



U.S. Department of Education
Institute of Education Sciences
NCES 2005-163

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

Undergraduate Financial Aid Estimates for 2003-04 by Type of Institution

E.D. TAB

June 2005

Lutz Berkner
Christina Chang Wei
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

Grover J. Whitehurst
Acting 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. Unless specifically noted, all information contained herein is in the public domain.

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

June 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>.

This publication is only available online. To download, view, and print the report as a PDF file, go to the NCES World Wide Web Electronic Catalog address shown above.

Suggested Citation

Berkner, L., Wei C.C., He, S., Lew, S., Cominole, M., and Siegel, P. (2005). *2003-04 National Postsecondary Student Aid Study (NPSAS:04): Undergraduate Financial Aid Estimates for 2003-04 by Type of Institution* (NCES 2005-163). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved [date] from <http://nces.ed.gov/pubsearch>.

Content Contact

Aurora D'Amico
(202) 502-7334
aurora.d'amico@ed.gov

Foreword

This E.D. TAB is the second 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 survey that examines how students and their families pay for postsecondary education. The first E.D. TAB (Berkner et al. 2005) included national estimates of financial aid for both undergraduate and graduate or first-professional students and provided details on the federal student aid programs in Title IV of the Higher Education Act. This E.D. TAB focuses only on undergraduates, including separate tables for those who attended public 4-year, private not-for-profit 4-year, public 2-year, or private for-profit postsecondary institutions during the 2003–04 academic year. It describes average tuition and fees, average total price of attendance, and the percentages of undergraduates receiving various types and combinations of financial aid and average amounts received, with a particular focus on grants and loans.

NPSAS surveys have been conducted every 3 or 4 years since 1987. The estimates for 2003–04 in this E.D. TAB are presented in tables comparable to those with estimates for 1995–96 and 1999–2000 that were previously published by NCES in the undergraduate financing reports for NPSAS:96 (Berkner 1998) and NPSAS:2000 (Berkner et al. 2002). The descriptive reports for all of the NPSAS studies and public access data files are available at <http://nces.ed.gov/DAS>.

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.* Provides detailed descriptions of 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 Gabel 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, Theresa Gilligan and Donna Anderson for the student interview data files, Kristin 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, Vicky Dingler, Joanna Wu, and John Vavricka created the Data Analysis System files and Patti Gildersleeve and Wes Nations prepared this E.D. TAB for publication.

At NCES, James Griffith, Tracy Hunt-White, Linda Zimbler, 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 E.D. TAB. Duc-Le To of the Institute of Education Sciences (IES) coordinated the final review.

The final E.D. TAB was also reviewed by Kenneth Redd of the National Association of Student Financial Aid Administrators.

Table of Contents

	Page
Foreword	iii
Acknowledgments	iv
List of Tables	vii
Introduction	1
Organization of the E.D. TAB	2
Student Characteristics.....	2
Price of Attendance and Financial Aid	3
Selected Findings	5
All Institutions.....	5
Public 4-Year Institutions.....	5
Private Not-For-Profit 4-Year Institutions	6
Public 2-Year Institutions.....	7
Private For-Profit Institutions	8
Tables	9
References	31
Appendix A—Supplemental Tables	33
Appendix B—Glossary	37
Appendix C—Technical Notes and Methodology	41
Overview	41
Data Sources for NPSAS:04	42
Sample Design.....	42
Perturbation	46
Imputation	46
Weighting.....	48
Quality of Estimates	49
Standard Errors.....	56
Cautions for Analysts.....	58

	Page
Data Analysis System.....	61
Statistical Procedures	62

List of Tables

Table		Page
1	Average tuition and fees, average total price of attendance, and percentage of undergraduates receiving any aid, any grants, or any student loans and average amounts received, by student characteristics: 2003–04	10
2	Percentage of undergraduates receiving grants from federal, state, institutional or other sources, and average grant amounts received, by student characteristics: 2003–04.....	11
3	Percentage distribution of undergraduates receiving various types of financial aid packages, by student characteristics: 2003–04.....	12
4	Average total amount of financial aid that undergraduates received in various types of financial aid packages, by student characteristics: 2003–04	13
5	Average tuition and fees, average total price of attendance, and percentage of undergraduates in public 4-year institutions receiving any aid, any grants, or any student loans and average amounts received, by student characteristics: 2003–04.....	14
6	Percentage of undergraduates in public 4-year institutions receiving grants from federal, state, institutional or other sources, and average grant amounts received, by student characteristics: 2003–04	15
7	Percentage distribution of undergraduates in public 4-year institutions receiving various types of financial aid packages, by student characteristics: 2003–04	16
8	Average total amount of financial aid that undergraduates in public 4-year institutions received in various types of financial aid packages, by student characteristics: 2003–04.....	17
9	Average tuition and fees, average total price of attendance, and percentage of undergraduates in private not-for-profit 4-year institutions receiving any aid, any grants, or any student loans and average amounts received, by student characteristics: 2003–04.....	18

Table		Page
10	Percentage of undergraduates in private not-for-profit 4-year institutions receiving grants from federal, state, institutional or other sources, and average grant amounts received, by student characteristics: 2003–04.....	19
11	Percentage distribution of undergraduates in private not-for-profit 4-year institutions receiving various types of financial aid packages, by student characteristics: 2003–04.....	20
12	Average total amount of financial aid that undergraduates in private not-for-profit 4-year institutions received in various types of financial aid packages, by student characteristics: 2003–04.....	21
13	Average tuition and fees, average total price of attendance, and percentage of undergraduates in public 2-year institutions receiving any aid, any grants, or any student loans and average amounts received, by student characteristics: 2003–04.....	22
14	Percentage of undergraduates in public 2-year institutions receiving grants from federal, state, institutional or other sources, and average grant amounts received, by student characteristics: 2003–04	23
15	Percentage distribution of undergraduates in public 2-year institutions receiving various types of financial aid packages, by student characteristics: 2003–04	24
16	Average total amount of financial aid that undergraduates in public 2-year institutions received in various types of financial aid packages, by student characteristics: 2003–04.....	25
17	Average tuition and fees, average total price of attendance, and percentage of undergraduates in private for-profit institutions receiving any aid, any grants, or any student loans and average amounts received, by student characteristics: 2003–04.....	26
18	Percentage of undergraduates in private for-profit institutions receiving grants from federal, state, institutional or other sources, and average grant amounts received, by student characteristics: 2003–04	27
19	Percentage distribution of undergraduates in private for-profit institutions receiving various types of financial aid packages, by student characteristics: 2003–04	28
20	Average total amount of financial aid that undergraduates in private for-profit institutions received in various types of financial aid packages, by student characteristics: 2003–04.....	29

Table	Page
APPENDIX A	
A-1 Percentage distribution of undergraduates attending various types of institutions, by student characteristics: 2003–04	34
A-2 Percentage distribution of undergraduates by student characteristics, within type of institution: 2003–04.....	35
APPENDIX C	
C-1 Counts of sampled, eligible, and participating institutions and enrollment list participation rates, by institutional characteristics	44
C-2 Counts of sampled, eligible, and responding students and response rates, by institutional characteristics	46
C-3 Summary of weight components.....	48
C-4 Summary of institution nonresponse bias analysis for all institutions, by type of institution.....	51
C-5 Summary of student nonresponse bias analysis for all students in public 2-year institutions.....	53
C-6 Item response rates for all students, by type of institution.....	55
C-7 Summary of item nonresponse bias analysis for all students and by institutional sector	57
C-8 Standard errors for table 1: Average tuition and fees, average total price of attendance, and percentage of undergraduates receiving any aid, any grants, or any student loans and average amounts received, by student characteristics: 2003–04.....	60

THIS PAGE INTENTIONALLY LEFT BLANK

Introduction

This E.D. TAB presents selected findings about the price of attendance and the types and amounts of financial aid received by postsecondary undergraduates during the 2003–04 academic year. It is based on the undergraduate data in the 2003–04 National Postsecondary Student Aid Study (NPSAS:04), a nationally representative survey of undergraduate, graduate, and first-professional students.

The information about undergraduate students in NPSAS:04 was collected from a sample of about 80,000 undergraduates who were enrolled at any time between July 1, 2003, and June 30, 2004, in about 1,300 postsecondary institutions that offered undergraduate programs of study. The sample was limited to institutions that were eligible to participate in the federal financial aid programs included in Title IV of the Higher Education Act and were located in the 50 states, the District of Columbia, and Puerto Rico. The NPSAS:04 sample of undergraduates represents about 19 million 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 were enrolled in the fall of 2003.

The tables in this E.D. TAB show the percentage of students who received financial aid of a particular type or combination, and the average amount that was received by those students who were awarded that type or combination of aid. 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 Lifetime Learning) and do not include all of the possible types of loans that students may take out to finance their educational expenses. In this report, all federal, state, and institutional student loans are included, in addition to alternative private student loans from sources such as Sallie Mae and The Education Resources Institute (TERI). Some examples of borrowing that are not included in the estimate of total loans or total aid are the use of credit cards, home equity loans, and loans from individuals.

All average amounts of financial aid described in this E.D. TAB and presented in the tables reflect the weighted means and are based only on the recipients of the specified types or combinations of aid. Nonrecipients of a particular type or combination of aid are excluded from the calculation of the average amount received so that none of the individuals in the sample for that aid type or combination have zero dollar amounts.

The estimates presented in this E.D. TAB 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 will suppress the printing of estimates when the number of sample cases in a table cell is too low to produce a reliable estimate; this is indicated in the tables of this E.D. TAB by the note “Reporting standards not met.” 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 were statistically significant at the .05 level.

Organization of the E.D. TAB

This introduction briefly describes the student characteristics, price of attendance and types of financial aid that appear in the tables that follow. The first set of tables (tables 1–4) presents national (including Puerto Rico) percentages and averages for undergraduates at all types of institutions. These tables of national totals are followed by comparable sets of tables for undergraduates in each of four major types of postsecondary institutions: public 4-year, private not-for-profit 4-year, public 2-year, and private for-profit. Students who attended more than one institution during the 2003–04 academic year are included in the national totals, but are excluded from the tables for each type of institution.

The percentage distributions of students and their characteristics among and within the types of institutions are shown in appendix A. The variables used to produce the tables are described in the glossary (appendix B). Additional information about public access to the data files with the DAS, the methodology of the survey, and the statistical procedures used in this E.D. TAB is presented in appendix C.

Student Characteristics

The tables in this E.D. TAB show totals for all undergraduates (full-time and part-time), as well as separate totals for those who were 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 2003–04 academic year (July 1, 2003 to June 30, 2004).

The student characteristics shown in the tables include dependency status and income within dependency status. For federal 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 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, but for independent students only the income of the student (and a spouse, if married) is considered. The income levels shown in the tables are the total income for 2002, because financial aid need analysis is based on income in the calendar year prior to the academic year (2003–04). The median family income in 2002 for parents of dependent undergraduates enrolled in 2003–04 was about \$60,000; about one-fourth of the dependent students came from families with annual incomes of less than \$32,000 and about one-fourth came from families with incomes of more than \$92,000. The median income of independent students (and a spouse, if married) was about \$25,000.

Price of Attendance and Financial Aid

The tables include the average amount of tuition and fees charged by the institutions and the average total price of attendance to the students. The total price of attendance includes the tuition and fees as well as all other expenses related to enrollment: books and supplies, room and board (or housing and meal allowances for off-campus students), transportation, and other personal living expenses. These are the average estimated expenses for various categories of students (e.g., on-campus, off-campus, dependent, independent) reported by the institutions.

There are many different types of financial aid available to students, but the focus of this E.D. TAB is on grants and student loans, which are the two major types of aid to undergraduates. Grant aid includes grants, scholarships, or tuition waivers from federal, state, institutional, or other sources (such as private foundations, employers, and parents' employers). The major federal grant programs are Federal Pell Grants and Federal Supplemental Educational Opportunity Grants.

The federal student loan programs (Stafford and Perkins loans) are the major source of student loans to undergraduates. Federal Parent Loans for Undergraduate Students (PLUS) were excluded from the student loan totals because the focus of this E.D. TAB is on the amount that students themselves borrow for their education. Parent PLUS loans, work-study aid, veteran's benefits and job training aid are not shown separately in this E.D. TAB, but they are included in the total aid averages.

Financial aid is typically awarded in "packages" that may include more than one type of aid (e.g., loans and grants) and aid from more than one source (e.g., federal grants and state grants). The tables show three categories of financial aid packages, based on whether the

financial aid package included loans to students. The category “grants or any other aid except loans” includes the students who received any type or combination of grants, work-study, veteran’s benefits, or job training funds, but did not take out a student loan in 2003–04. The category “grants or any other aid with loans” includes the students who received grants or any other type of aid and also took out student loans in 2003–04.

Selected Findings¹

All Institutions

All undergraduates enrolled in postsecondary institutions in 2003–04:

- Sixty-three percent of all undergraduates enrolled in 2003–04 received some type of financial aid (table 1). Undergraduates were more likely to receive grants than student loans in 2003–04, but the average grant amount was less than the average student loan amount. About one-half (51 percent) of undergraduates received grants and about one-third (35 percent) took out student loans. The average amount of grants received was \$4,000, and the average amount borrowed by undergraduates in 2003–04 was \$5,800.
- Undergraduates enrolled in 2003–04 were more likely to receive federal grants than grants from any other source (table 2). Twenty-eight percent of all undergraduates received federal grants (such as Federal Pell Grants or Federal Supplemental Educational Opportunity Grants), 18 percent received institutional grants, 15 percent received state grants, and 15 percent received grants from other sources (e.g., employers, parents' employers, or private foundations or organizations).

Undergraduates enrolled full time for 9 or more months in 2003–04:

- About three-fourths (76 percent) of all full-time/full-year undergraduates received some financial aid in 2003–04 and the average total aid received was \$9,900 (table 1). One-half (50 percent) of the full-time/full-year undergraduates enrolled in 2003–04 took out student loans to help finance their education, borrowing an average of \$6,200 that year.
- Forty percent of all full-time/full-year undergraduates received both grants (or other aid) and loans in 2003–04 (table 3). The average amount of total aid received by full-time/full-year students with both grants (or other aid) and loans in their aid packages was \$13,600 (table 4).

Public 4-Year Institutions

All undergraduates enrolled in public 4-year institutions in 2003–04:

- Sixty-nine percent of all undergraduates enrolled in public 4-year institutions in 2003–04 received some type of financial aid (table 5). About one-half (52 percent) of all undergraduates attending public 4-year institutions in 2003–04 received grants and 45 percent took out student loans. Those who were awarded grants received an average of

¹ The numbers in the selected findings refer to the totals that include Puerto Rico.

\$4,000 in grant funds, while those who took out student loans borrowed an average of \$5,600.

- Twenty-seven percent of all undergraduates enrolled in public 4-year institutions in 2003–04 received a federal grant, 21 percent received institutional grants, 19 percent received state grants, and 14 percent received grants from other sources such as employers or private organizations (table 6). The average federal grant amount was \$2,800, the average institutional grant was \$2,900, the average state grant was \$2,200, and the average grant funded through other sources was \$2,000.

Undergraduates enrolled full time for 9 or more months in public 4-year institutions in 2003–04:

- Nine out of ten (91 percent) full-time/full-year dependent undergraduates from families with incomes under \$32,000 attending public 4-year institutions in 2003–04 received some type of financial aid (table 5). The average amount of total aid received by these low-income dependent undergraduates was \$9,900 (table 8). About three-fourths (73 percent) received a federal grant at an average of \$3,700 (table 6).
- About one-half (52 percent) of full-time/full-year dependent undergraduates with family incomes under \$32,000 received both grants (or other aid) and student loans at public 4-year institutions in 2003–04 (table 7). Thirty-seven percent received grants (or other aid) and did not take out any student loans. Those with both grants (or other aid) and loans in their financial aid package received an average total aid of \$12,100 (table 8).

Private Not-For-Profit 4-Year Institutions

All undergraduates enrolled in private not-for-profit 4-year institutions in 2003–04:

- Eighty-three percent of all undergraduates attending private not-for-profit 4-year institutions received some type of financial aid in 2003–04 (table 9). About three-fourths (73 percent) of the undergraduates enrolled in private not-for-profit 4-year institutions received grants and 56 percent took out student loans in 2003–04. The average grant amount was \$7,700 and the average student loan was \$6,900.
- One-half (50 percent) of all undergraduates enrolled in private not-for-profit 4-year institutions in 2003–04 received institutional grants, 28 percent received federal grants, 22 percent received state-funded grants, and 23 percent received grants from other sources such as private organizations or employers (table 10). The average institutional grant amount awarded to undergraduates at private not-for-profit 4-year institutions in 2003–04 was \$7,100, the average federal grant was \$3,000, the average state grant was \$2,800, and the average grant from other sources was \$2,900.

Undergraduates enrolled full time for 9 or more months in private not-for-profit 4-year institutions in 2003–04:

- About four out of five (81 percent) full-time/full-year undergraduates received grants to attend private not-for-profit 4-year institutions in 2003–04, and about two-thirds (66 percent) took out student loans. The average grant amount was \$9,400 and the average student loan amount in 2003–04 was \$7,200 (table 9).
- Among full-time/full-year undergraduates enrolled in private not-for-profit 4-year institutions in 2003–04, 62 percent received both grants (or other aid) and student loans in their financial aid packages (table 11). The average total amount in the financial aid package of full-time/full-year students with both grants (or other aid) and student loans was \$19,300 (table 12).

Public 2-Year Institutions

All undergraduates enrolled in public 2-year institutions in 2003–04:

- Forty-seven percent of all undergraduates enrolled in public 2-year institutions in 2003–04 received some type of financial aid (table 13). Forty percent received grants and 12 percent took out student loans. Although a smaller percentage of undergraduates attending public 2-year institutions received loans than grants, the average student loan amount (\$3,600) was larger than the average grant amount (\$2,200).
- Among undergraduates attending public 2-year institutions in 2003–04, 23 percent received a federal grant, 11 percent received a state-funded grant, 8 percent received institutional grants, and 12 percent received grants from other sources such as employers or private organizations (table 14). The average federal grant was \$2,300, the average state grant was \$1,000, the average institutional grant was \$1,200, and the average grant awarded from other sources was \$1,100.

Undergraduates enrolled full time for 9 or more months in public 2-year institutions in 2003–04:

- About one-half (53 percent) of the full-time/full-year undergraduates attending public 2-year institutions received grants and about one-fourth (23 percent) took out student loans in 2003–04 (table 13). The average amount of grants received by full-time/full-year undergraduates was \$3,400, and the average student loan amount was \$4,100.
- Thirty-nine percent of full-time/full-year undergraduates enrolled in public 2-year institutions received grants (or other aid) and did not take out student loans in 2003–04 (table 15). Seventeen percent received both grants (or other aid) and loans, and 6 percent received only loans and no other type of aid. Those with aid packages that consisted of only grants (or other aid) and no student loans received an average \$3,700 in total financial aid (table 16). Those with grants (or other aid) and loans received an average of \$8,100 in total aid.

Private For-Profit Institutions

All undergraduates enrolled in private for-profit institutions in 2003–04:

- Among students attending private for-profit institutions, about 9 out of 10 (89 percent) received some type of financial aid in 2003–04 (table 17). About two-thirds (66 percent) of the undergraduates enrolled in private for-profit institutions received grants and about three-fourths (73 percent) took out student loans in 2003–04. The average grant amount was \$3,300 and the average student loan amount was \$6,800.
- About one-half (53 percent) of all undergraduates at private for-profit institutions received a federal grant in 2003–04 (table 18). Eight percent received state grants, 7 percent received institutional grants, and 13 percent received grants funded through other sources.

Undergraduates enrolled full time for 9 or more months in private for-profit institutions in 2003–04:

- Sixty-two percent of full-time/full-year undergraduates enrolled at private for-profit institutions in 2003–04 received financial aid packages including both grants (or other aid) and student loans (table 19). Thirteen percent received only grants (or other aid) and no student loans, and 18 percent received only student loans.
- Among full-time/full-year undergraduates enrolled at private for-profit institutions in 2003–04, those who had both grants (or other aid) and student loans in their financial aid packages received an average of \$13,000 in total aid (table 20). Those with only grants (or other aid) but no loans received an average of \$4,300 in total aid, and those who only took out student loans received an average loan of \$9,500.

Tables

Table 1. Average tuition and fees, average total price of attendance, and percentage of undergraduates receiving any aid, any grants, or any student loans and average amounts received, by student characteristics: 2003–04

Student characteristics	Average tuition and fees	Average total price of attendance	Total aid		Total grants		Student loans	
			Percent	Average amount	Percent	Average amount	Percent	Average amount
All undergraduates								
U.S. total (excluding Puerto Rico)	\$4,500	\$11,300	63.0	\$7,400	50.4	\$4,000	35.1	\$5,800
Total (50 states, DC, and Puerto Rico)	4,526	11,300	63.2	7,400	50.7	4,000	35.0	5,800
Attendance pattern								
Full-time/full-year	7,703	17,200	76.2	9,900	62.2	5,600	49.5	6,200
Part-time or part-year	2,358	7,200	54.3	4,900	42.7	2,400	24.9	5,300
Dependency status								
Dependent	6,200	13,700	63.8	8,600	50.4	5,200	38.1	5,300
Independent	2,900	8,800	62.7	6,100	51.0	2,900	32.0	6,400
Dependent student income								
Less than \$32,000	5,200	12,300	78.5	8,500	74.6	5,500	39.2	5,000
\$32,000 to 92,000	5,900	13,300	62.5	8,400	46.6	4,800	40.7	5,300
More than \$92,000	8,000	16,000	51.9	9,100	34.0	5,400	31.6	5,600
Independent student income								
Less than \$25,000	3,300	9,600	71.6	6,800	63.3	3,300	38.9	6,200
\$25,000 or more	2,500	8,000	54.0	5,200	39.1	2,200	25.2	6,700
Full-time/full-year undergraduates								
Total	7,700	17,200	76.2	9,900	62.2	5,600	49.5	6,200
Dependency status								
Dependent	8,400	17,600	73.5	10,100	59.4	6,000	46.7	5,600
Independent	5,900	15,900	82.9	9,600	69.4	4,500	56.6	7,500
Dependent student income								
Less than \$32,000	7,100	16,100	88.3	10,600	85.1	6,900	49.6	5,400
\$32,000 to 92,000	7,900	17,100	72.6	9,800	56.7	5,600	49.4	5,600
More than \$92,000	10,400	20,100	62.6	9,900	42.3	5,800	39.2	5,800
Independent student income								
Less than \$25,000	5,900	15,700	86.8	10,000	78.9	4,900	58.9	7,200
\$25,000 or more	6,100	16,300	75.9	8,700	52.3	3,400	52.3	8,100

NOTE: The total price of attendance includes tuition and fees, room and board, and other expenses as estimated by the institutions. "Total aid" includes all types of financial aid from any source except parents, friends, or relatives. Does not include federal tax credits for education (Hope and Lifetime Learning). "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 other forms of financing such as credit cards, home equity loans, loans from individuals, and federal Parent Loans for Undergraduate Students (PLUS). Federal PLUS loans and other types of aid such as veterans' benefits and job training funds are included in total aid. 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. Income is total income in 2002. 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. Percentage of undergraduates receiving grants from federal, state, institutional or other sources, and average grant amounts received, by student characteristics: 2003–04

Student characteristics	Federal grants		State grants		Institutional grants		Other grants	
	Percent	Average amount	Percent	Average amount	Percent	Average amount	Percent	Average amount
All undergraduates								
U.S. total (excluding Puerto Rico)	27.1	\$2,600	14.6	\$2,000	17.6	\$4,200	14.6	\$2,000
Total (50 states, DC, and Puerto Rico)	27.6	2,600	14.7	2,000	17.6	4,200	14.5	2,000
Attendance pattern								
Full-time/full-year	33.3	3,200	22.6	2,400	29.6	5,000	15.3	2,300
Part-time or part-year	23.6	2,000	9.2	1,200	9.1	2,400	13.9	1,800
Dependency status								
Dependent	22.8	2,700	17.9	2,200	25.5	5,100	13.4	2,100
Independent	32.3	2,500	11.5	1,500	9.7	2,000	15.6	1,900
Dependent student income								
Less than \$32,000	62.4	3,200	28.7	2,500	28.0	4,200	11.0	2,100
\$32,000 to 92,000	14.2	1,800	17.8	2,100	25.7	5,100	14.7	2,000
More than \$92,000	0.9	1,500	7.4	2,200	22.5	6,000	13.0	2,300
Independent student income								
Less than \$25,000	50.7	2,700	15.9	1,600	13.0	2,000	10.6	1,900
\$25,000 or more	14.4	1,900	7.1	1,300	6.6	1,900	20.4	1,900
Full-time/full-year undergraduates								
Total	33.3	3,200	22.6	2,400	29.6	5,000	15.3	2,300
Dependency status								
Dependent	25.0	3,100	22.9	2,500	34.2	5,500	16.2	2,200
Independent	54.3	3,400	21.7	2,100	18.1	2,700	12.8	2,700
Dependent student income								
Less than \$32,000	72.3	3,700	38.5	2,800	37.4	4,800	13.6	2,100
\$32,000 to 92,000	16.1	2,000	23.1	2,300	35.1	5,600	17.8	2,100
More than \$92,000	1.0	1,800	9.2	2,300	29.7	6,200	15.6	2,500
Independent student income								
Less than \$25,000	69.4	3,600	25.6	2,100	20.6	2,800	9.8	2,500
\$25,000 or more	27.1	2,600	14.7	1,800	13.4	2,400	18.2	2,800

NOTE: Federal grants are Federal Pell Grants, Federal Supplemental Educational Opportunity Grants (FSEOG), and a small percentage of grants and scholarships from other federal programs. State and institutional grants include any grants, scholarships, or tuition waivers that are funded by a state or by the institution attended, respectively. Other grants include grants and scholarships from private sources outside of the institution, including tuition aid from employers. Students may receive grants 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. Income is total income in 2002. 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 distribution of undergraduates receiving various types of financial aid packages, by student characteristics: 2003–04

Student characteristics	Percentage			
	No financial aid	Grants or any other aid except loans	Grants or any other aid with loans	Student loans only
All undergraduates				
U.S. total (excluding Puerto Rico)	37.0	27.9	26.6	8.5
Total (50 states, DC, and Puerto Rico)	36.8	28.2	26.6	8.5
Attendance pattern				
Full-time/full-year	23.9	26.6	40.3	9.2
Part-time or part-year	45.8	29.4	17.0	7.9
Dependency status				
Dependent	36.2	25.7	29.2	8.9
Independent	37.3	30.7	24.0	8.0
Dependent student income				
Less than \$32,000	21.5	39.3	36.9	2.3
\$32,000 to 92,000	37.5	21.8	29.8	10.9
More than \$92,000	48.1	20.3	20.4	11.3
Independent student income				
Less than \$25,000	28.4	32.7	33.4	5.5
\$25,000 or more	46.0	28.8	14.7	10.5
Full-time/full-year undergraduates				
Total	23.9	26.6	40.3	9.2
Dependency status				
Dependent	26.5	26.8	37.7	9.0
Independent	17.1	26.3	46.8	9.8
Dependent student income				
Less than \$32,000	11.7	38.7	47.7	1.9
\$32,000 to 92,000	27.5	23.2	39.1	10.4
More than \$92,000	37.4	23.4	26.7	12.6
Independent student income				
Less than \$25,000	13.2	27.9	53.5	5.4
\$25,000 or more	24.1	23.6	34.6	17.7

NOTE: "Grants or any other aid" includes any combination of grants, scholarships or tuition waivers as well as work-study, veterans' benefits and job training. "Student loans" may be from any source, but exclude other forms of financing such as credit cards, home equity loans, loans from individuals, and federal Parent Loans for Undergraduate Students (PLUS). Federal PLUS loans are included in total 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. Income is total income in 2002. Prior year (2002) income is used in federal need analysis. Estimates include students at postsecondary institutions in Puerto Rico. Detail may not sum to totals because of rounding.

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

Table 4. Average total amount of financial aid that undergraduates received in various types of financial aid packages, by student characteristics: 2003–04

Student characteristics	Average total amount of financial aid			Student loans only
	Total aid	Grants or any other aid except loans	Grants or any other aid with loans	
All undergraduates				
U.S. total (excluding Puerto Rico)	\$7,400	\$3,500	\$11,900	\$6,000
Total (50 states, DC, and Puerto Rico)	7,400	3,500	11,900	5,900
Attendance pattern				
Full-time/full-year	9,900	5,400	13,600	6,600
Part-time or part-year	4,900	2,300	8,900	5,400
Dependency status				
Dependent	8,600	4,600	13,200	5,100
Independent	6,100	2,600	10,300	6,900
Dependent student income				
Less than \$32,000	8,500	4,700	12,800	4,700
\$32,000 to 92,000	8,400	4,200	12,800	4,900
More than \$92,000	9,100	5,200	14,900	5,600
Independent student income				
Less than \$25,000	6,800	3,000	10,400	6,900
\$25,000 or more	5,200	2,200	9,900	6,900
Full-time/full-year undergraduates				
Total	9,900	5,400	13,600	6,600
Dependency status				
Dependent	10,100	5,700	14,200	5,700
Independent	9,600	4,700	12,500	8,600
Dependent student income				
Less than \$32,000	10,600	6,200	14,400	5,600
\$32,000 to 92,000	9,800	5,200	13,700	5,600
More than \$92,000	9,900	6,000	15,200	5,900
Independent student income				
Less than \$25,000	10,000	5,100	12,700	8,800
\$25,000 or more	8,700	3,900	12,000	8,500

NOTE: "Total aid" includes all types of financial aid from any source except parents, friends, or relatives. Does not include federal tax credits for education (Hope and Lifetime Learning). "Grants or any other aid" includes any combination of grants, scholarships or tuition waivers as well as work-study, veterans' benefits and job training. "Student loans" may be from any source, but exclude other forms of financing such as credit cards, home equity loans, and loans from individuals, and federal Parent Loans for Undergraduate Students (PLUS). Federal PLUS loans are included in total 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. Income is total income in 2002. 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. Average tuition and fees, average total price of attendance, and percentage of undergraduates in public 4-year institutions receiving any aid, any grants, or any student loans and average amounts received, by student characteristics: 2003–04

Student characteristics	Average tuition and fees	Average total price of attendance	Total aid		Total grants		Student loans	
			Percent	Average amount	Percent	Average amount	Percent	Average amount
All undergraduates								
U.S. total (excluding Puerto Rico)	\$4,300	\$12,300	68.5	\$7,600	51.5	\$4,000	44.8	\$5,600
Total (50 states, DC, and Puerto Rico)	4,200	12,300	68.6	7,600	51.7	4,000	44.5	5,600
Attendance pattern								
Full-time/full-year	5,400	15,200	76.3	8,700	59.1	4,600	51.4	5,800
Part-time or part-year	2,500	8,200	57.5	5,500	41.0	2,600	34.5	5,200
Dependency status								
Dependent	4,900	13,500	69.2	7,600	50.8	4,400	44.7	5,000
Independent	2,900	10,100	67.5	7,600	53.5	3,300	44.1	6,800
Dependent student income								
Less than \$32,000	4,500	12,900	85.1	9,000	81.2	5,800	48.7	4,800
\$32,000 to 92,000	4,800	13,200	69.7	7,200	48.6	3,600	48.1	5,000
More than \$92,000	5,500	14,300	55.7	7,100	31.4	3,800	35.0	5,100
Independent student income								
Less than \$25,000	3,200	10,900	75.5	8,600	65.2	3,800	53.5	6,600
\$25,000 or more	2,500	9,100	58.1	6,000	39.4	2,300	32.9	7,100
Full-time/full-year undergraduates								
Total	5,400	15,200	76.3	8,700	59.1	4,600	51.4	5,800
Dependency status								
Dependent	5,700	15,200	74.5	8,300	56.3	4,700	48.4	5,200
Independent	4,500	15,100	83.7	10,500	70.5	4,600	63.5	7,600
Dependent student income								
Less than \$32,000	5,200	14,500	90.5	9,900	87.3	6,300	53.5	5,000
\$32,000 to 92,000	5,600	15,000	74.6	7,800	54.4	3,800	51.3	5,300
More than \$92,000	6,300	16,100	62.1	7,400	36.3	3,900	39.1	5,200
Independent student income								
Less than \$25,000	4,600	15,000	88.2	11,000	80.0	5,000	68.8	7,400
\$25,000 or more	4,400	15,200	73.4	8,900	48.6	3,400	51.5	8,300

NOTE: The total price of attendance includes tuition and fees, room and board, and other expenses as estimated by the institutions. "Total aid" includes all types of financial aid from any source except parents, friends, or relatives. Does not include federal tax credits for education (Hope and Lifetime Learning). "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 other forms of financing such as credit cards, home equity loans, loans from individuals, and federal Parent Loans for Undergraduate Students (PLUS). Federal PLUS loans and other types of aid such as veterans' benefits and job training funds are included in total aid. 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. Income is total income in 2002. 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 6. Percentage of undergraduates in public 4-year institutions receiving grants from federal, state, institutional or other sources, and average grant amounts received, by student characteristics: 2003–04

Student characteristics	Federal grants		State grants		Institutional grants		Other grants	
	Percent	Average amount	Percent	Average amount	Percent	Average amount	Percent	Average amount
All undergraduates								
U.S. total (excluding Puerto Rico)	26.2	\$2,800	18.5	\$2,300	20.9	\$2,900	14.5	\$2,000
Total (50 states, DC, and Puerto Rico)	26.6	2,800	18.6	2,200	20.8	2,900	14.5	2,000
Attendance pattern								
Full-time/full-year	30.2	3,200	24.6	2,400	27.5	3,100	15.2	2,100
Part-time or part-year	21.3	2,000	10.0	1,600	11.2	2,100	13.4	1,900
Dependency status								
Dependent	21.8	2,800	21.4	2,400	24.3	3,200	14.5	2,100
Independent	35.6	2,800	13.4	1,800	14.2	1,900	14.4	1,800
Dependent student income								
Less than \$32,000	67.1	3,400	40.0	2,700	33.5	3,100	13.4	2,300
\$32,000 to 92,000	14.4	1,800	20.4	2,100	24.5	3,100	15.5	2,000
More than \$92,000	1.0	1,900	8.7	2,500	16.6	3,900	13.5	2,300
Independent student income								
Less than \$25,000	53.2	2,900	19.0	1,900	18.2	2,000	10.1	2,000
\$25,000 or more	14.6	2,000	6.7	1,600	9.4	1,700	19.5	1,800
Full-time/full-year undergraduates								
Total	30.2	3,200	24.6	2,400	27.5	3,100	15.2	2,100
Dependency status								
Dependent	23.6	3,100	24.8	2,500	28.5	3,300	16.3	2,100
Independent	56.5	3,500	24.0	2,200	23.1	2,300	10.7	2,200
Dependent student income								
Less than \$32,000	73.3	3,700	46.6	2,900	38.0	3,200	14.9	2,200
\$32,000 to 92,000	15.5	1,900	23.8	2,200	29.1	3,200	17.3	2,000
More than \$92,000	1.2	2,000	9.9	2,600	20.3	3,800	15.3	2,300
Independent student income								
Less than \$25,000	70.4	3,600	29.0	2,200	25.5	2,300	9.1	2,100
\$25,000 or more	24.9	2,800	12.6	1,900	17.6	2,200	14.3	2,200

NOTE: Federal grants are Federal Pell Grants, Federal Supplemental Educational Opportunity Grants (FSEOG), and a small percentage of grants and scholarships from other federal programs. State and institutional grants include any grants, scholarships, or tuition waivers that are funded by a state or by the institution attended, respectively. Other grants include grants and scholarships from private sources outside of the institution, including tuition aid from employers. Students may receive grants 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. Income is total income in 2002. 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 7. Percentage distribution of undergraduates in public 4-year institutions receiving various types of financial aid packages, by student characteristics: 2003–04

Student characteristics	Percentage			
	No financial aid	Grants or any other aid except loans	Grants or any other aid with loans	Student loans only
All undergraduates				
U.S. total (excluding Puerto Rico)	31.5	23.8	32.6	12.2
Total (50 states, DC, and Puerto Rico)	31.4	24.1	32.4	12.1
Attendance pattern				
Full-time/full-year	23.7	24.9	40.1	11.4
Part-time or part-year	42.5	23.1	21.3	13.1
Dependency status				
Dependent	30.8	24.5	32.2	12.5
Independent	32.5	23.5	32.8	11.3
Dependent student income				
Less than \$32,000	14.9	36.4	46.3	2.5
\$32,000 to 92,000	30.3	21.6	33.4	14.7
More than \$92,000	44.3	20.7	18.9	16.1
Independent student income				
Less than \$25,000	24.5	22.0	45.5	8.0
\$25,000 or more	41.9	25.2	17.7	15.2
Full-time/full-year undergraduates				
Total	23.7	24.9	40.1	11.4
Dependency status				
Dependent	25.5	26.1	36.6	11.8
Independent	16.3	20.1	53.9	9.7
Dependent student income				
Less than \$32,000	9.5	37.0	51.6	2.0
\$32,000 to 92,000	25.5	23.2	38.1	13.2
More than \$92,000	37.9	23.0	22.4	16.7
Independent student income				
Less than \$25,000	11.8	19.4	63.1	5.7
\$25,000 or more	26.6	21.9	32.9	18.6

NOTE: "Grants or any other aid" includes any combination of grants, scholarships or tuition waivers as well as work-study, veterans' benefits and job training. "Student loans" may be from any source, but exclude other forms of financing such as credit cards, home equity loans, loans from individuals, and federal Parent Loans for Undergraduate Students (PLUS). Federal PLUS loans are included in total 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. Income is total income in 2002. Prior year (2002) income is used in federal need analysis. Estimates include students at postsecondary institutions in Puerto Rico. Detail may not sum to totals because of rounding.

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

Table 8. Average total amount of financial aid that undergraduates in public 4-year institutions received in various types of financial aid packages, by student characteristics: 2003–04

Student characteristics	Average total amount of financial aid			
	Total aid	Grants or any other aid except loans	Grants or any other aid with loans	Student loans only
All undergraduates				
U.S. total (excluding Puerto Rico)	\$7,600	\$4,400	\$10,700	\$5,900
Total (50 states, DC, and Puerto Rico)	7,600	4,400	10,600	5,900
Attendance pattern				
Full-time/full-year	8,700	5,500	11,500	6,200
Part-time or part-year	5,500	2,800	8,400	5,500
Dependency status				
Dependent	7,600	5,100	10,600	5,200
Independent	7,600	3,200	10,800	7,200
Dependent student income				
Less than \$32,000	9,000	6,300	11,300	6,000
\$32,000 to 92,000	7,200	4,400	9,900	5,100
More than \$92,000	7,100	4,600	11,300	5,300
Independent student income				
Less than \$25,000	8,600	3,900	11,100	6,900
\$25,000 or more	6,000	2,500	9,900	7,300
Full-time/full-year undergraduates				
Total	8,700	5,500	11,500	6,200
Dependency status				
Dependent	8,300	5,500	11,100	5,600
Independent	10,500	5,300	12,700	8,900
Dependent student income				
Less than \$32,000	9,900	7,000	12,100	6,700
\$32,000 to 92,000	7,800	4,800	10,400	5,600
More than \$92,000	7,400	5,000	11,400	5,500
Independent student income				
Less than \$25,000	11,000	5,900	12,800	8,500
\$25,000 or more	8,900	4,300	11,900	9,100

NOTE: "Total aid" includes all types of financial aid from any source except parents, friends, or relatives. Does not include federal tax credits for education (Hope and Lifetime Learning). "Grants or any other aid" includes any combination of grants, scholarships or tuition waivers as well as work-study, veterans' benefits and job training. "Student loans" may be from any source, but exclude other forms of financing such as credit cards, home equity loans, and loans from individuals, and federal Parent Loans for Undergraduate Students (PLUS). Federal PLUS loans are included in total 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. Income is total income in 2002. 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 9. Average tuition and fees, average total price of attendance, and percentage of undergraduates in private not-for-profit 4-year institutions receiving any aid, any grants, or any student loans and average amounts received, by student characteristics: 2003–04

Student characteristics	Average tuition and fees	Average total price of attendance	Total aid		Total grants		Student loans	
			Percent	Average amount	Percent	Average amount	Percent	Average amount
All undergraduates								
U.S. total (excluding Puerto Rico)	\$14,200	\$22,600	83.2	\$13,500	73.1	\$7,900	57.4	\$7,000
Total (50 states, DC, and Puerto Rico)	13,800	22,200	83.3	13,100	73.5	7,700	56.3	6,900
Attendance pattern								
Full-time/full-year	18,400	28,300	88.7	16,300	81.5	9,400	65.8	7,200
Part-time or part-year	7,500	13,600	75.9	8,100	62.4	4,500	43.0	6,300
Dependency status								
Dependent	17,800	27,000	85.1	15,600	77.7	9,200	60.3	6,700
Independent	7,300	14,200	80.5	8,800	66.5	4,700	49.7	7,400
Dependent student income								
Less than \$32,000	15,000	23,800	92.8	15,900	90.7	10,200	63.5	6,400
\$32,000 to 92,000	17,300	26,400	87.5	16,400	80.2	9,500	66.4	6,900
More than \$92,000	20,300	30,000	76.4	14,200	65.6	7,900	49.2	6,800
Independent student income								
Less than \$25,000	8,600	16,000	83.1	10,500	74.4	5,600	57.7	7,400
\$25,000 or more	6,200	12,700	78.2	7,300	59.8	3,800	43.0	7,300
Full-time/full-year undergraduates								
Total	18,400	28,300	88.7	16,300	81.5	9,400	65.8	7,200
Dependency status								
Dependent	19,700	29,600	88.1	17,000	81.4	10,100	64.7	6,900
Independent	12,900	23,000	91.1	13,300	81.7	6,700	70.5	8,600
Dependent student income								
Less than \$32,000	16,800	26,400	95.9	17,900	94.5	11,600	69.6	6,500
\$32,000 to 92,000	19,200	29,000	90.2	17,800	84.1	10,300	70.8	7,100
More than \$92,000	22,200	32,400	80.3	14,900	69.5	8,500	53.0	6,800
Independent student income								
Less than \$25,000	12,800	22,700	92.0	14,200	87.1	7,500	70.4	8,500
\$25,000 or more	13,000	23,400	89.6	11,700	72.1	5,100	70.7	8,800

NOTE: The total price of attendance includes tuition and fees, room and board, and other expenses as estimated by the institutions. "Total aid" includes all types of financial aid from any source except parents, friends, or relatives. Does not include federal tax credits for education (Hope and Lifetime Learning). "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 other forms of financing such as credit cards, home equity loans, loans from individuals, and federal Parent Loans for Undergraduate Students (PLUS). Federal PLUS loans and other types of aid such as veterans' benefits and job training funds are included in total aid. 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. Income is total income in 2002. 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 10. Percentage of undergraduates in private not-for-profit 4-year institutions receiving grants from federal, state, institutional or other sources, and average grant amounts received, by student characteristics: 2003–04

Student characteristics	Federal grants		State grants		Institutional grants		Other grants	
	Percent	Average amount	Percent	Average amount	Percent	Average amount	Percent	Average amount
All undergraduates								
U.S. total (excluding Puerto Rico)	26.1	\$3,000	22.5	\$2,800	51.0	\$7,200	23.9	\$2,900
Total (50 states, DC, and Puerto Rico)	28.2	3,000	22.1	2,800	49.6	7,100	23.3	2,900
Attendance pattern								
Full-time/full-year	31.6	3,400	28.8	3,000	64.2	7,900	22.1	2,800
Part-time or part-year	23.5	2,200	12.9	2,000	29.3	4,500	24.9	3,000
Dependency status								
Dependent	24.8	3,200	24.4	3,000	64.7	7,900	21.5	2,700
Independent	33.8	2,800	18.4	2,300	24.7	3,600	26.2	3,200
Dependent student income								
Less than \$32,000	72.7	3,800	37.3	3,500	61.9	7,600	17.9	2,700
\$32,000 to 92,000	19.1	2,100	29.4	2,900	70.0	8,100	24.2	2,700
More than \$92,000	1.2	1,400	8.6	2,200	58.7	7,600	19.9	2,700
Independent student income								
Less than \$25,000	55.6	3,100	23.8	2,600	33.6	3,800	16.0	3,300
\$25,000 or more	15.6	2,000	13.9	2,000	17.3	3,400	34.6	3,100
Full-time/full-year undergraduates								
Total	31.6	3,400	28.8	3,000	64.2	7,900	22.1	2,800
Dependency status								
Dependent	25.6	3,400	27.4	3,100	69.8	8,400	22.9	2,700
Independent	57.0	3,600	34.7	2,700	40.4	4,400	18.5	3,800
Dependent student income								
Less than \$32,000	78.4	4,100	42.8	3,700	67.6	8,300	19.6	2,700
\$32,000 to 92,000	19.6	2,100	33.3	2,900	75.4	8,700	25.5	2,600
More than \$92,000	1.2	‡	9.4	2,300	63.1	8,000	21.4	2,800
Independent student income								
Less than \$25,000	72.8	3,700	35.9	2,900	45.9	4,700	14.5	3,900
\$25,000 or more	29.0	2,800	32.6	2,400	30.6	3,700	25.4	3,700

‡ Reporting standards not met.

NOTE: Federal grants are Federal Pell Grants, Federal Supplemental Educational Opportunity Grants (FSEOG), and a small percentage of grants and scholarships from other federal programs. State and institutional grants include any grants, scholarships, or tuition waivers that are funded by a state or by the institution attended, respectively. Other grants include grants and scholarships from private sources outside of the institution, including tuition aid from employers. Students may receive grants 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. Income is total income in 2002. 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 11. Percentage distribution of undergraduates in private not-for-profit 4-year institutions receiving various types of financial aid packages, by student characteristics: 2003–04

Student characteristics	Percentage			
	No financial aid	Grants or any other aid except loans	Grants or any other aid with loans	Student loans only
All undergraduates				
U.S. total (excluding Puerto Rico)	16.9	25.8	51.1	6.3
Total (50 states, DC, and Puerto Rico)	16.7	27.1	50.1	6.2
Attendance pattern				
Full-time/full-year	11.3	22.8	61.8	4.1
Part-time or part-year	24.2	32.9	33.8	9.2
Dependency status				
Dependent	15.0	24.8	56.5	3.8
Independent	19.6	30.8	39.5	10.2
Dependent student income				
Less than \$32,000	7.2	29.3	62.7	0.9
\$32,000 to 92,000	12.5	21.1	62.5	3.9
More than \$92,000	23.6	27.2	43.7	5.5
Independent student income				
Less than \$25,000	16.9	25.4	51.1	6.7
\$25,000 or more	21.8	35.2	29.8	13.2
Full-time/full-year undergraduates				
Total	11.3	22.8	61.8	4.1
Dependency status				
Dependent	11.9	23.4	61.6	3.2
Independent	8.9	20.6	62.8	7.7
Dependent student income				
Less than \$32,000	4.1	26.3	69.2	0.4
\$32,000 to 92,000	9.8	19.4	67.9	3.0
More than \$92,000	19.7	27.3	47.8	5.3
Independent student income				
Less than \$25,000	8.0	21.5	66.3	4.2
\$25,000 or more	10.4	19.0	56.6	14.0

NOTE: "Grants or any other aid" includes any combination of grants, scholarships or tuition waivers as well as work-study, veterans' benefits and job training. "Student loans" may be from any source, but exclude other forms of financing such as credit cards, home equity loans, loans from individuals, and federal Parent Loans for Undergraduate Students (PLUS). Federal PLUS loans are included in total 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. Income is total income in 2002. Prior year (2002) income is used in federal need analysis. Estimates include students at postsecondary institutions in Puerto Rico. Detail may not sum to totals because of rounding.

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

Table 12. Average total amount of financial aid that undergraduates in private not-for-profit 4-year institutions received in various types of financial aid packages, by student characteristics: 2003–04

Student characteristics	Average total amount of financial aid			Student loans only
	Total aid	Grants or any other aid except loans	Grants or any other aid with loans	
All undergraduates				
U.S. total (excluding Puerto Rico)	\$13,500	\$7,000	\$17,500	\$7,500
Total (50 states, DC, and Puerto Rico)	13,100	6,700	17,300	7,500
Attendance pattern				
Full-time/full-year	16,300	9,400	19,300	9,400
Part-time or part-year	8,100	4,200	12,300	6,300
Dependency status				
Dependent	15,600	8,600	19,200	7,500
Independent	8,800	4,200	12,800	7,500
Dependent student income				
Less than \$32,000	15,900	7,800	19,800	‡
\$32,000 to 92,000	16,400	9,100	19,400	7,000
More than \$92,000	14,200	8,600	18,400	8,200
Independent student income				
Less than \$25,000	10,500	4,900	13,600	7,900
\$25,000 or more	7,300	3,800	11,500	7,300
Full-time/full-year undergraduates				
Total	16,300	9,400	19,300	9,400
Dependency status				
Dependent	17,000	9,900	20,100	9,300
Independent	13,300	6,800	15,900	9,600
Dependent student income				
Less than \$32,000	17,900	9,700	21,100	‡
\$32,000 to 92,000	17,800	10,600	20,300	9,300
More than \$92,000	14,900	9,300	18,700	9,500
Independent student income				
Less than \$25,000	14,200	7,100	16,700	‡
\$25,000 or more	11,700	6,200	14,200	8,900

‡ Reporting standards not met.

NOTE: "Total aid" includes all types of financial aid from any source except parents, friends, or relatives. Does not include federal tax credits for education (Hope and Lifetime Learning). "Grants or any other aid" includes any combination of grants, scholarships or tuition waivers as well as work-study, veterans' benefits and job training. "Student loans" may be from any source, but exclude other forms of financing such as credit cards, home equity loans, loans from individuals, and federal Parent Loans for Undergraduate Students (PLUS). Federal PLUS loans are included in total 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. Income is total income in 2002. Prior year (2002) income is used in federal need analysis. Estimates include students at postsecondary institutions in Puerto Rico. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

Table 13. Average tuition and fees, average total price of attendance, and percentage of undergraduates in public 2-year institutions receiving any aid, any grants, or any student loans and average amounts received, by student characteristics: 2003–04

Student characteristics	Average tuition and fees	Average total price of attendance	Total aid		Total grants		Student loans	
			Percent	Average amount	Percent	Average amount	Percent	Average amount
All undergraduates								
U.S. total (excluding Puerto Rico)	\$1,000	\$6,100	46.8	\$3,200	39.8	\$2,200	12.1	\$3,600
Total (50 states, DC, and Puerto Rico)	1,000	6,100	46.8	3,200	39.8	2,200	12.1	3,600
Attendance pattern								
Full-time/full-year	2,000	10,500	61.3	4,900	52.7	3,400	22.8	4,100
Part-time or part-year	800	4,900	42.7	2,400	36.1	1,700	9.0	3,300
Dependency status								
Dependent	1,300	6,700	42.7	3,200	35.4	2,400	12.3	2,900
Independent	900	5,800	49.5	3,200	42.7	2,000	11.9	4,200
Dependent student income								
Less than \$32,000	1,200	6,600	63.7	3,600	60.0	3,000	11.9	2,600
\$32,000 to 92,000	1,400	6,800	38.6	2,800	29.5	1,900	14.4	2,800
More than \$92,000	1,300	6,600	22.4	2,800	14.5	1,700	7.4	3,600
Independent student income								
Less than \$25,000	1,000	6,300	60.3	3,700	54.5	2,400	15.5	4,100
\$25,000 or more	800	5,400	40.2	2,500	32.6	1,400	8.9	4,200
Full-time/full-year undergraduates								
Total	2,000	10,500	61.3	4,900	52.7	3,400	22.8	4,100
Dependency status								
Dependent	2,100	10,000	54.6	4,100	45.8	3,100	18.5	3,200
Independent	2,000	11,400	72.7	6,000	64.4	3,700	30.0	4,900
Dependent student income								
Less than \$32,000	1,900	9,600	77.1	4,800	73.3	4,000	17.8	2,800
\$32,000 to 92,000	2,100	10,000	50.0	3,600	40.3	2,300	20.5	3,200
More than \$92,000	2,200	10,200	34.3	3,900	20.6	2,400	14.0	4,300
Independent student income								
Less than \$25,000	2,000	11,300	78.9	6,300	72.7	4,100	32.3	4,800
\$25,000 or more	2,100	11,500	61.0	5,200	48.7	2,700	25.8	5,200

NOTE: The total price of attendance includes tuition and fees, room and board, and other expenses as estimated by the institutions. "Total aid" includes all types of financial aid from any source except parents, friends, or relatives. Does not include federal tax credits for education (Hope and Lifetime Learning). "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 other forms of financing such as credit cards, home equity loans, loans from individuals, and federal Parent Loans for Undergraduate Students (PLUS). Federal PLUS loans and other types of aid such as veterans' benefits and job training funds are included in total aid. 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. Income is total income in 2002. 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 14. Percentage of undergraduates in public 2-year institutions receiving grants from federal, state, institutional or other sources, and average grant amounts received, by student characteristics: 2003–04

Student characteristics	Federal grants		State grants		Institutional grants		Other grants	
	Percent	Average amount	Percent	Average amount	Percent	Average amount	Percent	Average amount
All undergraduates								
U.S. total (excluding Puerto Rico)	23.1	\$2,300	11.3	\$1,000	7.5	\$1,200	11.8	\$1,100
Total (50 states, DC, and Puerto Rico)	23.1	2,300	11.3	1,000	7.5	1,200	11.8	1,100
Attendance pattern								
Full-time/full-year	35.4	3,200	19.3	1,300	14.2	1,700	10.3	1,500
Part-time or part-year	19.6	1,800	9.0	800	5.6	800	12.2	1,000
Dependency status								
Dependent	19.7	2,300	12.3	1,100	9.6	1,600	8.4	1,300
Independent	25.3	2,200	10.6	900	6.2	800	13.9	1,100
Dependent student income								
Less than \$32,000	49.5	2,700	20.0	1,200	13.8	1,200	7.1	1,300
\$32,000 to 92,000	10.4	1,500	10.8	1,000	9.3	1,800	9.8	1,200
More than \$92,000	0.4	‡	5.1	1,100	4.1	2,100	6.6	1,500
Independent student income								
Less than \$25,000	41.2	2,400	15.0	1,000	8.7	700	10.1	1,200
\$25,000 or more	11.7	1,600	6.9	900	4.1	900	17.2	1,000
Full-time/full-year undergraduates								
Total	35.4	3,200	19.3	1,300	14.2	1,700	10.3	1,500
Dependency status								
Dependent	25.2	2,900	17.9	1,300	15.6	2,000	10.4	1,400
Independent	52.6	3,400	21.6	1,300	11.9	1,100	10.3	1,800
Dependent student income								
Less than \$32,000	62.6	3,400	28.8	1,400	19.0	1,700	8.4	1,100
\$32,000 to 92,000	14.4	1,800	15.6	1,100	16.5	2,100	12.4	1,200
More than \$92,000	0.3	‡	8.0	1,400	8.0	2,600	7.6	2,400
Independent student income								
Less than \$25,000	65.0	3,600	24.6	1,300	12.7	1,100	8.2	1,600
\$25,000 or more	29.2	2,500	15.9	1,200	10.6	1,100	14.1	2,000

‡ Reporting standards not met.

NOTE: Federal grants are Federal Pell Grants, Federal Supplemental Educational Opportunity Grants (FSEOG), and a small percentage of grants and scholarships from other federal programs. State and institutional grants include any grants, scholarships, or tuition waivers that are funded by a state or by the institution attended, respectively. Other grants include grants and scholarships from private sources outside of the institution, including tuition aid from employers. Students may receive grants 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. Income is total income in 2002. 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 15. Percentage distribution of undergraduates in public 2-year institutions receiving various types of financial aid packages, by student characteristics: 2003–04

Student characteristics	Percentage			
	No financial aid	Grants or any other aid except loans	Grants or any other aid with loans	Student loans only
All undergraduates				
U.S. total (excluding Puerto Rico)	53.2	34.7	8.3	3.8
Total (50 states, DC, and Puerto Rico)	53.2	34.8	8.3	3.8
Attendance pattern				
Full-time/full-year	38.7	38.6	17.3	5.5
Part-time or part-year	57.3	33.7	5.7	3.3
Dependency status				
Dependent	57.3	30.4	7.1	5.2
Independent	50.5	37.5	9.1	2.9
Dependent student income				
Less than \$32,000	36.3	51.8	9.6	2.3
\$32,000 to 92,000	61.4	24.2	7.6	6.8
More than \$92,000	77.6	15.0	2.2	5.2
Independent student income				
Less than \$25,000	39.7	44.7	13.2	2.4
\$25,000 or more	59.8	31.4	5.5	3.3
Full-time/full-year undergraduates				
Total	38.7	38.6	17.3	5.5
Dependency status				
Dependent	45.4	36.1	12.2	6.3
Independent	27.3	42.7	25.8	4.3
Dependent student income				
Less than \$32,000	23.0	59.3	15.5	2.3
\$32,000 to 92,000	50.1	29.5	13.3	7.2
More than \$92,000	65.7	20.4	4.3	9.7
Independent student income				
Less than \$25,000	21.1	46.6	28.7	3.6
\$25,000 or more	39.0	35.2	20.3	5.5

NOTE: "Grants or any other aid" includes any combination of grants, scholarships or tuition waivers as well as work-study, veterans' benefits and job training. "Student loans" may be from any source, but exclude other forms of financing such as credit cards, home equity loans, loans from individuals, and federal Parent Loans for Undergraduate Students (PLUS). Federal PLUS loans are included in total 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. Income is total income in 2002. Prior year (2002) income is used in federal need analysis. Estimates include students at postsecondary institutions in Puerto Rico. Detail may not sum to totals because of rounding.

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

Table 16. Average total amount of financial aid that undergraduates in public 2-year institutions received in various types of financial aid packages, by student characteristics: 2003–04

Student characteristics	Average total amount of financial aid			Student loans only
	Total aid	Grants or any other aid except loans	Grants or any other aid with loans	
All undergraduates				
U.S. total (excluding Puerto Rico)	\$3,200	\$2,300	\$6,900	\$3,500
Total (50 states, DC, and Puerto Rico)	3,200	2,300	6,900	3,500
Attendance pattern				
Full-time/full-year	4,900	3,700	8,100	4,200
Part-time or part-year	2,400	1,800	5,800	3,200
Dependency status				
Dependent	3,200	2,500	5,900	2,900
Independent	3,200	2,100	7,300	4,200
Dependent student income				
Less than \$32,000	3,600	3,200	6,200	2,800
\$32,000 to 92,000	2,800	2,000	5,600	2,700
More than \$92,000	2,800	1,800	7,000	3,700
Independent student income				
Less than \$25,000	3,700	2,500	7,500	4,500
\$25,000 or more	2,500	1,600	6,900	4,000
Full-time/full-year undergraduates				
Total	4,900	3,700	8,100	4,200
Dependency status				
Dependent	4,100	3,300	6,800	3,600
Independent	6,000	4,200	9,100	5,500
Dependent student income				
Less than \$32,000	4,800	4,200	7,400	‡
\$32,000 to 92,000	3,600	2,500	6,200	3,300
More than \$92,000	3,900	2,500	8,500	4,600
Independent student income				
Less than \$25,000	6,300	4,500	9,300	6,400
\$25,000 or more	5,200	3,400	8,600	4,400

‡ Reporting standards not met.

NOTE: "Total aid" includes all types of financial aid from any source except parents, friends, or relatives. Does not include federal tax credits for education (Hope and Lifetime Learning). "Grants or any other aid" includes any combination of grants, scholarships or tuition waivers as well as work-study, veterans' benefits and job training. "Student loans" may be from any source, but exclude other forms of financing such as credit cards, home equity loans, loans from individuals, and federal Parent Loans for Undergraduate Students (PLUS). Federal PLUS loans are included in total 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. Income is total income in 2002. Prior year (2002) income is used in federal need analysis. Estimates include students at postsecondary institutions in Puerto Rico. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

Table 17. Average tuition and fees, average total price of attendance, and percentage of undergraduates in private for-profit institutions receiving any aid, any grants, or any student loans and average amounts received, by student characteristics: 2003–04

Student characteristics	Average tuition and fees	Average total price of attendance	Total aid		Total grants		Student loans	
			Percent	Average amount	Percent	Average amount	Percent	Average amount
All undergraduates								
U.S. total (excluding Puerto Rico)	\$7,600	\$15,000	89.2	\$8,900	65.3	\$3,300	74.5	\$6,800
Total (50 states, DC, and Puerto Rico)	7,600	14,900	89.2	8,800	65.7	3,300	73.4	6,800
Attendance pattern								
Full-time/full-year	10,600	20,300	92.3	11,100	69.8	4,200	79.5	7,900
Part-time or part-year	6,000	12,100	87.7	7,500	63.6	2,700	70.3	6,100
Dependency status								
Dependent	8,900	16,100	85.2	10,000	59.7	3,800	72.6	6,000
Independent	7,200	14,500	90.5	8,400	67.6	3,100	73.7	7,000
Dependent student income								
Less than \$32,000	8,800	15,600	93.0	9,600	87.1	4,000	75.6	5,900
\$32,000 to 92,000	9,000	16,400	83.1	10,100	42.5	3,300	74.2	5,900
More than \$92,000	9,100	16,900	63.7	12,000	18.7	3,600	55.9	7,000
Independent student income								
Less than \$25,000	7,500	14,300	92.6	8,400	81.5	3,300	75.2	6,500
\$25,000 or more	6,800	14,800	87.7	8,300	49.4	2,900	71.7	7,700
Full-time/full-year undergraduates								
Total	10,600	20,300	92.3	11,100	69.8	4,200	79.5	7,900
Dependency status								
Dependent	11,800	21,000	87.1	12,600	65.5	5,000	75.2	6,800
Independent	10,100	20,100	94.4	10,500	71.4	3,900	81.2	8,300
Dependent student income								
Less than \$32,000	11,700	20,600	95.8	12,300	91.2	5,400	78.2	6,800
\$32,000 to 92,000	11,800	20,900	82.6	12,500	48.6	4,300	75.5	6,600
More than \$92,000	12,500	22,800	68.4	14,900	25.1	4,500	61.8	7,900
Independent student income								
Less than \$25,000	10,500	20,000	95.9	10,800	85.5	4,300	82.1	7,700
\$25,000 or more	9,500	20,200	92.3	10,100	53.0	3,200	80.1	9,000

NOTE: The total price of attendance includes tuition and fees, room and board, and other expenses as estimated by the institutions. "Total aid" includes all types of financial aid from any source except parents, friends, or relatives. Does not include federal tax credits for education (Hope and Lifetime Learning). "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 other forms of financing such as credit cards, home equity loans, loans from individuals, and federal Parent Loans for Undergraduate Students (PLUS). Federal PLUS loans and other types of aid such as veterans' benefits and job training funds are included in total aid. 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. Income is total income in 2002. 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 18. Percentage of undergraduates in private for-profit institutions receiving grants from federal, state, institutional or other sources, and average grant amounts received, by student characteristics: 2003–04

Student characteristics	Federal grants		State grants		Institutional grants		Other grants	
	Percent	Average amount	Percent	Average amount	Percent	Average amount	Percent	Average amount
All undergraduates								
U.S. total (excluding Puerto Rico)	52.3	\$2,600	7.9	\$2,600	6.9	\$2,300	12.8	\$3,200
Total (50 states, DC, and Puerto Rico)	52.8	2,600	8.3	2,500	6.9	2,300	12.6	3,200
Attendance pattern								
Full-time/full-year	54.8	3,300	13.7	3,000	9.7	3,100	13.0	3,400
Part-time or part-year	51.8	2,300	5.5	1,900	5.4	1,500	12.5	3,100
Dependency status								
Dependent	48.4	2,600	11.8	2,900	13.0	3,100	6.8	3,400
Independent	54.2	2,600	7.2	2,300	4.9	1,600	14.4	3,200
Dependent student income								
Less than \$32,000	84.0	2,900	15.0	3,100	13.6	3,200	5.3	2,700
\$32,000 to 92,000	24.2	1,600	10.9	2,700	12.9	3,100	8.5	3,800
More than \$92,000	2.1	‡	2.7	‡	11.1	3,000	6.7	‡
Independent student income								
Less than \$25,000	74.5	2,800	9.9	2,300	5.7	1,500	9.1	3,100
\$25,000 or more	27.6	2,000	3.5	2,300	3.9	1,800	21.4	3,300
Full-time/full-year undergraduates								
Total	54.8	3,300	13.7	3,000	9.7	3,100	13.0	3,400
Dependency status								
Dependent	49.8	3,200	17.4	3,500	20.6	3,900	7.9	3,500
Independent	56.7	3,300	12.2	2,700	5.5	2,000	15.0	3,400
Dependent student income								
Less than \$32,000	87.3	3,600	23.1	3,700	21.1	3,700	5.6	2,600
\$32,000 to 92,000	22.5	1,800	14.5	3,000	20.6	3,900	10.7	4,100
More than \$92,000	1.1	‡	4.7	‡	18.7	4,000	6.4	‡
Independent student income								
Less than \$25,000	77.8	3,600	16.4	2,800	6.7	1,900	9.0	3,400
\$25,000 or more	29.1	2,300	6.7	2,400	3.8	2,400	22.7	3,400

‡ Reporting standards not met.

NOTE: Federal grants are Federal Pell Grants, Federal Supplemental Educational Opportunity Grants (FSEOG), and a small percentage of grants and scholarships from other federal programs. State and institutional grants include any grants, scholarships, or tuition waivers that are funded by a state or by the institution attended, respectively. Other grants include grants and scholarships from private sources outside of the institution, including tuition aid from employers. Students may receive grants 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. Income is total income in 2002. 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 19. Percentage distribution of undergraduates in private for-profit institutions receiving various types of financial aid packages, by student characteristics: 2003–04

Student characteristics	Percentage			
	No financial aid	Grants or any other aid except loans	Grants or any other aid with loans	Student loans only
All undergraduates				
U.S. total (excluding Puerto Rico)	10.9	14.7	55.7	18.8
Total (50 states, DC, and Puerto Rico)	10.8	15.8	54.9	18.6
Attendance pattern				
Full-time/full-year	7.7	12.8	61.8	17.7
Part-time or part-year	12.4	17.4	51.3	19.0
Dependency status				
Dependent	14.8	12.6	57.3	15.3
Independent	9.5	16.8	54.1	19.6
Dependent student income				
Less than \$32,000	7.0	17.5	72.0	3.5
\$32,000 to 92,000	16.9	8.9	49.5	24.7
More than \$92,000	36.4	7.8	30.4	25.5
Independent student income				
Less than \$25,000	7.4	17.4	65.9	9.3
\$25,000 or more	12.3	16.1	38.6	33.1
Full-time/full-year undergraduates				
Total	7.7	12.8	61.8	17.7
Dependency status				
Dependent	13.0	11.9	62.6	12.6
Independent	5.6	13.2	61.5	19.7
Dependent student income				
Less than \$32,000	4.2	17.6	74.6	3.6
\$32,000 to 92,000	17.4	7.1	55.7	19.8
More than \$92,000	31.6	6.6	40.0	21.8
Independent student income				
Less than \$25,000	4.1	13.8	73.1	9.0
\$25,000 or more	7.7	12.3	46.3	33.8

NOTE: "Grants or any other aid" includes any combination of grants, scholarships or tuition waivers as well as work-study, veterans' benefits and job training. "Student loans" may be from any source, but exclude other forms of financing such as credit cards, home equity loans, loans from individuals, and federal Parent Loans for Undergraduate Students (PLUS). Federal PLUS loans are included in total 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. Income is total income in 2002. Prior year (2002) income is used in federal need analysis. Estimates include institutions in Puerto Rico. Detail may not sum to totals because of rounding.

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

Table 20. Average total amount of financial aid that undergraduates in private for-profit institutions received in various types of financial aid packages, by student characteristics: 2003–04

Student characteristics	Average total amount of financial aid			Student loans only
	Total aid	Grants or any other aid except loans	Grants or any other aid with loans	
All undergraduates				
U.S. total (excluding Puerto Rico)	\$8,900	\$3,500	\$10,600	\$7,900
Total (50 states, DC, and Puerto Rico)	8,800	3,500	10,600	7,900
Attendance pattern				
Full-time/full-year	11,100	4,300	12,900	9,500
Part-time or part-year	7,500	3,100	9,100	7,100
Dependency status				
Dependent	10,000	3,800	12,000	7,700
Independent	8,400	3,400	10,100	8,000
Dependent student income				
Less than \$32,000	9,600	3,700	11,200	6,500
\$32,000 to 92,000	10,100	3,700	12,600	7,300
More than \$92,000	12,000	4,900	15,900	9,400
Independent student income				
Less than \$25,000	8,400	3,200	9,900	8,000
\$25,000 or more	8,300	3,700	10,600	8,000
Full-time/full-year undergraduates				
Total	11,100	4,300	12,900	9,500
Dependency status				
Dependent	12,600	5,100	14,700	9,500
Independent	10,500	4,000	12,200	9,500
Dependent student income				
Less than \$32,000	12,300	5,500	14,100	‡
\$32,000 to 92,000	12,500	4,300	14,900	8,700
More than \$92,000	14,900	‡	18,200	12,200
Independent student income				
Less than \$25,000	10,800	4,300	12,000	10,700
\$25,000 or more	10,100	3,700	12,600	9,100

‡ Reporting standards not met.

NOTE: "Total aid" includes all types of financial aid from any source except parents, friends, or relatives. Does not include federal tax credits for education (Hope and Lifetime Learning). "Grants or any other aid" includes any combination of grants, scholarships or tuition waivers as well as work-study, veterans' benefits and job training. "Student loans" may be from any source, but exclude other forms of financing such as credit cards, home equity loans, and loans from individuals, and federal Parent Loans for Undergraduate Students (PLUS). Federal PLUS loans are included in total 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. Income is total income in 2002. 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).

THIS PAGE INTENTIONALLY LEFT BLANK

References

- Berkner, L. (1998). *Student Financing of Undergraduate Education: 1995–96* (NCES 98–076). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Berkner, L., Berker, A., Rooney, K., and Peter, K. (2002). *Student Financing of Undergraduate Education: 1999–2000* (NCES 2002–167). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- 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. Washington, DC: National Center for Education Statistics.
- Chromy, J.R. (1979). *Sequential Sample Selection Methods*. Proceedings of the American Statistical Association, Section on Survey Research Methods, 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*. 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.
- U.S. Department of Education. (2003). *NCES Statistical Standards* (NCES 2003–601). Washington, DC: National Center for Education Statistics. Retrieved March 2, 2005, from <http://nces.ed.gov/pubs2003/2003601.pdf>.

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix A—Supplemental Tables

Table A-1. Percentage distribution of undergraduates attending various types of institutions, by student characteristics: 2003–04

Student characteristics	Type of institution				
	Public 4-year	Private not-for-profit 4-year	Public 2-year	Private for-profit	More than one institution and other
All undergraduates					
U.S. total (excluding Puerto Rico)	30.1	13.1	40.7	7.7	8.5
Total (50 states, DC, and Puerto Rico)	30.0	13.5	40.3	7.8	8.5
Attendance pattern					
Full-time/full-year	43.1	19.1	21.9	6.4	9.5
Part-time or part-year	20.8	9.6	53.1	8.7	7.8
Dependency status					
Dependent	39.6	16.9	31.4	3.7	8.4
Independent	20.5	10.1	49.1	11.7	8.6
Dependent student income					
Less than \$32,000	33.6	14.6	36.5	6.8	8.5
\$32,000 to 92,000	40.9	15.5	32.4	3.2	8.0
More than \$92,000	42.9	21.9	24.3	1.8	9.1
Independent student income					
Less than \$25,000	22.6	9.3	45.9	13.5	8.7
\$25,000 or more	18.4	10.9	52.2	10.0	8.5
Full-time/full-year undergraduates					
Total	43.1	19.1	21.9	6.4	9.5
Dependency status					
Dependent	48.1	21.5	19.1	2.5	8.7
Independent	30.4	12.9	29.0	16.2	11.5
Dependent student income					
Less than \$32,000	43.9	19.2	23.4	5.0	8.5
\$32,000 to 92,000	49.5	19.9	20.1	2.1	8.4
More than \$92,000	49.3	26.6	13.6	1.1	9.5
Independent student income					
Less than \$25,000	32.8	12.9	29.4	14.3	10.7
\$25,000 or more	26.0	13.1	28.2	19.7	13.0

NOTE: "Other" institutions (1 percent) are public less-than-2-year and private not-for-profit less-than-4-year. 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. Income is total income in 2002. Prior year (2002) income is used in federal need analysis. Estimates include students at postsecondary institutions in Puerto Rico. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS:04).

Table A-2. Percentage distribution of undergraduates by student characteristics, within type of institution: 2003–04

Student characteristics	Total	Type of institution			
		Public 4-year	Private not-for-profit 4-year	Public 2-year	Private for-profit
All undergraduates					
Total (50 states, DC, and Puerto Rico)	100.0	100.0	100.0	100.0	100.0
U.S. total (excluding Puerto Rico)	99.0	99.2	96.0	100.0	98.5
Puerto Rico	1.0	0.8	4.0	#	1.5
Attendance pattern					
Full-time/full-year	41.1	59.1	58.2	22.3	33.9
Part-time or part-year	58.9	41.0	41.8	77.7	66.1
Dependency status					
Dependent	49.7	65.7	62.3	38.8	23.9
Independent	50.3	34.3	37.7	61.2	76.1
Dependent student income					
Less than \$32,000	24.6	20.9	21.3	28.6	44.9
\$32,000 to 92,000	50.5	52.2	46.5	52.1	43.2
More than \$92,000	24.9	26.9	32.2	19.3	12.0
Independent student income					
Less than \$25,000	49.3	54.4	45.5	46.1	56.7
\$25,000 or more	50.7	45.6	54.5	53.9	43.3
Full-time/full-year undergraduates					
Total	100.0	100.0	100.0	100.0	100.0
Dependency status					
Dependent	71.8	80.1	80.9	62.7	28.3
Independent	28.2	19.9	19.1	37.3	71.7
Dependent student income					
Less than \$32,000	22.9	20.9	20.4	28.0	45.9
\$32,000 to 92,000	50.6	52.0	46.8	53.2	42.9
More than \$92,000	26.6	27.2	32.8	18.9	11.2
Independent student income					
Less than \$25,000	64.3	69.5	63.9	65.2	56.7
\$25,000 or more	35.7	30.5	36.1	34.8	43.3

Rounds to zero.

NOTE: Totals include public less-than-2-year and private not-for-profit less-than-4-year institutions as well as students who attended more than one institution. 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. Income is total income in 2002. Prior year (2002) income is used in federal need analysis. Estimates include students at postsecondary institutions in Puerto Rico. Detail may not sum to totals because of rounding.

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 B—Glossary

This glossary includes descriptions of the variables that were used in the tables of this E.D. TAB. The National Postsecondary Student Aid Study (NPSAS:04) Data Analysis System (DAS) was used to generate the tables in this E.D. TAB. Readers may refer to appendix C for more information about 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 this E.D. TAB. The glossary is organized alphabetically by variable name (displayed in capital letters to the right of the variable label).

GLOSSARY INDEX

STUDENT CHARACTERISTICS

Attendance pattern ATTNSTAT
Dependency status DEPEND
Dependent student income DEPINC
Independent student income..... INDEPINC

INSTITUTION CHARACTERISTICS

Type of institution..... SECTOR4
Tuition and fees TUITION2
Total price of attendance..... BUDGETAJ

TYPES OF FINANCIAL AID

Total aid..... TOTAID
Total grants TOTGRT
Total student loansTOTLOAN
Federal grants..... TFEDGRT
State grants..... STGTAMT
Institutional grants INGRTAMT
Other grants OTHGTAMT
Type of aid package..... AIDTYPE

DAS Variable

Type of aid package

AIDTYPE

Types of aid included in the student’s financial aid package received in the 2003–04 academic year. Categories were based on whether the aid or combination of types of aid included loans to the student. PLUS loans to parents are included in “other aid.” The categories are:

Grants or any other aid except loans	The student received any combination of grants, work-study, or other types of aid, but no loans to the student in 2003–04.
Grants or any other aid with loans	The student received any combination of grants, work-study, or other types of aid, including loans to the student in 2003–04.
Student loans only	The student took out a student loan in 2003–04 and received no other aid of any type.
No financial aid	The student did not receive any type of financial aid in 2003–04.

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 (July 1, 2003 to June 30, 2004). Full-year is defined as enrollment for 9 or more months during the academic 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.
Part-time or part-year	Enrolled for less than 9 months full time.

Total price of attendance

BUDGETAJ

Total educational expenses of the student during the 2003–04 academic year. The total price of attendance includes the tuition and fees as well as all other expenses related to enrollment: books and supplies, room and board (or housing and meal allowances for off-campus students), transportation, and other personal living expenses. The total price of attendance is based on the student budgets reported by the institutions. Student budgets are prepared by institutional financial aid offices to estimate the typical educational expenses of various types of students (e.g., dependent, independent, on-campus, off-campus, living with parents) and are used as part of the need analysis that determines the student’s need for financial aid.

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.

DAS Variable***Dependent student income*****DEPINC**

For dependent undergraduates, this is the total income of the student's parents in 2002. 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. The median income of dependent students' parents was approximately \$60,000 in 2002.

Independent student income**INDEPINC**

For independent students, this is the total income of the student (and spouse, if married) in 2002. 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. The median income of independent students (and spouse, if married) was approximately \$25,000 in 2002.

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.

Other grants**OTHGTAMT**

Indicates the total amount of grant aid received during the 2003–04 academic year that was funded from sources other than the institution attended or federal and state governments. It includes grants and scholarships from foundations or other private organizations, the student's employer, or the student's parents' employers.

Type of institution**SECTOR4**

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. Four-year institutions award at least a bachelor's degree; 2-year institutions award at least an associate's degree or other award requiring 2 years of study (e.g., 2-year vocational certificate); less-than-2-year institutions award certificates or other credentials in vocational programs lasting less than 2 years. 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.

Sample students determined to have attended more than one institution during the NPSAS study year have been classified into a separate category (since all or part of their financial aid may not have been received at the NPSAS sample institution) that also includes students at public less-than-2-year and private less-than-4-year institutions (who represent 1 percent of the total undergraduates).

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. State grants include need- and merit-based grant programs.

DAS Variable

Federal grants

TFEDGRT

Total amount of federal grants received by a student during the 2003–04 academic year. These are primarily Federal 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.

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, federal Parent Loans for Undergraduate Students (PLUS), job training aid, veterans’ benefits and Department of Defense programs, or graduate assistantships. It excludes federal tuition tax credits and some types of borrowing for education, such as the use of credit cards and home equity loans.

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. It includes 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. Federal PLUS loans are included in total aid. 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 other forms of financing such as credit card debt, home equity loans, or loans from family or friends.

NOTE: The major sources of loans to students are the federal Stafford loan programs. Annual loan limits for Stafford loans vary by class level and dependency status. There are two types of Federal Stafford loans. 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. 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). Students may receive either subsidized or unsubsidized Stafford loans or a combination of the two types.

Tuition and fees

TUITION2

Indicates the total amount of tuition and fees charged to the student at the NPSAS sample institution during the 2003–04 academic year. Although there are variations in the use of the terms, the price charged by institutions for instruction is generally called “tuition” and additional charges to students for other services, equipment, or use of particular facilities are called “fees.” (In some states public institutions use the term “fees” for all charges to students.) The tuition and fees charged to in-state residents at public institutions, which receive subsidies from state governments, are usually lower than those at most private institutions. The average tuition and fees shown for public 4-year institutions in the tables include the additional fees charged to out-of-state students.

Appendix C—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 that 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 dataset that brings together information about a variety of aid programs for a large sample of undergraduate, graduate, and first-professional students. NPSAS 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. It also includes data on tuition and price of attendance, the various types of financial aid received, and the net price of attendance after aid. These results are published in three descriptive reports: a profile of undergraduates, an undergraduate financing report, and a graduate/first-professional students financing report. NPSAS provides research and policy analysts with data to address basic issues about postsecondary affordability and the effectiveness of the existing financial aid programs.

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 was 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 directly downloaded 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 Federal 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 that 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.¹ 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 about 1,600 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, a small sample of additional institutions was selected from a frame of institutions not included on the initial sampling frame. Of the final total 1,670 sample institutions, 810 were selected with certainty.² Of these 1,670 sample institutions, 1,630 were found to be NPSAS eligible institutions and 1,360 of these 1,630 institutions provided student enrollment lists for use as the second stage (i.e., student) sampling frame. Table C-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.

¹ 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 (Connecticut, Delaware, Nebraska, Oregon), four medium-size states (Georgia, Indiana, Minnesota, Tennessee), and four large states (California, Illinois, New York, Texas).

² Number of institutions have been rounded to 10's.

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

Institutional characteristics ¹	Sampled institutions	Eligible institutions ²	Institutions providing lists ³		
			Number	Unweighted percent	Weighted percent
All institutions	1,670	1,630	1,360	83.5	80.0
Institutional level					
Less-than-2-year	260	250	200	82.1	80.8
2-year	490	480	410	85.4	78.0
4-year non-doctorate	460	460	380	83.3	74.6
4-year doctorate	450	450	370	82.4	85.6
Institutional control					
Public	810	800	680	84.9	79.6
Private not-for-profit	570	560	450	81.2	79.8
Private for-profit	290	270	230	84.2	86.7
Type of institution					
Public less-than-2-year	70	60	50	76.6	74.3
Public 2-year	380	380	320	85.4	77.6
Public 4-year non-doctorate	130	130	110	85.1	70.3
Public 4-year doctorate	230	230	200	86.3	87.1
Private not-for-profit less-than-4-year	70	70	70	89.0	92.6
Private not-for-profit 4-year non-doctorate	280	270	220	81.9	78.1
Private not-for-profit 4-year doctorate	220	220	170	77.7	80.8
Private for-profit less-than-2-year	170	160	140	84.0	82.3
Private for-profit 2-year or more	110	110	90	84.4	88.2

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

² Among the ineligible institutions: 35 percent closed after the sampling frame was defined, 38 percent were treated as merged institutions because two or more campuses were included on one combined student list, and the remaining 27 percent failed to meet one or more of the criteria for institutional NPSAS eligibility.

³ Percents are based on the eligible institutions within the row under consideration.

NOTE: Columns for number of institutions have been rounded to 10's.

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 109,200 students. Upon the completion of data collection, 90 percent of the 101,000 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 C-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 C-2. Counts of sampled, eligible, and responding students and response rates, by institutional characteristics

Institutional characteristics ¹	Sampled students	Eligible students ²	Responding students ^{3,4}	
			Unweighted percent	Weighted percent
All students	109,200	101,000	89.8	91.0
Institutional level				
Less-than-2-year	13,300	11,300	92.6	93.6
2-year	41,500	37,300	83.1	84.6
4-year non-doctorate	21,500	20,500	94.0	94.8
4-year doctorate	32,900	31,800	94.1	94.7
Institutional control				
Public	71,000	65,500	87.0	89.2
Private not-for-profit	22,700	21,700	95.3	96.1
Private for-profit	15,500	13,800	95.0	96.1
Type of institution				
Public less-than-2-year	3,200	2,600	84.2	90.6
Public 2-year	36,300	32,500	81.3	83.9
Public 4-year non-doctorate	9,200	8,900	91.9	93.3
Public 4-year doctorate	22,300	21,600	93.7	94.2
Private not-for-profit less-than-4-year	3,100	2,800	94.3	94.6
Private not-for-profit 4-year non-doctorate	9,700	9,300	96.3	96.9
Private not-for-profit 4-year doctorate	9,900	9,600	94.5	95.4
Private for-profit less-than-2-year	9,300	8,000	94.9	94.3
Private for-profit 2-year or more	6,200	5,800	95.0	96.7

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

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

³ 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).

⁴ Percents are based on the eligible students within the row under consideration.

NOTE: Columns for number of students have been rounded to 100’s.

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 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 nonsampling errors.

Imputation

All variables with missing data used in this E.D. TAB 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,³ 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 that 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.⁴

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'

³ 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.

⁴ 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 E.D. TAB 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,⁵ 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 C-3. There is one student analysis weight, and this weight variable is STUDYWT.

Table C-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).

⁵ 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

The bias in an estimated mean based on respondents, \bar{y}_R , is the difference between this mean and the target parameter, π , 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, π , can be estimated for these variables as follows:

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

where η is the weighted unit (or item) nonresponse rate. For the variables that are from the frame, rather than from the sample, π 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 Federal 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 C-1, 1,360 of the 1,630 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 nondoctorate 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 (U.S. Department of Education 2003). 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:⁶

- type of institution;⁷
- 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;
- female undergraduate enrollment;
- total graduate/first-professional enrollment;
- male graduate/first-professional enrollment; and
- female graduate/first-professional enrollment.

⁶ For the continuous variables, categories were formed based on quartiles or logical breaks.

⁷ Type of institution was only used in the nonresponse bias analysis for all institutions.

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 C-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 percentage 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 C-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
Before weight adjustments							
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
After weight adjustments							
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 C-2, of the 101,000 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 nondoctoral 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);
- Federal Pell Grant recipient (yes/no); and
- Stafford loan recipient (yes/no).

For federally aided students:

- Federal 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 C-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.⁸

In summary, Table C-5 demonstrates that weighting adjustments have reduced the overall level of nonresponse bias, but that bias remains even after adjusting weights. The percentage of all variable categories considered with significant nonresponse bias decreased from 35.4 percent before weighting adjustments to 29.2 percent after weighting adjustments. Although there was considerable reduction in bias due to weighting adjustments, nonresponse bias remains in nearly 30 percent of the variables after weighting adjustments.

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

Nonresponse bias statistics	Public 2-year
Before weight adjustments	
Mean estimated relative bias	0.11
Median estimated relative bias	0.04
Percent significant bias	35.42
After weight adjustments	
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

When item response rates were less than 85 percent, a nonresponse bias analysis was conducted. 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” (U.S. Department of Education 2003).

⁸ Data not shown.

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

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 C-6, for the responding students, the weighted item response rates for items used in this E.D. TAB for all students ranged from 68.5 percent to 100 percent. The item response rates by type of institution ranged from 47.6 percent to 100 percent. All of the items, except for other grants, dependent student income, and independent student income, had response rates of 85 percent or above, both overall and by type of institution. For each of these three items, the overall response rates are below 85 percent. For other grants, the response rate is below 85 percent for each type of institution. For dependent student income, the response rate is below 85 percent for three of nine types of institution. For independent student income, the response rate is below 85 percent for six of the nine types of institution.

Therefore, a nonresponse bias analysis was conducted for other grants, dependent student income, and independent student income. 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 these items, 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 C-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
TFEDGRT	Total federal grants	99.2	99.8	99.5	99.2	99.2	99.6	99.0	97.9	100.0	99.8
INGRTAMT	Institutional grants total	98.2	99.3	98.0	99.4	98.5	87.1	98.5	99.2	93.7	95.8
OTHTYPE	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
STGTAMT	State grants total	98.1	99.3	98.0	99.4	98.4	86.4	98.5	99.2	93.8	95.7
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
ATTNSTAT	Attendance pattern	99.0	99.7	98.6	99.6	99.4	98.6	99.7	99.8	97.3	97.2
DEPEND	Dependency status	94.1	93.4	92.6	94.2	93.2	96.2	97.0	96.1	96.7	99.4
SECTOR4	Type of institution	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
TUITION2	Tuition and fees	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BUDGETADJ	Total price of attendance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
OTHGTAMT	Other grants	68.5	59.3	67.7	69.9	71.8	54.6	68.0	71.5	47.6	64.0
AIDTYPE	Aid package by type of aid	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DEPINC	Dependent student income	83.9	63.7	77.1	87.1	86.1	88.7	91.7	88.2	81.6	94.7
INDEPINC	Independent student income	81.5	69.0	77.2	81.0	82.8	90.1	84.3	83.9	87.2	94.5

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 C-7 shows that other grants, dependent student income, and independent student income have a large amount of significant bias prior to imputation. For all students, the mean estimated relative bias ranges from 0.09 to 0.11, the median ranges from 0.03 to 0.05, and the percentage of all variable categories with significant bias ranges from 47.3 to 50 percent. Results are also presented for nine institutional sectors. The three statistics vary considerably. For example, the percentage of categories with significant bias ranges from a low of 2.6 percent to a high of 42.2 percent.

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 other grants, dependent student income, and independent student income are usually non-ignorable (i.e., the respondents' distribution patterns differ from those in the full population). Therefore, replacing missing data with reasonable values produces 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. The effectiveness of imputation implemented to reduce item nonresponse bias will be presented in the forthcoming methodology report.

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.,

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

Table C-7. Summary of item nonresponse bias analysis for all students and by institutional sector

Variable	Variable label	All students	Public less-than-2-year	Public 2-year	Public 4-year non-doctorate	Public 4-year doctorate	Private not-for-profit less-than-4-year	Private not-for-profit 4-year non-doctorate	Private not-for-profit 4-year doctorate	Private for-profit less-than-2-year	Private for-profit 2-year or more
OTHGTAMT	Other grants										
Mean estimated relative bias		0.11	0.06	0.09	0.09	0.07	0.10	0.05	0.06	0.07	0.07
Median estimated relative bias		0.05	0.05	0.03	0.03	0.02	0.07	0.03	0.02	0.04	0.04
Percent significant bias		49.09	5.41	29.27	18.18	23.91	2.56	18.60	11.11	17.95	20.93
DEPINC	Dependent student income										
Mean estimated relative bias		0.09	0.06	0.12	†	†	†	†	†	0.09	†
Median estimated relative bias		0.03	0.01	0.03	†	†	†	†	†	0.03	†
Percent significant bias		50.00	27.27	27.50	†	†	†	†	†	37.84	†
INDEPINC	Independent student income										
Mean estimated relative bias		0.09	0.08	0.12	0.12	0.09	†	0.06	0.08	†	†
Median estimated relative bias		0.03	0.04	0.06	0.05	0.03	†	0.03	0.02	†	†
Percent significant bias		47.27	29.73	36.59	25.00	32.61	†	27.91	42.22	†	†

†Not applicable.

NOTE: Nonresponse bias analysis was conducted for three items for all students and for types of institution 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). Item nonresponse bias analysis was conducted using unimputed data after weight adjustments because weight adjustments were not designed to reduce item nonresponse bias. A byproduct of the imputation is the reduction or elimination of item nonresponse bias. The effectiveness of imputation implemented to reduce item nonresponse bias will be presented in the forthcoming methodology report.

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

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.

Cautions for Analysts

Multiple institutions. Students who attended more than one institution during the 2003–04 academic year (about 7 percent of undergraduates 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 E.D. TAB, 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 E.D. TAB.

Sources of error. The estimates in this E.D. TAB 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.

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 (described earlier) 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 C-8.⁹ 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.

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.

⁹ All standard errors for estimates presented in this E.D. TAB can be viewed at http://nces.ed.gov/das/library/tables_listings/2005163.asp.

Table C-8. Standard errors for table 1: Average tuition and fees, average total price of attendance, and percentage of undergraduates receiving any aid, any grants, or any student loans and average amounts received, by student characteristics: 2003–04

Student characteristics	Average tuition and fees	Average total price of attendance	Total aid		Total grants		Student loans	
			Percent	Average amount	Percent	Average amount	Percent	Average amount
All undergraduates								
U.S. total (excluding Puerto Rico)	\$60	\$90	0.37	\$80	0.42	\$60	0.22	\$50
Total (50 states, DC, and Puerto Rico)	60	90	0.36	80	0.41	60	0.22	50
Attendance pattern								
Full-time/full-year	120	140	0.40	110	0.48	90	0.44	60
Part-time or part-year	60	80	0.56	70	0.57	40	0.30	70
Dependency status								
Dependent	110	140	0.53	120	0.51	90	0.46	60
Independent	50	80	0.49	50	0.50	30	0.43	70
Dependent student income								
Less than \$32,000	112	160	0.68	140	0.72	90	0.66	100
\$32,000 to 92,000	116	140	0.66	150	0.59	110	0.61	70
More than \$92,000	192	250	0.91	170	0.87	160	0.71	110
Independent student income								
Less than \$25,000	60	100	0.63	70	0.61	40	0.70	80
\$25,000 or more	60	110	0.73	90	0.66	40	0.59	100
Full-time/full-year undergraduates								
Total	120	140	0.40	110	0.48	90	0.44	60
Dependency status								
Dependent	140	170	0.48	140	0.59	120	0.54	60
Independent	120	150	0.81	100	0.83	60	0.93	100
Dependent student income								
Less than \$32,000	150	190	0.71	180	0.88	130	0.93	110
\$32,000 to 92,000	160	180	0.63	160	0.73	130	0.73	70
More than \$92,000	240	260	0.80	190	0.94	170	0.73	110
Independent student income								
Less than \$25,000	130	170	0.70	120	0.81	70	0.94	110
\$25,000 or more	200	250	1.44	170	1.45	100	1.87	140

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

The estimates for average aid amounts in this E.D. TAB are only for aid recipients who received the specified type of aid. Average aid amounts for specific groups where most students do not receive aid are not reflective of the amount of support received 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.

Data Analysis System

The estimates presented in this E.D. TAB 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 E.D. TAB. In addition to the table estimates, the DAS calculates the proper standard errors¹⁰ and weighted sample sizes for these estimates. For example, table C-8 contains standard errors that correspond to estimates in table 1 in this E.D. TAB. 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 E.D. TAB can be viewed at http://nces.ed.gov/das/library/tables_listings/2005163.asp. In addition to tables, the DAS will also produce a correlation matrix of selected variables to be used for linear regression models. 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:

¹⁰ 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.

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

Statistical Procedures

Differences Between Means

The descriptive comparisons were tested in this E.D. TAB using Student's *t* statistic. Differences between estimates are tested against the probability of a Type I error,¹¹ or significance level. The significance levels were determined by calculating the Student's *t* values for the differences between each pair of means or proportions and comparing these with published tables of significance levels for two-tailed hypothesis testing ($p \leq .05$).

Student's *t* values may be computed to test the difference between estimates with the following formula:

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2}} \quad (1)$$

where E_1 and E_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors. This formula is valid only for independent estimates. When estimates are not independent, a covariance term must be added to the formula:

$$\frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2 - 2(r)se_1 se_2}} \quad (2)$$

where r is the correlation between the two variables.¹² The denominator in this formula will be at its maximum when the two estimates are perfectly negatively correlated, that is, when $r = -1$. This means that a conservative dependent test may be conducted by using -1 for the correlation in this formula as follows:

¹¹ A Type I error occurs when one concludes that a difference observed in a sample reflects a true difference in the population from which the sample was drawn, when no such difference is present.

¹² U.S. Department of Education, National Center for Education Statistics, *A Note from the Chief Statistician*, no. 2, 1993.

$$t = \frac{E_1 - E_2}{\sqrt{(se_1)^2 + (se_2)^2 + 2se_1se_2}} . \quad (3)$$

The estimates and standard errors are obtained from the DAS. If the comparison is between the mean of a subgroup and the mean of the total group, the following formula is used:

$$\frac{E_{\text{sub}} - E_{\text{tot}}}{\sqrt{se_{\text{sub}}^2 + se_{\text{tot}}^2 - 2p se_{\text{sub}}^2}} \quad (4)$$

where p is the proportion of the total group contained in the subgroup.¹³ The estimates, standard errors, and correlations can all be obtained from the DAS.

There are hazards in reporting statistical tests for each comparison. First, comparisons based on large t statistics may appear to merit special attention. This can be misleading since the magnitude of the t statistic is related not only to the observed differences in means or percentages but also to the number of respondents in the specific categories used for comparison. Hence, a small difference compared across a large number of respondents would produce a large t statistic.

A second hazard in reporting statistical tests is the possibility that one can report a “false positive” or Type I error. In the case of a t statistic, this false positive would result when a difference measured with a particular sample showed a statistically significant difference when there is no difference in the underlying population. Statistical tests are designed to control this type of error, denoted by alpha. The alpha level of .05 selected for findings in this E.D. TAB indicates that a difference of a certain magnitude or larger would be produced no more than one time out of twenty when there was no actual difference in the quantities in the underlying population. When we test hypotheses that show t values at the .05 level or smaller, we treat this finding as rejecting the null hypothesis that there is no difference between the two quantities. However, there are other cases when exercising additional caution is warranted. When there are significant results not indicated by any hypothesis being tested or when we test a large number of comparisons in a table, Type I errors cannot be ignored. For example, when making paired comparisons among different levels of income, the probability of a Type I error for these comparisons taken as a group is larger than the probability for a single comparison.

When the either of the two situations described in the previous paragraph was encountered in this E.D. TAB, comparisons were made when $p \leq .05/k$ for a particular pairwise comparison, where that comparison was one of k tests within a family. This guarantees both that the

¹³ Ibid.

individual comparison would have $p \leq .05$ and that for k comparisons within a family of possible comparisons, the significance level for all the comparisons will sum to $p \leq .05$.¹⁴

For example, in a comparison of the percentages of males and females who attend public institutions, only one comparison is possible (males vs. females). In this family, $k=1$, and the comparison can be evaluated without adjusting the significance level. When respondents are divided into three income groups and all possible comparisons are made, then $k=3$ and the significance level of each test must be $p \leq .05/3$, or $p \leq .017$. The formula for calculating family size (k) is as follows:

$$k = \frac{j(j-1)}{2} \quad (5)$$

where j is the number of categories for the variable being tested. There were a few instances when apparent differences between income or need levels were significant when $k=1$, but not when $k=3$. These comparisons are stated in the text and the significance level is footnoted.

¹⁴ The standard that $p \leq .05/k$ for each comparison is more stringent than the criterion that the significance level of the comparisons should sum to $p \leq .05$. For tables showing the t statistic required to ensure that $p \leq .05/k$ for a particular family size and degrees of freedom, see Olive Jean Dunn, "Multiple Comparisons Among Means," *Journal of the American Statistical Association* 56 (1961): 52–64.