



U.S. Department of Education  
Institute of Education Sciences  
NCES 2005-158

# 2003-04 National Postsecondary Student Aid Study (NPSAS:04)

## Student Financial Aid Estimates for 2003-04

**E.D. TAB**

February 2005

Lutz Berkner  
Shirley He  
Stephen Lew  
**MPR Associates, Inc.**

Melissa Cominole  
Peter Siegel  
**RTI International**

James Griffith  
*Project Officer*  
**National Center for  
Education Statistics**

**U.S. Department of Education**

Margaret Spellings  
*Secretary*

**Institute of Education Sciences**

Grover J. Whitehurst  
*Director*

**National Center for Education Statistics**

C. Dennis Carroll  
*Associate Commissioner*

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfills a congressional mandate to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries.

NCES activities are designed to address high priority education data needs; provide consistent, reliable, complete, and accurate indicators of education status and trends; and report timely, useful, and high quality data to the U.S. Department of Education, the Congress, the states, other education policymakers, practitioners, data users, and the general public.

We strive to make our products available in a variety of formats and in language that is appropriate to a variety of audiences. You, as our customer, are the best judge of our success in communicating information effectively. If you have any comments or suggestions about this or any other NCES product or report, we would like to hear from you. Please direct your comments to:

National Center for Education Statistics  
Institute of Education Sciences  
U.S. Department of Education  
1990 K Street NW  
Washington, DC 20006-5651

February 2005

The NCES World Wide Web Home Page is <http://nces.ed.gov>

The NCES World Wide Web Electronic Catalog is <http://nces.ed.gov/pubsearch>

**Suggested Citation**

Berkner, L., He, S., Lew, S., Cominole, M., and Siegel, P. (2005). *2003-04 National Postsecondary Student Aid Study (NPSAS:04) Student Financial Aid Estimates for 2003-04* (NCES 2005-158). U.S. Department of Education, National Center for Education Statistics. Washington, DC.

**For ordering information on this report, write:**

U.S. Department of Education  
ED Pubs  
P.O. Box 1398  
Jessup, MD 20794-1398

Or call toll free 1-877-4ED-PUBS or order online at <http://www.edpubs.org>

**Content Contact:**

Aurora D'Amico  
(202) 502-7334  
[Aurora.D'Amico@ed.gov](mailto:Aurora.D'Amico@ed.gov)

## Foreword

---

This report is the first publication based on the 2003–04 National Postsecondary Student Aid Study (NPSAS:04), conducted by the National Center for Education Statistics (NCES) within the U.S. Department of Education. NPSAS is a comprehensive study that examines how students and their families pay for postsecondary education. The study includes nationally representative samples of undergraduate, graduate, and first-professional students; students attending less-than-2-year, 2-year, and 4-year institutions, and institutions awarding advanced degrees; and students who receive financial aid and those who do not receive aid. This is the sixth in the series of NPSAS studies, which have been conducted every 3 or 4 years since 1987. Public access data files and descriptive reports for all of the NPSAS studies are available at <http://nces.ed.gov/DAS>.

This report describes the percentages of students receiving various types of financial aid and average amounts received, by type of institution attended, attendance pattern, dependency status, and income level. All average amounts of financial aid described in the report and presented in the tables reflect the weighted means and are based only on the recipients of the specified types of aid.

The following reports based on NPSAS:04 will be published by NCES in the future:

- *Methodology Report for the National Postsecondary Student Aid Study: 2003–04.* Describes the sampling, data collection procedures, weighting, and variance estimation procedures for the study.
- *Profile of Undergraduates in U.S. Postsecondary Education Institutions: 2003–04.* Describes the demographic and enrollment characteristics of undergraduate students.
- *Student Financing of Undergraduate Education: 2003–04.* Focuses on undergraduate tuition, total price of attendance, types and sources of financial aid received, net price, financial aid need, and unmet need.
- *Student Financing of Graduate and First-Professional Education: 2003–04.* Describes the demographic and enrollment characteristics of graduate and first-professional students and the types and sources of financial aid received.

## Acknowledgments

---

The 2003–04 National Postsecondary Student Aid Study was conducted by RTI International and MPR Associates for the National Center for Education Statistics (NCES). John Riccobono and Tim Gable of RTI were responsible for overall direction and management of the project. Others at RTI who made major contributions were Brian Kuhr for institutional contacting, Norma Marti for institutional data collection, Jeff Franklin for student telephone interviews, Melissa Cominole and Donna Anderson for the student interview data files, Kristen Dudley for the institutional and Department of Education data files, Donna Jewell for data processing, Peter Siegel for sampling and weighting, and Karol Krotki for imputation. Sallie Fiore and Lynne Hawley prepared the methodology appendix for publication.

At MPR, Lutz Berkner served as principal investigator; Shirley He and Stephen Lew were responsible for programming the derived variables and preparing the data files and documentation; Vicky Dinger and Joanna Wu created the Data Analysis System files; and Christina Chang Wei contributed to the writing of this report. Patti Gildersleeve prepared the report for publication.

At NCES, James Griffith, Tracy Hunt-White, Linda Zimble, and Dennis Carroll reviewed the work at every phase of the project and contributed many helpful comments and suggestions for improvements. Paula Knepper, Steve Kaufman, and Marilyn Seastrom, Chief Statistician, provided a comprehensive technical and methodological review of this report.

The final report was also reviewed by Kenneth Redd (National Association of Student Financial Aid Administrators), Tricia Grimes (Minnesota Higher Education Services Office), Donald Heller (Pennsylvania State University), Melanie Corrigan (American Council on Education), and Robin Gurley (Education Statistics Services Institute).

# Table of Contents

---

	<b>Page</b>
<b>Foreword</b> .....	iii
<b>Acknowledgments</b> .....	iv
<b>List of Tables</b> .....	vi
<b>Introduction</b> .....	1
Institution and Student Characteristics.....	2
Types of Financial Aid.....	3
Sources of Financial Aid.....	3
Federal Title IV Aid.....	3
Graduate and First-Professional Aid.....	4
<b>Selected Findings</b> .....	5
<b>Tables</b> .....	9
<b>Appendix A—Glossary</b> .....	21
<b>Appendix B—Technical Notes and Methodology</b> .....	27
Overview.....	27
Data Sources for NPSAS:04.....	28
Sample Design.....	28
Perturbation.....	32
Imputation.....	32
Weighting.....	34
Quality of Estimates.....	35
Cautions for Analysts.....	42
Standard Errors.....	45
Data Analysis System.....	46
References for Appendix B.....	47

## List of Tables

---

Table	Page
1 Percentage of undergraduates receiving selected types of financial aid, by type of institution, attendance pattern, dependency status, and income level: 2003–04.....	10
2 Average amounts of selected types of financial aid received by undergraduates, by type of institution, attendance pattern, dependency status, and income level: 2003–04.....	11
3 Percentage of undergraduates receiving selected types of financial aid from federal, state, or institutional sources, by type of institution, attendance pattern, dependency status, and income level: 2003–04 .....	12
4 Average amounts of selected types of financial aid from federal, state, or institutional sources received by undergraduates, by type of institution, attendance pattern, dependency status, and income level: 2003–04 .....	13
5 Percentage of undergraduates receiving federal Title IV aid from selected programs, by type of institution, attendance pattern, dependency status, and income level: 2003–04.....	14
6 Average amounts of federal Title IV aid received by undergraduates from selected programs, by type of institution, attendance pattern, dependency status, and income level: 2003–04.....	15
7 Percentage distribution of dependent undergraduates at specified parental income levels, by type of institution, attendance pattern, and receipt of specified types of financial aid: 2003–04.....	16
8 Percentage distribution of independent undergraduates at specified student income levels, by type of institution, attendance pattern, and receipt of specified types of financial aid: 2003–04.....	17
9 Percentage of graduate and first-professional students receiving selected types of financial aid, by type of institution, graduate program, attendance pattern, and income level: 2003–04.....	18
10 Average amounts of selected types of financial aid received by graduate and first-professional students, by type of institution, graduate program, attendance pattern, and income level: 2003–04 .....	19

<b>Table</b>	<b>Page</b>
<b>APPENDIX B TABLES</b>	
B-1	Counts of sampled, eligible, and participating institutions and enrollment list participation rates, by institutional characteristics ..... 30
B-2	Counts of sampled, eligible, and responding students and response rates, by institutional characteristics ..... 32
B-3	Summary of weight components..... 34
B-4	Summary of institution nonresponse bias analysis for all institutions, by type of institution..... 37
B-5	Summary of student nonresponse bias analysis for all students in public 2-year institutions..... 39
B-6	Item response rates for all students, by type of institution..... 41
B-7	Summary of item nonresponse bias analysis for all students and by type of institution..... 42
B-8	Standard errors for table 1: Percentage of undergraduates receiving selected types of financial aid, by type of institution, attendance pattern, dependency status, and income level: 2003–04 ..... 44

**THIS PAGE INTENTIONALLY LEFT BLANK**



## Introduction

---

This report presents selected findings about the financial aid received by postsecondary students during the 2003–04 academic year. It is based on survey data in the 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

NPSAS:04 is based on data collected from a sample of about 80,000 undergraduates and 11,000 graduate and first-professional students who were enrolled at any time between July 1, 2003, and June 30, 2004, in about 1,400 postsecondary institutions. The sample was limited to institutions in the 50 states, the District of Columbia, and Puerto Rico that were eligible to participate in the federal financial aid programs in Title IV of the Higher Education Act. The NPSAS:04 study sample represents about 19 million undergraduates and 3 million graduate and first-professional students. Because NPSAS:04 includes students enrolled at any time over a 12-month period, it includes more students than were enrolled only in the 2003 fall term. Preliminary data from the Integrated Postsecondary Education Data System indicate that about 15 million undergraduates and 2.5 million graduate and first-professional students were enrolled in the fall of 2003.

NPSAS classifies financial aid by *type* (e.g., grants, loans, work-study, graduate assistantships, or some combination) and by the *source* of aid funds (e.g., federal, state, institutional, or employer). Financial aid includes any type of aid received from any source except parents, friends, or relatives. However, the aid estimates do not include federal tax credits for postsecondary education (Hope and Lifelong Learning) and do not include all types of borrowing for education (such as credit cards or home equity loans). The tables in this report show the percentage of students who received financial aid of a particular type or from a particular source, and the average amount that was received by those students who were awarded that category of aid. Students may receive more than one type of aid and aid from more than one source.

The estimates presented in the report were produced using the NCES Data Analysis System (DAS) Online, a web-based table-generating application that provides the public with direct, free access to the NPSAS:04 data as well as other postsecondary datasets collected by NCES. The NPSAS:04 estimates are subject to sampling and nonsampling errors. The DAS produces the design-adjusted standard errors necessary for testing the statistical significance of differences in the estimates. All comparisons made in the text were tested using Student's *t* statistic for

comparing two numbers, and all differences cited are statistically significant at the .05 level. Additional information about public access to the data files with the DAS and the data sources used in the survey is presented in appendix B of this report.

The following provides some general information about the financial aid data presented in the tables. More details about the particular variables used to produce the tables are available in the glossary (appendix A). The brief descriptions of the federal Title IV programs are based on the U.S. Department of Education's comprehensive *2003–04 Federal Student Aid Handbook*, available at <http://ifap.ed.gov/IFAPWebApp/currentSFAHandbooksPag.jsp>.

### ***Institution and Student Characteristics***

Information about the type of institution attended only includes students who were enrolled at one institution. Students who attended more than one institution during the 2003–04 academic year are classified in a separate category because the institution at which they were sampled was not necessarily where they received their financial aid.

The attendance pattern is important in understanding the distribution of financial aid because students who are enrolled part time or for only part of an academic year are not eligible to receive as much aid as students enrolled full time for a full academic year. Full-time/full-year attendance is defined as being enrolled full time for 9 or more months during the academic year (July 1, 2003, through June 30, 2004).

Many financial aid programs are need-based, which means that eligibility is usually related to income level. A critical question in determining students' need for financial aid is whether the students are dependent or independent of their parents for financial support. For financial aid purposes, most undergraduates under the age of 24 are considered to be dependent on their parents. The exceptions are those under 24 who are married, have dependents of their own, are veterans, or are orphans or wards of the court. These exceptions, as well as graduate students and any students age 24 or older, are considered to be independent for financial aid purposes.

For dependent students, financial aid need analysis takes into consideration the income of the dependent student's parents; for independent students, only the income of the student (and a spouse, if married) is considered. The tables show total income in 2002 because financial aid need analysis is based on income in the calendar year prior to the academic year (2003–04).

### ***Types of Financial Aid***

The three basic types of undergraduate financial aid are grants, student loans, and work-study jobs. Grants include grants, scholarships, or tuition waivers from federal, state, institutional, or private sources, including employers. Grants may be awarded on the basis of need or merit, or both. Merit may be defined as academic success, athletic ability, artistic talents, or criteria established by institutions other than financial need. Student loans may be from any source, but federal Parent Loans for Undergraduate Students (PLUS) are excluded from the student loan totals. PLUS loans to parents are included in the “other type of aid” category, as are veterans’ benefits and job training funds. Students may receive more than one type of aid and aid from more than one source.

### ***Sources of Financial Aid***

The federal financial aid totals include a small percentage of students who received aid from programs that are not included in the federal Title IV programs described below. The federal aid totals do not include veterans’ benefits or Department of Defense programs. Federal grants are Pell Grants, Federal Supplemental Educational Opportunity Grants (FSEOGs), and a small percentage of grants from other non-Title IV federal programs. Federal student loans are Stafford and Perkins loans and a small percentage of loans from the federal Public Health Service. The student loan totals exclude PLUS loans to parents.

Although some states and postsecondary institutions fund their own student loan and work-study programs, only grants are shown separately for state and institutional aid funds.

### ***Federal Title IV Aid***

The programs in Title IV of the Higher Education Act are the primary source of federal financial aid to students. The federal Title IV programs include Pell Grants, Stafford student loans, parent PLUS loans, and three campus-based programs (federal work-study, Perkins loans, and FSEOGs). Pell Grants are awarded on the basis of need and are intended to aid students in the lower income levels. The maximum Pell Grant amount in 2003–04 was \$4,050.

There are two types of federal Stafford loans. Subsidized Stafford loans are need-based, and the federal government pays the interest for students while they are enrolled. Unsubsidized Stafford loans are not need-based, and students are charged interest on the loans while they are enrolled. Students who qualify may take out subsidized, unsubsidized, or a combination of both types of Stafford loans. Both types of Stafford loans have annual borrowing limits that vary by student class level and dependency status. For example, in 2003–04, the combined (subsidized

plus unsubsidized) annual Stafford loan limits ranged from \$2,625 for dependent first-year undergraduates to \$5,500 for dependent undergraduates in the third year or above; for independent undergraduates, the annual loan limits ranged from \$6,625 for first-year students to \$10,500 for independent students in the third year or above; and for graduate and first-professional students, the annual loan limit was \$18,500, but students at eligible medical schools could borrow up to \$38,500 annually.

PLUS loans are available to the parents of dependent undergraduates and are not need-based. There is no fixed annual PLUS loan limit. Parents may borrow any amount that does not exceed the student's total price of attendance at the institution minus any other financial aid received.

The federal Title IV campus-based program funds are allocated to institutions, and the financial aid officers at the institutions determine the allocation of awards to students within federal guidelines. Pell Grant recipients are given priority for FSEOG awards and Perkins loans.

### ***Graduate and First-Professional Aid***

Graduate students include any students who have earned a bachelor's degree and are enrolled in master's degree, doctoral degree, or postbaccalaureate certificate programs, or are taking advanced-level courses without being formally enrolled in a degree program. First-professional students are enrolled in advanced degree programs in the fields of law, medicine and related fields, and theological professions (see appendix A for specific degree programs). The income levels shown are the income of the student and a spouse, if married.

The major types of financial aid received by graduate and first-professional students are student loans, grants (including fellowships), and assistantships (including teaching, research, or any other graduate assistantships). Grant and fellowship funds may come from any source. The source of funds for graduate fellowships and assistantships is not usually specified in the data sources. Research assistantships and fellowships administered by the institutions may include funds from federal and other outside sources.

Aid from employers is included in the grants category and is also shown separately. Employer aid consists of tuition reimbursements to students from employers, grants to students from their parents' employers, and tuition waivers from the institution for faculty or staff and their dependents. Although graduate students holding assistantships may be considered employees of the institution attended, tuition waivers for graduate assistants are not included in the employer aid category. Such tuition waivers are included in the total grants category, however.

## Selected Findings<sup>1</sup>

---

### *Types of financial aid received by undergraduates in 2003–04 (tables 1 and 2):*

- Sixty-three percent of all undergraduates enrolled in the 2003–04 academic year received some type of financial aid (grants, loans, work-study, or other). Those who received aid were awarded an average amount of \$7,300.
- About one-half (51 percent) of undergraduates received grants and about one-third (35 percent) took out student loans in 2003–04. Eight percent of all undergraduates received aid through work-study jobs and 7 percent received other types of aid (federal PLUS loans to parents, veterans' benefits, and job training funds).
- The average amount of grant aid received by undergraduates who were awarded grants was \$4,000 in 2003–04. Among those who took out student loans, the average amount borrowed for the 2003–04 academic year was \$5,800. The average work-study award was \$2,000.
- Three out of four (76 percent) undergraduates who were enrolled full time for the full academic year in 2003–04 received some type of financial aid. The average amount of financial aid received by aided full-time, full-year undergraduates was \$9,900.
- About one-half of full-time, full-year undergraduates took out student loans and 62 percent received grants in 2003–04. The average amount borrowed by full-time, full-year undergraduates for the 2003–04 academic year was \$6,200. The amount of grant aid received by full-time, full-year undergraduates in 2003–04 was \$5,600.

### *Sources of aid funds received by undergraduates in 2003–04 (tables 3 and 4):*

- Forty-six percent of all undergraduates received financial aid funded by the federal government in 2003–04. About one-third (34 percent) took out federal student loans, 28 percent received federal grants, and 6 percent held federal work-study jobs.
- Undergraduates who took out federal loans borrowed an average amount of \$5,100 through federal loan programs in 2003–04. Undergraduates who were awarded federal grants received an average amount of \$2,600 in federal grants. Undergraduates who held federal work-study jobs received an average amount of \$1,800 for work-study.
- Among undergraduates enrolled in 2003–04, 15 percent received grants from state funds; the average state grant amount that they received was \$2,000. Among undergraduates enrolled full time for the full academic year, 23 percent received state grants; the average state grant amount that they received was \$2,400.

---

<sup>1</sup> The numbers in the selected findings refer to totals that include Puerto Rico.

- Eighteen percent of all undergraduates received grants from the postsecondary institutions that they attended in 2003–04. The average amount of institutional grant aid that they received was \$4,200. Among undergraduates enrolled full time for the full academic year, 30 percent received institutional grants.

***Federal Title IV program aid received by undergraduates in 2003–04 (tables 5 and 6):***

- Forty-six percent of all undergraduates received financial aid from one or more federal Title IV programs in 2003–04.
- Federal Pell Grants were awarded to 27 percent of all undergraduates in 2003–04. The average Pell Grant amount received was \$2,500. Undergraduates enrolled full time for the full academic year who were awarded Pell Grants received an average grant of \$3,100.
- Twelve percent of all undergraduates enrolled in 2003–04 received aid through one or more of the federal campus-based Title IV aid programs, which include Perkins loans, federal work-study, and Federal Supplemental Educational Opportunity Grants. The average amount of federal campus-based aid received by undergraduates from one or more of these programs was \$1,800.
- One-third (33 percent) of all undergraduates took out federal Stafford loans in 2003–04, borrowing an average of \$4,900. Subsidized Stafford loans, which are awarded on the basis of need, were taken out by 28 percent of undergraduates. Unsubsidized Stafford loans, which are available without a test of need, were taken out by 21 percent of undergraduates.
- In 2003–04, parents of 9 percent of dependent undergraduates who were enrolled full time for the full academic year borrowed an average of \$9,400 through the PLUS program.

***Income distribution of dependent undergraduate federal Title IV aid recipients (table 7):***

- Among all dependent undergraduates who received federal Pell Grants in 2003–04, 84 percent came from families with incomes under \$40,000.
- Among all dependent undergraduates who received federal Title IV campus-based aid in 2003–04, 55 percent came from families with incomes under \$40,000.
- Among all dependent undergraduates who took out subsidized Stafford loans in 2003–04, 44 percent came from families with incomes under \$40,000.
- Among all dependent undergraduates who took out unsubsidized Stafford loans in 2003–04, 29 percent came from families with incomes of \$100,000 or more.

***Income distribution of independent undergraduate federal Title IV aid recipients (table 8):***

- Among all independent undergraduates who received Pell Grants in 2003–04, 40 percent had incomes under \$10,000.

- Among all independent undergraduates who received federal Title IV campus-based aid in 2003–04, 45 percent had incomes under \$10,000.
- Among all independent undergraduates who took out any Stafford loans in 2003–04, 26 percent had incomes under \$10,000.

***Aid received by graduate and first-professional students in 2003–04 (tables 9 and 10):***

- About three-fourths (73 percent) of all graduate and first-professional students enrolled in the 2003–04 academic year received some type of financial aid. The average amount of aid received was \$15,100.
- Forty-two percent of graduate and first-professional students took out student loans in 2003–04, borrowing an average amount of \$16,800. Among students in first-professional degree programs, 78 percent took out student loans, borrowing an average amount of \$26,400.
- In the 2003–04 academic year, 40 percent of all graduate and first-professional students received grants from institutional, state, federal, or private sources, including employers. The average amount received was \$5,700.
- Fifteen percent of graduate and first-professional students received aid from teaching, research, or other graduate assistantships in 2003–04. The average amount received from assistantships was \$10,000. Forty-one percent of graduate students in doctoral degree programs held assistantships and received an average amount of \$13,300.
- Excluding students holding assistantships, 21 percent of graduate and first-professional students received aid from employers in 2003–04, usually as tuition reimbursements. The average aid amount that they received from employers was \$3,000. Among part-time students, 26 to 29 percent received aid from employers.

**THIS PAGE INTENTIONALLY LEFT BLANK**



## **Tables**

---

**Table 1. Percentage of undergraduates receiving selected types of financial aid, by type of institution, attendance pattern, dependency status, and income level: 2003–04**

Institution and student characteristics	Any aid	Any grants	Student loans	Work-study	Any other aid
<b>All undergraduates</b>					
U.S. total (excluding Puerto Rico)	63.0	50.4	35.1	7.5	7.0
Total (50 states, DC, and Puerto Rico)	63.2	50.7	35.0	7.5	6.9
Type of institution					
Public					
Less-than-2-year	49.7	37.5	12.2	3.0	11.3
2-year	46.8	39.8	12.1	3.5	4.1
4-year non-doctorate-granting	67.6	50.6	42.3	8.7	6.8
4-year doctorate-granting	69.2	52.2	45.7	8.3	8.3
Private not-for-profit					
Less-than-4-year	84.1	71.1	48.5	6.6	10.3
4-year non-doctorate-granting	85.1	74.8	57.9	20.1	11.0
4-year doctorate-granting	80.4	71.3	53.6	22.8	10.1
Private for-profit					
Less-than-2-year	83.0	64.1	57.3	2.0	10.6
2-year or more	92.3	66.5	81.4	2.4	9.9
More than one institution	66.3	47.6	42.7	7.0	8.2
Attendance pattern					
Full-time/full-year	76.1	62.2	49.5	13.5	9.4
Full-time/part-year	66.2	49.4	39.8	4.6	7.7
Part-time/full-year	60.5	49.1	27.9	4.2	4.5
Part-time/part-year	40.5	31.9	12.7	1.9	4.3
<b>Full-time/full-year undergraduates</b>					
Dependency status					
Dependent	73.5	59.3	46.7	15.4	10.2
Independent	82.9	69.4	56.6	8.8	7.5
Dependency and income in 2002					
Dependent students					
Less than \$20,000	87.8	85.7	46.2	19.9	5.6
\$20,000–39,999	85.7	80.1	53.3	22.0	7.9
\$40,000–59,999	73.9	59.9	49.4	17.5	10.1
\$60,000–79,999	69.0	50.6	47.6	14.0	12.2
\$80,000–99,999	70.3	49.0	48.3	12.8	13.4
\$100,000 or more	60.9	40.4	38.1	8.3	11.3
Independent students					
Less than \$10,000	84.4	79.9	56.6	13.7	5.4
\$10,000–19,999	89.1	79.7	62.0	9.8	7.3
\$20,000–29,999	85.7	68.5	60.0	6.1	8.5
\$30,000–49,999	80.8	60.7	56.1	5.6	9.3
\$50,000 or more	68.3	37.3	44.1	1.9	10.0

NOTE: "Any aid" includes all types of financial aid from any source except parents, friends, or relatives. "Any grants" include grants, scholarships or tuition waivers from federal, state, institutional, or private sources, including employers. "Student loans" may be from any source, but exclude federal Parent Loans for Undergraduate Students (PLUS). "Other" types of aid include federal PLUS loans to parents, veterans' benefits, and job training funds. Students may receive more than one type of aid. Full-time/full-year students were enrolled full time for 9 or more months from July 1, 2003, to June 30, 2004. Independent students are age 24 or over and students under 24 who are married, have dependents, are veterans, or are an orphan or ward of the courts. Other undergraduates under age 24 are considered to be dependent. For dependent students, income is the income of their parents. Independent student income includes the income of a spouse if the student is married. Prior-year (2002) income is used in federal need analysis. Estimates include students at postsecondary institutions in Puerto Rico. SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

**Table 2. Average amounts of selected types of financial aid received by undergraduates, by type of institution, attendance pattern, dependency status, and income level: 2003–04**

Institution and student characteristics	Total aid	Total grants	Student loans	Work-study	Total other aid
<b>All undergraduates</b>					
U.S. total (excluding Puerto Rico)	\$7,400	\$4,000	\$5,800	\$2,000	\$6,200
Total (50 states, DC, and Puerto Rico)	7,300	4,000	5,800	2,000	6,200
Type of institution					
Public					
Less-than-2-year	3,800	2,200	5,400	2,600	3,000
2-year	3,200	2,200	3,600	2,000	2,800
4-year non-doctorate-granting	6,700	3,500	5,300	2,000	5,400
4-year doctorate-granting	8,100	4,200	5,800	2,100	7,100
Private not-for-profit					
Less-than-4-year	7,600	4,300	5,300	1,500	5,900
4-year non-doctorate-granting	12,100	6,900	6,700	1,600	8,100
4-year doctorate-granting	15,000	9,000	7,300	2,100	12,200
Private for-profit					
Less-than-2-year	6,300	2,700	5,000	2,100	5,900
2-year or more	9,900	3,600	7,400	2,700	6,700
More than one institution	7,200	3,500	5,800	1,900	6,200
Attendance pattern					
Full-time/full-year	9,900	5,600	6,200	1,900	7,900
Full-time/part-year	5,900	2,900	5,100	1,800	4,800
Part-time/full-year	5,400	2,700	5,800	2,100	4,600
Part-time/part-year	3,000	1,600	4,500	2,000	2,700
<b>Full-time/full-year undergraduates</b>					
Dependency status					
Dependent	10,100	6,000	5,600	1,900	8,800
Independent	9,500	4,500	7,500	2,100	4,800
Dependency and income in 2002					
Dependent students					
Less than \$20,000	10,300	6,900	5,200	1,900	6,400
\$20,000–39,999	10,500	6,400	5,400	1,900	7,100
\$40,000–59,999	9,700	5,500	5,700	1,900	7,400
\$60,000–79,999	9,800	5,500	5,700	1,800	8,300
\$80,000–99,999	10,100	5,700	5,800	1,700	9,400
\$100,000 or more	9,900	5,900	5,800	2,100	11,200
Independent students					
Less than \$10,000	10,400	5,400	7,000	2,000	4,700
\$10,000–19,999	9,700	4,400	7,300	2,400	5,100
\$20,000–29,999	9,500	4,300	7,700	2,000	4,900
\$30,000–49,999	8,700	3,400	8,000	2,400	4,000
\$50,000 or more	7,800	2,800	8,400	‡	5,400

‡ Reporting standards not met.

NOTE: Amounts are averages for those who received the specified type of aid. "Total aid" includes all types of financial aid from any source except parents, friends, or relatives. "Total grants" include grants, scholarships or tuition waivers from federal, state, institutional, or private sources, including employers. "Student loans" may be from any source, but exclude federal Parent Loans for Undergraduate Students (PLUS). "Other" types of aid include federal PLUS loans to parents, veterans' benefits, and job training funds. Students may receive more than one type of aid. Full-time/full-year students were enrolled full time for 9 or more months from July 1, 2003, to June 30, 2004. Independent students are age 24 or over and students under 24 who are married, have dependents, are veterans, or are an orphan or ward of the courts. Other undergraduates under age 24 are considered to be dependent. For dependent students, income is the income of their parents. Independent student income includes the income of a spouse if the student is married. Prior-year (2002) income is used in federal need analysis. Estimates include students at postsecondary institutions in Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

**Table 3. Percentage of undergraduates receiving selected types of financial aid from federal, state, or institutional sources, by type of institution, attendance pattern, dependency status, and income level: 2003–04**

Institution and student characteristics	Federal aid				State aid		Institutional aid	
	Any aid	Any grants	Student loans	Work-study	Any aid	Any grants	Any aid	Any grants
<b>All undergraduates</b>								
U.S. total (excluding Puerto Rico)	46.1	27.1	33.8	5.6	15.6	14.6	18.9	17.6
Total (50 states, DC, and Puerto Rico)	46.4	27.6	33.7	5.6	15.6	14.6	18.8	17.6
Type of institution								
Public								
Less-than-2-year	27.0	21.5	10.8	1.1	13.8	3.8	4.9	3.5
2-year	29.2	23.1	11.3	2.4	12.2	11.3	8.3	7.5
4-year non-doctorate-granting	52.8	29.5	40.8	6.5	20.8	19.3	17.4	15.8
4-year doctorate-granting	51.3	24.9	43.9	5.9	19.0	18.2	25.5	23.6
Private not-for-profit								
Less-than-4-year	70.6	49.1	45.1	5.4	23.4	20.3	28.5	26.0
4-year non-doctorate-granting	65.1	31.6	56.4	15.4	24.6	24.0	48.8	47.1
4-year doctorate-granting	59.0	22.5	51.1	17.8	19.4	18.7	55.2	53.6
Private for-profit								
Less-than-2-year	73.8	55.3	54.7	1.2	5.5	2.4	8.0	5.3
2-year or more	85.1	51.6	80.2	2.0	11.9	11.2	8.2	7.6
More than one institution	50.6	27.3	41.1	5.2	10.9	10.2	13.6	12.3
Attendance pattern								
Full-time/full-year	60.8	33.3	47.9	10.3	23.6	22.5	31.4	29.6
Full-time/part-year	50.4	30.3	37.9	3.3	12.3	10.6	14.1	12.9
Part-time/full-year	43.3	29.5	26.9	2.7	13.1	12.2	12.3	11.2
Part-time/part-year	20.6	13.5	11.9	1.1	5.6	5.0	5.4	4.8
<b>Full-time/full-year undergraduates</b>								
Dependency status								
Dependent	56.2	25.0	45.0	11.8	23.7	22.8	35.9	34.2
Independent	72.6	54.3	55.4	6.7	23.3	21.6	20.0	18.1
Dependency and income in 2002								
Dependent students								
Less than \$20,000	76.7	73.3	44.7	17.0	36.6	35.9	37.8	36.2
\$20,000–39,999	75.1	63.0	52.0	18.1	38.8	37.8	41.7	39.9
\$40,000–59,999	56.6	21.5	47.7	14.3	28.4	27.5	35.9	34.5
\$60,000–79,999	49.0	3.7	45.7	10.6	19.8	19.0	36.1	34.2
\$80,000–99,999	49.0	1.1	45.9	8.3	14.4	13.6	35.1	33.5
\$100,000 or more	39.1	1.0	36.3	4.8	9.4	8.3	30.5	28.7
Independent students								
Less than \$10,000	78.9	73.7	55.7	11.1	27.6	26.2	24.6	22.3
\$10,000–19,999	81.6	68.3	60.8	7.3	27.1	25.3	21.1	18.8
\$20,000–29,999	77.1	53.2	59.3	4.4	23.4	21.8	18.5	16.8
\$30,000–49,999	66.0	36.9	54.8	3.7	19.4	17.2	18.1	16.3
\$50,000 or more	44.9	4.9	42.4	0.7	10.8	8.7	10.6	9.8

NOTE: Federal aid excludes veterans' benefits and Department of Defense programs. Federal grants are Pell grants and Federal Supplemental Educational Opportunity Grants (FSEOG) and a small percentage of grants from other federal programs. Federal student loans are Stafford and Perkins loans and a small percentage of loans from the federal Public Health Service. Student loans exclude federal Parent Loans for Undergraduate Students (PLUS). Students may receive more than one type of aid and aid from more than one source. Full-time/full-year students were enrolled full time for 9 or more months from July 1, 2003, to June 30, 2004. Independent students are age 24 or over and students under 24 who are married, have dependents, are veterans, or are an orphan or ward of the courts. Other undergraduates under age 24 are considered to be dependent. For dependent students, income is the income of their parents. Independent student income includes the income of a spouse if the student is married. Prior-year (2002) income is used in federal need analysis. Estimates include students at postsecondary institutions in Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

**Table 4. Average amounts of selected types of financial aid from federal, state, or institutional sources received by undergraduates, by type of institution, attendance pattern, dependency status, and income level: 2003–04**

Institution and student characteristics	Federal aid				State aid		Institutional aid	
	Total aid	Total grants	Student loans	Work-study	Total aid	Total grants	Total aid	Total grants
<b>All undergraduates</b>								
U.S. total (excluding Puerto Rico)	\$6,100	\$2,600	\$5,100	\$1,800	\$2,100	\$2,000	\$4,300	\$4,200
Total (50 states, DC, and Puerto Rico)	6,100	2,600	5,100	1,800	2,100	2,000	4,300	4,200
Type of institution								
Public								
Less-than-2-year	3,800	2,100	4,900	2,600	2,300	1,200	1,500	1,000
2-year	3,300	2,300	3,400	2,000	1,100	1,000	1,300	1,200
4-year non-doctorate-granting	5,900	2,800	4,800	1,800	2,200	2,000	2,400	2,300
4-year doctorate-granting	7,000	2,800	5,200	1,900	2,500	2,400	3,200	3,100
Private not-for-profit								
Less-than-4-year	5,600	2,800	4,700	1,400	2,800	2,300	3,500	3,300
4-year non-doctorate-granting	7,600	2,900	5,400	1,500	2,700	2,700	6,400	6,300
4-year doctorate-granting	8,300	3,200	5,300	2,000	3,100	3,000	8,300	8,200
Private for-profit								
Less-than-2-year	5,600	2,300	4,400	1,700	3,400	1,100	1,700	1,300
2-year or more	8,300	2,800	6,400	2,800	2,800	2,600	2,700	2,600
More than one institution	6,500	2,600	5,200	1,700	1,900	1,800	3,700	3,700
Attendance pattern								
Full-time/full-year	7,200	3,200	5,300	1,800	2,500	2,400	5,100	5,000
Full-time/part-year	5,000	2,100	4,300	1,700	1,700	1,400	3,100	3,100
Part-time/full-year	5,200	2,200	5,400	2,100	1,400	1,300	2,300	2,100
Part-time/part-year	3,500	1,300	4,100	2,000	900	800	1,700	1,600
<b>Full-time/full-year undergraduates</b>								
Dependency status								
Dependent	6,800	3,100	4,400	1,700	2,600	2,500	5,600	5,500
Independent	8,100	3,400	7,000	2,000	2,200	2,100	2,800	2,700
Dependency and income in 2002								
Dependent students								
Less than \$20,000	7,300	4,000	4,700	1,800	2,900	2,900	4,700	4,700
\$20,000–39,999	6,700	2,900	4,600	1,800	2,800	2,700	5,100	5,000
\$40,000–59,999	6,000	1,700	4,500	1,700	2,500	2,300	5,600	5,500
\$60,000–79,999	6,500	1,500	4,300	1,600	2,200	2,000	5,700	5,700
\$80,000–99,999	6,800	2,300	4,300	1,700	2,300	2,100	6,300	6,100
\$100,000 or more	7,200	1,700	4,200	1,700	2,600	2,400	6,200	6,200
Independent students								
Less than \$10,000	8,500	3,900	6,600	1,700	2,400	2,200	3,000	3,000
\$10,000–19,999	7,900	3,200	6,700	2,300	2,200	2,000	2,700	2,600
\$20,000–29,999	8,000	3,400	7,200	1,800	2,100	1,900	2,500	2,500
\$30,000–49,999	7,400	2,200	7,300	2,500	2,300	2,000	2,500	2,400
\$50,000 or more	7,700	1,300	8,000	‡	2,000	1,600	2,700	2,500

‡ Reporting standards not met.

NOTE: Amounts are averages for those who received the specified type of aid. Federal aid excludes veterans' benefits and Department of Defense programs. Federal grants are Pell grants and Federal Supplemental Educational Opportunity Grants (FSEOG) and a small percentage of grants from other federal programs. Federal student loans are Stafford and Perkins loans and a small percentage of loans from the federal Public Health Service. Student loans exclude federal Parent Loans for Undergraduate Students (PLUS). Students may receive more than one type of aid and aid from more than one source. Full-time/full-year students were enrolled full time for 9 or more months from July 1, 2003, to June 30, 2004. Independent students are age 24 or over and students under 24 who are married, have dependents, are veterans, or are an orphan or ward of the courts. Other undergraduates under age 24 are considered to be dependent. For dependent students, income is the income of their parents. Independent student income includes the income of a spouse if the student is married. Prior-year (2002) income is used in federal need analysis. Estimates include students at postsecondary institutions in Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

**Table 5. Percentage of undergraduates receiving federal Title IV aid from selected programs, by type of institution, attendance pattern, dependency status, and income level: 2003–04**

Institution and student characteristics	Any federal Title IV aid	Federal Pell grants	Federal campus-based aid	Federal Stafford loans			Federal PLUS loans
				Any Stafford	Subsidized	Unsubsidized	
<b>All undergraduates</b>							
U.S. total (excluding Puerto Rico)	45.9	26.3	12.2	33.3	27.8	20.8	3.4
Total (50 states, DC, and Puerto Rico)	46.3	26.8	12.3	33.2	27.7	20.7	3.3
Type of institution							
Public							
Less-than-2-year	26.9	21.1	3.4	10.6	9.6	9.3	0.1
2-year	29.2	22.6	6.2	11.1	9.2	6.1	0.2
4-year non-doctorate-granting	52.8	29.0	13.4	40.2	31.9	22.9	3.4
4-year doctorate-granting	51.1	23.8	13.6	43.1	33.2	25.4	5.7
Private not-for-profit							
Less-than-4-year	70.2	47.3	15.8	44.7	39.0	33.6	5.4
4-year non-doctorate-granting	65.0	30.6	24.9	55.7	47.5	31.9	7.3
4-year doctorate-granting	58.6	21.4	27.1	49.5	41.5	22.4	8.7
Private for-profit							
Less-than-2-year	73.8	51.7	18.4	54.6	52.1	44.1	6.0
2-year or more	85.1	50.5	17.8	80.1	75.9	71.3	4.3
More than one institution	50.6	26.9	10.4	40.6	34.1	26.4	4.1
Attendance pattern							
Full-time/full-year	60.6	32.1	20.1	47.1	38.3	27.0	6.3
Full-time/part-year	50.3	29.0	10.7	37.5	33.4	26.9	2.8
Part-time/full-year	43.2	29.1	8.1	26.6	22.5	17.4	1.1
Part-time/part-year	20.6	13.2	3.3	11.7	10.1	8.5	0.5
<b>Full-time/full-year undergraduates</b>							
Dependency status							
Dependent	56.0	23.8	19.1	44.1	33.0	20.7	8.8
Independent	72.5	53.2	22.5	54.9	51.8	43.1	†
Dependency and income in 2002							
Dependent students							
Less than \$20,000	76.7	72.4	35.7	43.3	42.9	10.8	3.9
\$20,000–39,999	75.1	61.8	32.2	50.4	48.7	13.6	6.1
\$40,000–59,999	56.6	20.3	21.2	46.7	42.9	15.0	8.4
\$60,000–79,999	48.8	2.2	14.9	45.0	34.1	22.6	11.1
\$80,000–99,999	48.6	#	10.1	45.3	24.5	30.4	12.2
\$100,000 or more	38.8	#	6.2	36.0	11.2	29.4	10.3
Independent students							
Less than \$10,000	78.8	73.0	32.8	54.8	53.8	39.0	†
\$10,000–19,999	81.5	67.1	28.4	60.4	59.0	45.3	†
\$20,000–29,999	77.0	52.1	17.9	58.9	57.1	48.5	†
\$30,000–49,999	65.9	34.8	13.6	54.1	50.4	47.0	†
\$50,000 or more	44.7	3.6	2.9	42.4	30.9	39.0	†

† Not applicable.

# Rounds to zero.

NOTE: "Any federal Title IV aid" consists of Pell grants, the federal campus-based aid programs, Stafford loans, and Parent Loans for Undergraduate Students (PLUS). The federal campus-based programs are Federal Supplemental Educational Opportunity Grants (FSEOG), federal work-study, and Perkins loans. Stafford loans include those administered through the Federal Family Education Loan program (FFELP) and the William D. Ford Federal Direct Loan program. Students may receive both subsidized and unsubsidized Stafford loans. Subsidized loans are need-based and students are not charged interest while they are enrolled. Students may receive more than one type of aid. Full-time/full-year students were enrolled full time for 9 or more months from July 1, 2003, to June 30, 2004. Independent students are age 24 or over and students under 24 who are married, have dependents, are veterans, or are an orphan or ward of the courts. Other undergraduates under age 24 are considered to be dependent. For dependent students, income is the income of their parents. Independent student income includes the income of a spouse if the student is married. Prior-year (2002) income is used in federal need analysis. Federal PLUS loans are only available to parents of dependent students. Estimates include students at postsecondary institutions in Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

**Table 6. Average amounts of federal Title IV aid received by undergraduates from selected programs, by type of institution, attendance pattern, dependency status, and income level: 2003–04**

Institution and student characteristics	Total federal Title IV aid	Federal Pell grants	Federal campus-based aid	Federal Stafford loans			Federal PLUS loans
				Total Stafford	Subsidized	Unsubsidized	
<b>All undergraduates</b>							
U.S. total (excluding Puerto Rico)	\$6,100	\$2,500	\$1,800	\$4,900	\$3,200	\$3,600	\$9,000
Total (50 states, DC, and Puerto Rico)	6,100	2,500	1,800	4,900	3,200	3,600	9,000
<b>Type of institution</b>							
<b>Public</b>							
Less-than-2-year	3,800	2,100	1,200	4,900	2,200	3,300	‡
2-year	3,300	2,200	1,200	3,400	2,300	2,700	5,600
4-year non-doctorate-granting	5,900	2,700	1,800	4,700	3,300	3,600	6,600
4-year doctorate-granting	7,000	2,700	2,200	5,000	3,600	3,800	8,100
<b>Private not-for-profit</b>							
Less-than-4-year	5,500	2,600	900	4,700	2,600	3,300	6,600
4-year non-doctorate-granting	7,600	2,600	1,900	5,200	3,600	3,700	10,400
4-year doctorate-granting	8,300	2,700	2,900	4,800	3,700	3,900	12,800
<b>Private for-profit</b>							
Less-than-2-year	5,600	2,400	500	4,400	2,200	2,900	6,600
2-year or more	8,300	2,700	1,000	6,300	3,100	3,800	10,400
More than one institution	6,500	2,600	1,700	5,200	3,300	3,600	8,400
<b>Attendance pattern</b>							
Full-time/full-year	7,200	3,100	2,000	5,000	3,600	3,700	9,400
Full-time/part-year	5,000	2,100	1,100	4,300	2,400	3,000	7,600
Part-time/full-year	5,200	2,200	1,400	5,400	3,300	3,900	8,000
Part-time/part-year	3,500	1,200	1,100	4,100	2,300	2,900	8,200
<b>Full-time/full-year undergraduates</b>							
<b>Dependency status</b>							
Dependent	6,800	2,900	2,200	4,200	3,400	3,500	9,400
Independent	8,100	3,300	1,600	6,800	3,800	4,100	†
<b>Dependency and income in 2002</b>							
<b>Dependent students</b>							
Less than \$20,000	7,300	3,700	2,200	4,300	3,400	3,400	7,400
\$20,000–39,999	6,700	2,700	2,400	4,200	3,500	3,100	7,800
\$40,000–59,999	6,000	1,600	2,300	4,200	3,500	3,000	7,900
\$60,000–79,999	6,500	1,300	2,000	4,200	3,300	3,300	8,700
\$80,000–99,999	6,800	‡	2,100	4,200	3,200	3,600	9,700
\$100,000 or more	7,300	‡	2,200	4,100	3,200	3,800	11,700
<b>Independent students</b>							
Less than \$10,000	8,500	3,600	1,600	6,400	3,800	3,700	†
\$10,000–19,999	8,000	3,100	1,600	6,600	3,800	3,800	†
\$20,000–29,999	8,000	3,200	1,600	7,100	3,900	4,100	†
\$30,000–49,999	7,400	2,200	1,700	7,200	3,800	4,200	†
\$50,000 or more	7,800	1,600	1,300	8,000	3,900	5,600	†

† Not applicable.

‡ Reporting standards not met.

NOTE: Amounts are averages for those who received the specified type of aid. "Total federal Title IV aid" consists of Pell grants, the federal campus-based aid programs, Stafford loans, and Parent Loans for Undergraduate Students (PLUS). The federal campus-based programs are Federal Supplemental Educational Opportunity Grants (FSEOG), federal work-study, and Perkins loans. Stafford loans include those administered through the Federal Family Education Loan program (FFELP) and the William D. Ford Federal Direct Loan program. Students may receive both subsidized and unsubsidized loans. Subsidized loans are need-based and students are not charged interest while they are enrolled. Students may receive more than one type of aid. Full-time/full-year students were enrolled full time for 9 or more months from July 1, 2003, to June 30, 2004. Independent students are age 24 or over and students under 24 who are married, have dependents, are veterans, or are an orphan or ward of the courts. Other undergraduates under age 24 are considered to be dependent. For dependent students, income is the income of their parents. Independent student income includes the income of a spouse if the student is married. Prior-year (2002) income is used in federal need analysis. Federal PLUS loans are only available to parents of dependent students. Estimates include students at postsecondary institutions in Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

**Table 7. Percentage distribution of dependent undergraduates at specified parental income levels, by type of institution, attendance pattern, and receipt of specified types of financial aid: 2003–04**

Institution and student characteristics	Dependent students' parental income					
	Less than \$20,000	\$20,000– 39,999	\$40,000– 59,999	\$60,000– 79,999	\$80,000– 99,999	\$100,000 or more
U.S. total (excluding Puerto Rico)	12.7	19.2	18.1	17.0	12.0	21.1
Total (50 states, DC, and Puerto Rico)	13.1	19.3	18.0	16.8	11.9	20.9
Type of institution						
Public						
Less-than-2-year	14.8	27.0	22.0	15.2	4.3	16.7
2-year	15.5	21.6	19.9	16.9	9.7	16.4
4-year non-doctorate-granting	12.3	19.3	20.0	18.2	12.6	17.6
4-year doctorate-granting	10.2	16.4	17.1	18.1	13.4	24.8
Private not-for-profit						
Less-than-4-year	20.5	25.7	15.1	16.1	7.2	15.4
4-year non-doctorate-granting	12.0	18.4	17.7	16.5	13.6	21.9
4-year doctorate-granting	9.8	15.7	13.8	14.3	13.6	32.8
Private for-profit						
Less-than-2-year	25.8	26.5	19.4	11.1	7.1	10.1
2-year or more	26.7	28.9	16.6	12.1	5.9	9.8
More than one institution	12.7	19.9	15.7	15.7	13.1	22.9
Attendance pattern						
Full-time/full-year	12.3	17.8	17.5	17.5	12.8	22.2
Full-time/part-year	15.1	20.1	18.2	15.3	10.6	20.6
Part-time/full-year	14.2	23.4	19.2	15.7	9.7	17.8
Part-time/part-year	13.4	20.6	19.3	16.5	11.5	18.8
Any aid						
Did not receive any financial aid	8.0	12.7	18.3	19.2	13.0	28.8
Received financial aid	16.0	23.0	17.9	15.5	11.2	16.4
Federal Title IV aid program recipients						
Any federal Title IV aid	18.3	26.2	17.9	14.1	10.0	13.5
Pell grant	37.7	46.6	14.1	1.7	#	#
Federal campus-based aid	24.8	30.4	18.6	12.6	6.5	7.1
Any Stafford loan	12.3	21.8	19.5	17.3	12.5	16.6
Stafford subsidized loan	16.1	27.7	23.4	16.9	9.0	6.9
Stafford unsubsidized loan	7.2	13.8	14.2	18.8	17.7	28.5
Parent PLUS loans	5.7	13.3	17.8	21.2	16.6	25.4

# Rounds to zero.

NOTE: Detail may not sum to totals because of rounding. Dependent students are undergraduates under age 24 who are not married, have no dependents, are not veterans, and are not orphans or ward of the courts. For dependent students, income is the income of their parents. Prior-year (2002) income is used in federal need analysis. "Any federal Title IV aid" consists of Pell grants, the federal campus-based aid programs, Stafford loans, and Parent Loans for Undergraduate Students (PLUS). The federal campus-based programs are Federal Supplemental Educational Opportunity Grants (FSEOG), federal work-study, and Perkins loans. Stafford loans include those administered through the Federal Family Education Loan program (FFELP) and the William D. Ford Federal Direct Loan program. Students may receive both subsidized and unsubsidized loans. Subsidized loans are need-based and students are not charged interest while they are enrolled. Columns sum across, but detail may not sum to totals because of rounding. Estimates include students at postsecondary institutions in Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).



**Table 8. Percentage distribution of independent undergraduates at specified student income levels, by type of institution, attendance pattern, and receipt of specified types of financial aid: 2003–04**

Institution and student characteristics	Independent student income				
	Less than \$10,000	\$10,000– 19,999	\$20,000– 29,999	\$30,000– 49,999	\$50,000 or more
U.S. total (excluding Puerto Rico)	22.3	18.2	15.8	19.0	24.8
Total (50 states, DC, and Puerto Rico)	22.5	18.2	15.8	18.9	24.6
Type of institution					
Public					
Less-than-2-year	22.0	18.2	15.5	20.0	24.4
2-year	20.6	17.3	15.6	20.0	26.6
4-year non-doctorate-granting	23.5	18.9	16.2	17.6	23.8
4-year doctorate-granting	28.5	19.3	15.7	17.4	19.0
Private not-for-profit					
Less-than-4-year	31.6	22.4	17.2	12.8	16.0
4-year non-doctorate-granting	19.6	15.9	16.3	19.7	28.6
4-year doctorate-granting	25.2	16.3	13.3	18.1	27.1
Private for-profit					
Less-than-2-year	34.6	24.7	16.1	12.1	12.5
2-year or more	21.5	19.9	18.0	19.1	21.5
More than one institution	21.7	19.5	14.4	18.3	26.1
Attendance pattern					
Full-time/full-year	33.2	23.1	15.0	14.8	14.0
Full-time/part-year	28.6	21.7	16.9	16.0	16.8
Part-time/full-year	17.4	17.1	17.4	21.2	26.9
Part-time/part-year	17.0	14.3	14.4	20.9	33.4
Any aid					
Did not receive any financial aid	17.8	13.0	13.4	20.0	35.9
Received financial aid	25.3	21.3	17.2	18.3	17.9
Federal Title IV aid program recipients					
Any federal Title IV aid	30.3	24.5	18.9	16.3	10.0
Pell grant	39.5	27.8	18.3	13.4	1.0
Federal campus-based aid	44.8	28.4	13.7	10.6	2.5
Any Stafford loan	26.4	23.3	19.0	17.5	13.8
Stafford subsidized loan	27.8	24.5	19.9	17.2	10.6
Stafford unsubsidized loan	24.3	22.6	19.1	18.3	15.6
Parent PLUS loans	†	†	†	†	†

† Not applicable.

NOTE: Independent students are age 24 or over and students under 24 who are married, have dependents, are veterans, or are an orphan or ward of the courts. Independent student income includes the income of a spouse if the student is married. Prior-year (2002) income is used in federal need analysis. "Any federal Title IV aid" consists of Pell grants, the federal campus-based aid programs, and Stafford loans. The federal campus-based programs are Federal Supplemental Educational Opportunity Grants (FSEOG), federal work-study, and Perkins loans. Stafford loans include those administered through the Federal Family Education Loan program (FFELP) and the William D. Ford Federal Direct Loan program. Students may receive both subsidized and unsubsidized loans. Subsidized loans are need-based and students are not charged interest while they are enrolled. Federal Parent Loans for Undergraduate Students (PLUS) loans are only available to parents of dependent students. Columns sum across, but detail may not sum to totals because of rounding. Estimates include students at postsecondary institutions in Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

**Table 9. Percentage of graduate and first-professional students receiving selected types of financial aid, by type of institution, graduate program, attendance pattern, and income level: 2003–04**

Institution and student characteristics	Any aid	Grants		Total assistant-ships	Student loans	
		Any grants	Employer aid		Any loans	Stafford loans
U.S. total (excluding Puerto Rico)	72.6	39.9	20.4	14.8	42.0	39.5
Total (50 states, DC, and Puerto Rico)	72.6	40.1	20.5	14.8	42.0	39.5
Type of institution						
Public 4-year						
Non-doctorate-granting	59.5	29.7	19.6	9.9	32.2	31.1
Doctorate-granting	71.8	41.7	17.5	24.5	36.0	33.1
Private not-for-profit 4-year						
Non-doctorate-granting	69.2	37.5	29.5	2.7	37.8	36.7
Doctorate-granting	77.3	41.9	17.5	10.7	50.5	47.1
Private for-profit 4-year	90.6	43.6	43.6	0.1	74.6	74.2
More than one institution	72.3	40.6	22.5	10.8	48.7	47.6
Graduate program						
Master's degree	71.0	38.5	24.2	12.4	40.8	38.5
Doctoral degree	82.6	54.7	14.2	41.2	30.5	28.1
First-professional degree	88.8	40.8	6.2	6.9	78.4	74.0
Other and nondegree	53.6	31.4	23.2	5.6	24.9	23.8
Attendance pattern						
Full-time/full-year	87.0	44.7	9.2	21.6	63.6	59.6
Full-time/part-year	68.5	34.0	18.8	13.5	39.0	37.2
Part-time/full-year	70.7	40.5	25.6	14.0	37.3	35.5
Part-time/part-year	56.2	34.5	28.7	6.9	19.6	18.3
Income level						
Less than \$10,000	80.9	38.8	8.9	19.0	59.8	55.7
\$10,000–19,999	81.7	40.9	9.8	29.4	48.9	46.6
\$20,000–29,999	78.9	36.9	13.0	18.7	53.0	50.9
\$30,000–49,999	70.9	40.4	24.6	12.1	39.8	37.2
\$50,000 or more	62.3	41.5	32.5	6.4	25.2	23.7

NOTE: "Any aid" includes all types of financial aid from any sources (federal, state, institutional or private) except parents, friends, or relatives. Grants may come from any source and include fellowships, tuition waivers, and aid from employers. Employer aid excludes tuition waivers to students holding assistantships. Teaching assistantships are funded by institutions, but research assistantship funds may come from any source. Stafford loans include those administered through the Federal Family Education Loan program (FFELP) and the William D. Ford Federal Direct Loan program. Students may receive Stafford loans that are subsidized, unsubsidized, or both. Students may receive more than one type of aid. Income is the total income of the student and spouse (if married) for calendar year 2002. Estimates include students at postsecondary institutions in Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

**Table 10. Average amounts of selected types of financial aid received by graduate and first-professional students, by type of institution, graduate program, attendance pattern, and income level: 2003–04**

Institution and student characteristics	Total aid	Grants		Total assistant-ships	Student loans	
		Total grants	Employer aid		Total loans	Stafford loans
U.S. total (excluding Puerto Rico)	\$15,200	\$5,700	\$3,000	\$10,100	\$16,900	\$15,500
Total (50 states, DC, and Puerto Rico)	15,100	5,700	3,000	10,000	16,800	15,400
Type of institution						
Public 4-year						
Non-doctorate-granting	7,100	2,600	2,300	6,400	8,700	8,800
Doctorate-granting	14,700	5,800	2,500	10,000	15,500	15,000
Private not-for-profit 4-year						
Non-doctorate-granting	8,500	2,900	2,600	‡	12,300	12,200
Doctorate-granting	20,500	7,700	3,800	12,300	21,900	18,500
Private for-profit 4-year	15,200	4,600	4,600	‡	15,700	15,200
More than one institution	14,800	4,700	2,200	7,100	16,400	15,500
Graduate program						
Master's degree	11,800	4,400	3,200	8,300	13,600	13,000
Doctoral degree	20,200	10,200	3,500	13,300	17,800	16,700
First-professional degree	27,500	7,100	3,500	7,500	26,400	22,500
Other and nondegree	7,800	2,700	1,700	6,400	11,800	11,300
Attendance pattern						
Full-time/full-year	23,200	8,600	3,400	11,400	21,400	18,800
Full-time/part-year	12,600	6,500	4,300	9,300	12,900	11,600
Part-time/full-year	11,400	4,200	3,200	9,600	13,000	12,800
Part-time/part-year	6,000	2,700	2,300	6,000	10,100	10,200
Income level						
Less than \$10,000	20,700	6,900	3,000	8,900	20,300	18,000
\$10,000–19,999	18,300	7,800	3,200	11,000	17,000	15,200
\$20,000–29,999	15,800	6,800	2,500	11,200	14,700	13,600
\$30,000–49,999	13,400	5,000	3,100	10,400	15,300	14,200
\$50,000 or more	9,800	4,100	3,000	8,700	14,700	14,400

‡ Reporting standards not met.

NOTE: Amounts are averages for those who received the specified type of aid. "Total aid" includes all types of financial aid from any sources (federal, state, institutional or private) except parents, friends, or relatives. Grants may come from any source and include fellowships, tuition waivers, and aid from employers. Employer aid excludes tuition waivers to students holding assistantships. Teaching assistantships are funded by institutions, but research assistantship funds may come from any source. Stafford loans include those administered through the Federal Family Education Loan program (FFELP) and the William D. Ford Federal Direct Loan program. Stafford loans include both subsidized and unsubsidized loan amounts. Students may receive more than one type of aid. Income is the total income of the student and spouse (if married) for calendar year 2002. Estimates include students at postsecondary institutions in Puerto Rico.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

**THIS PAGE INTENTIONALLY LEFT BLANK**

## Appendix A—Glossary

---

This glossary includes descriptions of the variables that were used in the tables of this report. The National Postsecondary Student Aid Study (NPSAS:04) Data Analysis System (DAS) was used to generate the tables in this report. Readers can refer to appendix B for more information on the DAS software.

Variables are listed in the glossary index below by general topic area and in the order in which they appear in the tables of the report. The glossary which follows is organized alphabetically by variable name (displayed in capital letters to the right of the variable label).

### GLOSSARY INDEX

#### INSTITUTION AND STUDENT CHARACTERISTICS

Type of institution.....AIDSECT  
Attendance pattern .....ATTNSTAT  
Dependency status .....DEPEND  
Income level in 2002.....INCOME

#### TYPES OF AID TO UNDERGRADUATES

Total aid .....TOTAIID  
Total grants .....TOTGRT  
Total student loans .....TOTLOAN  
Total work-study .....TOTWKST  
Other types of aid.....OTHTYPE

#### SOURCES OF AID TO UNDERGRADUATES

Federal aid total .....TFEDAID  
Federal grants.....TFEDGRT  
Federal student loans.....TFEDLN  
Federal work-study .....TFEDWRK  
State aid total .....STATEAMT  
State grants.....STGTAMT  
Institutional aid total .....INSTAMT  
Institutional grants .....INGRTAMT

#### FEDERAL TITLE IV AID TO UNDERGRADUATES

Federal Title IV aid.....TITIVAMT  
Pell grants .....PELLAMT  
Federal campus-based aid.....CAMPAMT  
Stafford loans.....STAFFAMT  
Stafford subsidized loans .....STAFSUB  
Stafford unsubsidized loans .....STAFUNSB  
PLUS loans .....PLUSAMT

#### GRADUATE AND FIRST-PROFESSIONAL STUDENTS

Type of institution.....AIDSECTG  
Graduate program .....GRADDEG  
Attendance pattern .....ATTNSTAT  
Income level in 2002.....INCOME  
Total aid.....TOTAIID  
Total grants .....TOTGRT  
Employer aid.....EMPLYAMT  
Graduate assistantships .....GRASTAMT  
Total student loans .....TOTLOAN  
Stafford loans.....STAFFAMT

***Type of institution***

**AIDSECT  
AIDSECTG**

The control and level of the NPSAS sample institution attended by the student in 2003–04, based on the classification in the 2003 IPEDS Institutional Characteristics file. Control concerns the source of revenue and control of operations (public, private not-for-profit, private for-profit) and level concerns the highest degree or award offered by the institution in any program. Doctorate-granting institutions award a doctoral or first-professional degree in one or more programs; 4-year non-doctorate-granting institutions award at least a bachelor’s degree; 2-year institutions award at least an associate’s degree; less-than-2-year institutions award certificates or other credentials in vocational programs. It should be noted that some large community colleges in Florida have begun offering bachelor’s degrees in a few programs and have been reclassified as 4-year institutions in IPEDS.

The nine categories of types of institutions were used as the sampling frame for the national NPSAS sample. Sample students determined to have attended more than one institution during the NPSAS study year have been reclassified into a separate category, since all or part of their financial aid may not have been received at the NPSAS sample institution.

***Attendance pattern***

**ATTNSTAT**

Based on the number of months enrolled full time or part time at all institutions attended during the 2003–04 academic year. Full-year is defined as enrollment for 9 or more months during the NPSAS year. Months did not have to be contiguous or at the same institution, and students did not have to be enrolled for a full month in order to be considered enrolled for that month. Full-time is usually defined as 12 or more credit-hours. The categories are:

Full-time/full-year	Enrolled full time for 9 or more months.
Full-time/part-year	Enrolled full time, but for less than 9 months.
Part-time/full-year	Enrolled for 9 or more months, but less than 9 months were full time.
Part-time/part-year	Enrolled for less than 9 months, and these were not all full time.

***Federal campus-based aid***

**CAMPAMT**

Total amount of federal campus-based aid received during the 2003–04 academic year. The federal campus-based aid programs are the Supplemental Educational Opportunity Grants (FSEOG), federal work-study, and Perkins loans. The federal campus-based program funds are allocated to institutions and the financial aid officers at the institutions determine the allocation of awards to students within federal guidelines. All of the federal campus-based aid is awarded on the basis of need. Pell grant recipients are given priority for FSEOG awards and Perkins loans.

***Dependency status***

**DEPEND**

Student’s dependency status for federal financial aid purposes during the 2003–04 academic year. Students were considered to be financially independent of their parents for federal financial aid purposes in 2003–04 if they met any of the following criteria: was age 24 or older on 12/31/03; was married; had legal dependents; was a veteran of U.S. armed forces; was an orphan or ward of the court; or was enrolled in a graduate or first-professional degree program (beyond a bachelor’s degree) in 2003–04. All other students under 24 were considered to be dependent unless they could document that they were receiving no parental support and were determined to be independent by a financial aid officer using professional judgment.

***Employer aid*****EMPLYAMT**

Total amount of aid received from employers during the 2003–04 academic year. Employer aid consists of grants to students from their employers or their parents' employers, including employer-paid tuition reimbursements. It includes tuition waivers from postsecondary institutions for faculty or staff and their dependents, but does not include tuition waivers for graduate students holding assistantships.

***Graduate program*****GRADDEG**

Indicates the general type of graduate program in which the student was enrolled in 2003–04. Specific categories include master's degree, doctoral degree, and first-professional degree. NCES defines first-professional programs to include one of the following: Chiropractic (D.C. or D.C.M.), Pharmacy (D.Pharm.), Dentistry (D.D.S. or D.M.D.), Podiatry (Pod.D. or D.P.), Medicine (M.D.), Veterinary Medicine (D.V.M.), Optometry (O.D.), Law (L.L.B. or J.D.), Osteopathic Medicine (D.O.), or Theology (M.Div., M.H.L., or B.D.). Students in postbaccalaureate certificate programs and those not enrolled in a formal degree program are classified as "other and no degree."

***Total assistantships*****GRASTAMT**

Indicates the total amount of all graduate student assistantships received during the 2003–04 academic year, including all research assistantships, teaching assistantships, and any other type of graduate assistantships. Assistantships are classified as institutional aid, but include research assistantships funded from federal or other sources.

***Income level in 2002*****INCOME**

For dependent undergraduates, this is the total income of the student's parents. For independent undergraduates and graduate students, this is the total income of the student and spouse, if married. Prior calendar year income is reported in the financial aid application and used in determining the expected family contribution (EFC) in need analysis. That is, 2002 income was used to determine financial aid eligibility for the 2003–04 academic year.

***Institutional grants*****INGRTAMT**

Indicates the total amount of grant aid received during the 2003–04 academic year that was funded by the postsecondary institution attended. This includes all grants, scholarships, tuition waivers, and graduate fellowships from institutional funds. It includes both need- and merit-based grants.

***Institutional aid total*****INSTAMT**

Indicates the total amount of institutional aid received during 2003–04. This includes all types of institutional grants and scholarships from institutional funds, tuition waivers, institutional loans, institutional work-study (outside of the federal work-study program), and graduate student assistantships.

***Other types of aid*****OTHTYPE**

Indicates the total amount of aid received during the 2003–04 academic year that was not classified as grants, student loans, or work-study. This includes federal PLUS loans to parents, vocational rehabilitation and job training grants, veterans' benefits and Department of Defense programs, and graduate student assistantships.

***Pell grants***

**PELLAMT**

Total amount of federal Pell grants received at all institutions attended during the 2003–04 academic year. Pell grants are need-based grants awarded to undergraduates who have not yet received a bachelor’s degree and students in teaching certificate programs. They are intended as a financial base, to which other financial aid awards can be added. For the 2003–04 academic year, the maximum Pell grant amount was \$4,050 for students who had a federal expected family contribution (EFC) of zero and were enrolled full time for a full academic year. The actual amount of a Pell grant received by the student depends on the EFC, price of attendance, and the actual attendance pattern (full-time or part-time, full-year or part-year).

***PLUS loans***

**PLUSAMT**

Indicates the total amount of federal Parent Loans for Undergraduate Students (PLUS) received in 2003–04. Federal PLUS loans are available to the parents of dependent undergraduates in addition to any federal Stafford loans for which students are eligible. PLUS loans are not based on need. There is no fixed limit to the amount of a PLUS loan, but the PLUS loan may not exceed the total price of attendance minus any other financial aid.

***Stafford loans***

**STAFFAMT**

Indicates the total amount of federal Stafford loans (subsidized and unsubsidized) received at all institutions attended during the 2003–04 academic year including loans borrowed to attend schools other than the NPSAS sample school. Annual loan limits for Stafford loans vary by class level and dependency status. This includes Stafford loans delivered through either the William Ford Direct Loan program or the Federal Family Education Loan Program (FFELP).

NOTE: There are two types of Federal Stafford Loans: 1) Subsidized Stafford loans are awarded on the basis of financial need. If a student qualifies for a subsidized loan, the federal government pays the interest on the loan until the student begins repayment, and during authorized periods of deferment thereafter. 2) Unsubsidized Stafford loans are not awarded on the basis of need. Students who qualify for an unsubsidized loan are charged interest from the time the loan is disbursed until it is paid in full. Students can choose to pay the interest or allow it to accumulate. If the student allows the interest to accumulate, it will be capitalized (added to the principal amount of the loan).

Both subsidized and unsubsidized Stafford loans are available through two different programs. Although the source of funds is different, both programs offer the same types of Stafford loans: 1) Under the William Ford Direct Loan program, the federal government makes loans directly to students and parents through postsecondary institutions. Participating institutions process the applications and disburse the loans directly to students. 2) Under the Federal Family Education Loan Program (FFELP), private lenders such as banks, credit unions, and savings and loan associations process the applications and make the loans to students.

***Stafford subsidized loans***

**STAFSUB**

Indicates the amount of federal subsidized Stafford loans received in 2003–04. Subsidized Stafford loans are awarded on the basis of financial need. If a student qualifies for a subsidized loan, the federal government pays the interest on the loan until the student begins repayment (generally 6 months after leaving postsecondary education), and during authorized periods of deferment thereafter. This includes subsidized Stafford loans delivered through either the William Ford Direct Loan program or the Federal Family Education Loan Program (FFELP). See STAFFAMT for more information about Stafford loans, the FFELP, and the William Ford Direct Loan program.



***Stafford unsubsidized loans*****STAFUNSB**

Indicates the amount of federal unsubsidized Stafford loans received in 2003–04. Unsubsidized Stafford loans are available to students enrolled at least half time (usually taking at least two courses) without demonstrating need. Students are charged interest on the loan from the time the loan is disbursed until it is paid in full. Students can choose to pay the interest while they are enrolled or allow it to accumulate. If the student allows the interest to accumulate, it will be capitalized (added to the original loan principal). This includes unsubsidized Stafford loans delivered through either the William Ford Direct Loan program or the Federal Family Education Loan Program (FFELP). See STAFFAMT for more information about Stafford loans, the FFELP, and the William Ford Direct Loan program.

***State aid total*****STATEAMT**

Indicates the total amount of state-funded financial aid received by the student during the 2003–04 academic year. This includes state grants, state loans, state-sponsored work-study, and vocational rehabilitation and job training grants, including any federal Workforce Investment Act (WIA) funds.

***State grants*****STGTAMT**

Total amount of state-funded grants, scholarships, and fellowships received during the 2003–04 academic year. These include the federal matching funds to states through the Leveraging Education Assistance Partnership (LEAP) program. These include need- and merit-based grant programs.

***Federal aid total*****TFEDAID**

Indicates the total amount of federal financial aid received in 2003–04. This includes federal grants, federal student loans, federal work-study, and federal PLUS loans to parents. It does not include federal veterans' benefits or Department of Defense programs.

***Federal grants*****TFEDGRT**

Total amount of federal grants received by a student during the 2003–04 academic year. These are primarily Pell grants and Federal Supplemental Educational Opportunity Grants (FSEOG), but also include several smaller federal grant programs as well as any federal graduate fellowships or traineeships received during the 2003–04 academic year. They do not include federal veterans' benefits or Department of Defense programs.

***Federal student loans*****TFEDLN**

Indicates the total amount of federal loans to students received during the 2003–04 academic year. These include Perkins loans, all types of Stafford loans, and federal loans through the Public Health Service. They exclude federal PLUS loans to parents.

***Federal work-study*****TFEDWRK**

Indicates the total amount awarded through the federal work-study program in 2003–04. It includes the institutional matching funds as well as the federal funds. Federal work-study is one of the three federal Title IV campus-based aid programs and is awarded on the basis of need.

***Federal Title IV aid***

**TITIVAMT**

Indicates the total amount received from federal financial aid programs in Title IV of the Higher Education Act during the 2003–04 academic year. The Title IV programs include Pell grants, Stafford loans, parent PLUS loans, and the federal campus-based programs (Perkins loans, Supplemental Educational Opportunity Grants, and federal work-study).

***Total aid***

**TOTAID**

Total amount of financial aid received by a student in 2003–04 from any source except parents, relatives, or friends. It includes any grants, student loans, work-study, PLUS loans to parents, job training funds, veterans' benefits and Department of Defense programs, or graduate assistantships.

***Total grants***

**TOTGRT**

Indicates the total amount of all grants and scholarships received by a student in 2003–04. Grants are a type of student financial aid that does not require repayment or employment. It is equal to the sum of all federal grants, state grants, institutional grants, and grants from employers or private sources. These include all need-based grants, merit scholarships, tuition waivers, and employer tuition reimbursements.

***Total student loans***

**TOTLOAN**

Total amount of all student loans received during the 2003–04 academic year. This includes all student loans through federal, state, institutional, or private programs. It excludes federal PLUS loans to parents. Loans are a type of student financial aid that advances funds and that are evidenced by a promissory note requiring the recipient to repay the specified amounts under prescribed conditions. They do not include loans from family or friends.

***Total work-study***

**TOTWKST**

Indicates the total amount of work-study aid received during the 2003–04 academic year. It includes all federal work-study, state work-study, and institutional work-study, including undergraduates who had assistantships, tutoring, dormitory, or advising jobs. Graduate research, teaching, or other assistantships are classified separately

## Appendix B—Technical Notes and Methodology

---

### Overview

The National Postsecondary Student Aid Study (NPSAS) was first implemented by NCES during the 1986–87 academic year to meet the need for national-level data about significant financial aid issues. Since 1987, NPSAS has been conducted every 3 to 4 years, with the most recent implementation during the 2003–04 academic year. NPSAS:04 was conducted as the student component of the National Study of Faculty and Students (NSoFaS).

NPSAS is the only periodic, nationally representative survey of student financial aid. There is no other single national database which contains student-level records for students receiving aid from all of the numerous and disparate programs funded by the federal government, the states, postsecondary institutions, employers, and private organizations. The NPSAS studies reflect the changes made in government guidelines for financial aid eligibility and availability, providing measures of the impact of those changes. The NPSAS studies also provide information about the current operation of financial aid for postsecondary students.

The fundamental purpose of NPSAS is to create a research dataset that brings together information about a variety of aid programs for a large sample of undergraduate, graduate, and first-professional students. NPSAS also provides the data for comprehensive descriptions of the undergraduate and graduate/first-professional student populations in terms of their demographic characteristics, academic programs, types of institutions attended, attendance patterns, employment, and participation in civic and volunteer activities. These results are published in two descriptive reports: a profile of undergraduates and a separate profile of graduate/first-professional students. Demographic and enrollment data provided establish the appropriate context allowing research and policy analysts to address basic issues about postsecondary affordability and the effectiveness of the existing financial aid programs. These results are published in a third report on undergraduate financing, which includes descriptions of tuition and price of attendance levels, the percentage of students receiving various types of financial aid and the average amounts received, as well as the net price of attendance after aid.

Another purpose of NPSAS is gathering base-year data on a subset of students who become the sample for a longitudinal study. NPSAS:04 serves as the base year for a Beginning

Postsecondary Students Longitudinal Study with a follow-up survey 2 years later (BPS:04/06), and then again in 2009. A section of the NPSAS student interview focuses on describing the experience of these students in their first year of postsecondary education. Also, for the first time, NPSAS:04 includes representative samples of undergraduate students for 12 states that explicitly expressed interest and support for such state-level data.

## **Data Sources for NPSAS:04**

Information for NPSAS:04 were obtained from several sources, including the following:

- **Student Records:** Data from institutional financial aid and registrar records at the institutions currently attended. These data are entered at the institution by institutional personnel or field data collectors in 2003–04 using a computer assisted data entry program (web-CADE) or downloaded directly to a data file.
- **Student Interview:** Data collected directly from sampled students via web-based self-administered or interviewer-administered questionnaires.
- **Central Processing System (CPS):** U.S. Department of Education database of federal financial aid applications for the 2003–04 academic year.
- **National Student Loan Data System (NSLDS):** U.S. Department of Education database of federal Title IV loans and Pell grants.
- **Integrated Postsecondary Education Data System (IPEDS):** U.S. Department of Education, National Center for Education Statistics, database of descriptive information about individual postsecondary institutions.

## **Sample Design**

The NPSAS:04 target population consists of all eligible students enrolled at any time between July 1, 2003 and June 30, 2004 in postsecondary institutions in the United States or Puerto Rico which had signed Title IV participation agreements with the United States Department of Education making them eligible for the federal student aid programs (Title IV institutions). To be eligible for NPSAS, students had to be enrolled in either an academic program with at least one course for credit that could be applied toward fulfilling the requirements for an academic degree or enrolled in an occupational or vocational program that requires at least 3 months or 300 clock hours of instruction to receive a degree, certificate, or other formal award. Eligible students could not be concurrently enrolled in high school and could not be enrolled solely in a GED or other high school completion program.

The institution sampling frame for NPSAS:04 was constructed from the 2000–01 IPEDS Institutional Characteristics (IC) files. The institutions on the sampling frame were partitioned

into 58 institutional strata based on institutional control, highest level of offering, and Carnegie classification. NPSAS:04 also includes state-representative undergraduate student samples for three types of institutions (public 4-year, public 2-year, and private not-for-profit 4-year) in 12 states.<sup>1</sup> Interested readers are referred to the forthcoming NPSAS:04 Methodology Report for a more detailed description of the sample designs, including a complete listing of the 58 strata and further details.

Institutions were selected using Chromy's sequential probability minimum replacement (pmr) sampling algorithm (Chromy 1979), which is similar to systematic sampling, to select institutions with probabilities proportional to a composite measure of size based on expected enrollment. Initially a sample of 1,633 institutions was selected in fall 2002 so that these institutions could be notified of their selection early and to allow a separate field test sample to be selected from the remaining institutions on the sampling frame. In summer 2003, an additional sample of 34 institutions was selected from a frame of institutions not included on the initial sampling frame. Of the total 1,667 sample institutions, 808 were selected with certainty. Of these 1,667 sample institutions, 1,633 were found to be NPSAS eligible institutions and 1,364 of these 1,633 institutions provided student enrollment lists for use as the second stage (i.e., student) sampling frame. Table B-1 shows the number of institutions sampled, the number of eligible institutions, and the count and unweighted and weighted percentages of institutions providing enrollment lists by institutional characteristics.

The sampling frames for selecting sample students were paper and electronic lists of students provided by the sample institutions for those students enrolled in terms or courses of instruction during the previously defined NPSAS year. Student lists were sampled on a flow basis as they were received, using equal probability stratified systematic sampling. There were eight student sampling strata as follows:

- (1) in-state first-time beginner students;
- (2) out-of-state first-time beginner students;
- (3) in-state other undergraduate students;
- (4) out-of-state other undergraduate students;
- (5) master's students;
- (6) doctoral students;
- (7) other graduate students; and
- (8) first-professional students.

---

<sup>1</sup> These 12 states were selected by NCES from those expressing interest. The 12 states were categorized into three groups based on population size: four small states (CT, DE, NE, OR), four medium-size states (GA, IN, MN, TN), and four large states (CA, IL, NY, TX).

**Table B-1. Counts of sampled, eligible, and participating institutions and enrollment list participation rates, by institutional characteristics**

Institutional characteristics <sup>1</sup>	Sampled institutions	Eligible institutions <sup>2</sup>	Institutions providing lists <sup>3</sup>		
			Number	Unweighted percent	Weighted percent
<b>All institutions</b>	1,667	1,633	1,364	83.5	80.0
<b>Institutional level</b>					
Less-than-2-year	261	246	202	82.1	80.8
2-year	492	481	411	85.4	78.0
4-year non-doctorate	462	456	380	83.3	74.6
4-year doctorate	452	450	371	82.4	85.6
<b>Institutional control</b>					
Public	814	802	681	84.9	79.6
Private not-for-profit	567	559	454	81.2	79.8
Private for-profit	286	272	229	84.2	86.7
<b>Type of institution</b>					
Public less-than-2-year	68	64	49	76.6	74.3
Public 2-year	384	377	322	85.4	77.6
Public 4-year non-doctorate	134	134	114	85.1	70.3
Public 4-year doctorate	228	227	196	86.3	87.1
Private not-for-profit less-than-4-year	74	73	65	89.0	92.6
Private not-for-profit 4-year non-doctorate	277	271	222	81.9	78.1
Private not-for-profit 4-year doctorate	216	215	167	77.7	80.8
Private for-profit less-than-2-year	174	163	137	84.0	82.3
Private for-profit 2-year or more	112	109	92	84.4	88.2

<sup>1</sup> Institutional characteristics are based on data from the sampling frame which was formed from the 2000–01 Integrated Postsecondary Education Data System (IPEDS).

<sup>2</sup> Among the 34 ineligible institutions: 12 closed after the sampling frame was defined, 13 were treated as merged institutions because two or more campuses were included on one combined student list, and the remaining 9 failed to meet one or more of the criteria for institutional NPSAS eligibility.

<sup>3</sup> Percents are based on the eligible institutions within the row under consideration.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

First-time beginner students (FTBs) were stratified separately from other undergraduate students because they were oversampled to allow for sufficient numbers to be surveyed in the 2006 follow-up study, the Beginning Postsecondary Students Longitudinal Study (BPS:04/06). FTBs and other undergraduate students were each divided into in-state and out-of-state strata because undergraduate in-state students were oversampled in the 12 states with state-representative samples. These in-state and out-of-state strata were used for all institutions to allow for sampling ease and consistency; however, in states that did not have state-representative samples, in-state students were sampled at the same rate as out-of-state students.

For each student stratum, the enrollment list was sampled at a rate designed to provide approximately equal student-level probabilities. Student sampling rates were revised after sufficient lists had been received to more accurately estimate the overall sample yield. Those sampling procedures resulted in the selection of 109,213 students. Upon the completion of data collection, 90,746 students out of the 101,013 sample members determined to be eligible for

NPSAS, were determined to have sufficient key data to meet the definition of a respondent. A student respondent is defined as any sample member who is determined to be eligible for the study and, minimally, has valid data from any source for the following:

- student type (undergraduate or graduate/first professional);
- date of birth or age;
- gender; and
- at least 8 of the following 15 variables:
  - dependency status;
  - marital status;
  - any dependents;
  - income;
  - expected family contribution (EFC);
  - degree program;
  - class level;
  - first-time beginner (FTB) status;
  - months enrolled;
  - tuition;
  - received federal aid;
  - received non-federal aid;
  - student budget;
  - race; and
  - parent education.

Table B-2 shows the number of students sampled, the number of eligible students, and the unweighted and weighted percentages of study respondents by institutional characteristics. See the forthcoming *NPSAS:04 Methodology Report* for further details.

**Table B-2. Counts of sampled, eligible, and responding students and response rates, by institutional characteristics**

Institutional characteristics <sup>1</sup>	Sampled students	Eligible students <sup>2</sup>	Responding students <sup>3,4</sup>	
			Unweighted percent	Weighted percent
<b>All students</b>	109,213	101,013	89.8	91.0
<b>Institutional level</b>				
Less-than-2-year	13,321	11,330	92.6	93.6
2-year	41,514	37,293	83.1	84.6
4-year non-doctorate	21,452	20,547	94.0	94.8
4-year doctorate	32,926	31,843	94.1	94.7
<b>Institutional control</b>				
Public	71,025	65,537	87.0	89.2
Private not-for-profit	22,731	21,661	95.3	96.1
Private for-profit	15,457	13,815	95.0	96.1
<b>Type of institution</b>				
Public less-than-2-year	3,183	2,580	84.2	90.6
Public 2-year	36,300	32,451	81.3	83.9
Public 4-year non-doctorate	9,195	8,883	91.9	93.3
Public 4-year doctorate	22,347	21,623	93.7	94.2
Private not-for-profit less-than-4-year	3,064	2,772	94.3	94.6
Private not-for-profit 4-year non-doctorate	9,741	9,302	96.3	96.9
Private not-for-profit 4-year doctorate	9,926	9,587	94.5	95.4
Private for-profit less-than-2-year	9,267	8,028	94.9	94.3
Private for-profit 2-year or more	6,190	5,787	95.0	96.7

<sup>1</sup> Institutional characteristics are based on data from the sampling frame which was formed from the 2000–01 Integrated Postsecondary Education Data System IPEDS.

<sup>2</sup> Ineligible students were identified during the student interview or from institutional records if student eligibility was not determined from a student interview.

<sup>3</sup> A responding student is defined as any eligible student, for whom sufficient data were obtained from one or more sources, including: student interview, institutional records, and the Department of Education’s Central Processing System (CPS).

<sup>4</sup> Percents are based on the eligible students within the row under consideration.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

## Perturbation

To protect the confidentiality of NCES data that contain information about specific individuals, NPSAS:04 data were subject to perturbation. Data were subject to perturbation procedures to minimize disclosure risk. Perturbation procedures, which have been approved by the NCES Disclosure Review Board, preserve the central tendency estimates, but may result in slight increases in non-sampling errors.

## Imputation

All variables with missing data used in this report as well as those included in the related Data Analysis System (DAS) release have been imputed. The imputation procedures employed a two-step process. In the first step, the matching criteria and imputation classes that were used to



stratify the dataset were identified such that all imputation was processed independently within each class. In the second step, the weighted sequential hot deck process was implemented,<sup>2</sup> whereby missing data were replaced with valid data from donor records that match the recipients with respect to the matching criteria.

Variables requiring imputation were not imputed simultaneously. Basic demographic variables with full information were imputed first. Then, variables with increasing levels of missing data were imputed using previously imputed variables in the determination of optimal matching criteria. The order in which variables were imputed was also determined to some extent by the substantive nature of the variables. For example, basic demographics (such as age) were imputed first and these were used to process education variables (such as student level and enrollment intensity) which in turn were used to impute the financial aid variables (such as aid receipt and loan amounts).

For variables with less than 5 percent missing data, the variables used for matching criteria were selected based on prior knowledge about the dataset and the known relationships between variables. For example, in almost all cases the student's age and enrollment intensity (full-time/part-time status) were used as matching variables in the imputation process.

For variables with more than 5 percent missing data, a process called Chi-Square Automatic Interaction Detector (CHAID) was used to identify the matching criteria that are most closely related to the variable being imputed (Kass 1980). This step produced a number of imputation classes which contain sets of donors that were used to impute recipients belonging to that class.

Next, the imputation classes were used as input to a SAS macro that implemented the weighted sequential hot deck procedure. Additionally, data were sorted within each imputation class to increase the chance of obtaining a close match between donor and recipient. The hot deck process is sequential in that the search for donors occurs sequentially, starting with the recipient and progressing up and down the sorted file to find the set of eligible donors from which a random selection of one was made. The process is weighted since it incorporates the sample weight of each record in the search and selection routine.<sup>3</sup>

In some cases, further intervention was needed to ensure accuracy and consistency of imputation as determined by preexisting edit rules. For example, to impute the level of parents'

---

<sup>2</sup> The term "hot deck" refers to the fact that the set of potential donors changes for each recipient. In contrast, cold deck imputation defines one static set of donors for all recipients. In all such imputation schemes the selection of the donor from the entire deck is a random process.

<sup>3</sup> For further details, we suggest Cox (1980) and Iannacchione (1982).

education, when we know the parents have some college but not the parents' specific education level, the potential pool of donors was limited to those with at least some college education, to prevent imputing parents' education level as less than college.

## Weighting

All estimates in this report are weighted to represent the target population described in the sample design section. The weights compensate for the unequal probability of selection of institutions and students in the NPSAS sample. The weights also adjust for multiplicity at the institution and student levels,<sup>4</sup> unknown student eligibility, nonresponse, and poststratification. The institution weight is computed and then used as a component of the student weight. All of the weight components, including the probabilities of selection and adjustments are summarized in table B-3. There is one student analysis weight, and this weight variable is STUDYWT.

**Table B-3. Summary of weight components**

Weight component	Purpose
Institution sampling weight	To account for the institution's probability of selection.
Institution multiplicity adjustment	To adjust the weights for institutions that had multiple chances of selection.
Institution poststratification adjustment	To adjust the institution weights to match population enrollment totals to ensure population coverage.
Institution nonresponse adjustment	To adjust the weights to compensate for nonresponding institutions.
Student sampling weight	To account for the student's probability of selection.
Student subsampling weight	To account for the subsampling of students on paper lists.
Student multiplicity adjustment	To adjust the weights for students who attended more than one institution.
Student unknown eligibility adjustment	To adjust the weights of nonresponding students with unknown eligibility.
Student nonresponse adjustment	To adjust the weights to compensate for nonresponding students.
Student poststratification adjustment	To adjust the student weights to match known population enrollment and aid totals to ensure population coverage.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

<sup>4</sup> It was determined after institution sample selection that in some cases, either 1) an institution had merged with another institution, or 2) student enrollment lists for two or more campuses were submitted as one combined student list. In these instances, the institution weights were adjusted for the joint probability of selection. Likewise, students who attended more than one institution during the NPSAS year also had multiple chances of selection. If it was determined from any source (the student interview, or the student loan files (Pell or Stafford)) that a student had attended more than one institution, the student's weight was adjusted to account for multiple chances of selection.

## Quality of Estimates

### *Unit Response Rates and Bias Analysis*

NCES Statistical Standard 4-4-1 states that: “Any 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. Estimates of survey characteristics for nonrespondents and respondents are required to assess the potential nonresponse bias. The level of effort required is guided by the magnitude of the nonresponse.” Response rates are discussed below for institutions and students. When response rates were less than 85 percent, a nonresponse bias analysis was conducted.

The bias in an estimated mean based on respondents,  $\bar{y}_R$ , is the difference between this mean and the target parameter,  $\pi$ , i.e., the mean that would be estimated if a complete census of the target population was conducted and everyone responded. This bias can be expressed as follows:

$$B(\bar{y}_R) = \bar{y}_R - \pi$$

The estimated mean based on nonrespondents,  $\bar{y}_{NR}$ , can be computed if data for the particular variable are available for most of the nonrespondents. The true target parameter,  $\pi$ , can be estimated for these variables as follows:

$$\hat{\pi} = (1 - \eta) \bar{y}_R + \eta \bar{y}_{NR}$$

where  $\eta$  is the weighted unit (or item) nonresponse rate. For the variables that are from the frame, rather than from the sample,  $\pi$  can be estimated without sampling error. The bias can then be estimated as follows:

$$\hat{B}(\bar{y}_R) = \bar{y}_R - \hat{\pi}$$

or equivalently

$$\hat{B}(\bar{y}_R) = \eta(\bar{y}_R - \bar{y}_{NR}).$$

This formula shows that the estimate of the nonresponse bias is the difference between the mean for respondents and nonrespondents multiplied by the weighted nonresponse rate.

### ***Institution-Level Bias Analysis***

An institution respondent is defined as any sample institution for which:

- A student list was received that was sufficient for selecting a sample or
- A sample of students was selected from a NSLDS file of Stafford loan and Pell grant recipients in cases where such a student file was believed to include at least 85 percent of the student population.

As shown in table B-1, 1,364 of the 1,633 eligible sample institutions were respondents (83.5 unweighted percent and 80.0 weighted percent). The institution weighted response rate is also below 85 percent for six of the nine types of institutions. The weighted response rates by type of institution range from 70.3 percent for public 4-year non-doctorate institutions to 92.6 percent for private not-for-profit less-than-4-year institutions.

A nonresponse bias analysis was conducted for all institutions and for the six types of institutions with a weighted response rate below 85 percent. The nonresponse bias was estimated for variables known, i.e., non-missing, for most respondents and nonrespondents. There are extensive data available for all institutions from IPEDS, and the following variables were used:<sup>5</sup>

- type of institution;<sup>6</sup>
- Carnegie classification;
- degree of urbanization;
- OBE region;
- Historically Black College or University indicator;
- percent of students receiving federal grant aid;
- percent of students receiving state/local grant aid;
- percent of students receiving institutional grant aid;
- percent of students receiving student loan aid;
- percent of students enrolled: Hispanic;
- percent of students enrolled: Asian or Pacific Islander;
- percent of students enrolled: Black, non-Hispanic;
- total undergraduate enrollment;
- male undergraduate enrollment;

---

<sup>5</sup> For the continuous variables, categories were formed based on quartiles or logical breaks.

<sup>6</sup> Type of institution was only used in the nonresponse bias analysis for all institutions.

- female undergraduate enrollment;
- total graduate/first-professional enrollment;
- male graduate/first-professional enrollment; and
- female graduate/first-professional enrollment.

First, for the institution-level variables listed above, the nonresponse bias was estimated and tested (adjusting for multiple comparisons) to determine if the bias is significant at the 5 percent level. Second, nonresponse adjustments were computed, and the variables listed above were included in the nonresponse models. The nonresponse adjustments (see the weighting section of this appendix) were designed to significantly reduce or eliminate nonresponse bias for variables included in the models. Third, after the weights were computed, any remaining bias was estimated for the variables listed above and statistical tests were performed to check the remaining significant nonresponse bias.

As shown in table B-4, the institution weighting adjustments eliminated some, but not all, bias. However, for all institutions, public less-than-2-year institutions, and public 2-year institutions, before weighting 5.6 percent, 6.3 percent, and 6.8 percent, respectively, of the variable categories were significantly biased, and after weighting, no significant bias remains for the variables analyzed. For the other types of institutions, the percent of variable categories with significant bias decreased after weight adjustments. Significant bias was reduced for the variables known for most respondents and nonrespondents, which are considered to be some of the more analytically important variables and are correlated with many of the other variables.

**Table B-4. Summary of institution nonresponse bias analysis for all institutions, by type of institution**

Nonresponse bias statistics	All institutions	Public less-than-2-year	Public 2-year	Public 4-year non-doctorate	Private not-for-profit 4-year non-doctorate	Private not-for-profit 4-year doctorate	Private for-profit less-than-2-year
<b>Before weight adjustments</b>							
Mean estimated relative bias	0.10	0.24	0.14	0.20	0.10	0.19	0.12
Median estimated relative bias	0.05	0.17	0.08	0.14	0.06	0.06	0.07
Percent significant bias	5.61	6.35	6.85	10.84	2.22	#	4.48
<b>After weight adjustments</b>							
Mean estimated relative bias	0.13	0.32	0.24	0.25	0.18	0.22	0.22
Median estimated relative bias	0.05	0.29	0.12	0.23	0.09	0.10	0.19
Percent significant bias	#	#	#	2.41	1.11	#	1.49

# Rounds to zero.

NOTE: Nonresponse bias analysis was conducted for all institutions and the six types of institutions with a weighted response rate less than 85 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

### ***Student-Level Bias Analysis***

As mentioned in the sample design section above, a student respondent is defined as any sample member who is determined to be eligible for the study and has valid data from any source for a selected set of key analytical variables. These are minimal data requirements and the vast majority of study respondents were characterized by considerably more complete data.

As shown in table B-2, of the 101,013 eligible sample students the unweighted response rate was 89.8 percent, and the weighted response rate was 91.0 percent. The student weighted response rate is also above 85 percent for all types of institutions with the exception of public 2-year institutions. The weighted response rates by type of institution range from 83.9 percent for public 2-year institutions to 96.9 percent for private not-for-profit 4-year non-doctoral institutions.

Therefore, a nonresponse bias analysis was conducted only for students from public 2-year institutions. The nonresponse bias was estimated for the seven variables known for both respondents and nonrespondents. Five of these variables were known for all sample members, and the remaining two variables were only known for federally aided students. These variables are included on the DAS and are listed below:

For all sample members:

- region;
- institution total enrollment;
- CPS match (yes/no);
- Pell grant recipient (yes/no); and
- Stafford loan recipient (yes/no).

For federally aided students:

- Pell grant amount; and
- Stafford loan amount.

Additionally, it was determined that percent part-time fall enrollment and in-state tuition are important variables to include in the nonresponse bias analysis for students in public 2-year institutions. These variables are not known for both respondents and nonrespondents; however, institution-level data available from IPEDS were used to conduct the analyses.

The steps listed above for institution nonresponse bias analysis are also applicable for the student nonresponse bias analysis. That is, the nonresponse bias was estimated for the above

variables, tested (adjusting for multiple comparisons) to determine if the bias is significant at the 5 percent level, and nonresponse adjustments were computed including the above variables in the nonresponse models. Any remaining bias was estimated for these variables and statistical tests were performed to check the remaining significant nonresponse bias.

As shown in table B-5, the student weighting adjustments eliminated some, but not all, bias for students in public 2-year institutions. Significant bias was reduced somewhat for the variables known for most respondents and nonrespondents, which are considered to be some of the more analytically important variables and are correlated with many of the other variables. However, significant bias still remains because there were small numbers of nonrespondents in this type of institution applying for and receiving federal aid. This may be due to the definition of a respondent. All significant bias was eliminated for the non-aid variables, i.e. region, institution total enrollment, percent part-time fall enrollment, and in-state tuition.

**Table B-5. Summary of student nonresponse bias analysis for all students in public 2-year institutions**

Nonresponse bias statistics	Public 2-year
<b>Before weight adjustments</b>	
Mean estimated relative bias	0.11
Median estimated relative bias	0.04
Percent significant bias	35.42
<b>After weight adjustments</b>	
Mean estimated relative bias	0.15
Median estimated relative bias	0.05
Percent significant bias	29.17

NOTE: Nonresponse bias analysis was conducted only for the one type of institution with a weighted response rate less than 85 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

### ***Item-Level Bias Analysis***

NCES Guideline 4-4-3A states: “For an item with a low total response rate, respondents and nonrespondents can be compared on the sampling frame and/or questionnaire variables for which data on respondents and nonrespondents are available. Base weights must be used in such analysis. Comparison items should have very high response rates. This approach may be limited to the extent that items available for respondents and nonrespondents may not be related to the low response rate item being analyzed.”

Moreover, NCES Statistical Standard 1-3-5 states that: “Item response rates (RRI) are calculated as the ratio of the number of respondents for whom an in-scope response was obtained ( $I^x$  for item  $x$ ) to the number of respondents who are asked to answer that item. The number

asked to answer an item is the number of unit level respondents (I) minus the number of respondents with a valid skip item for item x ( $V^x$ ). When an abbreviated questionnaire is used to convert refusals, the eliminated questions are treated as item nonresponse.”

$$RRI^x = I^x / (I - V^x)$$

A student is defined to be an item respondent for an analytic variable if that student has data for that variable from any source, including logical imputation. As shown in table B-6, for the 90,746 responding sample students, the weighted item response rates for items used in this ED Tab for all students ranged from 82.5 percent to 100 percent. The item response rates by type of institution ranged from 68.0 percent to 100 percent. All of the items, except for income, had a response rate above 85 percent. The response rates for income were below 85 percent for all students and for four of nine types of institution.

Therefore, a nonresponse bias analysis was conducted for the income item. The variables listed above in the student-level bias analysis section were used to compare the item respondents and nonrespondents. These variables are important to the study and will be related to many of the items being analyzed for low item response rates. For this item, the nonresponse bias was estimated as described in the above section for each of these variables known for both respondents and nonrespondents and tested (adjusting for multiple comparisons) to determine if the bias is significant at the 5 percent level.



**Table B-6. Item response rates for all students, by type of institution**

Variable.	Variable label	All students	Public less-than-2-year	Public 2-year	Public 4-year non-doctoral	Public 4-year doctoral	Private not-for-profit less-than-4-year	Private not-for-profit 4-year non-doctoral	Private not-for-profit 4-year doctoral	Private for-profit less-than-2-year	Private for-profit 2-year or more
TOTAID	Aid total amount	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
CAMPAMT	Federal campus-based aid	99.9	100.0	100.0	99.9	100.0	100.0	100.0	99.7	100.0	100.0
TITIVAMT	Total Title IV federal aid	100.0	100.0	100.0	99.9	100.0	100.0	100.0	99.8	100.0	100.0
TFEDAID	Total federal aid (excludes veterans/DOD)	100.0	100.0	100.0	99.9	100.0	100.0	100.0	99.8	100.0	100.0
PELLAMT	Pell Grant total	99.7	99.8	99.5	99.6	100.0	99.6	99.9	99.8	100.0	99.8
TFEDGRT	Total federal grants	99.2	99.8	99.5	99.2	99.2	99.6	99.0	97.9	100.0	99.8
PERKAMT	Perkins loan	97.4	98.4	96.7	95.6	97.7	97.4	98.9	98.3	99.3	99.3
PLUSAMT	PLUS loan total	99.4	99.8	99.2	99.0	100.0	98.5	99.8	99.4	100.0	99.4
STAFSUB	Stafford subsidized total	99.5	99.8	99.2	99.0	100.0	98.5	99.8	99.4	100.0	99.4
STAFFAMT	Stafford total subsidized+unsubsidized	99.7	100.0	99.7	99.2	100.0	98.6	99.9	99.6	100.0	99.5
STAFUNSB	Stafford unsubsidized total	99.5	99.8	99.2	99.0	100.0	98.5	99.8	99.4	100.0	99.4
TFEDLN	Total federal loans (excluding PLUS)	99.7	100.0	99.7	99.2	100.0	98.6	99.6	99.6	100.0	99.5
TFEDWRK	Federal work-study	97.8	99.2	98.0	99.2	97.9	86.7	97.6	97.6	93.5	95.7
INSTAMT	Institutional aid total	98.3	99.3	98.1	99.5	98.6	87.3	98.6	99.2	93.9	95.9
INGRTAMT	Institutional grants total	98.2	99.3	98.0	99.4	98.5	87.1	98.5	99.2	93.7	95.8
OTHYPE	Total other type of aid	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
STATEAMT	State aid total	98.3	99.3	98.1	99.5	98.5	87.3	98.6	99.2	93.9	95.9
STGTAMT	State grants total	98.1	99.3	98.0	99.4	98.4	86.4	98.5	99.2	93.8	95.7
EMPLYAMT	Employer aid (includes college staff)	98.3	99.3	98.1	99.5	98.5	87.2	98.6	99.2	93.9	95.9
TOTGRT	Total grants	99.9	100.0	100.0	99.9	99.8	100.0	99.9	99.5	100.0	100.0
TOTLOAN	Total loans (excluding PLUS)	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0
TOTWKST	Total work-study	98.2	99.3	98.1	99.5	98.5	87.2	98.6	99.2	93.8	95.8
GRASTAMT	Total graduate assistantships	99.2	†	†	99.5	99.0	†	99.6	99.0	†	100.0
ATTNSTAT	Attendance pattern	99.0	99.7	98.6	99.6	99.4	98.6	99.7	99.8	97.3	97.2
INCOME	Student income (categorical)	82.5	68.0	77.1	84.1	84.6	89.5	87.5	85.7	85.5	94.6
GRADDEG	Graduate degree program	98.8	†	†	98.8	98.8	†	99.3	98.5	†	100.0
STYPELST	Student type (UG/Gr/FP)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DEPEND	Dependency status	94.1	93.4	92.6	94.2	93.2	96.2	97.0	96.1	96.7	99.4
AIDSECT	Type of institution (with multiple)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AISECTG	Type of graduate institution (with multiple)	100.0	†	†	100.0	100.0	†	100.0	100.0	†	100.0

† Not applicable.

NOTE: Item response rates are calculated per NCES Statistical Standard 1-3-5 as the ratio of the number of respondents for whom an in-scope response was obtained to the number of respondents who were asked to answer that item.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

Table B-7 shows that the income item has a large amount of significant bias prior to imputation. A byproduct of the imputation (described in the imputation section of this appendix) is the reduction or elimination of item-level nonresponse bias. Imputation reduces or eliminates nonresponse bias by replacing missing data with statistically plausible values. Missing data and the associated nonresponse bias for variables such as income are usually non-ignorable (i.e., the respondents’ distribution patterns differ from those in the full population). Therefore, replacing missing data with plausible values results in imputed sample distributions that resemble full population distributions, thus reducing if not eliminating nonresponse bias. The use of carefully constructed imputation classes, donor-imputee matching criteria, and random hot-deck searches within imputation cells are all designed to ensure that imputed data are in fact plausible and that the nonresponse bias is ignorable within the imputation classes.

## Cautions for Analysts

**Multiple institutions.** Students who attended more than one institution during the 2003–04 academic year (about 7 percent of undergraduates and 4 percent of graduate students) are coded in a separate category (“more than one institution”) for institution type, institution control, and attendance pattern. Although included in the “totals” in this report, due to confounding tuition and fees and attendance patterns, students who attended multiple institutions were excluded in the estimates by institution type, tuition and fees categories, and attendance pattern in this report.

**Sources of error.** The estimates in this report are subject to sampling and nonsampling errors. Nonsampling errors are due to a number of sources, including but not limited to, nonresponse, coding and data entry errors, misspecification of composite variables, and inaccurate imputations. In a study like NPSAS there are multiple sources of data for some variables (CPS, CADE, Student Interview, etc.) and reporting differences can occur in each. Data swapping and other forms of perturbation, implemented in order to protect respondent confidentiality, can lead to inconsistencies as well.

**Table B-7. Summary of item nonresponse bias analysis for all students and by type of institution**

Variable	Variable label	All students	Public less-than-2-year	Public 2-year	Public 4-year non-doctoral	Public 4-year doctoral
<b>INCOME</b>	Student Income (categorical)					
Mean estimated relative bias		0.08	0.07	0.11	0.10	0.09
Median estimated relative bias		0.03	0.04	0.04	0.05	0.02
Percent significant bias		58.18	37.84	28.57	35.56	36.17

NOTE: Nonresponse bias analysis was conducted only for the one item with a weighted response rate less than 85 percent. Nonresponse bias analysis was based on the student-level variables known for both respondents and nonrespondents (described in the student-level bias analysis section above).

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003-04 National Postsecondary Student Aid Study (NPSAS:04).

Sampling errors exist in all sample-based datasets, including NPSAS. Estimates calculated from a sample will differ from estimates calculated from other samples even if all the samples used the same sample design and methods. For similar reasons, estimates of average aid amounts based on the NPSAS sample will probably differ from specific program amounts reported by the department's program offices.

The standard error is a measure of the precision of the estimate. In this tabulation, each estimate's standard error was calculated using bootstrap replication procedures and can be produced using the NPSAS:04 Data Analysis System (DAS) software. Standard errors for table 1 are presented in table B-8. All differences reported in the selected findings were significant at the 0.05 level.

### ***Comparing NPSAS:04 Estimates to Prior NPSAS Estimates***

Comparison of results with prior rounds of NPSAS requires compensation for three changes in the design of the survey over time. For NPSAS:2000, the survey was restricted for the first time to institutions participating in Title IV student aid programs. According to the Data Analysis System for NPSAS:96, only about 1 percent of the sampled undergraduates were attending an institution not eligible to participate in the Department's Title IV aid programs. When students attending non-Title IV-eligible institutions were excluded from the NPSAS:96 sample, the percentage of undergraduates who received financial aid increased by less than 0.3 percent. This small change primarily affects comparisons of students enrolled in less-than-2-year and private for-profit institutions. When using the DAS from prior NPSAS studies for comparisons to NPSAS:2000 and NPSAS:04, analysts may want to filter cases in the prior studies (e.g. NPSAS:96 or NPSAS:93) based on the variable that identifies whether the student was sampled from an institution that was eligible to participate in Title IV aid programs (T4ELIG).

Another design change was made beginning with NPSAS:90 to improve full-year estimates. NPSAS:87 sampled students enrolled in the fall (October). However, NPSAS:90 sampled students who were enrolled at four discrete points in time: summer (August), fall (October), winter (February), and spring (June). Since implementation of NPSAS in 1993, institutions have been asked to provide one list that represented students enrolled at any time during the respective financial aid award year. In NPSAS:87 and NPSAS:90, those students who were initially sampled in the fall could have been enrolled for the full academic year.

**Table B-8. Standard errors for table 1: Percentage of undergraduates receiving selected types of financial aid, by type of institution, attendance pattern, dependency status, and income level: 2003–04**

Institution and student characteristics	Any aid	Any grants	Student loans	Work-study	Any other aid
<b>All undergraduates</b>					
U.S. total (excluding Puerto Rico)	0.37	0.43	0.22	0.22	0.18
Total (50 states, D.C., and Puerto Rico)	0.36	0.41	0.22	0.22	0.18
Type of institution					
Public					
Less-than-2-year	2.98	2.55	0.99	0.83	1.38
2-year	0.83	0.77	0.36	0.23	0.28
4-year non-doctorate-granting	1.77	2.06	1.55	0.84	0.77
4-year doctorate-granting	0.63	0.66	0.57	0.27	0.28
Private not-for-profit					
Less-than-4-year	2.58	2.81	3.66	1.73	2.24
4-year non-doctorate-granting	0.98	1.53	1.80	1.63	0.83
4-year doctorate-granting	1.16	1.34	1.90	1.45	0.71
Private for-profit					
Less-than-2-year	0.64	0.69	0.49	0.15	0.48
2-year or more	0.55	1.18	1.07	0.43	1.17
More than one institution	0.89	0.83	0.94	0.40	0.40
Attendance pattern					
Full-time/full-year	0.40	0.48	0.44	0.41	0.26
Full-time/part-year	0.85	0.89	0.75	0.32	0.37
Part-time/full-year	0.76	0.75	0.62	0.26	0.24
Part-time/part-year	0.90	0.83	0.46	0.16	0.34
<b>Full-time/full-year undergraduates</b>					
Dependency status					
Dependent	0.49	0.59	0.54	0.46	0.30
Independent	0.81	0.83	0.93	0.44	0.44
Dependency and income in 2002					
Dependent students					
Less than \$20,000	1.01	1.12	1.44	1.26	0.58
\$20,000–39,999	0.83	0.94	1.11	0.87	0.43
\$40,000–59,999	1.01	1.11	1.05	0.86	0.50
\$60,000–79,999	0.97	1.05	1.07	0.70	0.62
\$80,000–99,999	1.16	1.47	1.13	0.90	0.70
\$100,000 or more	0.78	0.86	0.82	0.47	0.48
Independent students					
Less than \$10,000	0.89	0.96	1.28	0.95	0.54
\$10,000–19,999	1.05	1.29	1.42	0.96	0.66
\$20,000–29,999	1.75	2.04	1.81	0.72	1.08
\$30,000–49,999	1.68	1.85	2.42	0.79	1.19
\$50,000 or more	1.98	1.99	2.37	0.54	1.29

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

Another difference to note is that Puerto Rico was not part of the sample in NPSAS:87. The final restricted data files and the NPSAS DAS software will allow users to produce estimates comparable to 1987 by selecting only students who were enrolled in the fall and excluding those sampled from Puerto Rico (see the variable description for COMPTO87 in the DAS). These estimates will reflect full-year amounts of aid for students who were enrolled in the fall. Such estimates, however, will not reflect total expenditures as reported by the Department's specific Title IV program offices. This difference will be explained more fully in the forthcoming methodology report.

The estimates for average aid amounts in this report are only for aid recipients who received the specified type of aid. Further, average aid amounts for specific groups where most students do not receive aid are not reflective of the amount of support these students receive overall, and the type of support (e.g. whether it is grants, subsidized loans, unsubsidized loans, work-study, or some combination) is likely to differ. NCES recommends that readers not try to produce their own estimates such as the percentage of all students receiving aid or the numbers of undergraduates enrolled in the fall who received any aid, federal aid, state aid, etc., by combining estimates in this tabulation with the Integrated Postsecondary Education Data System (IPEDS) fall 2003 enrollment numbers. The IPEDS enrollment data include some students not eligible for NPSAS (e.g. those enrolled in U.S. Service Academies, those taking college courses while enrolled in high school). Additional information on the NPSAS:04 sample is presented in the sample design section of this appendix and will also be described in the forthcoming methodology report.

### ***Additional Notes on the Accuracy of the Estimates***

RTI conducted a bias analysis to determine if any variables were significantly biased due to institutional and student-level nonresponse. Several variables were found to have significant bias before weighting. The weighting procedures appear to have reduced the amount of significant bias for these variables. Additional information on the nonresponse bias analysis and weighting procedures can be found in the quality of estimates and weighting sections of this appendix.

### **Standard Errors**

To facilitate computation of standard errors for both linear and nonlinear statistics, a vector of bootstrap sample weights has been added to the analysis file. These weights are zero for units not selected in a particular bootstrap sample; weights for other units are inflated for the bootstrap subsampling. The initial analytic weights for the complete sample are also included for the purposes of computing the desired estimates. The vector of replicate weights allows for

computing additional estimates for the sole purpose of estimating a variance. Assuming  $B$  sets of replicate weights, the variance of any estimate,  $\hat{\theta}$ , can be estimated by replicating the estimation procedure for each replicate and computing a simple variance of the replicate estimates; i.e.,

$$\text{Var}(\hat{\theta}) = \frac{\sum_{b=1}^B (\hat{\theta}_b^* - \hat{\theta})^2}{B}$$

where  $\hat{\theta}_b^*$  is the estimate based on the  $b$ -th replicate weight (where  $b=1$  to the number of replicates) and  $B$  is the total number of sets of replicate weights. Once the replicate weights are provided, this estimate can be produced by most survey software packages (e.g., SUDAAN [RTI 2004]).

The replicate weights were produced using a methodology and computer software developed by Kaufman (2004). This methodology allows for finite population correction factors at two stages of sampling. The NPSAS application of the method incorporated the finite population correction factor at the first stage only where sampling fractions were generally high. At the second stage, where the sampling fraction was generally low, the finite population correction factor was set to 1.00.

## Data Analysis System

The estimates presented in this report were produced using the NPSAS:04 Data Analysis System (DAS). The DAS software makes it possible for users to specify and generate their own tables. The DAS also contains a detailed description of how each variable was created, and includes question wording for items coming directly from an interview.

With the DAS, users can replicate or expand upon the tables presented in this report. In addition to the table estimates, the DAS calculates the proper standard errors<sup>7</sup> and weighted sample sizes for these estimates. For example, table B-8 contains standard errors that correspond to estimates in table 1 in the report. If the number of valid cases is too small to produce a reliable estimate (fewer than 30 cases), the DAS prints the message “low-N” instead of the estimate. All standard errors for estimates presented in this report can be viewed at [http://nces.ed.gov/das/library/tables\\_listings/2004170.asp](http://nces.ed.gov/das/library/tables_listings/2004170.asp). In addition to tables, the DAS will also produce a correlation matrix of selected variables to be used for linear regression models.

---

<sup>7</sup> The NPSAS samples are not simple random samples, and therefore, simple random sample techniques for estimating sampling error cannot be applied to these data. The DAS takes into account the complexity of the sampling procedures and calculates standard errors appropriate for such samples. The method for computing sampling errors used by the DAS involves approximating the estimator by replication of the sampled population. The procedure used is a bootstrap technique.

Included in the output with the correlation matrix are the design effects (DEFTs) for each variable in the matrix. Since statistical procedures generally compute regression coefficients based on simple random sample assumptions, the standard errors must be adjusted with the design effects to take into account the stratified sampling method used in the NPSAS surveys.

The DAS can be accessed electronically at <http://nces.ed.gov/DAS>. For more information about the Data Analysis System, contact:

Aurora D'Amico  
Postsecondary Studies Division  
National Center for Education Statistics  
1990 K Street NW  
Washington, DC 20006–5652  
(202) 502-7334  
[Aurora.D'Amico@ed.gov](mailto:Aurora.D'Amico@ed.gov)

## References for Appendix B

- Chromy, J.R. (1979). *Sequential Sample Selection Methods*. Proceedings of the American Statistical Association Section on Survey Research Methods of the American Statistical Association, pp. 401–406.
- Cox, B. (1980). *The Weighted Sequential Hot Deck Imputation Procedure*. Proceedings of the American Statistical Association, Section on Survey Research Methods, pp. 721–726.
- Iannacchione, V. (1982). *Weighted Sequential Hot Deck Imputation Macros*. Presented at the Seventh Annual SAS User's Group International Conference, San Francisco.
- Kass, G.V. (1980). An Exploratory Technique for Investigating Large Quantities of Categorical Data. *Applied Statistics*, 29: 119–127.
- Kaufman, S. (2004). Using the Bootstrap in a Two-Stage Design when Some Second-Stage Strata Have Only One Unit Allocated. In *Proceedings of the American Statistical Association, Section on Survey Research Methods*.
- RTI International (RTI). (2004). *SUDAAN User's Manual, Release 9.0*. Research Triangle Park, NC: RTI International.