took out any student loans	0.26	0.67	0.91	0.40

¹ "Any financial aid" includes all types of financial aid from any source except parents, friends, or relatives. Direct PLUS Loans to parents and other types of aid such as employer aid, veterans' benefits, and job training grants are included, but federal tax credits for education are not included.

² "Any federal aid" includes all federal grants, work-study awards, and federal loans including Direct PLUS Loans. It includes aid from programs in Title IV of the Higher Education Act as well as aid from other federal sources, such as Public Health Service Loans, Bureau of Indian Affairs Grants, and District of Columbia Tuition Assistance Grants. It excludes federal veterans' benefits, education tax credits, and tax deduction benefits.

³ "Any grants" includes grants, scholarships, or tuition waivers from federal, state, institutional, or private sources, including employers.

⁴ "Any need-based aid" includes federal Pell Grants, federal Supplemental Educational Opportunity Grants, need-based state and institutional grants, federal Perkins Loans, Direct Subsidized Loans, and federal work-study. Direct PLUS Loans to parents, Direct Unsubsidized Loans, federal veterans' education benefits, job training grants, or other nonfederal loans, work-study, or private aid are not included.

⁵ "Federal Pell Grants" are need-based grants provided to undergraduates with demonstrated financial need in order to promote access to postsecondary education.

⁶ "Any student loans" includes only loans to students and may be from federal, state, institutional, or private sources, but excludes other forms of financing such as credit cards, home equity loans, loans from individuals, and Direct PLUS Loans to parents.

NOTE: Independent students include those who are age 24 or over, as well as those who are under age 24 and are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Family income for independent students consists of the student's 2014 income and, if married, the 2014 income of his or her spouse. The 2014 family income was used because it was reported on the federal financial aid application and used for federal financial need analysis for 2015–16. Estimates in this table pertain to students enrolled in Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. This table excludes international students, students from overseas U.S. territories, and students attending institutions in Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table B-4. Standard errors for table 2. Percentage distribution of undergraduates' family income and federal expected family contribution (EFC), by family income relative to federal poverty level: 2015–16

Family income and EFC	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total	†	†	†	†
Family income				
\$9,999 or less	0.20	0.33	0.63	†
\$10,000–19,999	0.18	0.33	0.73	0.17
\$20,000–29,999	0.17	0.04	0.51	0.22
\$30,000–39,999	0.15	†	0.20	0.21
\$40,000–49,999	0.13	†	0.07	0.18
\$50,000 or more	0.24	†	†	0.31
EFC				
\$0	0.25	0.22	0.42	0.24
\$1–1,499	0.17	0.21	0.40	0.20
\$1,500–4,999	0.19	0.04	0.11	0.27
\$5,000 or more	0.22	0.05	0.07	0.29

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table B-5. Standard errors for table 3. Percentage distribution of dependent and independent undergraduates' selected demographic characteristics, by family income relative to federal poverty level: 2015–16

Demographic characteristics	Dependent students			Independent students		
	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total	†	†	†	†	†	†
Sex						
Male	1.20	1.03	0.35	0.78	0.84	0.54
Female	1.20	1.03	0.35	0.78	0.84	0.54
Race/ethnicity						
White	1.31	0.97	0.52	0.80	1.03	0.75
Black	1.09	0.98	0.29	0.63	0.94	0.49
Hispanic	1.26	0.99	0.37	0.68	0.74	0.50
Asian	0.67	0.65	0.21	0.45	0.38	0.24
American Indian	0.26	0.28	0.07	0.19	0.18	0.12
Other	0.46	0.43	0.17	0.32	0.44	0.19
Parents' highest education						
High school diploma or less	1.29	1.08	0.31	0.72	0.79	0.56
Some college	1.29	1.12	0.35	0.76	0.94	0.52
Bachelor's or higher degree	1.29	0.89	0.38	0.78	0.93	0.53
Immigrant generation						
First generation	0.83	0.86	0.22	0.58	0.58	0.34
Second generation	1.26	1.00	0.38	0.77	0.68	0.44
Third or higher generation	1.29	1.06	0.44	0.86	0.90	0.53
First language learned to speak as child						
English	1.18	1.07	0.36	0.69	0.88	0.49
English and other language equally	0.73	0.68	0.23	0.40	0.49	0.20
Other language	0.99	1.01	0.28	0.55	0.71	0.44

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table B-6. Standard errors for table 4. Percentage distribution of dependent and independent undergraduates' selected enrollment characteristics, by family income relative to federal poverty level: 2015–16

Enrollment characteristics	Dependent students			Independent students		
	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total	†	†	†	†	†	†
Institution control and level						
Public	1.06	0.81	0.33	0.70	0.79	0.40
4-year	1.08	1.10	0.33	0.61	0.78	0.38
Less-than-4-year	1.38	1.12	0.35	0.71	1.00	0.46
Private nonprofit	0.72	0.58	0.23	0.58	0.53	0.32
4-year	0.72	0.58	0.23	0.55	0.53	0.33
Less-than-4-year	0.12	0.12	0.03	0.19	0.13	0.04
Private for-profit	0.49	0.49	0.11	0.89	0.97	0.47
4-year	0.36	0.36	0.08	0.76	0.86	0.44
Less-than-4-year	0.32	0.29	0.08	0.37	0.37	0.14
More than one institution	0.57	0.50	0.21	0.77	0.87	0.55
Undergraduate degree program						
No certificate or degree	0.37	0.33	0.13	0.33	0.39	0.31
Certificate	0.58	0.52	0.22	0.64	0.61	0.52
Associate's	1.25	1.20	0.41	0.82	1.00	0.67
Bachelor's degree	1.20	1.09	0.35	0.85	0.97	0.60
Attendance status						
Full-time/full-year	1.17	1.21	0.43	0.62	0.63	0.37
Full-time/part-year	0.98	0.98	0.30	0.79	0.96	0.41
Part-time/full-year	0.98	0.95	0.31	0.61	0.83	0.44
Part-time/part-year	1.10	0.94	0.38	0.86	1.09	0.57
Hours worked per week while enrolled						
0 hours	1.25	1.11	0.40	0.82	0.88	0.45
1–20 hours	1.11	1.14	0.37	0.61	0.76	0.35
21–35 hours	1.05	0.95	0.32	0.60	0.74	0.42
36 or more hours	0.75	0.66	0.25	0.59	0.93	0.59

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table B-7. Standard errors for table 5. Average total amounts of selected types of financial aid received by full-time/full-year dependent undergraduates who received any aid, by family income relative to federal poverty level and control and level of institution: 2015–16

Aid type by control and level of institution	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total financial aid	\$130	\$550	\$440	\$150
Public 4-year	110	390	380	130
Private nonprofit 4-year	360	1,500	1,710	370
Private for-profit 4-year	1,410	3,270	4,280	1,450
Public less-than-4-year	180	430	200	200
Private nonprofit less-than-4-year	1,740	†	†	2,030
Private for-profit less-than-4-year	700	1,540	910	820
Total grant aid	120	450	340	130
Public 4-year	90	370	310	110
Private nonprofit 4-year	320	1,470	1,500	330
Private for-profit 4-year	600	2,060	1,180	500
Public less-than-4-year	160	380	170	180
Private nonprofit less-than-4-year	990	†	†	1,180
Private for-profit less-than-4-year	470	1,550	300	530
Total student loans	70	170	140	80
Public 4-year	70	170	200	80
Private nonprofit 4-year	190	450	340	220
Private for-profit 4-year	480	770	850	670
Public less-than-4-year	140	350	330	170
Private nonprofit less-than-4-year	690	†	†	930
Private for-profit less-than-4-year	270	410	440	340

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table B-8. Standard errors for table 6. Average total amounts of selected types of financial aid received by full-time/full-year independent undergraduates who received any aid, by family income relative to federal poverty level and control and level of institution: 2015–16

Aid type by control and level of institution	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total financial aid	\$190	\$330	\$350	\$240
Public 4-year	220	450	470	340
Private nonprofit 4-year	620	1,150	1,500	780
Private for-profit 4-year	510	1,110	1,070	540
Public less-than-4-year	270	400	560	400
Private nonprofit less-than-4-year	1,180	1,230	1,740	2,100
Private for-profit less-than-4-year	370	600	490	580
Total grant aid	120	230	230	130
Public 4-year	170	360	280	190
Private nonprofit 4-year	480	870	1,380	530
Private for-profit 4-year	190	510	340	210
Public less-than-4-year	120	210	260	170
Private nonprofit less-than-4-year	440	420	370	750
Private for-profit less-than-4-year	90	110	150	160
Total student loans	100	200	200	160
Public 4-year	140	270	320	250
Private nonprofit 4-year	330	940	460	440
Private for-profit 4-year	370	520	870	560
Public less-than-4-year	190	420	440	240
Private nonprofit less-than-4-year	680	590	1,260	890
Private for-profit less-than-4-year	270	330	370	380

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table B-9. Standard errors for table 7. Average total price, net price, and out-of-pocket net price of attendance for full-time/full-year dependent undergraduates, by family income relative to federal poverty level and control and level of institution: 2015–16

Total price, net price, and out-of-pocket net price of attendance by control and level of institution	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total price of attendance	\$180	\$640	\$550	\$190
Public 4-year	130	480	460	140
Private nonprofit 4-year	370	1,420	1,370	370
Private for-profit 4-year	1,610	3,250	5,310	1,470
Public less-than-4-year	200	400	360	210
Private nonprofit less-than-4-year	1,830	†	†	1,940
Private for-profit less-than-4-year	980	1,400	920	1,130
Net price of attendance	140	400	440	160
Public 4-year	150	540	470	160
Private nonprofit 4-year	400	930	1,500	430
Private for-profit 4-year	1,230	2,570	4,470	1,330
Public less-than-4-year	220	410	350	250
Private nonprofit less-than-4-year	2,370	†	†	2,510
Private for-profit less-than-4-year	830	1,230	820	950
Out-of-pocket net price of attendance	140	320	400	160
Public 4-year	150	440	520	160
Private nonprofit 4-year	430	930	1,500	470
Private for-profit 4-year	970	3,240	3,530	1,150
Public less-than-4-year	230	440	360	260
Private nonprofit less-than-4-year	2,520	†	†	3,020
Private for-profit less-than-4-year	770	1,090	840	970

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table B-10. Standard errors for table 8. Average total price, net price, and out-of-pocket net price of attendance for full-time/full-year independent undergraduates, by family income relative to federal poverty level and control and level of institution: 2015–16

Total price, net price, and out-of-pocket net price of attendance by control and level of institution	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total price of attendance	\$260	\$450	\$500	\$270
Public 4-year	200	390	430	280
Private nonprofit 4-year	740	1,270	1,510	750
Private for-profit 4-year	1,000	1,920	1,920	770
Public less-than-4-year	250	370	460	340
Private nonprofit less-than-4-year	2,870	3,120	2,830	3,760
Private for-profit less-than-4-year	490	690	670	610
Net price of attendance	250	450	490	250
Public 4-year	220	440	450	280
Private nonprofit 4-year	720	1,570	1,510	720
Private for-profit 4-year	1,010	1,930	2,010	740
Public less-than-4-year	240	400	450	320
Private nonprofit less-than-4-year	2,990	2,880	2,840	4,140
Private for-profit less-than-4-year	510	690	720	600
Out-of-pocket net price of attendance	230	440	490	240
Public 4-year	270	530	520	340
Private nonprofit 4-year	750	1,540	1,880	710
Private for-profit 4-year	730	1,350	1,830	720
Public less-than-4-year	280	460	550	380
Private nonprofit less-than-4-year	3,180	2,970	2,840	4,560
Private for-profit less-than-4-year	530	780	780	600

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table B-11. Standard errors for table A-1. Percentage distribution of undergraduates by whether they were included in the analysis, and among those included, percentage distribution by dependency status: 2015–16

Whether included in the analysis and dependency status	Total
Total	†
Whether included in the analysis	
Yes	†
No	†
Dependency status of included students	
Dependent	0.32
Independent	0.32

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table B-12. Standard errors for table A-2. Average total amounts of selected types of financial aid received by full-time/part-year and part-time/full-year dependent and independent undergraduates who received any aid, by family income relative to federal poverty level and control and level of institution: 2015–16

Aid type by control and level of institution	Dependent students				Independent students			
	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total financial aid	\$200	\$300	\$300	\$200	\$100	\$200	\$200	\$100
Public 4-year	200	500	500	200	200	400	400	300
Private nonprofit 4-year	1,000	2,500	2,100	1,100	300	800	1,500	300
Private for-profit 4-year	600	1,400	1,000	700	300	600	500	400
Public less-than-4-year	100	200	200	100	100	200	200	100
Private nonprofit less-than-4-year	1,900	†	†	2,200	1,200	1,600	1,200	1,700
Private for-profit less-than-4-year	500	1,200	600	700	800	400	800	1,500
Total grant aid	100	200	200	200	100	100	100	100
Public 4-year	200	400	400	200	100	200	200	200
Private nonprofit 4-year	700	1,800	1,700	700	300	700	1,000	200
Private for-profit 4-year	300	500	600	400	100	200	300	100
Public less-than-4-year	100	100	200	100	100	100	100	100
Private nonprofit less-than-4-year	700	†	†	1,100	700	800	800	900
Private for-profit less-than-4-year	200	500	300	200	100	100	100	100
Total student loans	100	300	200	100	100	100	200	100
Public 4-year	200	300	300	200	200	300	300	200
Private nonprofit 4-year	400	1,200	300	500	200	400	500	200
Private for-profit 4-year	300	500	500	400	200	300	400	300
Public less-than-4-year	100	400	400	100	100	200	200	200
Private nonprofit less-than-4-year	600	†	†	600	400	600	†	800
Private for-profit less-than-4-year	400	800	400	400	300	300	300	500

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table B-13. Standard errors for table A-3. Average total amounts of selected types of financial aid received by part-time/part-year dependent and independent undergraduates who received any aid, by family income relative to federal poverty level and control and level of institution: 2015–16

Aid type by control and level of institution	Dependent students				Independent students			
	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total financial aid	\$200	\$300	\$400	\$300	\$100	\$200	\$200	\$100
Public 4-year	500	1,000	700	700	200	500	600	300
Private nonprofit 4-year	900	†	†	1,100	400	1,200	700	400
Private for-profit 4-year	600	1,100	1,000	800	300	400	500	400
Public less-than-4-year	100	300	300	100	100	200	200	100
Private nonprofit less-than-4-year	†	†	†	†	†	†	†	†
Private for-profit less-than-4-year	800	1,600	†	1,000	300	500	400	400
Total grant aid	100	200	300	200	0	100	100	100
Public 4-year	300	700	600	400	100	400	400	100
Private nonprofit 4-year	800	†	†	900	200	1,100	300	200
Private for-profit 4-year	200	700	400	300	100	200	200	200
Public less-than-4-year	100	200	200	100	100	100	100	100
Private nonprofit less-than-4-year	†	†	†	†	†	†	†	†
Private for-profit less-than-4-year	500	†	†	500	100	200	100	300
Total student loans	100	300	400	100	100	200	200	200
Public 4-year	200	†	1,100	200	200	400	400	300
Private nonprofit 4-year	500	†	†	600	300	800	800	400
Private for-profit 4-year	200	600	400	300	200	300	200	300
Public less-than-4-year	200	†	†	200	200	300	400	300
Private nonprofit less-than-4-year	†	†	†	†	†	†	†	†
Private for-profit less-than-4-year	600	†	†	500	300	400	400	400

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table B-14. Standard errors for table A-4. Average total price, net price, and out-of-pocket net price of attendance for full-time/part-year and part-time/full-year dependent and independent undergraduates, by family income relative to federal poverty level and control and level of institution: 2015–16

Total price, net price, and out-of-pocket net price of attendance by control and level of institution	Dependent students				Independent students			
	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total price of attendance	\$210	\$360	\$290	\$250	\$120	\$200	\$260	\$140
Public 4-year	190	660	590	230	200	380	410	240
Private nonprofit 4-year	1,290	2,090	1,860	1,370	460	920	1,770	460
Private for-profit 4-year	790	1,210	1,840	940	360	390	770	420
Public less-than-4-year	130	290	220	150	160	280	240	200
Private nonprofit less-than-4-year	3,210	†	†	2,750	1,840	1,770	2,090	2,480
Private for-profit less-than-4-year	530	800	480	710	580	430	640	1,060
Net price of attendance	160	300	220	190	110	190	210	140
Public 4-year	180	560	470	220	180	350	380	210
Private nonprofit 4-year	950	1,510	1,050	1,110	390	810	1,240	420
Private for-profit 4-year	810	1,130	1,450	980	320	360	770	390
Public less-than-4-year	130	300	240	160	160	280	220	200
Private nonprofit less-than-4-year	3,540	†	†	3,490	1,820	1,660	2,270	2,340
Private for-profit less-than-4-year	530	690	480	710	580	420	590	1,050
Out-of-pocket net price of attendance	120	280	230	140	100	200	210	120
Public 4-year	160	600	490	190	200	410	450	210
Private nonprofit 4-year	720	1,660	950	800	340	830	1,110	360
Private for-profit 4-year	830	940	1,430	1,030	290	320	630	370
Public less-than-4-year	140	310	250	170	160	270	220	210
Private nonprofit less-than-4-year	2,270	†	†	2,970	1,810	1,680	2,170	2,270
Private for-profit less-than-4-year	390	810	570	480	410	470	560	480

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

Table B-15. Standard errors for table A-5. Average total price, net price, and out-of-pocket net price of attendance for part-time/part-year dependent and independent undergraduates, by family income relative to federal poverty level and control and level of institution: 2015–16

Total price, net price, and out-of-pocket net price of attendance by control and level of institution	Dependent students				Independent students			
	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level	Total	Very low income (below 50 percent of federal poverty level)	Low income (between 50 and 100 percent of federal poverty level)	Income above federal poverty level
Total price of attendance	\$150	\$270	\$310	\$180	\$90	\$170	\$210	\$100
Public 4-year	380	680	620	480	170	420	520	160
Private nonprofit 4-year	1,020	3,020	†	1,210	450	740	1,370	460
Private for-profit 4-year	520	800	1,160	630	410	370	550	530
Public less-than-4-year	90	210	220	110	80	140	170	100
Private nonprofit less-than-4-year	†	†	†	†	1,440	†	†	†
Private for-profit less-than-4-year	760	1,010	1,230	1,060	580	790	670	660
Net price of attendance	120	220	240	150	80	140	180	90
Public 4-year	340	470	520	400	160	350	500	150
Private nonprofit 4-year	730	2,200	†	900	400	430	1,380	400
Private for-profit 4-year	430	650	740	540	370	320	490	490
Public less-than-4-year	100	210	240	120	80	150	160	90
Private nonprofit less-than-4-year	†	†	†	†	1,410	†	†	†
Private for-profit less-than-4-year	770	1,000	1,300	1,060	590	730	660	730
Out-of-pocket net price of attendance	100	200	190	130	70	130	180	80
Public 4-year	250	550	370	290	160	360	560	150
Private nonprofit 4-year	700	1,920	†	900	310	550	1,400	300
Private for-profit 4-year	320	500	710	440	350	340	410	470
Public less-than-4-year	100	210	230	120	70	140	170	90
Private nonprofit less-than-4-year	†	†	†	†	1,140	†	†	†
Private for-profit less-than-4-year	850	1,160	1,170	1,160	660	810	740	750

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 National Postsecondary Student Aid Study (NPSAS:16).

RUN YOUR OWN ANALYSIS WITH DATALAB

You can replicate or expand upon the figures and tables in this report, or even create your own. DataLab has several tools that allow you to customize and generate output from a variety of survey datasets. Visit DataLab at

<https://nces.ed.gov/datalab/>

The screenshot shows the NCES DataLab website. On the left, the logo reads "NCES DATALAB" with the tagline "Education data through fast, flexible, and powerful tools". Below this is a call to action: "Get started using DataLab: https://nces.ed.gov/datalab/". The main content area features a navigation menu with "ALL TOPICS" including Attendance and Enrollment, Education History, Educational Transitions, Employment, Faculty and Staff, Finances, Parents and Family, Pre-K and K-12 Staff, School and Institutional Characteristics, School Districts, Special Education, Staffing, Student Characteristics, and Teachers and Teaching. A central graphic displays a hexagonal grid with "DATALAB" in the center and various icons. On the right, there are sections for "LAUNCH BY DATASET" featuring QuickStats, PowerStats, and TrendStats, and a "VIEW ALL DATASETS" link with contact information for NCES.