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**NATIONAL CENTER FOR EDUCATION STATISTICS**

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Technical Report

October 1997

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National Postsecondary Student  
Aid Study, 1995-96 (NPSAS:96)  
Methodology Report

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U.S. Department of Education  
Office of Educational Research and Improvement

NCES 98-073

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### **Suggested Citation**

Department of Education, National Center for Education Statistics. *National Postsecondary Student Aid Study, 1995-96 (NPSAS:96), Methodology Report*, NCES 98-073, by John A. Riccobono, Roy W. Whitmore, Timothy J. Gabel, Mark A. Traccarella, and Daniel J. Pratt, Research Triangle Institute; Lutz K. Berkner, MPR Associates, Inc. Andrew G. Malizio, project officer. Washington, DC: 1997.

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## Foreword

This report describes the methods and procedures used for the 1996 National Postsecondary Student Aid Study (NPSAS:96). NPSAS:96 included important changes from previous NPSAS surveys (conducted in 1987, 1990, and 1993) in its sample design and collection of data. For example, the current study is the first to employ a single-stage institutional sampling design and to select a subsample of students for telephone interviews. It is also the first in the NPSAS series to take full advantage of extant data maintained in government data files. Even so, sufficient comparability in survey design and instrumentation was maintained to ensure that important comparisons with past NPSAS studies could be made.

We hope that the information provided in this report will be useful to a wide range of interested readers. We also hope that the results reported in the forthcoming descriptive summary reports will encourage use of the NPSAS:96 data. We welcome recommendations for improving the format, content, and approach, so that future methodology reports will be more informative and useful.

Mary Frase  
Acting Associate Commissioner  
Data Development and Longitudinal Studies Group

## Acknowledgements

The authors gratefully acknowledge the assistance of staff members of the National Center for Education Statistics (NCES) and the Office of Education Research and Improvement (OERI) for their advice, guidance, and review in conducting the study and in preparing this document. We are particularly grateful to C. Dennis Carroll, head of the Postsecondary Education and Outcomes Longitudinal Studies Program, and Dr. Andrew Malizio, Project Officer for NPSAS.

Particular thanks are also extended to the study technical review panel members, who provided considerable insight and guidance in development of the design and instrumentation of this study and an earlier major field test. Thanks are also extended to the project staff members of the three involved contractors--Research Triangle Institute (RTI), MPR Associates, and the National Association of Student Financial Aid Administrators (NASFAA). A cadre of staff from each of these organizations, including statisticians, analysts, survey managers, programmers, data collectors and interviewers--too numerous to list here worked long hours to produce the data files and reports of the 1996 NPSAS. At RTI, we are especially indebted to Ms. Lil Clark, who prepared the graphics, integrated the text, and produced the drafts and final version of this report.

We also wish to thank all of those from OERI/NCES, who reviewed earlier drafts of this report and offered many helpful suggestions, including: Robert Burton, Kathryn Chandler, Mary Frase, and Laurence Ogle. Julie Anne Cronin and Ann Parcell from the Office of Tax Analysis, U.S. Treasury Department also reviewed the report and provided helpful suggestions.

Most of all, we are greatly indebted to the staff of over 830 postsecondary education institutions who assisted in the institution records collection and to the over 34,000 students and parents who generously participated in the telephone survey. Their willingness to take the time to share information has made this study a success.

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# Chapter 1

## Introduction, Background, and Objectives

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This report describes methodological procedures and results for the 1995-96 National Postsecondary Student Aid Study (NPSAS:96). This study, which was preceded by a substantial field test,<sup>1</sup> was conducted for the National Center for Education Statistics (NCES) of the U.S. Department of Education, by Research Triangle Institute (RTI), assisted by MPR Associates, Inc. and the National Association of Student Financial Aid Administrators (NASFAA), as principal subcontractors.

This introductory chapter describes briefly the background, objectives, methodological issues, and products of NPSAS:96. In Chapter 2, study design and method are summarized. Descriptions and overall outcomes of the several stages of data collection are presented in Chapter 3. Chapter 4 presents evaluations of procedures used to collect information from institutions, students, and parents, and examines issues related to the quality of the data collected. Chapter 5 provides descriptions of data editing, coding, variable construction and other activities associated with producing study data files. The final chapter describes the analysis weight construction and identifies precision of study estimates. Materials used during the NPSAS:96 survey, as well as other related supporting material, are provided as appendixes to the report and cited, where appropriate, in the text.

### 1.1 BACKGROUND AND OBJECTIVES OF NPSAS

NPSAS is a comprehensive nationwide study to determine how students and their families pay for postsecondary education, and to describe some demographic and other characteristics of those enrolled. The study is based on a nationally representative sample of all students enrolled in postsecondary education institutions, including undergraduate, graduate, and first-professional students. Students attending all types and levels of institutions are represented in the samples, including public and private for-profit and not-for-profit institutions, and from less-than-2-year institutions to 4-year colleges and universities. The study is designed to address the policy questions resulting from the rapid growth of financial aid programs and the succession of changes in financial aid program policies since 1986. The first study (NPSAS:87) was conducted during the 1986-87 school year; subsequently, NPSAS has been conducted triennially as NPSAS:90, NPSAS:93, and the current NPSAS:96. Each study is designed to cover the July 1 through June 30 financial aid award year.

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<sup>1</sup>Research Triangle Institute, *National Postsecondary Student Aid Study: 1996--Field Test Methodology Report*, (Working Paper No. 96-17). National Center for Education Statistics: Washington, DC; Author; July 1996.



A main objective of the study is to produce reliable national estimates of characteristics related to financial aid for postsecondary students. The data are part of the NCES comprehensive information on student financial aid and other characteristics of those enrolled in postsecondary education. The data focus on three general questions with important policy implications for financial aid programs:

- How do students and their families finance postsecondary education?
- How does the process of financial aid work, in terms of both who applies and who receives aid?
- What are the effects of financial aid on students and their families?

The first and third questions address the basic purpose of financial aid and provide one measure of the success of financial aid programs, including the underlying strategies of students and families in financing postsecondary education (e.g., Do students avoid socially desirable career paths because of the need to repay higher levels of debt?) The Beginning Postsecondary Students and Baccalaureate and Beyond longitudinal studies, for which NPSAS provides base year information, also address the third question. The second question addresses the actual implementation of student aid programs. The implementation of Federal financial aid programs is greatly influenced by decisions and practices of school financial aid offices and banks which have the primary responsibility for providing information to students and awarding the various types of aid; consequently, information is needed regarding the types and amounts of aid awards being made by institutions.

## **1.2 METHODOLOGICAL ISSUES**

As described subsequently in Chapter 2, the NPSAS survey design is both large and complex. Data are collected from a very large and diverse set of respondents; over 950 postsecondary institutions, 50,000 students, and 8,800 parents were selected for participation in NPSAS:96. A major methodological concern underlying NPSAS is designing a data collection system that has the flexibility to gather comprehensive financial data from the most appropriate source and concurrently provide some assurance of comparability in data collection for each element. Of the potential sources for NPSAS data--government data files, institutions, students, or parents--none alone can provide a complete and accurate summary of postsecondary education financing.

Financial aid offices maintain accurate records of certain types of financial aid at that institution, but these records are not necessarily inclusive of all support and assistance. Such records may not contain financial aid provided at other institutions attended by the student and they cannot provide detailed information on sources of aid and educational financing other than those recorded by that financial aid office. (Two notable exceptions that are not maintained in many financial aid offices are employee benefits and graduate teaching or research assistantships.) Students and their parents are more likely than institutions to have a comprehensive picture of education financing, but may not have accurate memory or records of exact amounts and sources, which they may have earlier provided accurately to lending agencies or aid providers (or

clearinghouses), and which may exist in student financial aid records. Consequently, the NPSAS data requirements call for a survey design that builds a comprehensive and accurate understanding of postsecondary education financing from a number of different sources. To meet this challenge, NPSAS:96 relied on an integrated system of computer-assisted data capture instruments.

Innovative methodological solutions that were applied to NPSAS:96 challenges were tested and refined during a substantial field test conducted during the 1994-95 school year on a separate independent sample of students and institutions. Results of the field test have been reported separately.<sup>2</sup>

### 1.3 SPECIAL FEATURES OF NPSAS:96

Although the general purposes of the NPSAS studies have remained quite consistent, all NPSAS implementations except the first also have served as the base year for a longitudinal study. For NPSAS:96 and NPSAS:90, the longitudinal cohort was comprised of students who began their postsecondary education during the NPSAS year. As in the past, the NPSAS:96 longitudinal cohort was over-sampled to support the subsequent longitudinal follow-up studies, the 1996 Beginning Postsecondary Students (BPS:96) survey series.

In implementing three prior rounds of NPSAS and their associated field tests, NCES and its contractors have developed and refined a number of systems and methods to facilitate subsequent rounds. Consequently, in NPSAS:96, methods that had both proved successful and remained applicable to current study needs were generally maintained or refined. Like prior NPSAS implementations, however, the current study also attempted to take advantage of new technologies and to access newly available data sources toward improving study efficiency and/or the quality of data collected. The major new features of the NPSAS:96 study were:

- enriching study data by obtaining, through electronic data interchange (EDI) with a Department of Education (ED) data system, financial data provided by federal aid applicants on the Free Application for Federal Student Aid (FAFSA) and resulting Student Aid Report (SAR) -- obtained for school years 1995-96 and 1996-97;
- enriching study data by obtaining, through EDI with the ED National Student Loan Data System (NSLDS) files, information available for loan recipients during the 1995-96 school year<sup>3</sup>;
- increasing precision of study estimates (at negligible cost) by eliminating the previously used first stage of student sampling (i.e., geographic area);

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<sup>2</sup>Research Triangle Institute, July 1996, *Op. Cit.*

<sup>3</sup>As in prior NPSAS studies, financial data were also obtained for aid recipients through EDI with the ED Pell Grant Files.

- introducing cost efficiencies through a dynamic two phase sampling of students for telephone interview; and
- improving the quality of collected institutional data of record through an enhanced Computer Assisted Data Entry (CADE) procedure.

NPSAS:96 also introduced procedures to broaden the base of postsecondary student types for whom telephone interview data could be collected. In past NPSAS implementations, no mechanism existed for contacting and collecting information by telephone from students with severe hearing impairments; however, NPSAS:96 included the use of Telephone Display for the Deaf (TDD) technology to facilitate telephone communications with such students. Also, in NPSAS:96, a separate Spanish translation interview was prepared for administration to students with insufficient English language proficiency to complete the interview in English or with only moderate translation of terms by a bilingual interviewer<sup>4</sup>. This was particularly useful with the students from sampled postsecondary institutions in Puerto Rico.

#### **1.4 MAJOR NPSAS:96 PRODUCTS**

By Spring 1998 the following products/reports will be available:

- *Profile of Undergraduates in the U.S. Postsecondary Education Institutions: 1995-96*

Report describing the characteristics of undergraduates enrolled during 1995-96, including age, race, gender, income, financial aid receipt, community service, veteran status, and more, based on the 1996 National Postsecondary Student Aid Study. The report will include a special section on student employment.

- *Student Financing of Graduate and First-professional Education 1995-96*

Based on data from the 1996 NPSAS, this report will describe the characteristics of graduate and first-professional students enrolled during 1995-96, including age, race, gender, income, financial aid receipt, community service, veteran status, and more. Also, the report will describe those graduate and first-professional students who received financial aid, including grants, loans, and work-study from federal, state, institution, or other sources, by selected student characteristics. The report will include a section on the timing of graduate education - the number of years between finishing undergraduate work and beginning graduate study.

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<sup>4</sup>English/Spanish bilingual interviewers were used in NPSAS:96 as in previous NPSAS studies to interview Spanish speaking sample members with limited English proficiency.

- *Student Financing of Undergraduate Education, 1995-96*

This report will focus on undergraduate students, and examines how undergraduate students enrolled during 1995-96 financed their education. The report includes a section that explores undergraduate borrowing, including information from the National Student Loan Data System on cumulative borrowing. Other tables in the report will include information on total costs of attendance, the distribution of financial aid among students by type of institution, and the net cost of attendance.

- *NPSAS:96 Undergraduate and Graduate/First-professional Data Analysis Systems*

The Data Analysis System (DAS) is a Windows software application that provides public access to NCES survey data. Two DAS's have been created from the NPSAS:96 data -- an undergraduate DAS and a graduate/first-professional DAS. With the DAS, users can generate tables of percentages, means, or correlation coefficients simply by choosing the DAS variables (based on survey questionnaire items) that they would like to appear in a table and indicating what function should be used. Contact Aurora D'Amico at 202-219-1365 to obtain a NPSAS:96 DAS or one of the NPSAS:96 reports.

- *NPSAS:96 Restricted Use Data Files*

The survey data files used in to create variables in the Data Analysis Systems, and the associated electronic codebooks and file documentation, are available to researchers who have obtained a restricted data license from NCES. Information on obtaining a restricted data license may be found in the NCES Field Restricted Use Data Procedures Manual, available from Cynthia Barton at 202-219-2199. Her e-mail address is [Cynthia\\_Barton@ed.gov](mailto:Cynthia_Barton@ed.gov).

Information on NPSAS:96 products is available from the NCES Website <http://www.ed.gov/NCES/>.

## Chapter 2

# Design and Method of NPSAS:96

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The implementation of NPSAS:96 posed a number of operational challenges in both selecting samples and in subsequent phases of data collection. Perhaps the largest challenge was the need to complete complex, sequentially dependent operations in an overlapping manner, due to the time differential of when student sampling lists were made available from institutions.<sup>1</sup>

Considerable planning and development of operational controls were required. To meet the challenge, NPSAS:96 relied on an integrated system of computer assisted data capture approaches, including: (a) Electronic Data Interchange (EDI) with extant data bases, (b) Computer Assisted Data Entry (CADE), and (c) Computer Assisted Telephone Interviewing (CATI). The NPSAS Integrated Management System (IMS) provided the framework for articulating modules developed to record, abstract, or transfer data. Additional modules of the IMS facilitated editing of these data, loading data from one module to another (e.g., from the CADE record to the student CATI record), and preparing, daily reports of production and case management. Communication modules of the IMS provided the capability for transfer of data from the field to a central office and also for routine communication via electronic mail between all members of the project team.

The several innovative methodological solutions that were applied to NPSAS:96 challenges were refined during a substantial field test conducted during the 1994-95 school year on a separate independent sample of students and institutions.<sup>2</sup>

### 2.1 NPSAS:96 Target Population and Sampling Overview

The basic features of the NPSAS:96 Sampling Plan and the samples realized therefrom are summarized in the following two sections. Greater detail is provided in Appendix A for the interested reader.

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<sup>1</sup>Final 1995-96 enrollment lists were available from some institutions as early as February, 1996; however, other institutions did not provide final lists until August, 1996.

<sup>2</sup>Research Triangle Institute, July 1996, *op. cit.*

### 2.1.1 Target Population

The ideal target population for NPSAS:96 consists of all students who were enrolled in postsecondary institutions in the United States or Puerto Rico between July 1, 1995 and June 30, 1996.<sup>3</sup> Using this time period to define the survey population, however, would delay final sampling for many institutions until after the first 1996 summer session began. Consequently, the survey population was defined as those students who were enrolled in any term *beginning* between May 1, 1995 and April 30, 1996.<sup>4</sup> This definition of the survey population is completely consistent with that used for NPSAS:93. It also provides substantial comparability with the survey populations for NPSAS:90 and NPSAS:87.<sup>5</sup> Further constraints on this general population are provided subsequently.

### 2.1.2 Sample Design Overview

Geographic-area-clustered, three-stage sampling designs were used for all previous NPSAS studies.<sup>6</sup> However, as part of the NPSAS:96 field test activities, the feasibility of increasing precision of study estimates by eliminating the geographic area stage of sampling was examined. Both a clustered sample of institutions and an unclustered sample of institutions were selected for NPSAS:96.<sup>7</sup> A comparison of expected costs and precision for these two sampling designs (i.e., three-stage vs. two-stage) indicated that: (1) the expected difference in cost between the two designs was not substantial<sup>8</sup> and (2) standard errors for important estimates

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<sup>3</sup>Excluding students who were enrolled solely in a GED program or who were concurrently enrolled in high school.

<sup>4</sup>Nearly all members of the target population are also members of the survey population; however, the adopted definition of the survey population allowed the student lists needed for sample selection to be obtained in January or February for most institutions (e.g., those on a semester calendar system).

<sup>5</sup>For NPSAS:90, the students sampled were those enrolled on August 1, 1989, October 15, 1989, February 15, 1990, or June 15, 1990 (however, the June 15 enrollees were not sampled for 4-year institutions because of budgetary limitations); for NPSAS:87, only Fall 1986 enrollees were sampled.

<sup>6</sup>Stages were: (1) geographic areas constructed from 3-digit postal Zip code areas; (2) institutions within sample areas; and (3) students within sample institutions. An area clustered design was necessary for NPSAS:87 because a complete institution frame was not available at that time, and the frame was supplemented with local sources. An area clustered design was used for the 1990 and 1993 studies to reduce the costs associated with sending field staff to sample institutions to abstract registration and financial aid data for sample students.

<sup>7</sup>The field test sample of institutions was selected from those that were in neither of the institutional samples selected for the full-scale study, to insure that no institution would be burdened by participation in both surveys.

<sup>8</sup>The relatively small cost differential between the two approaches results from greater use of two new procedures for collecting student financial aid information and other information from institutional records. The first of these procedures, introduced in the NPSAS:96 Field Test involved collecting, through EDI, SAR data from the ED central processing system (CPS) prior to any data collection at the involved institution. The second procedure, which was introduced in NPSAS:93, was the use of remote CADE, by institutional staff at most schools

were expected to be 10 to 25 percent smaller with the two-stage design than those with the three-stage design. Since a two-stage design can only improve precision and the cost penalty did not appear to be substantial, the two-stage design was fielded for the full-scale NPSAS:96. Comparisons of cost and precision estimates under the two sampling approaches are provided in Appendix A (Tables A.1 and A.2); greater detail on procedures and conclusions is provided in the NPSAS:96 field test report.<sup>9</sup>

An overview of the sequential statistical sampling process for NPSAS:96 is provided in Figure 2.1. The institutional sampling frame for NPSAS:96 was constructed from the 1993-94 Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics (IC) file. This data base is considered to provide nearly complete coverage of the institutions in the target population. Listings in the file that were not eligible institutions (e.g., institutions located outside the U.S. and Puerto Rico; central offices) were not considered. The remaining institutions were then partitioned into nine institutional strata based on institutional control and highest level of offering:

- (1) Public, less-than-2-year;
- (2) Public, 2-year;
- (3) Public, 4-year, non-doctorate-granting;
- (4) Public, 4-year, doctorate-granting;<sup>10</sup>
- (5) Private, not-for-profit, less-than-4-year;
- (6) Private, not-for-profit, 4-year, non-doctorate-granting;
- (7) Private, not-for-profit, 4-year, doctorate-granting;<sup>10</sup>
- (8) Private, for-profit, less-than-2-year; and
- (9) Private, for-profit, 2-year or more.

A stratified sample of 973 institutions was then selected with probabilities proportional to size (pps); some of these institutions subsequently proved to be ineligible and others failed to participate.

The sampling frames for selecting sample students were hard-copy and machine-readable lists of students provided by the sample institutions for those students enrolled in terms or courses of instruction beginning during the previously defined NPSAS year.<sup>11</sup> Student listings were sampled on a flow basis as received, using stratified systematic sampling; student sampling strata were:

- (1) potential first-time, beginning students (FTBs).

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and by field staff only at the remainder, to obtain information from school records.

<sup>9</sup>Research Triangle Institute, July 1996, *Op. Cit.*

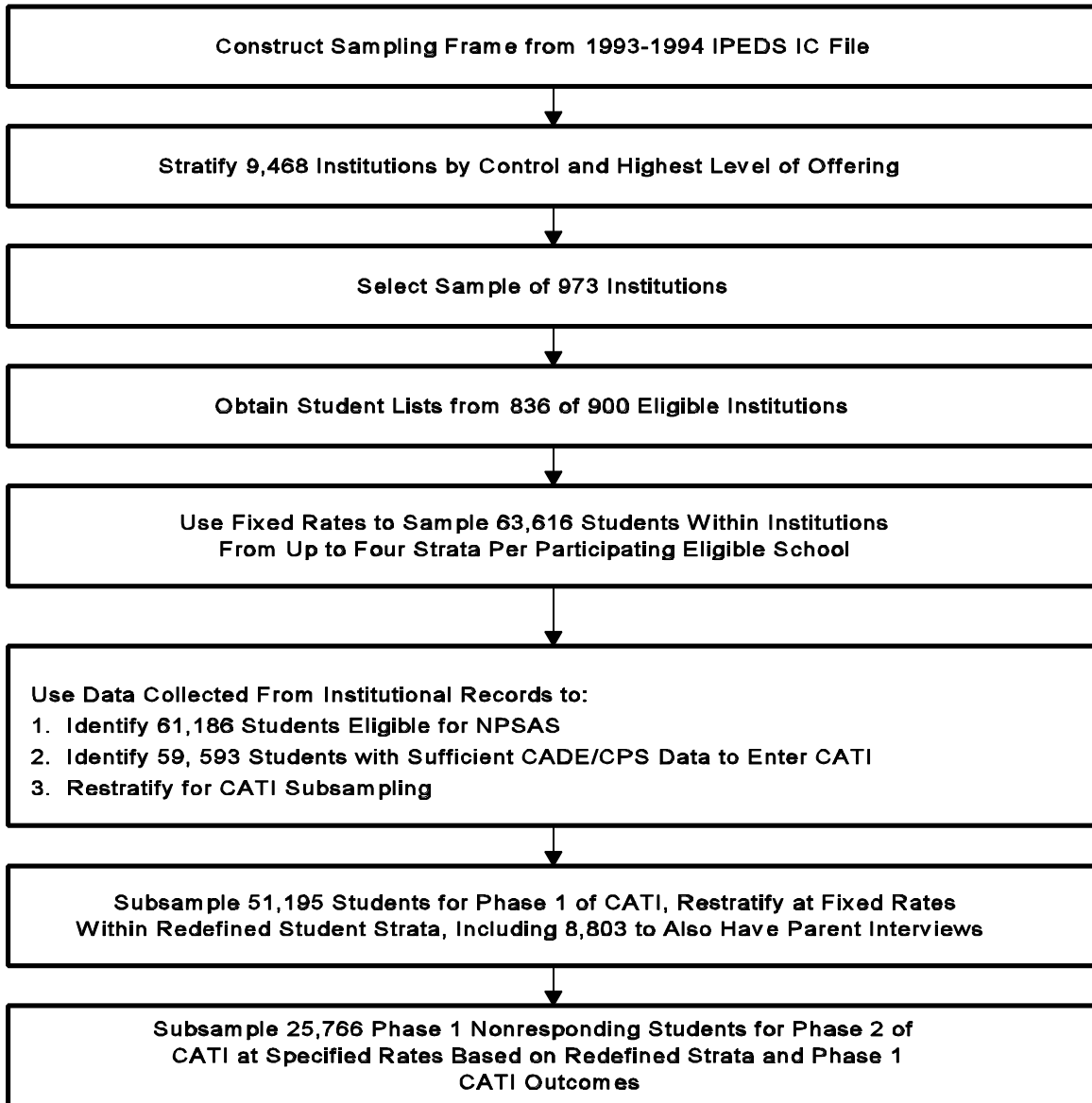
<sup>10</sup>Institutions that award first-professional degrees are included in doctorate-granting institutions.

<sup>11</sup>Quality control checks were performed on each listing received from a sample institution, by comparing the numbers of undergraduate, graduate, and first-professional students listed to the unduplicated head counts reported for the 1993-94 academic year in the 1994-95 IPEDS IC file.

- (2) other undergraduate students.
- (3) graduate students; and
- (4) first-professional students.



Figure 2.1—Schematic of sequential NPSAS:96 sampling operations



The list for each student stratum was sampled at a rate designed to provide approximately equal student-level probabilities under certain constraints (see below). Student sampling rates were revised after enough lists had been received to more accurately estimate the overall sample yield.

Due to budget limitations, CATI was attempted for only a subsample of the basic student sample. A two-phase, nonrespondent follow-up subsampling design was used to maximize the yield of completed student interviews obtained from the CATI subsample while achieving acceptable response rates. Previously collected student record data were used to partition the basic student sample into nine strata for the Phase 1 CATI subsampling:

- (1) potential first-time, beginning students (FTBs).
- (2) other undergraduate students who were financial aid applicants;
- (3) other undergraduate students who were not financial aid applicants;
- (4) graduate students who were financial aid applicants;
- (5) graduate students who were not financial aid applicants;
- (6) first-professional students who were financial aid applicants;
- (7) first-professional students who were not financial aid applicants;
- (8) students for whom no “records” data had been collected from any source; and
- (9) students identified as ineligible based on the CADE data.

Students were subsampled for CATI at fixed positive rates within each of the first seven strata (potential FTBs and federal aid applicants were selected with certainty, see Table 2.5); no students were selected from the last two listed strata.

Within the Phase 1 CATI subsample, *all* students in the below-listed categories (based on previously collected “records” data) were designated for parent interviewing.<sup>12</sup>

- (1) Dependent undergraduate students not receiving federal aid.
- (2) Dependent undergraduate students receiving federal aid, whose parents’ adjusted gross income was not available.
- (3) Independent undergraduate students who were 24- or 25- years old on December 31, 1995.

These sampling procedures resulted in selection of 51,195 students for Phase 1 of the student CATI. Among these students, 8,803 were also selected for parent interviewing. A sample of nonrespondents to Phase 1 of CATI were selected for Phase 2 of CATI with specified rates based on the outcome of the Phase 1 CATI efforts and the seven CATI sampling strata. If the student did not respond in Phase 1 of CATI and was not selected for Phase 2, the parent interview was not attempted; 25,766 students were selected for Phase 2 of CATI.

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<sup>12</sup>As suggested by the selection rules, the purpose of the parent data collection was primarily to complete data gaps regarding the parents’ financial resources.

## 2.2 NPSAS:96 Sample Implementation

The goal of all sampling activities was to attain sufficient numbers of eligible sample postsecondary students (within specified student and institution types). An important domain of the student sample was the set of students identified as FTBs,<sup>13</sup> who would comprise the baseline cohort for the BPS longitudinal study. The desired number of sample students was determined by accounting for expected (from prior NPSAS studies) rates of ineligibility among sample students and rates of FTB misclassification, (as determined from NPSAS:90 and the NPSAS:96 field test). Since the student samples were selected on a flow basis as sample institutions provided their enrollment lists (in order to meet the data collection schedule), the students were sampled at fixed rates. Under this approach, the actual numbers of students sampled are random variables; however, the sampling rates were set to meet or exceed the sample sizes shown in Table 2.1.

Table 2.1—Target numbers of sample students by institutional stratum and type of student

Institutional stratum	Total	Potential FTBs	Other undergraduates	Graduate students <sup>a</sup>	First-professional students <sup>a</sup>
Total	59,509	22,677	23,908	9,924	3,000
Public, less-than-2-year	1,674	1,575	99	†	†
Public, 2-year	7,761	4,345	3,416	†	†
Public, 4-year, non-doctorate-granting	9,656	2,896	4,860	1,900	†
Public, 4-year, doctorate-granting	13,043	2,471	5,685	3,803	1,084
Private, not-for-profit, less-than-4-year	2,301	1,485	816	†	†
Private, not-for-profit, non-doctorate-granting	7,918	2,528	3,490	1,900	†
Private, not for profit, 4-year, doctorate-granting	10,691	2,588	4,031	2,198	1,874
Private, for-profit, less-than-2-year	3,455	3,318	137	-- <sup>a</sup>	-- <sup>a</sup>
Private, for-profit, 2-year or more <sup>a</sup>	3,010	1,471	1,374	-- <sup>a</sup>	-- <sup>a</sup>

<sup>a</sup>Entries do not sum to total because a small sample of graduate and first-professional students was expected from private, for-profit institutions.

†Not applicable.

<sup>13</sup>Students who began their postsecondary education during the NPSAS year.

The NPSAS:96 sample was also designed to achieve at least 30 student CATI respondents from each sample institution that had at least that many eligible students enrolled during the NPSAS year.<sup>14</sup> Consequently, institution sample sizes were determined to achieve an average of approximately 50 or more sample students per institution within each institutional stratum. Given these student sample size goals, it was determined that the survey should be based on approximately 850 participating institutions. Based on institutional eligibility and participation rates obtained in prior NPSAS implementations and the NPSAS:96 field test, an initial sample of 973 institutions was selected to yield at least the targeted 850 eligible and participating schools.

### **2.2.1 Institutional Sample**

The target population for NPSAS:96 includes nearly all postsecondary institutions in the 50 states, the District of Columbia, and Puerto Rico. Specifically, to be eligible for NPSAS:96 an institution is required, during the 1995-96 academic year, to:<sup>15</sup>

- offer an educational program designed for persons who have completed secondary education; and
- offer more than just correspondence courses; and
- offer at least one academic, occupational, or vocational program of study lasting at least 3 months or 300 clock hours; and
- offer courses that are open to more than the employees or members of the company or group (e.g., union) that administers the institution; and
- be located in the 50 states, the District of Columbia, or Puerto Rico; and
- be other than a U.S. Service Academy.<sup>16</sup>

Institutions providing only avocational, recreational, or remedial courses or only in-house courses for their own employees are excluded.

The student sample was allocated to the separate applicable institutional and student sampling strata, defined above. Student sampling rates (used to define institution measures of size) were defined based on 1993-94 IPEDS IC file counts, a modeling procedure to partition FTBs and other undergraduates, and the required sample sizes (see Appendix A for details).

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<sup>14</sup>This was to allow NCES to send each participating institution a report using the results of the interviews with their students without violating confidentiality requirements.

<sup>15</sup>The listed eligibility requirements are consistent with those used in previous NPSAS implementations.

<sup>16</sup>These academies are not eligible for this financial aid study because of their unique funding/tuition base.

An independent sample of institutions was selected for each institutional stratum using Chromy's<sup>17</sup> sequential, probability minimum replacement (pmr) sampling algorithm to select institutions with probabilities proportional to their computed measures of size. However, rather than allow multiple selections of sample institutions,<sup>18</sup> those with expected frequencies of selection greater than unity (1.00) were selected with certainty. The remainder of the institutional sample was selected from the remaining institutions within each stratum. The sampling algorithm was implemented with a random start for each institutional stratum to ensure the positive pairwise probabilities of selection that are needed for proper variance estimation.<sup>19</sup>

The numbers of certainty and noncertainty schools selected, within each of the nine institutional strata, are shown in Table 2.2. Within each institutional stratum, additional implicit stratification was accomplished by sorting the stratum sampling frame in a serpentine manner<sup>20</sup> by: (a) institutional level of offering (where strata had been collapsed one level); (b) the IPEDS IC-listed Bureau of Economic Analysis of the U.S. Department of Commerce Region (OBE Region); and (c) the institution measure of size. The objectives of this additional, implicit stratification were to approximate proportional representation of institutions on these measures. Table 2.3, shows that the geographic distribution of the sample is consistent with that of the subset of institutions from which the sample was selected.

### 2.2.2 The Student Samples

In addition to the initial (basic) student sampling, additional student subsampling was implemented in NPSAS:96. Because of budgetary constraints, only a subsample of students were selected for interviewing; moreover, interviewing was conducted in two phases, and only a subsample of first phase nonrespondents were selected for the second interviewing phase. Additionally, certain students were selected for whom an interview with their parents would be required to obtain certain data elements. Finally, a small subsample of students was selected for reliability interviews.

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<sup>17</sup>Chromy, J.R. (1979). "Sequential Sample Selection Methods." *Proceedings of the American Statistical Association Section on Survey Research Methods*, 401-406.

<sup>18</sup>By precluding institutions with multiple selections at the first stage of sampling, it was unnecessary to select multiple second-stage samples of students.

<sup>19</sup>*c.f.*, Williams, R.L. and Chromy, J.R. (1980). "SAS Sample Selection MACROs." *Proceedings of the Fifth Annual SAS Users Group International Conference*, 392-396.

<sup>20</sup>*c.f.*, Chromy, J.R. (1981). "Variance Estimators for a Sequential Sample Selection Procedure." In: D. Krewski, R. Platek, and J.N.K. Rao (Eds.), *Current Top IMS in Survey Sampling*. New York: Academic Press, 329-347.

Table 2.2—Institutional sampling rates and number of certainty and non-certainty institutions sampled, by institutional stratum

Institutional stratum <sup>a</sup>	Size of Universe <sup>b</sup>	Sampling Rate	Number of sample institutions		
			Total	Certainty	Non-certainty
Total	9,468	0.10	973	131	842
1. Public, less-than-2-year	273	0.14	39	10	29
2. Public, 2-year	1,265	0.13	165	7	158
3. Public, 4-year, non-doctorate-granting	376	0.33	125	14	111
4. Public, 4-year, doctorate-granting	243	0.51	124	29	95
5. Private, not-for-profit, less-than-4-year	902	0.06	56	6	50
6. Private, not-for-profit, 4-year, non-doctorate-granting	1,306	0.09	120	2	118
7. Private, not-for-profit, 4-year, doctorate-granting	681	0.21	143	54	89
8. Private, for-profit, less-than-2-year	3,516	0.03	120	2	118
9. Private, for-profit, 2-year or more	906	0.09	81	7	74

<sup>a</sup>Stratum reflects institutional categorization as determined from the 1993-94 IPEDS IC file; some errors in this classification were uncovered when institutions were contacted.

<sup>b</sup>Based on the 1993-94 IPEDS IC file.

Table 2.3— Distribution of NPSAS:96 institutional sample by OBE region

OBE region <sup>a</sup>	Sample institutions		IPEDS institutions <sup>b</sup>	
	Number	Percent	Number	Percent
1. New England	62	6.4	542	5.7
2. Mid-East	181	18.6	1,557	16.4
3. Great Lakes	150	15.4	1,486	15.7
4. Plains	70	7.2	801	8.5
5. Southeast	194	19.9	2,105	22.2
6. Southwest	89	9.1	878	9.3
7. Rocky Mountains	34	3.5	322	3.4
8. Far West	170	17.5	1,622	17.1
9. Outlying Areas	23	2.4	155	1.6

<sup>a</sup> 1 includes CT, ME, MA, NH, RI, VT; 2 includes DE, DC, MD, NJ, NY, PA; 3 includes IL, IN, MI, OH, WI; 4 includes IA, KS, MN, MO, NE, ND, SD; 5 includes AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV; 6 includes AZ, NM, OK, TX; 7 includes CO, ID; 8 includes MT, UT, WY; 9 includes AK, CA, HI, NV, OR, WA; and 9 includes PR.

<sup>b</sup> Counts obtained from the 1993-94 IPEDS IC file, subsetted to those from which the sample was selected.

### 2.2.2.1 Basic Student Sample

The postsecondary students eligible for NPSAS:96 were those who attended a NPSAS-eligible institution during the previously defined NPSAS year and who were:

- enrolled in *either* (a) an academic program; (b) at least one course for credit that could be applied toward fulfilling the requirements for an academic degree; *or* (c) an occupational or vocational program that required at least 3 months or 300 clock hours of instruction to receive a degree, certificate, or other formal award;
- not concurrently enrolled in high school; and
- not enrolled *solely* in a GED or other high school completion program.

### Construction of Initial Sampling Frames

Each sampled institution that was verified as NPSAS-eligible was asked to provide lists of all its students who satisfied all the NPSAS eligibility conditions, preferably nonduplicated, machine-readable lists (diskette, magnetic tape, or electronic mail file), together with identifying and classifying information (see section 2.3.2 below). Although machine-readable files were preferred, the preferences of sample institutions were accommodated, and whatever type(s) of student list(s) they were able to provide were accepted. Separate, unduplicated lists (in which each student's name appears only once) were requested for first-time beginning, other undergraduate, graduate, and first-professional students (the basic strata) were requested of those providing hard copy lists. As expected, however, many institutions sent separate lists for each term or course of instruction; in which cases an individual student's name could appear on more than one list. In such cases, selected samples were "unduplicated" to ensure that each student received only one chance of selection.

As student lists were received from institutions, students were sampled.<sup>21</sup> Stratified systematic sampling was used to ensure comparable sampling procedures for both hard-copy and machine-readable lists. In the case of duplicated hard-copy lists, a stratified systematic sample was selected from each list provided (typically separate lists by term) and the *samples* selected were "unduplicated" against master lists (see Appendix A).<sup>22</sup> After the sample of students had been selected for an institution, Social Security numbers of those sampled were compared to those of students who had already been selected from other institutions to eliminate cross-institution duplication. Multiplicity adjustments in the sample weighting (see below, Chapter 6) accounted for the fact that any students who attended more than one institution during the NPSAS year had more than one chance of selection.

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<sup>21</sup>Machine-readable lists were unduplicated by sorting on the student ID number and deleting duplicates prior to sample selection.

<sup>22</sup>The fall term was given precedence in this process for comparability with NPSAS:87. If the institution did not have standard terms, other orderings of the student lists were used to achieve unduplication of the sample.

Initial student sampling rates were calculated for each sample institution using refined overall rates (see Appendix A) to approximate equal probabilities of selection within the ultimate institution-by-student sampling strata. However, these rates were sometimes modified for reasons listed below.

- The student sampling rates were increased, as needed, so that the sample size achieved at each sample institution would be at least 40 sample students, where possible.<sup>23</sup>
- The student sampling rates were decreased if the sample size was more than 50 greater than the institution had been told to expect.<sup>24</sup>
- The sample yield was monitored throughout the several months during which student lists were received, and the student sampling rates were adjusted periodically to ensure that the desired student sample sizes were achieved.

These adjustments to the initial sampling rates (especially the first two types of adjustments) resulted in some additional variability in the student sampling rates, and, hence, in some increase in survey design effects (variance inflation--see Chapter 6).

The actual sample sizes achieved in total and within each institutional and student stratum are shown in Table 2.4. In general, the 836 eligible and participating institutions classified fewer students than expected as potential FTBs; consequently, sampling rates for FTBs were increased to obtain the needed sample yield.<sup>25</sup> By comparing Table 2.4 with Table 2.1, it can be seen that the rate adjustment procedures were generally effective; the overall sample yield was actually greater than expected (63,616 students as compared to the target of 59,509).

### **2.2.2.2 Student Interview Subsample**

The student interview sampling design for NPSAS:96 required subsampling of those eligible students for whom CADE data had been obtained. In this subsampling, an attempt was made to maximize sample yield (completed interviews) without sacrificing response rates by using a two-phase, nonresponse subsampling design.

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<sup>23</sup>The reason for this constraint was to facilitate obtaining at least 30 responding students for most participating institutions, enabling NCES to send a report to the institution regarding its sample students, as a "Thank You" for participation without violating NCES confidentiality guidelines.

<sup>24</sup>This was to facilitate continued participation by the institutions for CADE data abstraction.

<sup>25</sup>For 35 four-year institutions, this rate was increased by selecting a supplemental sample.



Table 2.4—Realized student sample, by institutional and student strata

Institutional stratum	Total	Student stratum			
		Potential FTBs	Other undergraduates	Graduate students	First-professional students
Total	63,616	23,612	27,536	9,689	2,779 <sup>a</sup>
1. Public, less-than-2-year	1,662	1,016	646	†	†
2. Public, 2-year	8,476	4,434	4,042	†	†
3. Public, 4-year, non-doctorate-granting	10,891	3,629	5,454	1,805	†
4. Public, 4-year, doctorate-granting	14,751	3,631	6,228	3,757	1,135
5. Private, not-for-profit, less-than-4-year	2,507	1,404	1,103	†	†
6. Private, not-for-profit, 4-year, non-doctorate-granting	7,734	2,253	3,614	1,857	†
7. Private, not-for-profit, 4-year, doctorate-granting	10,668	2,639	4,353	2,049	1,627
8. Private, for-profit, less-than-2-year	3,414	2,933	481	†	†
9. Private, for-profit, 2-year or more	3,513 <sup>a</sup>	1,673	1,615	221	†

Note: The student sample was drawn from 836 schools determined to be eligible and providing lists.

<sup>a</sup>Totals shown include a small number of first-professional students, not shown separately.

†Not applicable.

When EDI from the ED Central Processing System (CPS) and CADE data collection were completed for a sample institution, the students who had not been identified as ineligible through previously collected data, and for whom such previously collected data were sufficient, were considered eligible for CATI.<sup>26</sup> Basically, all eligible sample students from schools that provided institutional records data were eligible for Phase 1 interviewing.<sup>27</sup> Interview-eligibles were partitioned into seven previously identified strata for the Phase 1 interviewing subsampling.

The student subsample for Phase 1 of interviewing is shown in Table 2.5. Potential FTBs and federal aid applicants were selected for Phase 1 interviewing with certainty. Excepting potential FTBs,<sup>28</sup> the Phase 1 (and subsequent Phase 2) subsampling rates were set to yield an appropriate compromise between high sample yield (high Phase 1 sampling rates and low Phase 2 sampling rates) and low variance inflation (comparable Phase 1 and Phase 2 sampling rates).

<sup>26</sup>For the few institutions that either provided no records data or provided them only after the interview subsamples, this determination of eligibility was based on CPS data alone.

<sup>27</sup>Among the institutions that did not provide institutional record data (or provided them late), most sample students with CPS matches were eligible for interviews. The weight adjustment for records data/CPS nonresponse accounts for the fact that only students with CPS matches (aid applicants) were eligible for interviewing in these institutions (see Chapter 6).

<sup>28</sup>All potential FTBs were also retained for both Phase 1 and Phase 2 because of the need to obtain as many interviews with FTBs as possible for the BPS longitudinal follow-up study.

Table 2.5—Phase 1 student interview subsampling

Student interview sampling stratum <sup>a</sup>	Number eligible for phase 1 <sup>b</sup>	Sampling rate <sup>c</sup>	Number selected
All students	59,593	0.859	51,195
Potential FTB	20,555	1.000	20,555
Other undergraduate, federal aid applicant	13,758	1.000	13,758
Other undergraduate, not federal aid applicant	13,554	0.703	9,532
Graduate student, federal aid applicant	2,065	1.000	2,065
Graduate student, not federal aid applicant	7,202	0.416	2,999
First-professional, federal aid applicant	1,893	1.000	1,893
First-professional, not federal aid applicant	566	0.694	393

<sup>a</sup>Reflects student reclassification as a result of records data.

<sup>b</sup>Excludes 1,593 CADE nonrespondents and 2,403 sample members determined ineligible for NPSAS from records data.

<sup>c</sup>Reflects average rate across all sequential samples implemented.

Phase 1 of CATI was defined to end when six telephone calls had been attempted without obtaining a completed interview, or the student:

- or his/her parent had been interviewed;
- was determined to be ineligible for NPSAS;
- initially refused to participate;
- required intensive tracing procedures, or
- was determined to be in a special population (i.e., deaf or language barrier).

All students for whom the sixth call in Phase 1 resulted in a “hard” appointment or for whom a partial interview had been completed (with either the sample student or the student’s parent—see Chapter 3) were retained for Phase 2 with certainty, as were all students in the potential FTB stratum. The remaining Phase 1 nonrespondents, who had not been determined ineligible or exclusions during Phase 1, were subsampled for Phase 2 using specified rates. The numbers of eligible cases for Phase 2, numbers of certainty selections, sampling rates for noncertainty selections, and total Phase 2 selections are shown in Table 2.6.

Table 2.6—Phase 2 student interview subsampling

Student interview sampling stratum <sup>a</sup>	Number eligible <sup>b</sup>	Certainty selection	Sampling rate <sup>c</sup>	Total selection
All students	37,814	23,402	0.262	27,178
Potential FTB	14,248	14,248	*	14,248
Other undergraduate, federal aid applicant	10,515	4,312	0.264	5,952
Other undergraduate, not federal aid applicant	7,544	2,733	0.261	3,989
Graduate student, federal aid applicant	1,493	598	0.287	855
Graduate student, not federal aid applicant	2,220	864	0.255	1,210
First-professional, federal aid applicant	1,479	540	0.213	740
First-professional, not federal aid applicant	320	107	0.362	184

<sup>a</sup>Reflects student reclassification as a result of records data.

<sup>b</sup>Excludes Phase 1 respondents and sample members determined to be NPSAS ineligible (N=521) or exclusions (N=57) during Phase 1.

<sup>c</sup>Reflects average rate across all samples implemented, excluding certainty selections.

\*FTBs were not subsampled in Phase 2.

### 2.2.2.3 Other Subsamples

Some additional subsampling of students, described below, was accomplished during the course of NPSAS:96 in order to: (a) complete important gaps in available data about the student's family financial information, or (b) provide the basis for methodological studies.

#### Reliability Reinterview Subsample

Among eligible sample members who *completed* the NPSAS:96 interview, a subsample was selected to participate in a reliability reinterview. A random selection algorithm was programmed directly into the CATI instrument so that selected respondents could be informed of their selection and allowed an opportunity to agree to the reinterview or to refuse it at that time.

The selection rate was set to yield a sample of approximately 300 students among the expected respondents during the first three months of interviewing; the time factor was based on the built-in delay in administering the reinterview and the need to complete reinterviews within the same time frame as other interviews. Consequently, the sample was obviously most heavily weighted with students: (a) from institutions at which prior sequential operations (initial sampling, record abstraction) were completed earlier, and (b) who completed the first interview relatively early during the data collection period. Since fewer completions than anticipated were experienced during the first 3 months (see Chapter 3), the reinterview sample yield during that period was 273 students.



## Parent Interview Subsample

A subsample of the students selected for Phase 1 interviewing also were selected to have their parents interviewed, in order to obtain valid data regarding parents' financial resources (typically not well known by the student). The main purpose of the parent interview was to reduce the number of students, especially dependent students,<sup>29</sup> for whom the parents' income would otherwise have to be imputed. Another purpose was to collect parent income data for students who had recently become independent students (for the purposes of federal financial aid applications) as a result of recently becoming 24 years old.<sup>30</sup>

Consequently, all the students in the three previously-identified student sampling strata were selected with certainty for parent interviews. The strata were developed at the conclusion of institutional records collection, and the parent interview subsample was identified among those students selected for Phase 1 interviewing. When the student had been selected for parent interview and either a student interview had been completed in Phase 1 or the student had been selected for Phase 2, the parent interview was attempted throughout the remainder of the CATI interview period. The numbers of students selected for parent interviewing in Phase 1 and in Phase 2, are shown in Table 2.7 for each of the three parent sampling strata.

Table 2.7—Numbers of students selected for parent interviewing

Parent sampling stratum <sup>a</sup>	Phase 1			Phase 2		
	Number of students eligible <sup>b</sup>	Number of students selected	Effective sampling rate <sup>c</sup>	Number of students eligible <sup>d</sup>	Number of students selected <sup>e</sup>	Effective sampling rate <sup>f</sup>
Total	9,251	8,803	.952	7,687	6,197	0.806
Dependent undergraduate students not receiving financial aid	4,195	4,117	.981	3,520	2,991	0.850
Dependent undergraduate students, receiving financial aid, whose parents' adjusted gross income was missing from institutional records	1,731	1,710	.988	1,439	1,271	0.856
24- and 25-year-old (newly independent) undergraduate students	3,325	2,976	.895	2,728	1,935	0.709

<sup>a</sup>Reflects student reclassification as a result of records data.

<sup>b</sup>This represents all eligible students in defined strata prior to Phase 1 sampling.

<sup>c</sup>This rate reflects only the overall Phase 1 student sampling (average rate across all sequential sampling implemented); all students within these defined strata, who were selected for Phase 1, were designated with certainty for parent interview.

<sup>d</sup>Excludes Phase 1 respondents and sample members determined to be NPSAS ineligible or exclusions during Phase 1.

<sup>e</sup>Includes certainty selections.

<sup>29</sup>An important historical gap in NPSAS student data has been the income of parents of dependent students who do not apply for financial aid; among those applying for (and/or receiving) aid, these data are usually obtained from existing records.

<sup>30</sup>Parent data for these students will reduce reliance on imputed parent incomes when analyzing the effect that becoming classified as an independent student has on financing postsecondary education.

<sup>f</sup>Reflects average rate across all samples implemented (consequently, this rate includes Phase 2 certainty selections).

### **2.3 Data Collection and Operational Design**

NPSAS:96 involved a multistage effort in collecting information related to student aid. For the first time in the NPSAS series, an initial NPSAS:96 data collection stage was planned, which involved collecting electronic SAR (ESAR) information directly from the Department of Education Central Processing System (CPS) for federal aid applications.<sup>31</sup> A second stage involved abstracting information from the student's records at the school from which he or she was sampled; starting with NPSAS:93, these data have been collected through a Computer Assisted Data Entry (CADE) system (to facilitate both collection and transfer of the information to subsequent electronic systems). As in NPSAS:93, the CADE collection system was implemented, at institutional choice, by either school staff or field interviewers employed by the contractor.

A third stage involved interviews with students (and in some cases their parents); as in all prior implementations of NPSAS, this data collection activity was conducted through a Computer Assisted Telephone Interviewing (CATI) procedure. For the first time in NPSAS implementations, only a subsample of the initial student sample was selected for the interview stage (in order to reduce overall costs for the NPSAS study). Final stages (again, for all eligible initial sample members) involved collecting additional ESAR data for the following (1996-97) academic year, and collecting information from the Pell-Grant File and the NSLDS file maintained by ED. Both the "following year" ESAR data and the NSLDS data represented additions to the NPSAS data base that were first introduced during NPSAS:96.

A schematic of the operational flow of major data collection components of the NPSAS:96 study is shown in Figure 2.2 and summarized in subsequent subsections. It should be noted that to meet established dates for conclusion of all study activities, while accommodating both differential dates at which student sampling could be initiated and differential timeliness of institutional turnaround, not all stages were implemented at the same time at all institutions. In fact the only fixed points in operations were: (a) selection of the institutional sample and initial institutional mailings; (b) cut-off of interviewing; and (c) the "Post CATI"<sup>32</sup> collection of electronic data from existing ED data files.

Start and end dates for the several study activities are shown in Table 2.8. The extent of activity overlap is clearly evident from this table. As examples: (a) the CADE record abstraction procedures had been ongoing for five months before the last student sample was selected; and (b) the cut-off date from preloading CADE data into the CATI records (necessary for CATI operations to commence) occurred almost 6 months after the initiation of

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<sup>31</sup>The contractor for this service is National Computer Systems (NCS). Students complete a Free Application for Federal Student Aid (FAFSA), which is mailed to the CPS contractor; this information is entered into the computer file and electronic versions of the SAR are created. The SAR information is made available to all institutions that the student indicates.

<sup>32</sup>It was actually necessary to obtain some of these data prior to the time CATI activities were concluded.

CATI.

Figure 2.2--Schematic of NPSAS:96 Major Data Collection Activities Flow

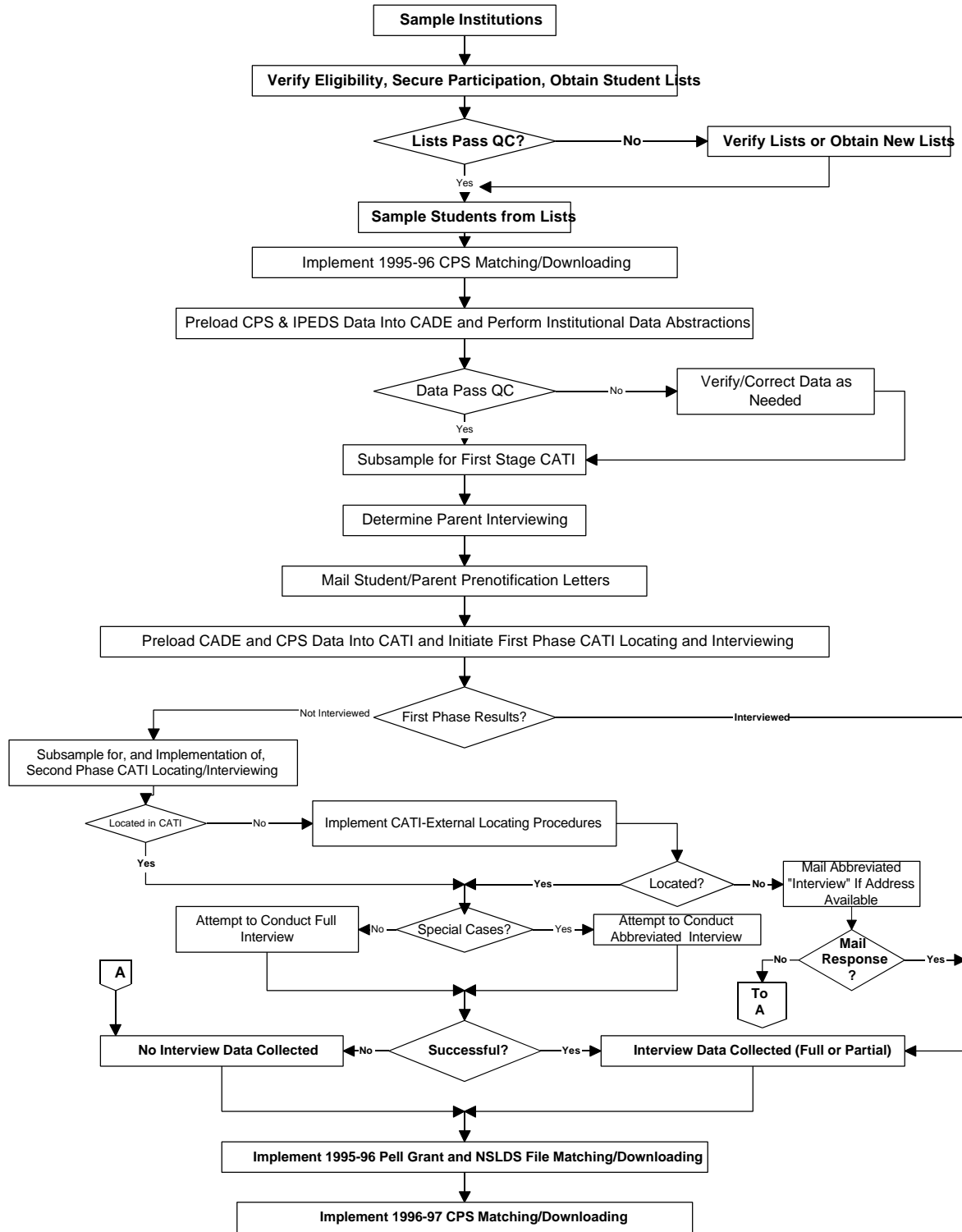




Table 2.8 — Start and end dates for major NPSAS:96 activities

Activity	Start date <sup>a</sup>	End date <sup>b</sup>
Select institutional sample <sup>c</sup>	12/10/94	12/10/94
Mail and phone contact with chief administrator	11/03/95	04/29/95
Mail and phone contact with institutional coordinator	01/11/96	08/22/96
Obtaining lists for student sampling	01/31/96	08/24/96
Select student samples	02/22/96	08/25/96
Request/obtain 1995-96 CPS data	03/05/96	09/05/96
Preload CPS data into CADE records	03/07/96	09/06/96
Implement CADE record abstraction <sup>d</sup>	03/22/96	12/12/96
Preload CADE data into CATI records <sup>d</sup>	05/06/96	10/25/96
Implement CATI interviewing (and related data collection) for students and parents	05/06/96	12/31/96
Request/obtain 1996-97 CPS data	02/18/97	02/27/97
Request/obtain 1995-96 Pell Grant data	12/03/96	01/27/97
Request/obtain historical NSLDS data (through fall 1996)	11/27/96	12/16/96

<sup>a</sup>Date on which the activity was initiated for the first applicable school and/or its associated students (and parents).

<sup>b</sup>Date on which the activity was completed for the last applicable school and/or its associated students (and parents).

<sup>c</sup>The institutional sample was drawn prior to selecting the field-test sample to ensure no overlap of the two.

<sup>d</sup>Eight institutions provided CADE data after the cut-off date for using those data in CATI.

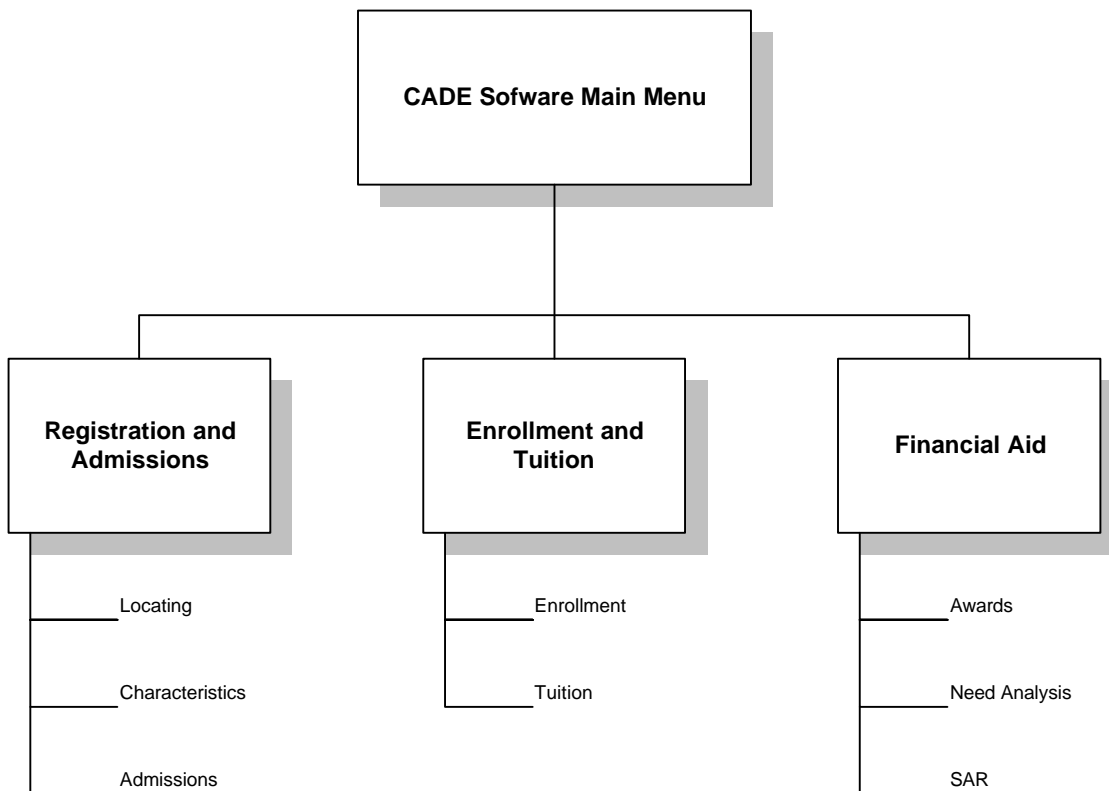
### 2.3.1 Overview of Data Collection Instruments and Extant Data Sources

As noted previously, some study data were obtained from extant data bases. Information related to application for financial aid was obtained (for two academic years) from a central data system, the CPS (which is operated for ED by a separate contractor). This information is provided by students to the CPS contractor on a Free Application for Federal Student Aid (FAFSA) form and then converted to electronic form, analyzed, and provided to involved schools (and other approved parties) in ESAR or hard-copy SAR form. (To see the type of information available from the SAR, see the SAR section in Appendix C). Additionally, data on nature and amounts of received Pell Grant or NSLDS loans were obtained from other extant data bases maintained by ED. The Pell Grant file that was accessed was for the 1995-96 academic year. Data obtained from the NSLDS file were loan histories for each applicable student.

The record abstraction instrument was programmed for CADE implementation. Each CADE student record was divided into three major sections (reflecting typically different physical locations of the records on campus) and eight subsections; this structure is shown in Figure 2.3. CADE was programmed so that this structure was not restrictive in access; specifically, the record abstractor could access any subsection through a menu and enter (or change) any data element in the section through scrolling. A summary of the major data elements collected through CADE is summarized below, by subsection.

- *Locating.* Collected up to four addresses and telephone numbers for student and/or parent/guardian (if not the student, names and relationship to student were collected).
- *Characteristics.* Collected student demographics (e.g., race, ethnicity, marital status, gender, date of birth, citizenship), type of high school diploma, and high school graduation date.

**Figure 2.3—Structure of the NPSAS:96 CADE instrument**



- *Admissions.* Collected standardized test scores.
- *Enrollment.* Collected dates of terms of enrollment during the NPSAS year, student level in first and last applicable term, degree program, and number of credits transferred.
- *Tuition.* Collected tuition accruing to student for each term enrolled.
- *Awards.* Collected the type/nature of all financial aid awards and the amount of aid associated with such awards.
- *Need Analysis.* Collected aid budget data, EFC, dependency status, and housing status.
- *SAR.* Collected selected information from the SAR; any such information collected through the CPS requests was preloaded (typically resulting in the completion of this subsection during preload).

A facsimile of the CADE instrument, identifying all data elements collected and the exact wording of the screens, is provided as Appendix C.

Several forms of student interview existed; however, the principal form was the full interview, which was programmed for CATI administration. The full interview consisted of 10 sections.<sup>33</sup> A depiction of the nature of, and the flow through the 10 student interview sections is shown in Figure 2.4. Progression through the sections is ordered to collect the most important data early in the interview. Of particular note is Section A; in this section final checks of study eligibility and FTB status were determined. A facsimile student interview is provided in Appendix D.

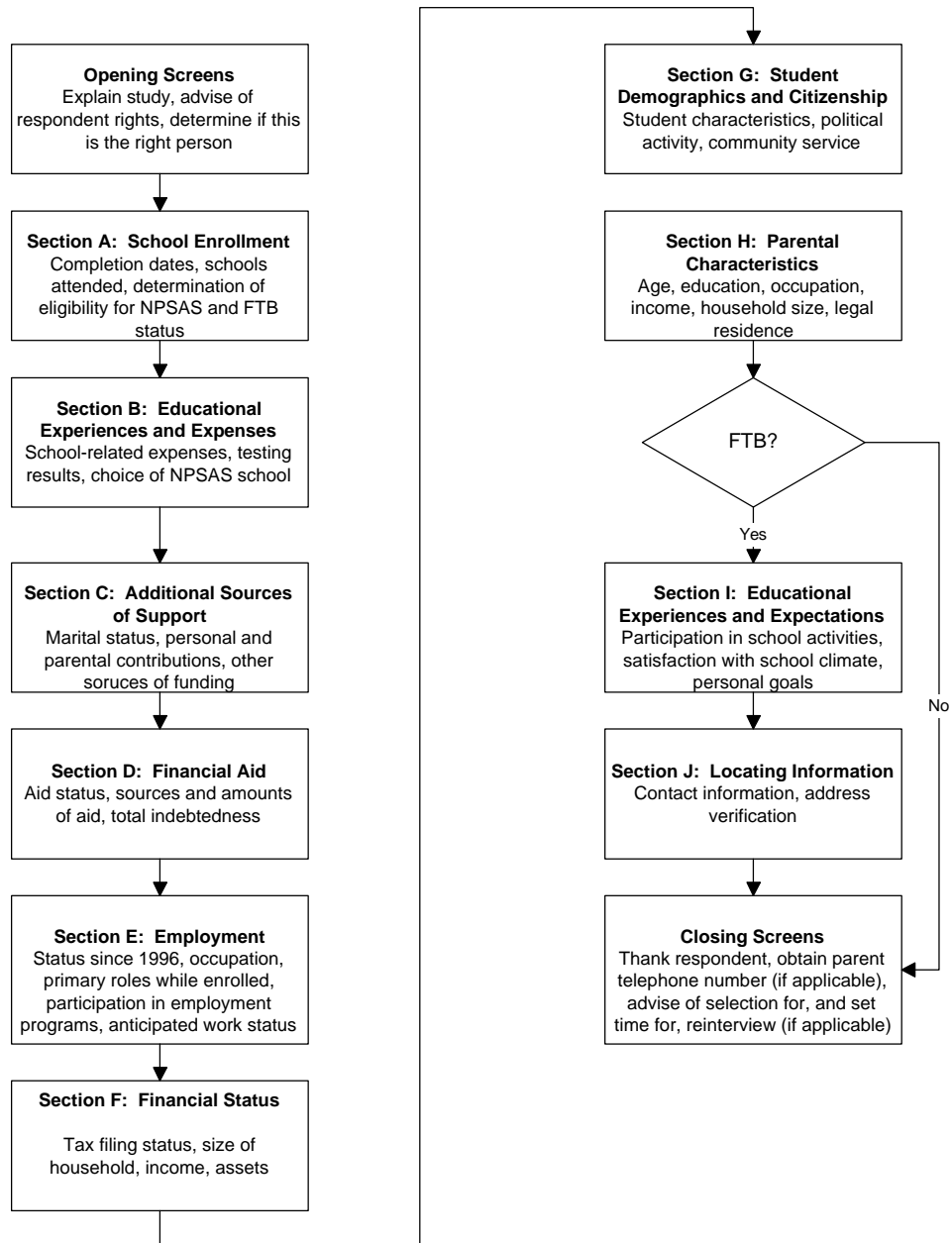
Three sets of abbreviated interviews were conducted, in special cases. First, the planned reliability reinterview study used an interview containing only a small subset of the items in the full student interview. Second, an abbreviated interview was developed (containing only selected items) for CATI administration to Spanish speakers with limited English proficiency.<sup>34</sup> The questions in this abbreviated interview were also reproduced, in Spanish and English language hard-copy versions, and mailed, for completion, to the hearing impaired (who completed only Section A--establishing study eligibility-- through TDD) and/or (if address was available) to those who could not be reached by phone or who indicated that they would complete a mailed copy but would *not* participate in a telephone interview.

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<sup>33</sup>While the logical flow within an interview is generally constrained to be linear (with forward branching as applicable), this is even more important in CATI, where previously supplied responses control subsequent branching items. Nonetheless, standard features were available to allow interviewers to back-up in the interview to change prior responses based on information provided subsequently.

<sup>34</sup>Spanish speakers who were relatively comfortable with English were guided through the full interview by bilingual interviewers; however, translation "on the fly" of the full interview to one with severe limitations in oral English was considered inappropriate.

Figure 2.4--Structure and flow of NPSAS:96 field test student CATI



Note: In addition to SKIP patterns shown, which involve entire sections, many subsections of the interview were applicable only to specific student subgroups (e.g., FTBs, graduate students, aid recipients, married students).

The abbreviated instruments contained 39 key questions, including some detailed multiple response questions regarding amounts of aid and expenses.

Finally, a minimal interview was developed for CATI administration to sample members who had refused to participate on *at least* two different occasions, but who agreed to “answer just a few questions (five minutes or less).” In addition to the information needed to establish NPSAS eligibility and FTB status, this interview collected only “broad stroke” data on degree program, student level, completion of programs, schools attended and how long (during NPSAS year), courseload, job load while enrolled, receipt of any aid, date of birth, marital status, number of dependents, amount ever borrowed for education, and disability status. A facsimile copy of the minimum interview as well as copies of other abbreviated interviews/questionnaires are provided in Appendix D.

The parent supplement interview (where applicable) was maintained within the same record as the student interview; this allowed the parent to be interviewed "on the spot" should that parent be contacted in attempting to locate the student.<sup>35</sup> The parent interview (a facsimile copy of which is included in Appendix D), contained five sections: (a) parental support; (b) total borrowing for education of all dependents; (c) employment and financial status; (d) reasons for not seeking financial aid, and activities in school selection; and (e) parent demographics.

### 2.3.2 Institutional Enlistment and Student List Acquisition and Sampling

Once institutions were sampled, attempts were made to contact the Chief Administrator of selected institutions to (a) advise on sample selection, (b) advise on study requirements and solicit participation, (c) request appointment of an Institutional Coordinator (IC), through which subsequent communication with, and requests of, the institution would be directed, and (d) verify institutional eligibility. The initial letter, on U.S. Department of Education letterhead, included a study fact sheet and endorsement letters, as appropriate, from the National Association of Financial Aid Administrators (NASFAA), the American Association of College Registrars and Admissions Officers (AACRAO), the Career College Association (CCA), and the National Accrediting Commission of Cosmetology Arts and Sciences (NACCAS). Concurrently, NASFAA mailed directly a separate letter urging participation to the Financial Aid Officers of all member institutions sampled for the field test. (Copies of these letters and attachments, as well as all other correspondence mailed to sampled institutions, students, or parents during the course of the field test, are included in Appendix B). Follow-up telephone calls were made to the Chief Administrator one week after the mailing; if the IC had not been named by that time, he/she was urged to do so (with varying degrees of success) during the telephone conversation.

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<sup>35</sup>It was recognized that this procedure would result in some wasted effort if the student was subsequently determined to be ineligible for NPSAS; however, this was more than compensated for by the savings from not having to try to relocate the parent.

Separate mailings to the ICs (containing all materials included in the initial mailing to the Chief Administrator) were initiated on a flow basis, as the ICs were designated. Follow-up telephone calls were, again, initiated one week following the mailing (the initial contact with the ICs typically involved a series of calls, including refusal conversion calls). ICs were advised of what would be expected from the school and asked to verify the IPEDS classification (institutional control and highest level of offering) and the calendar system used (including dates that terms started). ICs were also asked to (a) provide information on the school's record keeping approaches (including identifying the physical on-campus location of records needed for the subsequent record abstraction procedures), (b) identify their PC capabilities for operating the CADE software, and (c) set a date by which the school would provide student enrollment lists.

The list(s) requested (preferably a single unduplicated electronic list) were to contain all eligible students enrolled in any term starting within the study-defined year. (Sampled schools with additional NPSAS-year terms starting after the date of the request obviously could not provide complete lists until after the last applicable term began.) The data items requested for each listed student were:

- full name;
- student identification (ID) number;
- Social Security number (possibly identical with student ID);
- educational level -- undergraduate, graduate or first professional--during the *last* term of enrollment during the study-defined year; and
- an indication of FTB status: as an undergraduate student who first enrolled at the school during a term in the study-defined year; who was classified as freshman or first-year student at that time; and who had no transfer credits from another postsecondary institution.

Definitions of types of lists and information preferred, as well as instructions for preparing different forms of lists were included in the initial IC letter and further clarified, as needed, in follow-up telephone conversations. In such subsequent telephone contacts, contractor staff worked closely with the IC to determine the best reasonable alternative lists and student information that could be provided by the institution.

Prompting telephone calls were made to institutions that had not provided lists by one week following the most recent delivery date previously agreed upon by the IC. Throughout the list acquisition process, attempts were made by the contractor to accommodate school constraints and to reduce their burden, including contractor unduplication of lists. Where requested, institutions were reimbursed for personnel and computer time in list preparation.

Several checks on quality and completeness of provided student lists were implemented prior to actual student sampling. Institutions providing lists that failed these checks were called to rectify the detected problems. Completeness checks were failed if either of the below-listed conditions existed:

- potential FTBs were not identified (unless the institution explicitly indicated that no such students existed in their school); or
- student level--undergraduate, graduate, or first professional--was not clearly identified.

Quality checks were performed by checking the unduplicated count from provided lists against the *non-imputed* unduplicated counts from IPEDS IC files.<sup>36</sup> Nonimputed counts were available for quality checks for approximately 95 percent of the institutions. For applicable schools, separate checks were made for undergraduate, graduate, and first professional students; for schools serving only undergraduates, checks were made against total enrollment. Initially, the institution failed the check if the count for any unduplicated list differed by 25 percent from the IPEDS *non-imputed* count.<sup>37</sup> In early May, with NCES approval, the quality checks were considerably relaxed.<sup>38</sup> The revised checks remained in effect throughout the remainder of student sampling.

### 2.3.3 Student Record Abstraction

All prior NPSAS implementations have relied on collecting data of record regarding student financial need and aid as well as other features of his/her education, in order to: (a) reduce responding burden on the sampled students, and (b) obtain much more valid data than could be obtained through student interviews. In addition to collecting information from institutional files and from ED Pell Grant files (both of which have been accessed in prior NPSAS studies), NPSAS:96 also collected electronic SAR data of record from the ED CPS and from the ED NSLDS files. Both of these data collection activities also expanded the time horizon of data for the current NPSAS study. SAR data were obtained for both the NPSAS year (1995-96) *and* through February of the subsequent academic year (1996-97); NSLDS data were obtained historically over all years of postsecondary education through the 1995-96 academic year.

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<sup>36</sup>The order of preference was the 1994-95 IPEDS file or the 1993-94 IPEDS file (from which the institutional frame was constructed). If counts on both these files were imputed, no quality check was performed.

<sup>37</sup>If provided lists were not unduplicated, the contractor estimated the unduplicated total by applying an empirically determined multiplicity factor to the count over provided lists; in these cases, the critical difference was also relaxed to 30 percent.

<sup>38</sup>Revised procedures involved: (a) no checks for less-than-2-year institutions, since most (68 percent) were failing the checks but few (9 percent) were providing replacement lists; and (b) lists passed the checks if the student count differed from the IPEDS count for that type of student by 500 students or more and the IPEDS count was not zero.

### 2.3.3.1 CPS Electronic Data Interchange (EDI) for SAR Data

To reduce institutional burden in the subsequent institutional record abstraction, the NPSAS:96 contractor, with the assistance of NCES, arranged to obtain, through EDI, information from the Central Processing System, the CPS (which is operated for the Department of Education by a separate contractor, National Computer Systems - NCS). The data accessed included information from the FAFSA (provided by all federal financial aid applicants) and SAR. Generally, all such initial EDIs of SAR data were completed for an institution before CADE record abstraction was attempted for that institution.

### 2.3.3.2 CADE Data Abstraction from Students' Institutional Records

Data from sampled students' records at the NPSAS institution were collected using CADE technology, representing a refinement the procedures first used in NPSAS:93. CADE was programmed in CASES 4.1, for compatibility with CATI (see Section 2.3.4) and the Data Elements Dictionary used (see Section 2.3.6). Institutions were urged to have their own staff accomplish these activities, using the software, since this provided both cost efficiencies and better confidentiality protection for records of students not selected for the study. However, institutions were given the option of having the abstraction done by field data collectors (FDCs) employed by the contractor. Following the receipt of CPS information for students from an eligible institution, CADE materials and related information were prepared and packaged for delivery to either the IC or FDC, depending on stated institutional preference (which subsequently changed in some cases).<sup>39</sup>

To reduce burden in the CADE record abstractions, a number of data elements were preloaded into the CADE records for a particular institution. These preloaded elements included (a) CPS data, including the full SAR (where obtained), (b) previously verified institutional characteristics and identifiers from the contractor sampling files (e.g., level of offering, control, calendar system, institution-specific dates for terms of enrollment, grading system, stratum, whether clock or credit hours were awarded), (c) student names, ID numbers, and sampling strata (from the contractor sampling files), and (d) customized additional financial aid sources/programs unique to the specific institution and associated state.

The preloaded CADE packages were distributed on a flow basis to either the IC (on floppy disks) or to the FDC (electronically). Packages also included a hard-copy Users' Guide, an embedded programmed Tutorial, and a Fact Sheet (which summarized information previously provided by the institution regarding the physical campus location of relevant data). Associated refinements to the CADE software included:

- installation checks, to determine if PC limitations would create problems in operation CADE (if so, a message was displayed stating the problem and providing a contractor "hot line" number to call for assistance);

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<sup>39</sup>Some institutions eventually photocopied relevant records and provided them to the FIs or contractor central staff for direct entry into CADE.



- quality control checks to identify (and notify the user of) student records that were incomplete (and the area of incompleteness) or had not yet been accessed (when trying to close either an individual student record or the entire CADE package); and
- a pop-up screen showing overall full and partial completion rates for record abstraction at the institution.

Weekly telephone calls were initiated to ICs or FDCs (as applicable) to determine completion status for each school that was still active at that time. While CADE receipt was on a flow basis over institutions, the CADE package for a specific institution was not returned until it was completed. On receipt of the CADE package, each record was subjected to edit checks for completeness of critical items. Data from an institution failed the edit check if 50 percent or more of the student records failed all edit checks or if any anomalous data patterns were observed.<sup>40</sup>

Study plans called for completion of the institutional record abstracting at a school before students from that school were interviewed (to allow preloading of the CADE data into the student CATI record). This was the case for all but 40 schools, which had agreed to provide CADE data but had not done so prior to the last date that CATI could be initiated. CATI was initiated for students from these schools prior to receipt of CADE data, but special requests were also made of these schools to provide hard copy transcript and financial aid information in hard copy form.<sup>41</sup>

### 2.3.3.3 Other *Post Hoc* Student Record Data Obtained

Two additional EDI operations were performed shortly before the conclusion of CATI. Consistent with prior NPSAS studies, data were obtained from the ED 1995-96 Pell Grant files regarding applications for, and receipt of, Pell Grants. To facilitate the timely preparation of data files, this operation was initiated about four weeks prior to the cut-off date for interviewing. All initial sample members<sup>42</sup> with “apparently” valid SSNs at time (62,717 sample members) were submitted for potential matching to the ED files.<sup>43</sup> Extracted data from matching Pell Grant records<sup>44</sup> were downloaded and added to the data base.

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<sup>40</sup>Institutional failure of the edit check procedure led to follow-up contact with the involved IC toward resolving the existing problems.

<sup>41</sup>Response to this request considerably exceeded expectations (see Chapter 3).

<sup>42</sup>Since this submission was accomplished prior to final data cleaning, even those sample members classified at that time as “ineligible” were submitted for matching.

<sup>43</sup>Additional delay of this activity until completion of CATI would have resulted in only a handful of additional students for whom valid SSNs were available.

<sup>44</sup>Some students yielded multiple record matches, indicating Pell Grant activity at two institutions during the NPSAS year.

NPSAS:96 represented the first attempt to incorporate data from the ED NSLDS files. This EDI activity was accomplished in roughly the same time frame as the Pell Grant matching and again was attempted only for the 62,717 initial sample members with apparently valid SSNs at the time of matching. Because the NSLDS file is cumulative, full histories (through the 1995-96 academic year) of NSLDS activity were obtained for matches.

### **2.3.4 Student and Parent Locating and Interviewing**

NPSAS:96 student and parent interviews were principally conducted by telephone, using CATI technology, as has been the case for all prior NPSAS interviews. Like CADE, CATI was developed using CASES 4.1 software to facilitate preloading full-screen data entry and editing of "matrix-type" questions. The CATI system presented interviewers with screens of questions to be asked of the respondents, with the software guiding the interviewer and respondent through the interview, automatically skipping inapplicable questions based on prior response patterns or suggesting appropriate wording for probes should a respondent pause or seem uncertain in answering a question. Unlike prior NPSAS studies, CATI was initiated for only a subsample of the original student sample (see Section 2.2.2.2).

Prior to initiating CATI, notification letters, on Department of Education stationery and with attachments, were mailed to students (and parents, where applicable). These letters (copies provided in Appendix B) notified sample member of the upcoming survey, pointed out the importance of the study, disclosed average time burden, and urged participation.

Associated with the interviewing (and partially imbedded in the CATI instrument) was the necessity (due to incomplete or incorrect telephone numbers), in many cases, to locate the sample members. A major locating challenge for sample members at many institutions was the fact that by the time CATI was initiated, those individuals had moved from their "local" (school) address. To facilitate the tracing component, each CATI record contained roster lines for up to 20 telephone numbers (including numbers for individuals identified as tracing sources); each such roster line was associated with a history of the dates and results of all calls made to that number and a number-specific comment field. Locating calls, as well as interviews, were initiated according to a calling plan using an automatic call scheduler imbedded within the CATI software. This system allowed calls to be scheduled on the basis of established case priority, time of day, and history of success of prior calls at different times and on different days. It also allowed "special queue" access of certain special cases (e.g., limited English proficiency, prior refusals) *only* by appropriate special interviewers (e.g., bilingual interviewers, special "refusal converters").

If initial CATI tracing efforts (using information preloaded) failed, then CATI external student/parent tracing activities were executed. Such activities generally involved searches, by subcontractors, of various electronic databases. The specific CATI-external tracing activities are listed below (the order of listing generally represents the order in which these activities were sequentially implemented and increasing unit costs of the activities).

- *Referral to Fast Data.* This is a service whereby telephone numbers are obtained for known names and/or addresses through matching to an existing national telephone data base.<sup>45</sup> Matched cases were returned within 24 hours of submission.<sup>46</sup>
- *Referral to Equifax.* Equifax maintains credit files on a large number of individuals. Available databases include names, social security numbers, and current and former addresses and telephone numbers of individuals for whom credit histories have been assembled. Equifax also has arrangements with some states to access their drivers license databases. First, Equifax attempted a match with the electronic data; if this was unfruitful, an Equifax tracing expert reviewed the hard copy printout for possible leads, and implemented a check of such leads, if deemed appropriate. Turnaround was typically within two weeks.
- *Referral to Telematch.* This step was only used if Equifax returned an updated address without a telephone number. Tracing activity involved comparing the name and address to a database containing every published telephone number in the United States, with associated names and addresses. Turnaround was typically within 2 days.

To reduce interview burden and to guide the interview through appropriate branchings (e.g., questions appropriate only for graduate students), considerable information, in addition to tracing data, was preloaded into the CATI records prior to interviewing. Such preloaded information included (a) data previously collected through CPS and/or CADE; and (b) information from the sampling file (e.g., name, Social Security number, school name, school and student stratum). In a number of instances, specific questionnaire items were not asked (or only verified) if that information had been collected previously.<sup>47</sup>

Preloading and implementing CATI occurred on a flow basis, as the CADE results were received from the institutions. As indicated previously (section 2.3.3.2), this general approach did not hold for sample members at 40 institutions that delayed CADE submission beyond the deadline for CATI with initiation; CATI was attempted for such students without benefit of preloaded CADE data, but other preload data (e.g., CPS data) were included, where available. NCES-developed, on-line coding programs (for industry/occupation, IPEDS, and field of study coding) were imbedded in the overall interview administration system. These allow standard coding of responses while the respondent is still available to assist.

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<sup>45</sup>Effectively, this represented an outsourcing of directory assistance calls.

<sup>46</sup>About halfway through the CATI operation, this step was dropped, since matches were waning (due to the time lag from the date initial tracing information was obtained).

<sup>47</sup>The NPSAS:93 experience suggested a number of areas in which interview information should be collected even though comparable data from student records had been collected.

Results of CATI interviewing were monitored daily through the study Integrated Management System (IMS--see Section 2.3.6). Daily reports of production, with revised projections of future production to satisfy study requirements, were available to both NCES and contractor staff. CATI interviewing was also monitored through a formal, work-sample-based quality control procedure. Data to determine system level error rates and individual interviewer departures from system rates were collected daily; and distributed no less frequently than on a weekly basis.

### **2.3.5 Training Data Collectors**

In any survey, comprehensive training of those who collect study information is critical to the quality of the end-product data. In NPSAS:96, separate training was required for three different types of data collectors:

- contractor telephone interviewers who collected data through CATI, together with their supervisors and monitors;
- contractor field data collectors (FDCs) who collected records data through CADE, together with their field supervisors (FSs); and
- institutional staff who collected records data through CADE.

Training for the first two groups involved providing information regarding locating and dealing with students/parents or institutional staff, the nature of the data to be collected, and the nature of the computer program used for data collection; the latter group required only training regarding the computer program operation.

Initial telephone staff training for the full student and parent interviews was conducted in late April of 1996, immediately prior to the scheduled start date for CATI operations. All supervisors were trained separately prior to training any of the interviewers, so that they could assist during the interviewer and monitor training, conducted in early May. Additional training sessions for interviewers were conducted, as needed, through November 1996<sup>48</sup>. In total, 14 separate training sessions were held; four for day-shift interviewers and the remainder for night and weekend staff. In the initial training, 13 supervisors and 21 monitors were trained. Additionally, a total of 306 perspective telephone interviewers began training during NPSAS:96; of these, 269 successfully completed the training program and began interviewing.

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<sup>48</sup>Such additional training was required for unplanned replacement interviewers (to replace those who were dismissed or left the project), for planned supplemental interviewers (as students from additional schools were added to the CATI data base, operational efficiency required increasing the complement of interviewers), and for previously-trained interviewers found to need retraining.

Full interview training included 20 hours of instruction followed by 2 hours of observing supervisors conducting actual interviews. Instruction included an introduction to the nature and purpose of NPSAS:96, general interviewing techniques, general use of the CATI program, procedures for contacting sample members, review of all questions in both the student and parent interviews, practice with screens and subroutines requiring on-line coding or matrix entries, and practice with separate sections and the full interviews -- including participation in “mock” interviews and observations of both “mock” and actual interviews. As a training aid, each interviewer was issued an *Interviewer Manual*<sup>49</sup>. The Table of Contents of that manual as well as a copy of the training agenda for the full interview is provided in Appendix E.

Additional training was provided for administration of the reliability reinterviews, the abbreviated interviews, and the minimal interview. Reliability reinterview staff were chosen from among those who had shown high proficiency with the full interview, and the half-day training was restricted to familiarization with revised branching patterns and “fills” in the reinterview. Training for administration of the various abbreviated interviews was restricted to bilingual (Spanish/English) interviewers and “refusal converters,” as appropriate. Since these specialty interviewers included only well-seasoned staff who had been trained for the full interview, the training was again restricted to familiarization with special procedures to access the specialty interviews and with the CATI screens for the abbreviated instruments themselves.

The initial training for contractor CADE staff was conducted during March, 1996; all 11 field supervisors (FSs) and 65 of the 79 field data collectors (FDCs) used in the study were trained at that time. As a result of some loss of FDCs and an unexpected propensity of institutions that requested a change from their initial choice of “self-CADE” to the use of contractor FDCs, supplemental training of 14 additional FDCs was conducted during June, 1996. To reduce training travel costs for field staff, the initial training was conducted at two sites: in Research Triangle Park, NC for the East Coast, and in San Francisco for the West Coast. Since the supplemental training group was relatively small, only a single training session was held, at the East Coast site.

The initial training sessions included a full day of training for the FSs prior to the FDC training; FDCs were subsequently trained, with assistance from the FSs, over three additional days (with after-class homework). Training consisted of an overview of NPSAS:96 objectives and time frame (including a brief explanation of how the financial aid process works on campuses), review of the architecture and nature of the CADE software, review of and practice with each section of the CADE instrument, procedures for dealing with the IC and other staff at the institutions, instruction in, and practice with, locating records (including, but not restricted to, use of the “location of records” lists provided by the ICs), and procedures for contacting FSs and electronic transmission of completed cases.

During this training, considerable use was made of location and abstraction of records using mock student folders developed to represent diversity in record keeping at different types

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<sup>49</sup>Research Triangle Institute, *Telephone Interviewer Manual and Supervisor Supplement: NPSAS:96 Main Study*. Author, Research Triangle Park, NC: April 1996.

of postsecondary institutions. Each trainee was also provided with: a laptop computer to be used during their training and subsequent field work, a *Field Data Collector Manual*, and a *CADE Users' Manual*. The Table of Contents for both these manuals as well as the training agenda are provided in Appendix E.

Training of Institutional Staff in use of CADE relied heavily on self-training, since the major objective of that training was familiarity with the CADE program. The program was self-installing (including an initial check of the host PC for sufficient memory), and a self-teaching tutorial was imbedded. Help screens were imbedded within the program and a "hot line" number was established through which users could obtain answers to specific or general questions from central contractor staff who developed the software. Additionally, institutional staff were provided with a *CADE Users' Manual*.

### **2.3.6 Evaluation and Quality Control Design**

Evaluation of NPSAS:96 procedures have obvious implications for enhancements of subsequent waves of NPSAS and for possible methodological experiments within future NPSAS field tests. Each major component of the study was evaluated. Methodology consisted of both formative and summative evaluations. Formative evaluations were of an ongoing nature, designed to assess tasks at intermediate stages so that the effects of employing alternate methodologies could be analyzed and modifications and revisions could be employed and assessed prior to task completion. Such ongoing evaluations (many of which were imbedded within the study IMS) were a major part of NPSAS quality control. Summative evaluations assessed the results of the field test, including procedural changes instituted during the course of the study. A summary of NPSAS:96 field test evaluations that were planned and implemented is provided in Table 2.9.

A critical part of operational evaluation and quality control was regular quality circle meetings with field interviewers, telephone interviewers, interview monitors, and interviewer supervisors. These meetings provided an easily available forum for production staff and project management to address the important topic of work quality, discuss issues of concern, identify problems with the survey instruments, share ideas for improving the instruments, and suggest various approaches for improving operations and/or results. To implement suggested improvements arising from some such meetings, the operational features of the CATI instrument was refined a number of times over the course of the data collection period. On completion of data collection, final quality circle meetings were held, serving as debriefing sessions for the full operational period.

Table 2.9—Summary of NPSAS:96 evaluation approaches

Major area of evaluation	Evaluation approaches
System operation	Monitor (and correct) all anomalous systems operations.
Training	Debrief institutional coordinators. Debrief field interviewers/data abstractors. Debrief CATI staff.
Sampling	Analyze efficacy of CATI two phase subsampling approach. Monitor and adjust student sampling rates. Analyze accurateness of two-stage sampling approach assumptions.
List acquisition	Analyze overall response rate, accuracy, costs, and time to produce lists. Monitor accuracy of lists (completeness and multiplicities); resolve, where needed Analyze accurateness of assumptions regarding FTB identification under new rules. Debrief institutional coordinators.
Record abstraction	Monitor all electronic data interchange (EDI) approaches. Monitor completeness of all returned CADE data; resolve, where needed. Analyze overall response rates, costs, and time to complete CADE. Analyze data quality (missing data) under conditions of self-CADE, field-CADE, and EDI approaches. Debrief institutional coordinators. Debrief field staff.

(Continued on next page)

Table 2.9—Summary of NPSAS:96 evaluation approaches (continued)

Major area of evaluation	Evaluation approaches
Tracing activities	<p>Monitor (silent) CATI tracing staff performance. Correct or retrain as needed.</p> <p>Debrief and conduct Quality Circle Meetings with tracing staff and supervisors</p> <p>Analyze all levels of tracing results and costs.</p> <p>Analyze costs and efficacy of CATI-external tracing activities.</p>
Interview administration/data quality	<p>Monitor (silent) CATI interviewer performance; correct or retrain as needed.</p> <p>Analyze silent monitoring quality control data.</p> <p>Analyze CATI operational parameters (e.g., numbers of calls per case, total interviewer hours per completed interview).</p> <p>Analyze effectiveness of refusal conversion approaches.</p> <p>Analyze efficacy of special case abbreviated interviews.</p> <p>Analyze effectiveness of mailings and leaving messages on answering machines.</p> <p>Debrief and conduct quality circle meetings with interviewers, monitors, and supervisors.</p> <p>Analyze rates and patterns of interview nonresponse.</p> <p>Analyze validity of student responses.</p> <p>Analyze response temporal stability (reliability) through reinterviews of selected items.</p> <p>Analyze times to complete interview sections.</p>



As indicated in Table 2.9, the study design included a number of components for direct evaluation of data quality. Among these, a reliability reinterview was conducted with students about four weeks after the initial interview; this involved a random subsample of 250 respondents to the initial interview. The reliability reinterview contained only a small subset of the initial interview items. Also, validity of information collected from CATI was evaluated by comparison of certain CATI responses to information items available from institutional records.<sup>50</sup>

Both evaluation and quality control were greatly facilitated by the use of an Integrated Management System (IMS). All operational and management activities, (including sampling, locating, collecting institutional records data, interviewing, and data processing) were under this system, which consisted of a series of PC-based, fully linked modules. The various modules of the IMS provided the means to conduct, control, and monitor the complex, interrelated activities required in the NPSAS:96 study. Report production, data analyses, and document archiving were also integrated into this system.

The IMS structure allowed for streamlining related tasks and served as a centralized, easily accessible repository for project data and documents. The IMS provided authorized project staff (and NCES staff as remote users) menu-driven access to all IMS modules quickly and easily. Its use also enabled the application of extensive quality control measures throughout the various project activities. Table 2.10 provides a listing of major IMS processes and their purposes.

Figure 2.5 presents a schematic of various components and features of the IMS. The central system resided on a DEC PATHWORKS PC network, accessible to remote users through a dedicated network modem. Case-level status as well as routine summary reports were available across all components of the system. Summary reports and other project information were also accessible through the password-protected, restricted-use World-Wide Web page for the NPSAS:96 IMS. Information was integrated through the implementation of a case-level control system which monitored status in the various stages of production. Status from separate stages was incorporated in the master IMS to allow control of the flow of events in the system and monitoring of performance of study requirements.

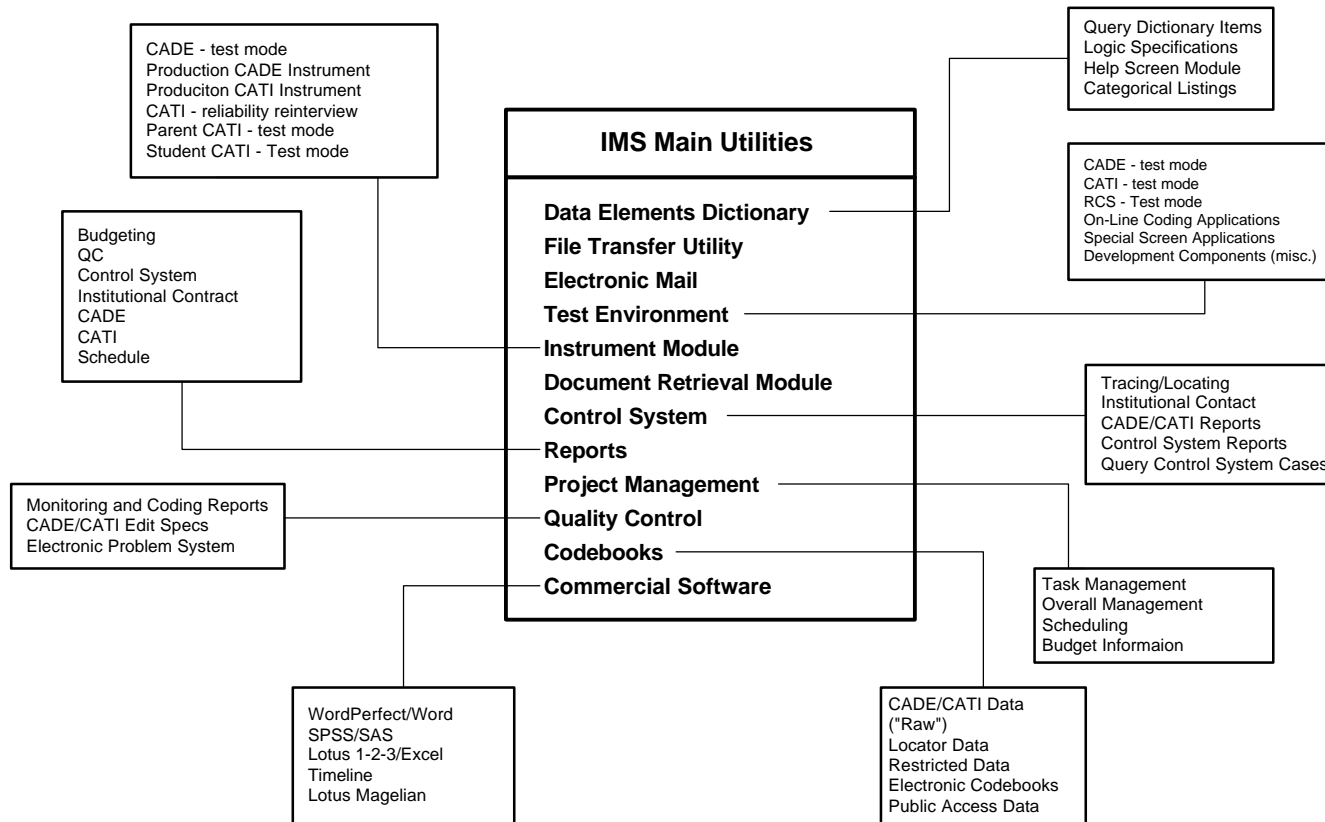
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<sup>50</sup>Generally, students were not asked about items of information collected from institutions; however, some items were included in CATI to assess validity by having the student either (a) “verify” the institutional data, or (b) provide an independent response.

Table 2.10—Integrated management system processes and purposes

IMS process/system	Purpose
Instrument module	Run the current version of the CADE and CATI instruments
Data elements dictionary	Produce and query CATI/CADE instrument code, specifications, screen wording, and associated documentation
Electronic mail	Routine communications among project personnel
File transfer	Transmit CADE data and programs to/from field data collectors; transmit CPS and NSLDS requests; transmit data to subcontractors and client
Receipt control system (RCS)	Institution-level and student/parent-level tracking of all data collection activities; canned and customized status reporting and query capabilities
Web interface	Internet access for project staff and client to CATI and CADE daily production reports, frequencies, timing information, etc.
Management reporting	Budget/staffing reports; project schedule
Electronic problem tracking	Document problems experienced in administration of the CATI instrument
Quality control	Run the QC monitoring software; produce QC monitoring reports
Data library	Maintain and provide access to all products for the project

**Figure 2.5--Integrated management system utilities**



NOTE: Model is representative of IMS Modules but is not inclusive.

# Chapter 3

## Overall Institution, Student, and Parent Data Acquisition Rates and Related Outcomes

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Attaining the participation rates required for NPSAS:96, by NCES Statistical Standards, demands high levels of cooperation at all stages of the survey process. This chapter provides the overall participation outcomes; further examination of factors related to these outcomes, together with results of other evaluations, are provided in subsequent chapters of this report.

### 3.1 Institutional Participation

A total of 73 (7.5 percent) of the 973 institutions initially selected for the full scale study were found to be ineligible for NPSAS:96. Forty-six of these institutions failed to meet one or more of the NPSAS institutional eligibility criteria specified previously in Chapter 2; another 23 institutions had closed between the time sampling frame information was collected and institutions were first contacted about participation in the study; and four institutions were “duplicated” with other selected institutions. The latter group reflected either improper classifications on the sampling frame or a subsequent merger with another sampled institution. Eligibility rates are shown in Table 3.1, by institutional level of offering, control, and sector.<sup>1</sup>

Institutional eligibility varies considerably with level of offering and control; it is markedly lower for less than 2-year institutions and for the private for-profit institutions. These differences were expected, and are directionally consistent with results from prior NPSAS studies.

The 900 eligible sample institutions were asked to participate in NPSAS:96 by: (1) providing comprehensive lists of students for sample selection and (2) assisting in abstracting data from student records for sampled students. Hence, the potential for institutional nonresponse existed at these two points in the survey process. Participation at the list provision level is also shown in Table 3.1. From the table, it can be seen that nearly all (896 or 99.6 percent) of the 900 eligible institutions initially agreed to participate in the study.

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<sup>1</sup>In this and subsequent tables, institutional classification errors on the sampling frame have been corrected; consequently, counts within corrected classification will differ somewhat from those in Chapter 2 based on uncorrected sampling strata.

Table 3.1—Overall institutional eligibility and enrollment list participation rates

Type of institution <sup>a</sup>	Institutions sampled	Eligible institutions <sup>b</sup>		Institutions agreeing to participate		Institutions providing lists <sup>c</sup>		
		Number	Percent <sup>d</sup>	Number	Percent <sup>e</sup>	Number	Percent <sup>e</sup>	
							Unweighted	Weighted
All institutions	973	900	92.5	896	99.6	836	92.9	91.1
Institutional level								
Less-than-2-year	172	118	68.6	117	99.2	100	84.7	92.1
2-year	264	251	95.1	249	99.2	238	94.8	94.2
4-year non-doctorate-granting	266	260	97.7	260	100.0	242	93.1	87.1
4-year doctorate-granting	271	271	100.0	270	99.6	256	94.5	83.6
Institutional control								
Public	455	448	98.5	447	99.8	434	96.9	97.6
Private, not-for-profit	321	303	94.4	302	99.7	274	90.4	89.3
Private, for-profit	197	149	75.6	147	98.7	128	85.9	87.8
Institutional sector								
Public, less-than-2-year	38	33	86.8	33	100.0	31	93.9	99.6
Public, 2-year	167	165	98.8	164	99.4	159	96.4	97.2
Public, 4-year non-doctorate-granting	123	123	100.0	123	100.0	119	96.7	96.0
Public, 4-year doctorate-granting	127	127	100.0	127	100.0	125	98.4	98.0
Private, not-for-profit, 2-year or less	57	45	78.9	45	100.0	42	93.3	99.3
Private, not-for-profit, 4-year non-doctorate-granting	121	115	95.0	115	100.0	102	88.7	83.5
Private, not-for-profit, 4-year doctorate-granting	143	143	100.0	142	99.3	130	90.9	76.3
Private, for-profit, less-than-2-year	117	75	64.1	74	98.7	61	81.3	89.8
Private, for-profit, 2-year or more	80	74	92.5	73	98.6	67	90.5	80.5

<sup>a</sup>Institutional classifications used here were verified by the institutions to correct classification errors on the sampling frame.

<sup>b</sup>Among the 73 institutions considered ineligible: 23 had closed since the sampling frame time frame; 4 were duplicates with other selected institutions (some through merger since the time frame of the sampling frame; and the remaining 46 failed to meet one or more of the criteria for institutional NPSAS eligibility.

<sup>c</sup>Unreadable electronic files were obtained from eight additional institutions.

<sup>d</sup>Percent is based on the total number of institutions sampled within the row under consideration.

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

However, this table also shows that not all of the institutions agreeing to participate actually provided a useable enrollment list; in fact, 60 did not.

Thus, 836 (92.9 percent) of the 900 eligible sample institutions actually provided a student enrollment list or data base that could be used for sample selection (another eight institutions provided electronic files that could not be processed). List provision (among eligible institutions) varied by type of institution considered; the percentage providing student sampling lists ranged from 81.3 percent of the private, for-profit, less-than-2-year institutions to 98.4 percent for public institutions with a doctoral or first-professional degree as the highest level of offering. As has been the case in prior NPSAS implementations, participation was highest among the public institutions and lowest among the private, for-profit institutions.

Weighted response rates were calculated based on the institutional probabilities of selection and are also shown in Table 3.1.<sup>2</sup> The overall weighted response rate of 91 percent and the weighted rates for all institution categorizations in Table 3.1 are similar to the unweighted rates. However, NPSAS:96 was designed to produce efficient estimates only at the student level. Institutions were selected with probabilities proportional to size; therefore, weighted institution-level estimates are subject to a high level of sampling variation, and the unweighted estimates may be more stable.

### **3.2 Obtaining Student Records**

As indicated previously, obtaining information from student records was a sequential three-stage process. The first stage, implemented for the first time in NPSAS:96, involved an electronic data interchange (EDI) with the ED CPS database of electronic SARs). The second stage involved collection of information from student records at the postsecondary institutions in the NPSAS sample using a CADE software system<sup>3</sup>; and the third stage involved EDIs with the ED Student Pell Summary records and ED's NSLDS database. Outcomes for these three activities are considered in separate subsections below.

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<sup>2</sup>The weighted response rates can be interpreted as the estimated percentages of institutions in the population that would have provided a useable student sampling list, if asked.

<sup>3</sup>The CADE operation was implemented by either staff at the NPSAS institution or contractor field data collectors (FDCs).

### 3.2.1 CPS SAR Data

Table 3.2 summarizes results of matching and downloading data for SAR 96 and SAR 97, in total and by selected student classifications. Obtaining a match was determined by whether or not: (1) the student was listed on the CPS files (i.e., had applied for Federal financial aid during the 1995-96 academic year and entered on the file by the time the request was made) and (2) a valid CPS ID and name<sup>4</sup> could be determined. While application for federal aid is one of the factors (and probably the principal one) affecting the match rate, differences shown in Table 3.2 should not be over-interpreted, since the percentages shown are unweighted.

From Table 3.2, it should be noted that the SAR 96 matching attempt involved only 61,932 of the total; specifically, those for whom a CPS ID had been determined from information on the institution's enrollment list<sup>5</sup>. (A total of 23 institutions failed to provide sufficient information to construct a CPS ID; other institutions provided no information or inaccurate information for differing numbers of students. No matches were obtained for 16 additional institutions.) Matches were obtained, and some SAR data obtained, for 30,821 of those submitted (about 50 percent).<sup>6</sup>

SAR 96 matching rates were lowest among students at public institutions offering less than 4-year programs and among graduate students; they were greatest among students attending private for-profit institutions and first-professional students. These results are not particularly surprising. Federal aid applications at public community colleges and technical institutions are expected to be proportionately less than other sectors, and federal aid applications at private for-profit institutions proportionately greater. Moreover, first-professional students tend to rely more on federal aid (primarily loans) whereas graduate students generally rely more on institutional aid (teaching and research assistantships).

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<sup>4</sup>For example, students who had changed their name (e.g., a female student who married) between application and the time that student lists were prepared, could create a non-match.

<sup>5</sup>Recall that both CADE and CATI data collections were conducted only after the initial SAR 96 matching attempt; consequently the CPS IDs for the additional 1,148 students (obtained from either CADE or CATI data) were not available for the SAR 96 request.

<sup>6</sup>For purposes of comparability, all percentages shown in Table 3.2 are based on the full set of 63,080 students with apparently valid CPS IDs; consequently the SAR-96 rates are depressed from the values obtained using only the subset of 61,932 actually submitted. Original plans called for resubmitting these students for SAR 96 data following CATI; however, at that time CPS processing of the 1995-96 year had been discontinued.

Table 3.2—Matching rates for CPS SAR data of 1995-96 (SAR 95-96) and of 1996-97 (SAR 96-97), by selected domains

Type of student <sup>a</sup>	Eligible <sup>b</sup>	Matched to SAR 96 <sup>c</sup>		Matched to SAR 97		Matched on both		Matched on either	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
All students	63,080	30,821	48.9	22,924	36.3	19,884	31.5	33,858	53.7
Institutional level									
Less than 2-year	5,251	2,856	55.4	1,104	21.4	912	17.7	3,048	59.1
2-year	12,947	5,823	45.0	4,101	31.7	3,348	25.9	6,576	50.8
4-year non-doctorate-granting	19,360	9,819	50.7	7,850	40.5	6,923	35.8	10,746	55.5
4-year doctorate-granting	25,614	12,323	48.1	9,869	38.5	8,701	34.0	13,491	52.7
Institutional control									
Public	35,737	15,263	42.7	12,068	33.8	10,195	28.5	17,136	48.0
Private, not-for-profit	20,673	10,896	52.7	8,630	41.7	7,715	37.3	11,811	57.1
Private, for-profit	6,670	4,662	69.9	2,226	33.4	1,974	29.6	4,914	73.7
Institutional sector									
Public, less than 2-year	1,519	446	29.4	207	13.6	148	9.7	505	33.2
Public, 2-year	8,512	2,750	32.3	2,172	25.5	1,668	19.6	3,254	38.2
Public, 4-year non-doctorate-granting	10,683	5,138	48.1	4,156	38.9	3,580	33.5	5,714	53.5
Public, 4-year doctorate-granting	15,023	6,929	46.1	5,533	36.8	4,799	31.9	7,663	51.0
Private, not-for-profit, 2-year or less	2,538	1,481	58.4	1,040	41.0	867	34.2	1,654	65.2
Private, not-for-profit, 4-year non-doctorate-granting	7,594	4,045	53.3	3,275	43.1	2,965	39.0	4,355	57.3
Private, not-for-profit, 4-year doctorate-granting	10,541	5,370	50.9	4,315	40.9	3,883	36.8	5,802	55.0
Private, for-profit, less than 2-year	3,166	2,221	70.2	803	25.4	689	21.8	2,335	73.8
Private, for-profit, 2-year or more	3,504	2,441	69.7	1,423	40.6	1,285	36.7	2,579	73.6
Student level <sup>d</sup>									
Undergraduate	50,590	27,027	53.4	20,189	39.9	17,536	34.7	29,680	58.7
Graduate	9,771	1,955	20.0	1,337	13.7	1,049	10.7	2,243	23.0
First-professional	2,719	1,839	67.6	1,398	51.4	1,299	47.8	1,938	71.3

NOTE: All percentages are unweighted and based on the eligible count within the row under consideration.

<sup>a</sup>Both institutional and student classifications used here have been verified to correct classification errors on the sampling frames.

<sup>b</sup>Only sampled students for whom an *apparently* legitimate social security number was available were submitted to CPS for matching. Of the 63,080 with valid CPS Ids, 3,643 were determined to be ineligible for NPSAS:96.

<sup>c</sup>These matching rates are somewhat depressed, since the 63,080 students include 1,148 students for whom CPS IDs were not determined until after CPS processing for the 1995-96 year had been discontinued; such students did not have the opportunity to match to SAR 96.

<sup>d</sup>Student level is based on the student's last term of enrollment at the NPSAS institution during the NPSAS year.



Following the completion of interviewing, the full set of 63,080 students was submitted for attempted matching to obtain SAR 97 data<sup>7</sup>. Matches were obtained for 22,924 (about 32 percent of the total). It is expected that the lower matching rate for SAR 97 represents changes in student status between the two academic years; e.g., leaving institution (through program completion or other reason) or changing status within institution (from undergraduate to graduate student). This hypothesis is supported by the fact that the match rate differential, while directionally consistent among all student classifications, is generally greatest among students at 2-year and less than 2-year institutions.

Overall, SAR data from either 95-96 or 96-97 were obtained for 54 percent of the students submitted, and SAR data for both years were collected for about 31 percent of them. The high rate of matches for either year signals a high reliability of analytic data constructed from SAR data (e.g., expected family contribution, family income); however, the lower rate of matches for both years suggest that data are probably insufficient to analyze trends over years.

### **3.2.2 Abstracting Students' Institutional Records**

The record abstraction phase of the study was restricted to those students enrolled in the 836 sample institutions providing an enrollment list from which a student sample could be selected (i.e., 63,616 students). As indicated previously, these data were to be entered into magnetic form, on site at the institution, using a computer-assisted data entry (CADE) program. To reduce the burden associated with record data abstraction, SAR96 data, where obtained previously from CPS, were preloaded into that section of the CADE record into which such data were, otherwise, to be abstracted.

At all participating institutions, the Institution Coordinator (IC) was given two principal options as to how the student information was to be entered into CADE. One option ("self-CADE") was direct abstraction by institutional staff (guided by the CADE program<sup>8</sup>, with reimbursement on request); the second option ("field-CADE") was to provide contractor Field Data Collectors (FDCs) with access to the records and have the abstractions performed by the FDCs. Generally, self-CADE was the recommended option, since it was less expensive and ensured no contractor staff access, during abstraction, to records of students who had not been

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<sup>7</sup>In an attempt to retrieve updated addresses and/or telephone numbers, 1,529 of these cases were actually submitted during CATI data collection.

<sup>8</sup>While the CADE system was self-directing and contained a number of checks to ensure proper installation and use, training institutional staff on the proper use of the system was still needed. This was accomplished through a CADE Users' Manual and an electronic tutorial; also a hot-line number was established by the contractor to address specific questions as they arose.

sampled<sup>9</sup>. A total of 28 institutions did not use either of these CADE options; for various reasons<sup>10</sup> they chose to provide electronic or hard copy of selected records to the contractor, and contractor central staff then transferred (or keyed) relevant information from those records into the CADE format (these institutions are classified as field-CADE).

Initially, 663 (79 percent) of the 836 participating institutions opted for self-CADE; however, only 474 (57 percent) actually completed the procedure under self-CADE. Among the 836 institutions, 199 ICs (24 percent of the total) changed their minds about the method of abstraction during the CADE operation; 194 of these changed from self-CADE to field-CADE, and the remaining 5 changed in the opposite direction.

In addition to obtaining student financial aid data, enrollment data, and other factual postsecondary data from institution records (the most reliable and valid source available), CADE operations also were designed to obtain information necessary to contact the student. For these and other purposes, all data in the CADE record were preloaded into the CATI record, after final quality assurance checks and determination of student eligibility. During the CADE operation, 2,430 students were determined to be NPSAS-ineligible (in the bulk of these cases, some student record data had already been abstracted prior to that determination); an additional 1,326 sample members were determined to be NPSAS-ineligible during the subsequent interviewing stage (complete or partial CADE data had also been obtained for over half of these cases). Irrespective of the availability of CADE data, however, none of these 3,756 students are considered in discussions of rates for obtaining record data .

Institutional response to the CADE data collection is shown in Table 3.3. Among the 836 institutions providing student lists, 804 (96 percent) provided complete or partial record data for at least one NPSAS-eligible student selected from that institution. It should be noted that eight of the 804 institutions providing such data did so only after the interviewing stage had been initiated for their students; consequently, even though all students from such institutions with sufficient CADE data are represented in the CADE database, only those students at the institution with sufficient SAR96 data were selected for (and are represented through) student interviewing. For purposes of presentation completeness, both weighted and unweighted institutional-level rates for obtaining record data are provided in Table 3.3.

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<sup>9</sup>An exception to this generality was institutions with large samples (particularly those with samples of graduate and first-professional samples--records for whom are frequently maintained in separate physical locations from that for undergraduates). Past experience, in both NPSAS:93 and the NPSAS:96 field test, suggested that a sizeable number of such institutions initially choosing self-CADE would subsequently discover the task too demanding and then request field-CADE for the (remaining) abstractions; to avoid the delay so introduced, field-CADE was highly recommended to such institutions from the outset.

<sup>10</sup>The typical reason expressed was unwillingness to have contractor staff accessing their files or unwillingness to perform self-CADE. Other institutions in this category resulted from those that initially attempted self-CADE but who admitted that they would be unable to do it too late in the process to schedule FDCs for field-CADE.

Table 3.3 —Institution-level rates for obtaining institutional record data (CADE), by selected classifications

Type of institution <sup>a</sup>	Eligible <sup>b</sup>	Provided record data <sup>c</sup>		
		Number	Percent <sup>d</sup>	
			Unweighted	Weighted
All institutions	836	804	96.2	96.3
Institutional level				
Less than 2-year	100	93	93.0	94.6
2-year	238	229	96.2	97.7
4-year non-doctorate-granting	242	237	97.9	97.8
4-year doctorate-granting	256	245	95.7	97.1
Institutional control				
Public	434	424	97.7	98.7
Private, not-for-profit	274	261	95.3	97.6
Private, for-profit	128	119	93.0	93.5
Institutional sector				
Public, less than 2-year	31	31	100.0	100.0
Public, 2-year	159	155	97.5	98.2
Public, 4-year non-doctorate-granting	119	117	98.3	99.4
Public, 4-year doctorate-granting	125	121	96.8	97.6
Private, not-for-profit, 2-year or less	42	38	90.5	98.4
Private, not-for-profit, 4-year non-doctorate-granting	102	100	98.0	97.1
Private, not-for-profit, 4-year doctorate-granting	130	123	94.6	96.8
Private, for-profit, less than 2-year	61	56	91.8	93.4
Private, for-profit, 2-year or more	67	63	94.0	94.0

NOTE: All percentages are based on the eligible group for the row under consideration.

<sup>a</sup>Institutional classifications were verified by participating institutions to correct classification errors in the sampling frame.

<sup>b</sup>The eligible group is comprised of the 836 NPSAS-eligible institutions that provided lists for student sampling.

<sup>c</sup>Includes institutions providing only partial data and those providing data for only a subset of sampled students; eight of the institutions provided these data only after interviewing had been initiated for students selected from their institution.

<sup>d</sup>NPSAS:96 was designed to produce efficient estimates only at the student level. Institutions were selected with probabilities proportional to size. Therefore, weighted institution-level estimates are subject to a high level of sampling variation, and the unweighted estimates may be more reliable.

Even though the sample was not designed to optimize the precision of institution-level estimates, the weighted and unweighted rates are quite comparable<sup>11</sup>. Among the types of institutions categorized in the table, some variation is evidenced; however, the range of variation is relatively small (between 90 percent and 100 percent). As has been the case in prior NPSAS studies (with notable exceptions among the public institutions), unweighted rates for obtaining record data were lowest among the for-profit institutions and institutions offering programs of 2-years or less.

Rates for obtaining institutional record data among the 59,860 NPSAS-eligible students sampled from the 836 participating institutions are shown in Table 3.4. Again, both weighted and unweighted results are shown; the weighted rates representing the CADE data coverage within the defined population of NPSAS-eligible students<sup>12</sup>. Overall, full or partial CADE data were obtained for about 93 percent of the selected students. Within the categories selected for presentation in the table, variations in rates is somewhat restricted, particularly among unweighted rates (unweighted rates range from a low of 88 percent to a high of 96 percent, while the weighted coverage rates range from a low of 81 percent to a high of 97 percent). Consistent with the institutional-level results, rates are generally lowest among students from institutions that offer less than a 4-year program or that are for-profit.

### **3.2.3 Other *Post Hoc* Records Abstracted**

The EDIs with the NSLDS database (attempted for the first time in NPSAS:96) and with the Pell Grant files were initiated towards the end of CATI operations. As with the previously described procedures with CPS, matching of students to the files required CPS IDs. At the time of both of these requests, *apparently* valid CPS IDs were available for only 62,717 sample members, the number subsequently submitted for both attempted matchings and associated data downloads<sup>13</sup>. The factors that determined a match for these attempts are consistent with those discussed in section 3.2.2.1 for the CPS operation, as are associated cautions regarding over interpretations of matching results.

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<sup>11</sup>A single exception involves the private, not-for-profit institutions offering less than a 4-year program; within this domain (represented here by less than 50 institutions), the weighted and unweighted rates differ by about 8 percentage points.

<sup>12</sup>The specific applicable postsecondary student population is those enrolled in institutions that would provide student sampling lists, if asked.

<sup>13</sup>Of these, 3,617 were ultimately determined to be ineligible for NPSAS.

Table 3.4 —Student-level rates for obtaining institutional record data (CADE), by selected classifications

Type of student <sup>a</sup>	Total eligible <sup>b</sup>	Record data obtained <sup>c</sup>		
		Number	Percent	
			Unweighted	Weighted
All students	59,860	55,665	93.0	93.0
Institutional level				
Less than 2-year	4,545	4,010	88.2	89.8
2-year	11,748	10,893	92.7	92.2
4-year non-doctorate-granting	18,709	17,543	93.8	94.0
4-year doctorate-granting	24,858	23,219	93.4	93.3
Institutional control				
Public	33,493	31,281	93.4	92.8
Private, not-for-profit	20,143	18,691	92.8	92.9
Private, for-profit	6,224	5,693	91.5	95.8
Institutional sector				
Public, less than 2-year	1,278	1,172	91.7	81.1 <sup>e</sup>
Public, 2-year	7,485	6,909	92.3	92.1
Public, 4-year non-doctorate-granting	10,282	9,529	92.7	92.7
Public, 4-year doctorate-granting	14,448	13,671	94.6	94.1
Private, not-for-profit, 2-year or less	2,424	2,150	88.7	87.2
Private, not-for-profit, 4-year non-doctorate-granting	7,356	7,040	95.7	95.6
Private, not-for-profit, 4-year doctorate-granting	10,363	9,501	91.7	91.1
Private, for-profit, less than 2-year	2,824	2,507	88.8	93.2
Private, for-profit, 2-year or more	3,400	3,186	93.7	97.2
Student level <sup>d</sup>				
Undergraduate	47,849	44,468	92.9	93.1
Graduate	9,371	8,653	92.3	91.9
First-professional	2,640	2,544	96.4	96.4

NOTE: All percentages are based on the eligible total for the row under consideration.

<sup>a</sup>Both institutional and student classifications have been verified against collected data to correct classification errors in the sampling frames.

<sup>b</sup>The eligible group is comprised of all 63,616 sampled students minus the 3,756 students found to be NPSAS-ineligible at any stage of data collection.

<sup>c</sup>Includes obtaining only partial data.

<sup>d</sup>Based on the student's last term of enrollment at the NPSAS institution during the NPSAS year.

<sup>e</sup>The difference between weighted and unweighted response rates is explained by one institution with 102 nonrespondents with larger-than-average weights.

Results of the NSLDS attempted matchings are shown in Table 3.5. Since NSLDS files are historical, information about receipt of such loans were available not only for the NPSAS year but also for prior years of postsecondary education (where applicable); therefore the table shows match rates for both the NPSAS year and historically. A total of 21,418 NPSAS sample members (34 percent of those submitted) were matched for the NPSAS year; 31,455 (50 percent) were matched over all years. NSLDS file records are maintained as “transactions;” consequently, in addition to loan receipt records, the files contain records for consolidations, cancellations, etc. Because of this and the historical nature of the files, several records were expected (and realized) for some students; in fact, for the 31,455 students matched, a total of 121,100 loan records were obtained (on average, almost four records per sample member).

For NSLDS matches for the NPSAS year and within the student classifications considered, the relative numbers of matches follow a pattern quite similar to that seen for the CPS matching (e.g., low match rates for graduate students and for those in public institutions with program offerings of two years or less, but high match rates for first-professional students and those in for-profit institutions). The reasons for the NSLDS matching pattern is also probably consistent with that advanced for the CPS matching pattern (see section 3.2.1, above).

The pattern is typically less distinct (and in some cases absent) for the historical match rates, certainly reflecting, at least in part, the fact that student status has changed over time (e.g., the higher historical rate for graduate students also reflect their aid packages when they were undergraduates).

Results of attempted matches to the Pell Grant file for the 1995-96 financial aid year are shown in Table 3.6. Matches were obtained for 13,650 (22 percent) of the 62,717 submitted cases. A handful of the matches involved graduate and first-professional students who are not eligible for this form of financial aid. However, the student level classification used is based on the last term of enrollment at the NPSAS institution during the NPSAS year, and the matched graduate and first-professional sample members were undergraduates at some time during the year (and as such eligible for this type of aid during the year).

Considerable variation in Pell Grant matching rates is observed over the categories of students shown in Table 3.6. Matching rates are lowest in the institutions offering programs at the graduate and first-professional level; however, this reflects the fact that the bulk of the graduate and first-professional students sampled from such institutions were not eligible for this form of aid during the year. Other than the confounding of the graduate and first-professional samples, the pattern of matches is fairly consistent with that observed for other EDI attempts; specifically relatively high match rates among sample members enrolled in for-profit institutions and relatively low match rates within public institutions with offerings of 2 years or less (probably for reasons similar to those advanced previously).

Table 3.5—Results of NSLDS matching attempt, by selected institutional and student classifications

Type of student <sup>a</sup>	Number eligible <sup>b</sup>	Matched to NSLDS <sup>c</sup>			
		Loan during NPSAS year		Loan historically <sup>d</sup>	
		Number	Percent	Number	Percent
All students	62,717	21,418	34.2	31,455	50.2
Institutional level					
Less than 2-year	5,045	1,697	33.6	2,369	47.0
2-year	12,892	3,105	24.1	5,168	40.1
4-year non-doctorate-granting	19,283	6,983	36.2	10,313	53.5
4-year doctorate-granting	25,497	9,633	37.8	13,605	53.4
Institutional control					
Public	35,651	9,407	26.4	15,307	42.9
Private, not-for-profit	20,547	8,548	41.6	11,769	57.3
Private, for-profit	6,519	3,463	53.1	4,379	67.2
Institutional sector					
Public, less than 2-year	1,511	108	7.1	331	21.9
Public, 2-year	8,509	760	8.9	2,158	25.0
Public, 4-year non-doctorate-granting	10,637	3,333	31.3	5,166	48.6
Public, 4-year doctorate-granting	14,994	5,206	34.7	7,652	51.0
Private, not-for-profit, 2-year or less	2,538	994	39.2	1,418	55.9
Private, not-for-profit, 4-year non-doctorate-granting	7,556	3,150	41.7	4,433	58.7
Private, not-for-profit, 4-year doctorate-granting	10,453	4,404	42.1	5,918	56.6
Private, for-profit, less than 2-year	3,060	1,555	50.8	1,898	62.0
Private, for-profit, 2-year or more	3,459	1,908	55.2	2,481	71.7
Student level <sup>e</sup>					
Undergraduate	50,266	17,964	35.7	24,671	49.1
Graduate	9,745	1,654	17.0	4,685	48.1
First-professional	2,706	1,800	66.5	2,099	77.6

Note: All percentages are unweighted and based on the eligible count within the row under consideration.

<sup>a</sup>Both institutional and student classifications used here have been verified to correct classification errors on the sampling frame.

<sup>b</sup>Only sampled students, for whom an *apparently* legitimate ID number was available at that time, were submitted for NSLDS matching. Of the 62,717 submitted, 3,617 were determined to be ineligible for NPSAS:96.

<sup>c</sup>The loan transaction matches for any year do not necessarily reflect a loan during the year. They may represent a consolidation or cancellation transaction.

<sup>d</sup>Over all years of postsecondary education reflected in the NSLDS files.

<sup>e</sup>Student level is based on the student’s last term of enrollment at the NPSAS institution during the NPSAS year.

Table 3.6—Results of Pell grant file matching attempt, by selected institutional and student classifications

Type of student <sup>a</sup>	Number eligible <sup>b</sup>	Matched to Pell	
		Number	Unweighted percent
All students	62,717	13,650	21.8
Institutional level			
Less than 2-year	5,045	2,078	41.2
2-year	12,892	3,494	27.1
4-year non-doctorate-granting	19,283	4,441	23.0
4-year doctorate-granting	25,497	3,637	14.3
Institutional control			
Public	35,651	6,515	18.3
Private, not-for-profit	20,547	4,061	19.8
Private, for-profit	6,519	3,074	47.2
Institutional sector			
Public, less than 2-year	1,511	290	19.2
Public, 2-year	8,509	1,625	19.1
Public, 4-year non-doctorate-granting	10,637	2,376	22.3
Public, 4-year doctorate-granting	14,994	2,224	14.8
Private, not-for-profit, 2-year or less	2,538	888	35.0
Private, not-for-profit, 4-year non-doctorate-granting	7,556	1,760	23.3
Private, not-for-profit, 4-year doctorate-granting	10,453	1,413	13.5
Private, for-profit, less than 2-year	3,060	1,637	53.5
Private, for-profit, 2-year or more	3,459	1,437	41.5
Student level <sup>c</sup>			
Undergraduate	50,266	13,616	27.1
Graduate	9,745	15	0.2
First-professional	2,706	19	0.7

Note: All percentages are unweighted and based on the eligible count within the row under consideration.

<sup>a</sup>Both institutional and student classifications used here have been verified to correct classification errors on sampling frame.

<sup>b</sup>Only sampled students, for whom an *apparently* legitimate ID number was available at that time, were submitted for NSLDS matching. Of the 62,717 submitted, 3,617 were determined to be ineligible for NPSAS:96.

<sup>c</sup>Student level is based on the student's last term of enrollment at the NPSAS institution during the NPSAS year.

The small number of graduate and first-professional students receiving Pell grants during the 1995-96 academic year were undergraduates during earlier terms of enrollment that year, and were eligible for such aid at that



time.

### 3.3 Student and Parent Locating and Collecting Interview/Questionnaire Data

For this presentation, student and parent interviews will be discussed separately, in that order, even though the two types of interviewing proceeded simultaneously, as a single operation using the same interviewer pool. Both interview programs were stored in a single CATI record, so that if a sampled parent was contacted before interviewing the student (which occurred frequently while trying to locate the student), that parent could be interviewed while he/she was already on the phone.<sup>14</sup>

The two-stage telephone interviewing of the previously selected sample of students (and parents of a subsample of those students) was sometimes as straightforward as placing a single telephone call; however, the operation frequently involved a number of sequential operations. The activities can be categorized into two major steps: locating (identifying an initial telephone number at which the sample member can be reached)<sup>15</sup> and interviewing (convincing the sample member to cooperate and conducting the interview at a convenient time).<sup>16</sup> For NPSAS:96, an automatic call scheduler was used to facilitate operations; while this scheduler served to optimize locating with as few calls as possible, it generated additional calendar time sequential dependencies.<sup>17</sup>

#### 3.3.1 Students

Figure 3.1 presents a schematic of the student interviewing process. As indicated previously, not all students were selected for interviewing. Specifically excluded from the interview sampling process were students for whom no institutional record data had been

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<sup>14</sup>While this procedure does represent real-time savings over a strictly sequential ordering of the two types of interviews, some inefficiencies were realized (i.e., some parents were interviewed before it had been determined that the student was NPSAS-ineligible).

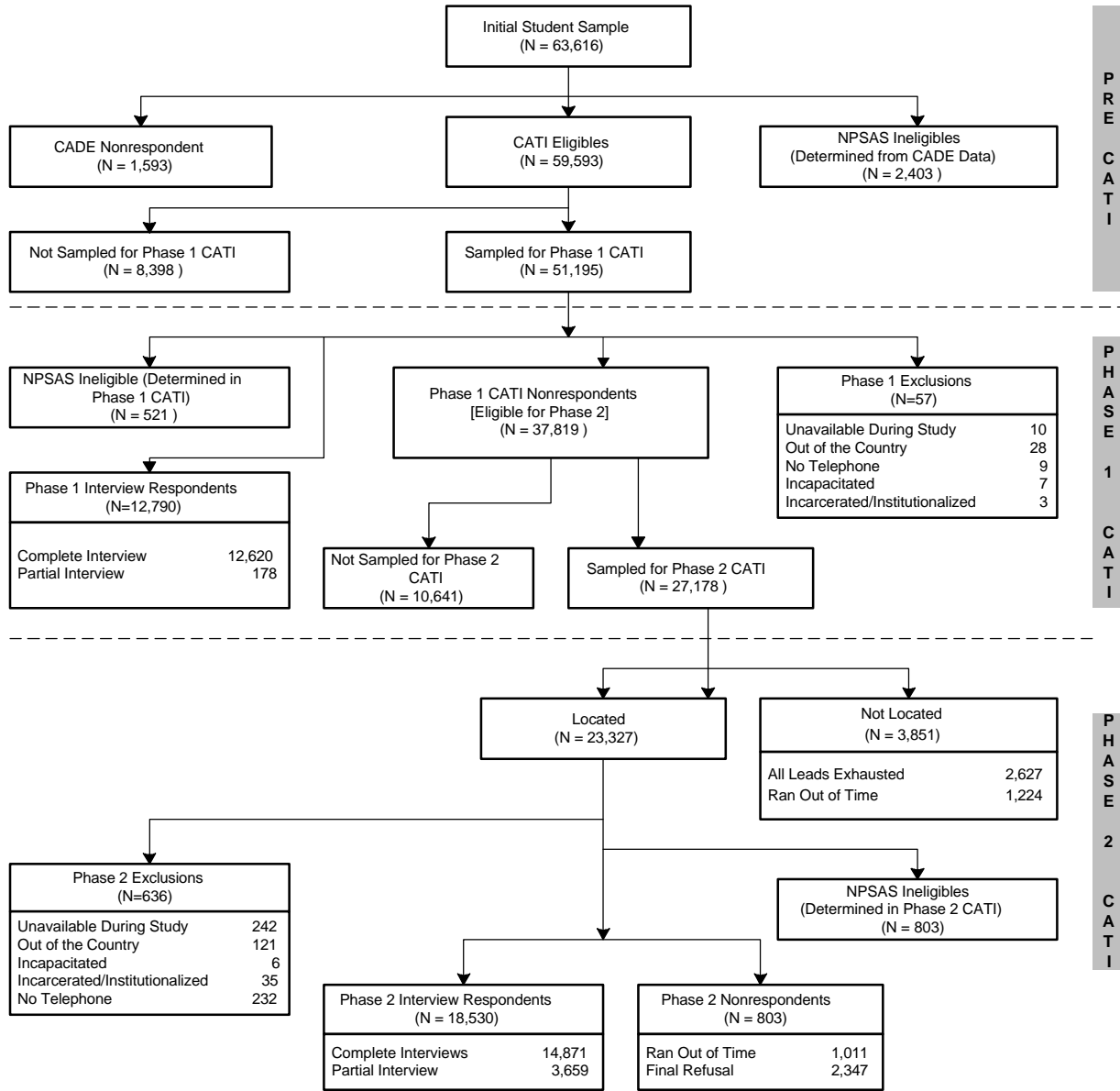
<sup>15</sup>Sequential activities associated with locating can involve: sequencing through the preloaded telephone numbers until the operable one is found; calling new numbers uncovered during calls to preloaded numbers; contacting directory assistance for a name at an available address (when no phone number is available or when a number has been disconnected); calling college locator services and/or Alumni Offices; as well as more intensive tracing activities (e.g., referred to external sources).

<sup>16</sup>Sequential activities associated with interviewing can involve: reaching sample members when they are available; convincing the sample member initially to participate; scheduling (and rescheduling if an appointment is missed) a convenient time to conduct (or finish) the interview; referring respondents with English language weaknesses to specialized interviewers; converting initial refusals (usually involving at least two additional contacts); plus relocating sample members that move before completing the interview (e.g., between institution years).

<sup>17</sup>Among other features, optimal calling plans involve (a) calling individuals who have yet to be reached during different time segments (early morning, mid-morning, mid-day, afternoon, early evening, late evening, Saturday, and Sunday) than those at which they were not reached in previous attempts and (b) calling individuals who have been reached (but for whom no call-back appointment exists) during similar time segment when they were reached previously. Within such systems, the potential for calendar delay between calls is obvious.

obtained and those found to be NPSAS-ineligible during record abstracting. The former group

**Figure 3.1—Student sample case flow through CATI selection, locating, interviewing, and related case resolution**



\*All Phase 1 Partial Interviews were abbreviated, Spanish-language interviews.

\*\*Phase 2 partial interviews consisted of a mix of minimal or abbreviated interviews and partially completed main interview.

as excluded because, in the absence of record abstract data: (1) the interview data would have considerably reduced utility, and (2) no locating data would be available from which to even start the tracing process. Exceptions were made to this rule, *if* sufficient SAR data had been collected (through the CPS) related to *both* financial aid and locating<sup>18</sup>.

Among the 59,593 NPSAS-eligible (as known at that time) students with sufficient CADE (or CPS) data, only 51,195 were sampled into the Phase-1 locating and interviewing stage (see Table 2.2.9 of Chapter 2 for strata and rates used in this sampling). Among those selected, 12,798 were both located and interviewed during Phase 1. The bulk of these cases (12,620) completed full interviews, but 178 completed only the Spanish-language abbreviated interview. An additional 580 students were finalized during Phase 1; of these 523 were found to be NPSAS-ineligibles (including deceased students) and 57 were determined to be exclusions (e.g., those determined to be incapacitated, incarcerated, institutionalized, out of the country for the duration of the data collection period). The designation “exclusions” indicates that the status of the case was resolved without an interview; such cases are considered “out-of-scope” for locating and interviewing by telephone.

The remaining 37,819 students selected for interviewing were *either* not located *or* located but not interviewed during the established Phase-1 level of effort. From this group of Phase-1 “nonrespondents,” 27,178 students were selected for the more intensive (and more costly) Phase-2 locating and interviewing effort<sup>19</sup> (see Table 2.2.10 of Chapter 2 for strata and rates used in this sampling). The bulk of those selected (23,327) were ultimately located or otherwise resolved. Other “resolutions” included 803 additional NPSAS-ineligibles (again including deceased sample members) and 636 exclusions. As in Phase 1, exclusion cases consisted of those whose status (generally obtained through some contacted third party) was determined to be such that attempts at interviewing them during the CATI operational period would be futile.

Not located cases are classified into two groups: (1) “ran out of time,” those for whom tracing either external to CATI or within the CATI-imbedded locator module was still ongoing (but still not fruitful) when data collection activities were ceased and (2) “all leads exhausted” cases, those for whom all tracing attempts both CATI internal and external had been exhausted with no success in locating. The first of these categories (which includes cases for whom additional locating leads had been obtained through CATI-external locating services) obviously represents an effect of the constricted time frame for those students sampled late in the process.

Among the 21,888 located Phase-2 sample members who were not resolved as NPSAS-ineligible or study exclusions, 18,530 were interviewed. Of these, 14,871 completed the main interview; the remaining 3,659 completed either parts of the main interview, an abbreviated interview, a minimal interview, or some combination thereof (see Section 4.2 for greater detail

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<sup>18</sup>As indicated earlier, no students from 8 institutions (which were particularly late in returning records data) would have been included in the interview sample if this exception had not been in effect.

<sup>19</sup>Additional efforts in Phase 2 included: referring cases to subcontractors for more intensive tracing, use of specially-trained interviewers for refusal conversion, mailing abbreviated interviews (in hard copy form) to the hearing-impaired and those identified as not having telephones, leaving call-back messages on answering machines, and administering a minimal (5-minute) interview to those who would participate under no other circumstances.

regarding partial completions). The 3,358 located sample members who were neither interviewed nor otherwise satisfactorily resolved are also classified into two major groups: final refusals and “ran out of time”.

The latter group contains some cases that were sampled late in the process and simply could not be completed (due to scheduling conflicts for a time to conduct the interview or lack of calendar time to implement full refusal conversion procedures) during the fixed data collection period. It also contains a set of students sampled earlier, who were contacted during the 1995-96 institution year, but who moved after the last term (and were subsequently untraceable) prior to completing enough of the interview to be deemed a respondent. Also, the group likely contains an unknown number of implicit refusal cases (those who, after first contact, use answering machines or friends/relatives as gatekeepers, and those who continue to make -- and then break -- appointments for an interview “in the future”).

Weighted and unweighted response rates for Phase-1 and Phase-2 interviewing as well as a weighted overall effective response rate (coverage rate)<sup>20</sup> are shown in Table 3.7, overall and by selected domains. Those who were determined to be either NPSAS-ineligible or exclusions in either interviewing phase are not included in the computations. In all cases, the phase-specific weights used for rates reflect differential sampling into the applicable phase and have been corrected to account for the fact that NPSAS-ineligibles and exclusions exist within the groups of students that were not located or interviewed. The overall rate accounts for the fact that those selected into phase 2 carry greater weight (since they represent those Phase-1 nonrespondents not sampled for Phase 2); for any domain, this rate is derived as the ratio of the weight sum for all respondents in the domain of interest (using Phase-1 weights for Phase-1 respondents and adjusted Phase-2 weights for Phase-2 respondents) to the weight sum of all cases in the domain of interest who were selected for Phase 1.

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<sup>20</sup>The effective response rate over both phases represents the interview coverage of NPSAS-eligible and non-excludable postsecondary students from NPSAS-eligible institutions that would have allowed sampling, if asked. An unweighted coverage rate would be relatively meaningless under the differential selection weights for Phase-2.

Table 3.7—Student interview response rates, by selected classifications

Type of Student <sup>a</sup>	Phase 1 <sup>b</sup>				Phase 2 <sup>c</sup>				Total interviewed	Weighted effective response rate <sup>d</sup>
	Eligible	Interviewed	Response rates		Eligible	Interviewed	Response rates			
			Unweighted	Weighted			Unweighted	Weighted		
All students	49,176	12,798	26.0	25.5	25,739	18,530	72.0	68.5	31,328	76.4
Institutional level										
Less-than-2-year	3,838	1,019	26.6	26.8	2,391	1,402	58.6	58.6	2,421	70.1
2-year	10,249	2,785	27.2	27.2	5,672	3,674	64.8	64.4	6,459	74.0
4-year non-doctorate-granting	15,370	4,302	28.0	26.4	7,746	5,847	75.5	71.3	10,149	78.8
4-year doctorate-granting	19,719	4,692	23.8	22.8	9,930	7,607	76.6	71.4	12,299	77.8
Institutional control										
Public	27,196	7,225	26.6	26.0	13,968	10,221	73.2	68.3	17,446	76.4
Private, not-for-profit	16,406	4,139	25.2	23.7	8,374	6,215	74.2	70.2	10,354	77.4
Private, for-profit	5,574	1,434	25.7	25.6	3,397	2,094	61.6	62.8	3,528	72.7
Institutional sector										
Public, less-than-2-year	1,002	285	28.4	27.1	525	325	61.9	64.2	610	75.1
Public, 2-year	6,295	1,753	27.8	27.3	3,391	2,201	64.9	64.6	3,954	74.1
Public, 4-year non-doctorate-granting	8,452	2,382	28.2	26.4	4,282	3,225	75.3	70.5	5,607	78.1
Public, 4-year doctorate-granting	11,447	2,805	24.5	23.7	5,770	4,470	77.5	72.2	7,275	78.6
Private, not-for-profit, 2-year or less	2,142	536	25.0	25.0	1,238	799	64.5	61.7	1,335	71.0
Private, not-for-profit, 4-year non-doctorate-granting	6,023	1,725	28.6	26.7	2,990	2,293	76.7	72.7	4,018	80.1
Private, not-for-profit, 4-year doctorate-granting	8,241	1,878	22.8	20.7	4,146	3,123	75.5	69.0	5,001	75.6
Private, for-profit, less-than-2-year	2,524	683	27.1	27.7	1,650	958	58.1	57.1	1,641	69.1
Private, for-profit, 2-year or more	3,050	751	24.6	24.5	1,747	1,136	65.0	66.1	1,887	74.9
Student interview stratum										
Potential FTB	19,236	5,860	30.5	32.0	13,376	9,076	67.8	67.1	14,936	77.6
Other undergraduate, federal aid applicant	13,545	3,200	23.6	24.1	5,783	4,605	79.6	74.6	7,805	80.7
Other undergraduate, federal aid non-applicant	9,175	1,928	21.0	23.0	3,692	2,624	71.1	63.9	4,552	72.0
Graduate student, federal aid applicant	2,040	568	27.8	27.2	834	658	78.9	74.5	1,226	81.5
Graduate student, federal aid non-applicant	2,910	758	26.0	25.6	1,143	851	74.4	68.5	1,609	76.5
First-professional student, federal aid applicant	1,883	411	21.8	21.5	733	584	79.7	76.4	995	81.6
First-professional student, federal aid non-applicant	387	73	18.9	18.9	178	132	74.2	72.6	205	77.7

NOTE: Respondent counts include partial interviews; all weighted rates have been corrected to account for any estimated or actual NPSAS-ineligibles or exclusions among the nonrespondents.

<sup>a</sup>Institutional categories used here were verified by the institutions to correct classification errors on the sampling frames. Student interview strata reflect only those corrections to the initial sampling strata that were available from CADE data; the few additional frame errors, detected only during the interview process have not been incorporated.

<sup>b</sup>The Phase-1 eligible group is comprised of the 51,195 students selected into Phase 1, minus 1,326 found to be NPSAS-ineligible and 693 found to be exclusions during interviewing.

<sup>c</sup>The Phase-2 eligible group is comprised of the 27,178 students selected for Phase 2, minus 803 found to be NPSAS-ineligible and 636 found to be exclusions during Phase-2 interviewing.

<sup>d</sup>This rate reflects the extent of respondent “coverage” of the full CATI sample and accounts for differential Phase-2 sampling rates; under such rate differentials, an unweighted coverage rate would not be meaningful.

The Phase-1 response rate achieved for all students was about 26 percent, and the weighted and unweighted rates within domain are quite similar (differing by no more than 2.1 percentage points). Phase-1 rates show some variation over the domains considered in the table, but are, for the most part within 2 and a half percentage points of the rate for all students (ranges are from 19 to 30 percent among unweighted rates and from 19 to 32 percent among weighted rates). First-professional students were the most difficult group to resolve in Phase 1 (this is also reflected in slightly lower rates for students at institutions from which these cases were sampled), while the potential FTBs (effort directed toward whom was greatest in all phases) were most easily resolved during the initial interviewing stage<sup>21</sup>.

The unweighted Phase-2 interview rate for all students selected for that phase was 72 percent; the weighted rate was 68 percent. As reflected in that difference, the within-domain weighted and unweighted Phase-2 rates generally differ more from each other than was the case for Phase-1. Considerably greater variability of Phase-2 rates is also observed over the tabled domains; unweighted rates range from 58 to 80 percent, while weighted rates range from 57 to 76. As with many of the rates presented in this report, phase-2 rates are lowest among students from institutions that are for-profit or offer less than a 4-year program.

Overall effective response rates are a complex function of both Phase-1 and Phase-2 rates; however, they are more heavily weighted by the Phase-2 results (due to both the considerably greater weights carried by those selected into Phase 2 and the relatively low Phase-1 rates). Coverage for the defined overall student population is 76 percent, and these rates vary from a low of 69 percent to a high of 82 percent across the domains presented in Table 3.7. As with other rates examined, rates are generally lowest among institutions offering programs of 2-years or less and among for-profit institutions.

Of some additional interest is the uniformly higher coverage rates for federal aid applicants than for non-applicants within the three student groups wherein such a breakdown is shown (i.e., non-FTB undergraduates, graduate students, and first-professional students). This directionality is also reflected (but to a lesser degree) in both the Phase-1 and Phase-2 rates. Federal aid applicants should be more easily located, since additional locating information is available from the SAR-96 data; also, a study of student aid should also be more relevant to recipients, which should lead to higher interviewing rates when they are located.

Table 3.8 provides results that allow an examination of the effect of each of the two sequential operations (locating and interviewing, when located) in obtaining responses. For these purposes, only unweighted rates are considered; the examination is also restricted to Phase-2 cases (Phase-1 results are not particularly applicable, since all respondent cases completed therein were both located *and* interviewed). Consequently these results are based on the 27,178 sample members selected for Phase 2 minus the 1,439 found to be

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<sup>21</sup>The higher Phase-1 interviewing rate among potential FTBs may also be a function of the “supplemental” samples of FTBs who were selected (for whom local telephone numbers were “fresher” than for other groups selected at the initial sampling stage).

Table 3.8—Phase-2 student locating rates and interview response rates conditional on locating, by selected classifications

Type of student <sup>a</sup>	Number Eligible <sup>b</sup>	Located <sup>c</sup>		Interviewed if located <sup>d</sup>	
		Number	Percent <sup>e</sup>	Number	Percent <sup>f</sup>
All students	25,739	21,888	85.0	18,350	84.7
Institutional level					
Less-than-2-year	2,391	1,685	70.5	1,402	83.2
2-year	5,672	4,446	78.4	3,674	82.6
4-year non-doctorate-granting	7,746	6,825	88.1	5,847	85.7
4-year doctorate-granting	9,930	8,932	90.0	7,607	85.2
Institutional control					
Public	13,968	12,091	86.6	10,221	84.5
Private, not-for-profit	8,374	7,317	87.4	6,215	84.9
Private, for-profit	3,397	2,480	73.0	2,094	84.4
Institutional sector					
Public, less-than-2-year	525	400	76.2	325	81.2
Public, 2-year	3,391	2,684	79.2	2,201	82.0
Public, 4-year non-doctorate-granting	4,282	3,787	88.4	3,225	85.2
Public, 4-year doctorate-granting	5,770	5,220	90.5	4,470	85.6
Private, not-for-profit, 2-year or less	1,238	957	77.3	799	83.5
Private, not-for-profit, 4-year non-doctorate-granting	2,990	2,662	89.0	2,293	86.1
Private, not-for-profit, 4-year doctorate-granting	4,166	3,698	89.2	3,123	84.5
Private, for-profit, less-than-2-year	1,650	1,140	69.1	958	84.0
Private, for-profit, 2-year or more	1,747	1,340	76.7	1,136	84.8
Student interview stratum					
Potential FTB	13,376	10,674	79.8	9,076	85.0
Other undergraduate, federal aid applicant	5,783	5,303	91.7	4,605	86.8
Other undergraduate, federal aid non-applicant	3,692	3,258	88.2	2,624	80.5
Graduate student, federal aid applicant	834	759	91.6	658	86.7
Graduate student, federal aid non-applicant	1,143	1,047	93.7	851	81.3
First-professional student, federal aid applicant	733	687	93.7	584	85.0
First-professional student, federal aid non-applicant	178	160	89.9	132	82.5

NOTE: All response rates are unweighted and apply only to eligible cases sampled for Phase 2 interviewing.

<sup>a</sup>Institutional categories used here were verified by the institutions to correct classification errors on the sampling frames. Student interview strata reflect only those corrections to the initial sampling strata that were available from CADE data; additional frame errors, detected only during the interview process are not incorporated.

<sup>b</sup>The eligible group is comprised of the 27,178 students selected for Phase 2 interviewing, minus 803 found to be NPSAS-ineligible and 636 found to be exclusions during Phase 2 interviewing.

<sup>c</sup>Eligible students were considered located if they were personally reached by telephone or if a third party verified that the number reached by phone was the student's residence.

<sup>d</sup>Including 14,871 complete interviews and 3,659 partial, abbreviated, and/or minimal interviews.

<sup>e</sup>Rate is based on the number of *eligible* students within the row under consideration.

<sup>f</sup>Rate is based on the number of *located* students within the row under consideration.



NPSAS-ineligible or exclusions during that phase. Rates for locating are based on eligible totals, while the conditional interviewing rates are based on the number located. Sample members were considered to be located if they were reached by telephone or if a third party verified that the phone number reached was at the sample members residence; interviewed cases include both complete interviews (14,871) and partial interviews (3,659).

The product of locating rates and the conditional interviewing rate yields the overall unweighted Phase 2 response rate shown previously in Table 3.7. This relationship allows the determination of the relative effect of the two operations on overall response rates. Over all students, the locating rate is 85 percent, as is the conditional interviewing rate; however, over the different types of institutions attended by sample members, the variation in conditional interviewing rates are quite small (ranging only from 81 percent to 86 percent) when compared to those for locating (ranging from 69 percent to 90 percent). Consequently, the ability to locate plays a larger part in determining response rates when considering the types of institutions shown; specifically, the previously noted relatively low response rates among students from institutions that are for-profit and/or that offer programs of two years or less are principally a function of the difficulty in locating them. This suggests that such students are more mobile and independent and/or that the associated institutions are less punctilious in maintaining information allowing the students to be located after graduation.

Since the bulk of the student samples from 2-year and less-than-2-year institutions were potential FTBs, it should not be surprising, in light of previous findings, that location rates for the potential FTB student sampling stratum was the lowest of all student strata considered. Among the remaining student strata, both locating and conditional interviewing rates show relatively small variation; however, (with a single exception) the directionality of rates for both locating and interviewing (after location) favors federal aid applicants (supporting the previously advanced rationale for the response rate differences).

### **3.3.2 Parent Subsample**

As indicated previously, a subset of students was selected for administration of interviews to their parent(s) to obtain supplemental interview data (e.g., parent demographics, finances, and postsecondary decision making regarding their child) that could not be reliably obtained from the student and that were not available from institutional or CPS records. This supplemental information was needed (and sought) for students who were: (1) dependent undergraduates who had not received federal aid; (2) dependent undergraduates who had received federal aid but for whom not all applicable data were obtained from extant records; and (3) “newly independent” undergraduate students (i.e., 24- and 25-year old students, who recently passed the age at which they could still be defined as dependent under Federal definitions).

Depending, in part, on the order in which they were contacted, the order in which parents and associated students were interviewed varied; however, due to the supplementary purpose of the parent interview, any data obtained therefrom were only applicable if the associated student was determined to be NPSAS-eligible *and* also interviewed<sup>22</sup>. During the process of parent and student interviewing, parents of selected students were also found to be either ineligible (e.g., deceased, student improperly defined and thus not eligible for parent interview) or excludable from any further attempts at interviewing, even if the student responded. In addition to the typical exclusions discussed previously regarding students (e.g., institutionalized, out of the country, infirm, having no telephone), parents were also excluded if the student or associated institution emphatically insisted that the parents not be contacted<sup>23</sup>.

The rates at which supplemental parent data were obtained among those NPSAS-eligible students who completed some full or partial form of the student interview are shown in Table 3.9. Among the 5,016 eligible parent interview cases,<sup>24</sup> full or partial parent interviews were obtained for 3,352, for an overall unweighted supplementation rate of 67 percent.<sup>25</sup> For the categories considered in the table, such rates range from a low of 51 percent among parents of applicable students sampled from private, for-profit, less-than-2-year institutions to a high of 76 percent among dependent, undergraduate, federal aid non-recipients. Even though statistics in Table 3.9 are contingent on response to the student interview, variations of the rates of supplementation among types of involved institutions mirror, in many ways, the variations in student interview rates; rates are lower among the for-profit institutions and among institutions offering programs of less than 4 years.

### 3.4 Overall Study Participation

The students included in the final NPSAS:96 analysis data base were defined to be the overall study respondents or, more accurately, “yielding cases”.<sup>26</sup> Of the 63,616 sample students selected from eligible sample institutions, only 51,195 selected for Phase 1 of the CATI sample were considered eligible as yielding cases.<sup>27</sup> As a result of the locating and

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<sup>22</sup>As might be expected, parent interview data were, in fact, collected for some students who were found NPSAS-ineligible or who were never interviewed; data from such interviews were not used.

<sup>23</sup>One institution refused to participate unless no attempts were made to contact parents of any of their selected students; continued institutional and student participation were deemed more important to study success than pursuit of a parent interview in such cases.

<sup>24</sup>Among NPSAS-eligible students who were interviewed, 5,531 had been selected for parent interview; among those, 60 parents were determined ineligible, and 455 were determined exclusions.

<sup>25</sup>Because of the nature of parent interviews and the fact that all CATI-eligible students who fell into one of the three applicable student types were selected with certainty for such interviews, weighted analyses are not particularly meaningful (and were not conducted). The lower rate of parent interviews, when compared to student interviews, reflects the fact that the former were given lower priority than the latter.

<sup>26</sup>A more stringent response definition was imposed for the subset used as the baseline cohort for the beginning postsecondary student (BPS) longitudinal study. Response rates for first-time beginning students (FTBs) are presented elsewhere in this report.

<sup>27</sup>As noted previously, institutional record data (CADE) are available for 55,665 students in a separate data file.

Table 3.9— Overall parent supplement interview rates, by selected classifications

Type of student of parent <sup>a</sup>	Eligible <sup>b</sup>	Interviewed <sup>c</sup>	
		Number	Percent
All students' parents	5,016	3,352	66.8
Institutional level			
Less-than-2-year	302	155	51.3
2-year	1,027	659	64.2
4-year non-doctorate-granting	1,662	1,127	67.8
4-year doctorate-granting	2,025	1,411	69.7
Institutional control			
Public	3,038	2,113	69.6
Private, not-for-profit	1,522	994	65.3
Private, for-profit	456	245	53.7
Institutional sector			
Public, less-than-2-year	72	44	61.1
Public, 2-year	633	421	66.5
Public, 4-year non-doctorate-granting	1,003	704	70.2
Public, 4-year doctorate-granting	1,330	944	71.0
Private, not-for-profit, 2-year or less	223	141	58.7
Private, not-for-profit, 4-year non-doctorate-granting	604	396	65.6
Private, not-for-profit, 4-year doctorate-granting	695	467	67.2
Private, for-profit, less-than-2-year	206	106	51.5
Private, for-profit, 2-year or more	250	139	55.6
Student interview stratum for parent supplement			
Dependent undergraduate, federal aid non-recipient	2,611	1,913	76.2
Dependent undergraduate, federal aid recipient lacking CADE	1,078	696	66.8
“Newly independent” undergraduate	1,327	743	58.6

NOTE: Response rates are unweighted (weighted rates are considered relatively meaningless for this group) and based on total eligible parents in the row under consideration.

<sup>a</sup>Institutional categories used here were verified by the institutions to correct classification errors on the sampling frames. Student interview strata for parent interviewing reflect only those corrections to the initial sampling strata available from CADE data; additional frame errors, detected only during the interview process are not incorporated.

<sup>b</sup>The eligible group is comprised of the 5,531 parents of students who were both selected for parent interviewing and responded to some form of the student interview, minus 515 parents determined to be ineligible or exclusions during interviewing.

<sup>c</sup>Including 3,313 full interviews and 39 partial interviews.

interviewing operations, an additional 1,326 sample members were found to be ineligible (some of these were deceased, but most failed to meet one or more of the criteria for NPSAS eligibility); consequently, the number of sample members eligible to be a yielding case was reduced to 49,869.

To assure that the study analysis file would contain sufficient meaningful data, an eligible student was defined to be a “yielding case” (included in the analysis data file), if either of the following conditions were satisfied:

1. The items in Section A of the Student CATI were sufficiently completed to identify first-time beginning students, or an abbreviated or minimal version of the student interview was completed (mail, Spanish, or refusal conversion instrument), or
2. CADE was effectively complete (i.e., Section 2, regarding enrollment and tuition was complete; the characteristics and subsection of Section 1 was complete; and either Section 3 was complete or comparable CPS, Pell, or NSLDS information was obtained).

Using this definition of the overall study yield status, Table 3.10 shows that 48,389 of the 49,869 eligible sample students were classified as “yielding cases” for an unweighted student yield rate of 97.0 percent. This table also presents the study yield rates, weighted and unweighted, by various institutional and student characteristics. The weighted yield rates are based on the student sampling weights with adjustments for institutional nonresponse and for student multiplicity (attendance at more than one NPSAS eligible institution during the NPSAS year). The overall weighted student yield rate in Table 3.10 is 96.3 percent. Both the weighted and unweighted yield rates shown in Table 3.10 are quite consistent and in all cases exceed 92 percent.

### **3.5 Reinterviews**

Among eligible sample members who completed the NPSAS:96 interview, a sample was selected to participate in a reliability reinterview (containing a small subset of the interview items and to be conducted approximately one month after the initial interview).<sup>28</sup>

A total of 273 respondents were selected for the reliability reinterview. The reinterview sample, together with rates of consent and subsequent participation in a reinterview, are shown in Table 3.11.<sup>29</sup>

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<sup>28</sup>Unfortunately, because of delays in development of the CATI reinterview program, as well as in relocating/recontacting some individuals selected for this substudy, the actual time interval between initial interview and reinterview was as long as six months.

<sup>29</sup>Due to the built-in delay in administering the reinterview and the plan to complete reinterviews during the same time frame as other interviews, the reinterview population was more heavily weighted with those who responded relatively early to the initial interview; consequently, reported agreement and response rates are probably biased upwards. Reinterview respondents were also disproportionately represented by those most easily located

Table 3.10—Overall study student yield rates

Type of student <sup>a</sup>	Eligible students <sup>b</sup>	Student yield <sup>c</sup>	Unweighted yield rate <sup>d</sup>	Weighted yield rate <sup>d</sup>
All students	49,869	48,389	97.0	96.3
Institutional level				
Less-than-2-year	3,971	3,831	96.5	96.5
2-year	10,401	10,049	96.6	95.4
4-year non-doctorate-granting	15,526	15,042	96.9	96.6
4-year doctorate-granting	19,971	19,467	97.5	97.1
Institutional control				
Public	27,513	26,724	97.1	96.0
Private, not-for-profit	16,665	16,158	97.0	96.8
Private, for-profit	5,691	5,507	96.8	97.7
Institutional sector				
Public, less-than-2-year	1,022	1,020	99.8	99.4
Public, 2-year	6,388	6,167	96.5	95.3
Public, 4-year non-doctorate-granting	8,538	8,221	96.3	95.7
Public, 4-year doctorate-granting	11,565	11,316	97.8	97.4
Private, not-for-profit, 2-year or less	2,208	2,072	93.8	92.8
Private, not-for-profit, 4-year non-doctorate-granting	6,082	5,966	98.1	97.8
Private, not-for-profit, 4-year doctorate-granting	8,375	8,120	97.0	96.4
Private, for-profit, less-than-2-year	2,587	2,492	96.3	96.2
Private, for-profit, 2-year or more	3,104	3,015	97.1	98.6
Student level <sup>e</sup>				
Undergraduate student	42,637	41,359	97.0	96.2
Graduate student	4,871	4,721	96.9	96.7
First-professional student	2,361	2,309	97.8	97.6

NOTE: All yield rates are conditional on institutional participation through student sampling.

<sup>a</sup>Both institutional and student classifications have been verified against collected data to correct classification errors on the sampling frames.

<sup>b</sup>The eligible group is comprised of the 51,195 students selected for Phase 1 CATI, less 1,326 students who were found to be NPSAS-ineligible during subsequent interviewing.

<sup>c</sup>A yielding student was defined as one who had completed the interview sufficiently to be accurately classified or for whom the CADE data were effectively complete.

<sup>d</sup>These rates are *not* corrected for the estimated 2.6 percent of non-yielding cases who were expected to be NPSAS-ineligible.

<sup>e</sup>Student level is based on the student's last term of enrollment at the NPSAS institution during the NPSAS year.

and most easily convinced to participate in the initial interview.

Table 3.11--Reliability reinterview results, by student and institution classifiers

Type of student	Selected for reinterview		Agreed to participate		Reinterviewed	
	Number	Percent <sup>a</sup>	Number	Percent <sup>b</sup>	Number	Percent <sup>c</sup>
Total	273	100.0	250	91.6	233	93.2
Student stratum <sup>d</sup>						
Potential FTB	144	52.7	129	89.6	120	93.0
Other undergraduate	91	33.3	86	94.5	78	90.7
Graduate/first-professional	38	14.0	35	92.1	35	92.1
Institutional control						
Public	151	55.3	140	90.3	132	94.3
Private, non-profit	94	34.4	84	89.4	80	95.2
Private, for-profit	28	10.3	26	92.9	21	80.8

<sup>a</sup>Percentage based on column total.

<sup>b</sup>Percentage based on total selected for interview, within row under consideration.

<sup>c</sup>Percentage based on total agreeing to participate in interview, within row under consideration.

<sup>d</sup>Some minor frame error corrections are not reflected here; consequently, some classification errors exist.

Among the 273 student respondents sampled for reinterview, 250 (approximately 92 percent) agreed to participate. Agreement rate differences among subgroups are not marked, ranging from 89 to 95 percent, with the lowest rates for agreement to participate being among non-FTB undergraduates and students from private, not-for-profit institutions. Among the 250 selected students agreeing to participate in the reinterview, 233 (approximately 93 percent) completed the reinterview. Over half of those who agreed and were not interviewed represented individuals who could not be relocated with the other half representing explicit or implicit refusals at the time of recontact. It is interesting to note that those in the FTB student group (who were subjected to the longest interview) were the least likely student group to be reinterviewed. Also, students from private for-profit institutions were substantially less likely to be reinterviewed, following the initial agreement, than were students in other types of institutions. This group is generally more mobile than others, and thus more difficult to relocate.

Despite the nature of the selection process, the reinterview sample was quite representative of the total respondent group in respect to institutional control. Specifically, the percentage distribution of the reinterview sample over institutional control as shown in Table 3.11 (second column) closely approximates that for all respondents (namely, public: 55 percent; private, non-profit: 32 percent; and private, for-profit: 13 percent). The distribution of reinterview selections over student types is also consistent with that for all respondents (potential FTBs: 50 percent; other undergraduates: 38 percent; and graduate/first-professional: 12 percent).

## Chapter 4

# Evaluation of Operations and Data

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Evaluation studies were planned for NPSAS:96 as part of the overall study design (see Section 2.3.6). Many such evaluations were formative, to assist in day-to-day monitoring of the study and to allow quick detection (for subsequent correction) of problematic operations; other evaluations were summative. Evaluations were useful in identifying potential sources influencing study outcomes, both overall and within the several categories of institutions and students represented in the study. Such results, reported in this chapter, should prove useful in planning for subsequent waves of NPSAS.

### 4.1 Enrollment List Acquisition and Processing

Consistent with NPSAS:93 and to facilitate control over student sample yield, student sampling within an institution was deferred until enrollment lists were obtained for all applicable terms. Given the sequential nature of the student data collection (i.e., CPS matching followed by institutional records collection, and, in turn, telephone interviewing) and the timeframe allotted for these activities, it was important to obtain enrollment lists from a majority of institutions early in the 1996 calendar year and all lists before the summer of that year. However, under the adopted approach, delays were necessitated at schools using certain calendar systems.

The process of contacting institutions and obtaining student enrollment lists spanned a seven-month period, from February through August 1996, during which time useable lists were obtained from 836 of the eligible sample institutions. Table 4.1 presents the number of enrollment lists returned by month and by type of institutional calendar system; cumulative receipt is depicted graphically in Figure 4.1. As can be seen, about two-thirds of the lists were obtained within the first three months of the process, and 96 percent of all institutions that ever provided lists did so within five months. Because schools using semester/trimester systems represent about two-thirds of the total participating schools, the “all institution” results most closely parallel those with this type of calendar system. Even though reimbursement was offered for computer and staff time needed to compile the lists, obtaining the lists at a number of schools involved a considerable number of prompting and follow-up telephone calls.

Other delays were strictly attributable to the particular calendar system used. Institutions using a semester or trimester system were considerably more likely than those on a quarter or continuous enrollment system to provide lists early; 59 percent on the semester/trimester schedule provided complete student lists within the first two months compared to only 4 percent of the schools on the quarter system and 15 percent of the schools on a continuous or other enrollment system.

Table 4.1—Enrollment list receipt, by month and institutional calendar system

Timeframe	All institutions		Semester/trimester		Quarter		Continuous/other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All months	836	100.0	556	100.0	152	100.0	128	100.0
February	148	17.7	143	25.7	0	0.0	5	3.9
March	205	24.5	184	33.1	6	3.9	15	11.7
April	179	21.4	111	20.0	49	32.2	19	14.8
May	80	21.5	58	10.4	67	44.1	55	43.0
June	90	10.8	43	7.7	22	14.5	25	19.5
July	24	2.9	13	2.3	5	3.3	6	4.7
August	10	1.2	4	0.7	3	2.0	3	2.3

Note: All statistics based on eligible institutions that provided lists. All percentages are based on the “All Months” total in the column under consideration.

Institutional NPSAS:96 participation (through list provision) was also examined for potential effects of prior NPSAS participation. Arguments have been made on both sides of this issue; prior participation would either reduce current participation propensity (due to past burden experienced) or would lead to higher current participation rates reflecting an overall cooperative propensity. Summary results of these analyses are shown in Table 4.2. Among eligible institutions, the NPSAS:96 participation rate (defined as providing student lists) among the 504 institutions that had previously participated in NPSAS was 95 percent; significantly higher than the 90 percent rate among the 396 that had not. Further (not shown in the table), NPSAS:96 participation was greatest (97 percent) among the 148 institutions that had participated in all 3 prior NPSAS studies.



Figure 4.1—Cumulative percentages of enrollment list receipt by month and institutional calendar system.

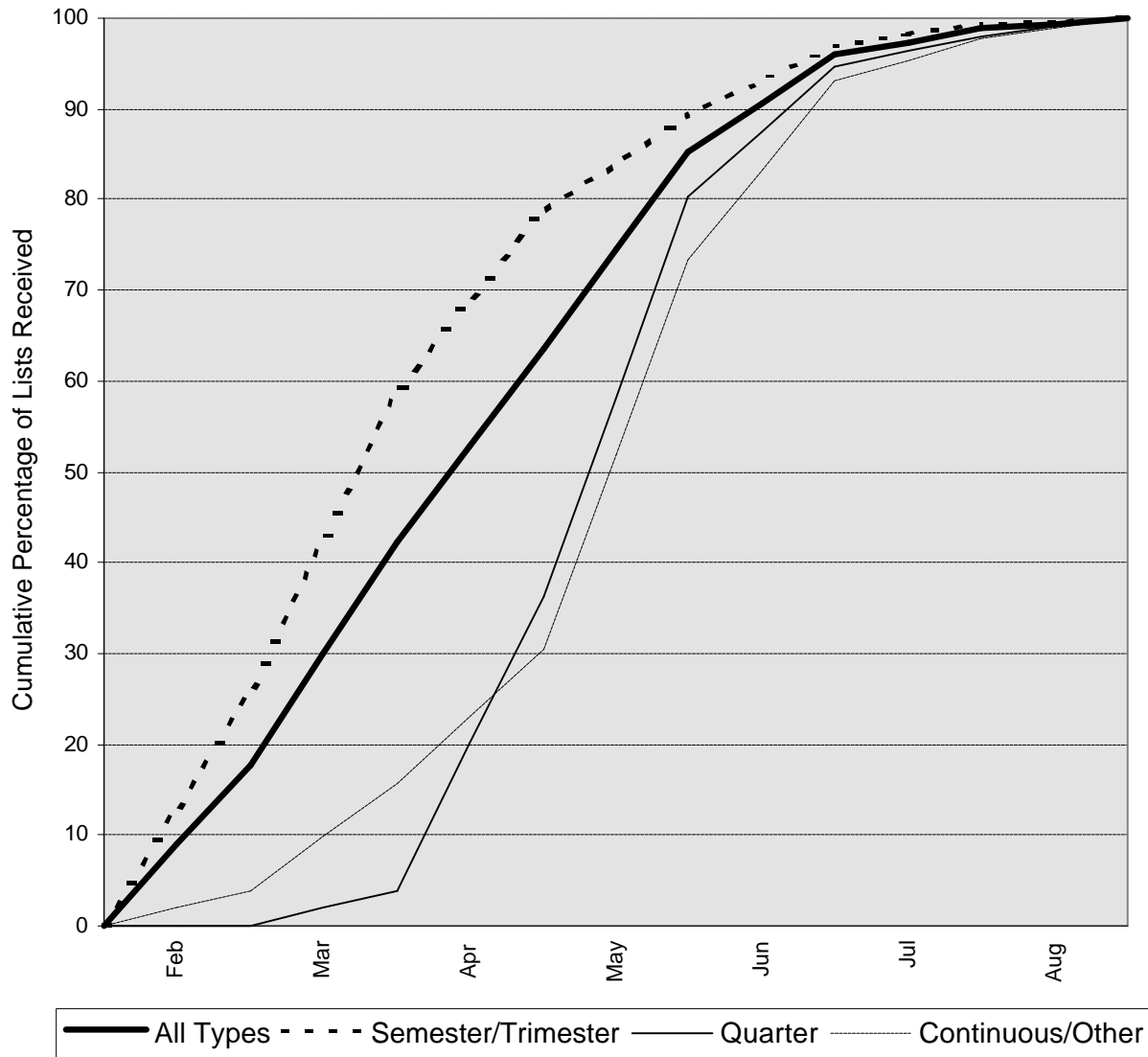


Table 4.2—Institutional NPSAS:96 enrollment list participation, by prior NPSAS participation

Type of institution <sup>a</sup>	Eligible institutions	Prior NPSAS participation					
		Number	Never		Number	At least once	
			Providing lists			Providing lists	
			Number	Percent <sup>b</sup>		Number	Percent <sup>c</sup>
All institutions	900	396	357	90.2	504	479	95.0
Institutional level							
Less-than-2-year	118	98	83	84.7	20	17	85.0
2-year	251	127	119	93.7	124	119	96.0
4-year non-doctorate-granting	260	116	107	92.2	144	135	93.8
4-year doctorate-granting	271	55	48	87.3	216	208	96.3
Institutional control							
Public	448	154	148	96.1	294	286	97.3
Private, not-for-profit	303	122	106	86.9	181	168	92.8
Private, for-profit	149	120	103	85.8	29	25	86.2
Institutional sector							
Public, less-than-2-year	33	25	24	96.0	8	7	87.5
Public, 2-year	165	66	64	97.0	99	95	96.0
Public, 4-year non-doctorate-granting	123	42	40	95.2	81	79	97.5
Public, 4-year doctorate-granting	127	21	20	95.2	106	105	99.1
Private, not-for-profit, 2-year or less	45	33	30	90.9	12	12	100.0
Private, not-for-profit, 4-year non-doctorate-granting	115	56	49	87.5	59	53	89.8
Private, not-for-profit, 4-year doctorate-granting	143	33	27	81.8	110	103	93.6
Private, for-profit, less-than-2-year	75	65	53	86.9	10	8	80.0
Private, for-profit, 2-year or more	74	55	50	74.6	19	17	89.5

<sup>a</sup>Institutional classifications used here were verified by the institutions to correct classification errors on the sampling frame.

<sup>b</sup>Percentages are based on the count of eligible schools with no prior NPSAS participation within the row under consideration.

<sup>c</sup>Percentages are based on the count of eligible schools with prior NPSAS participation within the row under consideration.

These results clearly support the participation propensity hypothesis. Moreover, the differences were directionally consistent within public and private, not-for-profit institutions (most pronounced among the latter). No consistent differences of any magnitude were observed among the private, for-profit institutions; also the directional difference was reversed among public institutions offering only programs less than 2 years.

Institutional participation across NPSAS studies was also examined in terms of the Carnegie classification categories, as shown in Table 4.3. Table 4.4 shows the number of historically black colleges and universities participating in the current and prior NPSAS studies.

Table 4.3—Institutional participation in NPSAS by Carnegie classification category and year of study

Carnegie institutional classification	NPSAS:87		NPSAS:90		NPSAS:93		NPSAS:96	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All institutions	880	100.0	990	100.0	1,061	100.0	836	100.0
Research I	72	8.2	64	6.5	67	6.3	78	9.3
Research II	25	2.9	22	2.2	25	2.4	23	2.8
Doctoral I	30	3.4	27	2.7	31	2.9	36	4.3
Doctoral II	31	3.5	37	3.7	38	3.6	31	3.7
Masters I	127	14.5	154	15.6	227	21.4	167	19.8
Masters II	14	1.5	19	1.9	33	3.1	22	2.6
Baccalaureate I	25	2.9	27	2.7	46	4.3	18	2.2
Baccalaureate II	50	5.7	63	6.4	104	9.8	56	6.7
Associate	236	26.8	247	24.9	225	21.2	202	24.2
Religious	18	2.0	8	0.8	18	1.7	9	1.1
Medical	5	0.5	16	1.6	22	2.1	4	0.5
Other health	7	0.8	12	1.2	11	1.0	5	0.6
Engineering/technical	9	1.0	6	0.6	6	0.6	3	0.4
Business/management	13	1.5	12	1.2	10	1.0	13	1.5
Art/music/design	7	0.8	6	0.6	10	1.0	6	0.7
Law	2	0.2	6	0.6	8	0.7	4	0.5
Teacher	0	0.0	0	0.0	1	0.0	0	0.0
Other special	2	0.2	2	0.2	4	0.4	0	0.0
Tribal	1	0.1	4	0.4	2	0.2	1	0.1
Not classified	206	23.5	258	26.1	173	16.3	158	18.9

Table 4.4—NPSAS participation of historically black colleges and universities (HBCUs)

Participated in:	Number of HBCUs participating
NPSAS:87	17
NPSAS:90	15
NPSAS:93	28
NPSAS:96	16

Types of lists provided by participating schools are shown, by highest level of offering, in Table 4.5. A single, unduplicated (i.e., with duplicate entries over terms of enrollment removed) electronic list was preferred; however, any set of electronic lists was desirable since they could be more easily unduplicated and used. Overall, two-thirds of the institutions provided some type of electronic list(s); another 12 percent of participating institutions provided simple, unduplicated hardcopy list(s) and the remainder (22 percent) provided hardcopy lists that required manual unduplication.

Table 4.5— Types of student lists provided by institutions, by highest level of offering

Highest level of offering	Type of lists received	Number	Percent <sup>a</sup>
All institutions	All lists	844	100.0
	Electronic	556	65.9
	Hard-copy, unduplicated	100	11.9
	Hard-copy, duplicated	188	22.3
Less-than-2-year	All lists	100	100.0
	Electronic	17	17.0
	Hard-copy, unduplicated	42	42.0
	Hard-copy, duplicated	41	41.0
2-year	All lists	239	100.0
	Electronic	139	58.2
	Hard-copy, unduplicated	32	13.4
	Hard-copy, duplicated	68	28.5
4-year, non-doctorate-granting	All lists	246	100.0
	Electronic	184	74.8
	Hard-copy, unduplicated	12	4.9
	Hard-copy, duplicated	50	20.3
4-year, doctorate-granting	All lists	259	100.0
	Electronic	216	83.4
	Hard-copy, unduplicated	14	5.4
	Hard-copy, duplicated	29	11.2

Note: Institutional total includes institutions providing unusable lists (i.e., lists that were not considered of acceptable completeness or accuracy for sample selection).

<sup>a</sup>Percents are based on the “All lists” total within the type of institution under consideration.

The propensity to provide electronic lists increases monotonically with the level of offering of the institution, probably reflecting the ability to provide such lists; this is quite likely related to the increasing average size of institutions (and associated increasing power and size of the computing facility and staff) as level of offering increases. The modal list type (42 percent) provided by less-than-two-year institutions was unduplicated hard-copy lists; only 17 percent of such institutions provided electronic lists. The percentage of lists requiring manual unduplication was also greatest among the less-than-2-year institutions, and decreased monotonically with increasing level of offering.

Returned lists were also evaluated in terms of appropriateness of format and documentation (relative to instructions provided to ICs for preparing lists), and accuracy of student counts; where possible, more appropriate information was obtained from the institutions. Table 4.6 indicates the major types of discrepancies encountered with the lists received. Of considerable note is the fact that: (a) almost half of the institutions provided lists with one or more such problems and (b) among problems encountered, the principal one (involving well over a third of the institutions) was “suspect count,” even though that check was considerably relaxed in early May 1996 (actually suspended at that time for less-than-2-year institutions). This check involved disagreement, by 25 percent or more, between the count obtained from lists (after correction for duplication) and the *nonimputed*<sup>2</sup> unduplicated counts from the 1994-95 or 1993-94 IPEDS IC file<sup>3</sup>. The check was suspended or relaxed because about 85 percent of the institutions that were called about the discrepancy indicated that the sampling list counts were correct.

The next most frequent problem experienced with provided lists (involving about 11 percent of the institutions overall) was failure to identify FTBs. This problem decreased with increasing institutional level of offering, reflecting the fact that this type of problem was more prevalent on hard-copy lists (as shown above).

## 4.2 CPS Matching

Two aspects of the Central Processing System (CPS) matching process (described in Chapter 2) were evaluated for this report. First, the percent of non-CPS match cases for which a Student Aid Report (SAR) was found in the institution records was examined to estimate “misses” in the CPS operation. Second, a comparison was made between the Expected Family Contribution (EFC) value obtained from the CPS and the updated EFC value as collected from institution records in CADE, to estimate corrections on the CPS data.

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<sup>2</sup>If only imputed data were available from both files, the check was not performed.

<sup>3</sup>Separate checks were performed, where applicable, for undergraduates, graduate students, and first-professional students.

Table 4.6—Types of discrepancies encountered with student lists, by highest level of offering

Institutional level of offering	Type of discrepancy encountered	Number	Percent <sup>a</sup>
All institutions (N = 844)	None	435	51.5
	Suspect count <sup>b</sup>	299	35.4
	FTBs not identified	92	10.9
	Insufficient documentation	11	1.3
	Unreadable electronic file	20	2.4
	Unable to identify graduate/first-professional students	12	1.4
	Other	44	5.2
	Less-than-2-year (N = 100)	None	43
Suspect count <sup>b</sup>		33	33.0
FTBs not identified		22	22.0
Insufficient documentation		1	1.0
Unreadable electronic file		1	1.0
Other		11	11.0
2-year (N = 239)	None	133	55.7
	Suspect count <sup>b</sup>	71	29.7
	FTBs not identified	35	14.6
	Insufficient documentation	2	0.8
	Unreadable electronic file	4	1.7
	Other	16	6.7
4-year, non-doctorate-granting (N = 246)	None	138	56.1
	Suspect count <sup>b</sup>	86	35.0
	FTBs not identified	20	8.1
	Insufficient documentation	3	1.2
	Unreadable electronic file	4	1.6
	Unable to identify graduate/first-professional students	7	2.9
	Other	8	3.3
4-year, doctorate-granting (N = 259)	None	121	46.7
	Suspect count <sup>b</sup>	109	42.1
	FTBs not identified	15	5.8
	Insufficient documentation	5	1.9
	Unreadable electronic file	11	4.3
	Unable to identify graduate/first-professional students	5	1.9
	Other	9	3.5

Note: Institutional total includes institutions providing unusable lists (i.e., lists that were not considered of acceptable completeness or accuracy for sample selection).

<sup>a</sup>Percentages are based on total institutions within institution type under consideration (shown in the first column of the table). Totals do not sum to 100 percent because some lists had multiple problems.

<sup>b</sup>These checks were considerably relaxed (and suspended for less-than-2-year institutions) on May 7, 1996.

An indicator of the comprehensiveness of the CPS matching process is the percent of non-CPS matches for whom a SAR was located at the institution. Since a hardcopy SAR in the institutional records implies that the student should have a record within the CPS database, this statistic can be thought of as a miss rate for CPS matching. That is, this is the rate at which students that should be in the CPS database were not successfully matched. Table 4.7 presents two such rates at which SARs were found for CPS non-matches. SAR rates are presented using both the initial and final counts of non-matches.

The first rate is based on the initial CPS matching attempt, which was made prior to initiation of CADE data collection within the institutions and as a result of which over 36,000 students did not match. Among these, a SAR was located during the CADE record abstraction for about 12 percent. This rate is an upper bound estimate, which also reflects the realities of operating within a tight timeframe with less than perfect data. Specifically, students for whom SSNs were unavailable at the time of matching could not have been matched and students first applying for aid in later terms of the 1995-96 financial aid year may have been entered into the system subsequent to the time of initial matching.

The second rate shown is based on a smaller subset of students who failed to match the CPS. This subset reflects an additional 3,971 matches that were obtained after collecting CADE records data, principally as a result of obtaining SSNs for additional students, and also for a considerably smaller relative number, availability of later entries made into the system for the 95-96 year. The reduction in the miss rate is dramatic over the first rate, demonstrating the confounding of the rates by inaccurate SSNs. Because this second “nonmatch” group still contains sample members for whom no SSN was obtained, these results too must be considered upper-bound estimates. Overall, a SAR was located and entered at the institution for 5 percent of this second group. Of particular note, however, the rate of 18 percent for students in private, for-profit schools and the 3 percent for students in the public institutions. The difference is most likely attributable to the differential rate at which institutions in the two sectors provided sufficient data on their enrollment list from which to construct a CPS ID number.<sup>4</sup> Also, students may enroll prior to applying for financial aid.

Another evaluation of the CPS matching process was performed using data from the 25,599 students for whom a CPS match was obtained prior to CADE and for whom an EFC value was obtained in CADE.<sup>5</sup> Specifically, the CADE EFC value was compared to the CPS EFC value to determine how often the CPS EFC value was updated based on the EFC value in the institutions financial aid records.

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<sup>4</sup>About 9 percent of students from private, for-profit institutions could not have matched to the CPS, as compared to only 2 percent of those in public institutions.

<sup>5</sup>Differences between CPS values and institutional record data were assumed to be the result of financial aid administrators using their professional judgement or an institution EFC formula to modify a student's EFC. Hence, the institution's EFC value was considered to be more current than the CPS EFC.

Table 4.7—Extent of “missed” CPS matches, by student types

Type of student	Number of cases which had not matched to a 1995-96 CPS record prior to CADE	Percent of cases for which a SAR was located and entered from institution records	Number of cases which never matched to 1995-96 CPS	Percent of cases for which a SAR was located and entered from institution records
<b>Total students</b>	36,230	11.9	32,259	4.8
<b>Institutional level</b>				
Less-than-2-year	2,802	20.0	2,303	10.3
2-year	7,724	10.0	7,124	5.2
4-year non-doctorate-granting	10,679	10.9	9,541	4.7
4-year doctorate-granting	15,025	11.9	13,291	3.7
<b>Institutional control</b>				
Public	22,478	8.5	20,474	2.8
Private, not for-profit	11,016	13.6	9,777	6.4
Private, for-profit	2,736	32.2	2,008	18.2
<b>Institutional sector</b>				
Public, less-than-2-year	1,121	6.3	1,073	4.7
Public, 2-year	6,037	4.0	5,762	1.3
Public, 4-year non-doctorate-granting	6,305	9.1	5,545	3.2
Public, 4-year doctorate-granting	9,015	11.5	8,094	3.2
Private, not for-profit, 2-year or less	1,121	16.2	1,057	13.1
Private, not for-profit, 4-year non-doctorate-granting	3,911	14.2	3,549	7.1
Private, not for-profit, 4-year doctorate-granting	5,984	12.7	5,171	4.5
Private, for-profit, less-than-2-year	1,396	34.4	945	18.8
Private, for-profit, 2-year or more	1,340	29.9	1,063	17.6
<b>Student type<sup>a</sup></b>				
Undergraduate	27,235	14.4	23,563	5.8
Graduate	8,002	2.8	7,816	1.4
First-professional	993	14.5	880	9.4

Note: A total of 36,230 cases were released for CADE data abstraction without having successfully matched to a 1995-96 CPS record. However, 3,971 of these cases did subsequently match to the CPS. Percentages are based on the row count of “no match” cases under consideration, counts associated with the numerator of the percent are not shown.

<sup>a</sup>Based on the student's last term of enrollment at the NPSAS institution during the NPSAS year.



As shown in Table 4.8, the CADE and CPS EFC values matched exactly for about 90 percent of the cases. When EFC updates did occur within CADE, they were typically from one non-zero EFC to another (either upward or downward).

### 4.3 Institutional Record Abstracting

The use of CADE procedures, by both contractor field data collectors and institutional staff, to abstract information from institutional student records was first initiated in NPSAS:93. As a result of the NPSAS:93 experiences and informal feedback from NPSAS:93 institutional coordinators, a number of procedures were initiated for NPSAS:96 to enhance the effectiveness and user friendliness of the approach, particularly for the institutional CADE user.

Other CADE procedural refinements were introduced to facilitate the timeliness of CADE completion, including: (a) prescheduling of schools for field staff, (b) maintaining a "hot line" for operational or interpretational problem resolution, (c) scheduled biweekly calls to prompt self-CADE schools and to offer answers to questions that may have arisen: and (d) scheduled weekly calls to field staff to assess their progress.

#### 4.3.1. Ease of CADE Software Use

In general, the refinements to CADE resulted in more efficient operations and fewer reported problems than were experienced in NPSAS:93; however, some challenges were not fully met. Based on feedback from the institutional coordinators, the debriefing of field supervisors and field data collectors was extremely positive, and the relative number of questions from the field were considerably reduced over those experienced in NPSAS:93 or in the NPSAS:96 field test. Contractor field staff, particularly those who had participated in NPSAS:93, reported marked improvement in ease of CADE operation and found both the *CADE User's Manual* and the training quite helpful. Of particular note was the reported "excellent depth and breadth" of the training, particularly the mock situations prepared by NASFAA.

The "hot line" established was generally well received. During the NPSAS:96 field test the most frequent "hot line" call requested information as to the specific meaning of one or more data elements that were being collected in CADE. This issue was substantially reduced through enhancements to the full scale version of the CADE User's Guide. The greatly expanded on-line help screens for the full-scale CADE instrument, including explanations as to the specific nature of information being requested, also played a part in reducing these types of questions.

Table 4.8—Extent and nature of CADE agreement with CPS EFC

Type of student	Pre-CADE CPS matches for whom a CADE EFC value was obtained at the institution		No update to the CPS EFC value	CPS EFC value updated from zero to a value greater than zero	CPS EFC value updated from positive value to zero	CPS EFC value modified downward (but not to zero)	CPS EFC value greater than zero modified upward
	Number	Percent	Percent	Percent	Percent	Percent	Percent
Total students	25,599	100.0	90.3	0.7	0.3	4.0	4.7
Institutional level							
Less-than-2-year	2,210	100.0	95.8	0.5	0.5	2.4	0.9
2-year	4,919	100.0	97.0	0.3	0.2	1.3	1.2
4-year non-doctorate-granting	8,280	100.0	91.3	0.5	0.3	3.9	4.1
4-year doctorate-granting	10,190	100.0	85.2	1.0	0.4	5.7	7.7
Institutional control							
Public	12,517	100.0	93.1	0.6	0.3	3.0	3.0
Private, not-for-profit	9,295	100.0	84.1	0.9	0.5	6.1	8.4
Private, for-profit	3,787	100.0	96.4	0.3	0.3	2.0	1.0
Institutional sector							
Public, less-than-2-year	362	100.0	99.5	0.3	0.0	0.0	0.3
Public, 2-year	2,309	100.0	97.6	0.2	0.4	0.9	0.9
Public, 4-year non-doctorate-granting	4,144	100.0	93.8	0.6	0.1	3.1	2.4
Public, 4-year doctorate-granting	5,702	100.0	90.5	0.7	0.3	4.0	4.5
Private, not-for-profit, 2-year or Less	1,305	100.0	95.4	0.6	0.2	2.2	1.6
Private, not-for-profit, 4-year non-doctorate-granting	3,525	100.0	87.2	0.5	0.4	5.3	6.6
Private, not-for-profit, 4-year doctorate-granting	4,465	100.0	78.5	1.3	0.6	7.8	11.8
Private, for-profit, less-than-2-year	1,664	100.0	94.7	0.6	0.5	3.2	1.0
Private, for-profit, 2-year or more	2,123	100.0	97.7	0.1	0.1	1.1	0.9
Student type <sup>a</sup>							
Undergraduate	22,238	100.0	87.5	0.5	0.3	3.9	4.4
Graduate	1,669	100.0	86.3	1.6	0.9	5.9	5.3
First-professional	1,692	100.0	85.5	2.7	0.7	3.0	8.1

Note: Only students for whom a CPS Match was obtained prior to the CADE data abstraction are considered. Percentages are based on the total count (column 1) for the row under consideration; counts associated with the numerator of the percent the are not shown.

<sup>a</sup>Based on the student's last term of enrollment at the NPSAS institution during the NPSAS year.

During the full scale study, a frequent problem arising at self-CADE schools involved specific situations of incompatible host systems or insufficient memory for installing CADE. A memory check was included as a part of the self-CADE installation routine, since CADE required approximately 300K of available conventional memory; however, this did not work particularly well for two reasons. First, schools were confused between conventional memory and total RAM. Second, the virus checking routine (a DOS batch program that called virus checking software) behaved somewhat unpredictably under certain Windows 95 configurations, reporting a virus detection when no virus actually existed. This was a relatively infrequent occurrence during the field test, and was unexpected during the full-scale study.

Problems with packaging CADE data (i.e. preparing data files for shipment back to the contractor), which were common during the NPSAS:93, were significantly reduced; this was attributed to adding a confirmation prompt to the main CADE menu when the packaging option was selected. The prompt reminded users that packaging was a final step, and additional data entry would not be possible once packaging was complete. Additionally, material was added to the *User's Manual* to fully describe the consequences of packaging.

### 4.3.2. Preloading Record Data into CADE

To reduce the CADE data entry effort, a large number of elements (summarized in Table 4.9) were preloaded into CADE records prior to collection on-site at the institution. This included customizing the financial aid award section of CADE to include non-federal aid that was common to a particular institution. Such customization proved highly successful during the field test, and was repeated for the full scale study. The most extensive set of preloaded data were obtained from the CPS for federal financial aid applicants. In addition to the CADE SAR items, student demographics such as date-of-birth, marital status, and veterans status were preloaded into CADE. Preloading operations proceeded smoothly, using procedures developed and tested during the NPSAS:96 field test. Delays in this operation that had been experienced during NPSAS:93 were effectively eliminated which is partially attributed to the flexibility of CASES 4.1, in which the CADE software was programmed.

Table 4.9—Nature and source of data element sets preloaded into CADE

CADE data element set	Data source
Institution name/ID	IPEDS
Names of most common institution financial aid awards	Institution coordinator
Names of most common state financial aid awards	Sallie Mae state aid report
Institution clock/credit hour indicator	IPEDS, institution coordinator
Institution term names and dates	Institution coordinator
Student name, SSN, institution ID	Enrollment list
Student type indicator (UG, Grad, FP, FTB)	Enrollment list
Student date-of-birth, marital status, veteran status, and citizenship	CPS record
Student address and phone number	CPS record
Student dependency and expected family contribution	CPS record
Application data from SAR	CPS record

### 4.3.3. CADE Data Completeness

Under the relatively stringent definition of a “CADE respondent<sup>6</sup>” in NPSAS:96, the vast majority of the eligible sample students (93 percent) were determined to be CADE respondents. Of the 804 institutions that provided any CADE data, 792 (over 98 percent) provided sufficient data for one or more students to be considered CADE respondents. In large measure this was due to the successful incorporation of data completion checks in the CADE software, which were implemented in the field. The relatively low rate of indeterminacy among the CADE responses is principally attributable to these checks.<sup>7</sup>

Each NPSAS institution is unique with regard to the type of data maintained for its students, and it was anticipated that not all desired information would be available at every institution. However, as a quality control measure the CADE software was designed to not allow “skipping” non-available items by leaving them blank. Instead, the CADE software allowed entry of a “Data Not Available” code. In general, the percent of indeterminate (data not available) responses was low for most CADE items. Table 4.10 lists the data elements with an indeterminacy rate of over 5 percent among the CADE respondents. Many of these items are applicable only to certain students (e.g. “Year Student Took SAT” is only applicable to those students for whom an SAT score was available at the institution). Consequently, the table is further restricted to items applicable to 1,000 or more respondents.

### 4.3.4 CADE Abstraction Modes

At all sampled schools, the IC were given an option as to whether information about sampled students would be abstracted (guided by the CADE program) by institutional staff<sup>8</sup> or by a contractor FDC. The first option was the recommended option.

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<sup>6</sup>In order to be considered a CADE respondent, the student CADE record was required to contain an indication of the student’s eligibility, enrollment data (full-time/part-time attendance status, number or credit/clock hours attempted, and/or tuition charges incurred) for at least one term and an indication of the student’s financial aid status (aid recipient/non-recipient and/or aid applicant/non-applicant).

<sup>7</sup>The NPSAS:93 lesson was clear in indicating that waiting to perform quality control on CADE data until after receiving them back in-house was too late. Therefore, when a user indicated a subsection was complete, the NPSAS:96 CADE software looked for missing data in specific fields; if missing data was discovered, the user was prompted to provide the missing information.

<sup>8</sup>While the CADE system was self-directing and contained a number of checks to ensure proper installation and use, training institutional staff on the proper use of the system was still needed. This was accomplished through a CADE Users’ Manual and an embedded tutorial; also, a hot-line number was established by the contractor to address specific questions as they arose.

Initial and final institutional choices of student record abstracting method are shown in Table 4.11 by institutional level, control, and sector, as well as by institution size and sample size. The large majority of coordinators (79 percent) from the 836 participating institutions *initially* chose the first option (self-CADE); the remaining coordinators chose the contractor FDC abstracting (field-CADE). In the final analysis, the proportion of self-CADE institutions fell to 57 percent. A total of 199 institutions changed methods during the CADE operations; only five of these changed from an initial choice of field-CADE to a final choice of self-CADE. Typically, an institution's abstraction method preference changed after determining that the abstracting job was greater than originally imagined and/or that institutional staff did not have sufficient available time to accomplish the task within the desired time frame.

The NPSAS:96 field test, as well as NPSAS:93 experience, suggested that institutions with very large student enrollment were much more likely to ultimately choose the field-CADE method. This is attributable, at least in part, (and verified by informal IC debriefings) to the size of the sample at the large institutions. Because student sample size is positively related to institution enrollment,<sup>9</sup> the burden of record abstraction becomes greater with increased enrollment.<sup>10</sup> For NPSAS:96, a pattern in the percent of self-CADE institutions within institutional size categories is not as pronounced. However, a clear trend appears when examining the self-CADE percentage by sample size categories, demonstrating the "burden effect" with regard to switches from self-CADE to field-CADE.

The relatively lower proportion of "initially self-CADE" institutions within the public 4-year doctorate/first-professional institutions in part reflects an adjustment to the institution contacting procedures based on the field test data collection experience. For the full-scale study, 4-year institutions on a semester calendar system were targeted as optimal for early field-CADE assignments, and efforts were made to persuade such schools to accept an FDC. The rationale for this adjustment was based on the shorter average duration of field-CADE and the need to complete abstraction very early for a sufficient number of institutions in order to begin CATI data collection.

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<sup>9</sup>Because fixed rates are used, within institutional strata, in NPSAS student sampling, the sample size for a institution is proportional to the size of its student body, relative to other schools in its stratum.

<sup>10</sup>The increase in burden at larger schools is related to other factors than simply increased student sample size; among other things, larger schools also are less likely to have all needed records for all sampled students in a central location.

Table 4.10—CADE data elements with highest indeterminacy rate

Data element	Number of applicable cases <sup>a</sup>	Percent responding explicitly "data not available" <sup>b</sup>
SAT reasoning score	11,750	97.0
Year student took SAT	11,746	31.0
Year Student took GRE	1,920	24.0
Type of high institution degree/diploma/certificate	55,616	23.0
Year student took ACT	9,205	22.0
Year student took other GIP admissions exam	2,256	22.0
Student marital status	55,622	22.0
Student hispanic status	55,616	17.0
Student veterans status	55,618	15.0
Student race	55,616	15.0
Year received high institution degree/certificate	41,852	14.0
GRE analytic score	1,927	11.0
Other GIP exam - score 1	1,522	9.7
Student cumulative GPA	54,202	9.2
Housing on/off campus	27,038	8.9
Other aid award 2 - source of award	2,559	7.6
Student citizenship status	55,618	6.9
Tuition - in/out of jurisdiction	34,881	6.1
Other aid award 1 - source of award	9,787	6.0
Indicator of transfer credits from other institution	32,280	5.3
Indicator of completed degree requirements	21,989	5.2
GRE math/quant score	1,938	5.1

Note: Results are limited to cases meeting the definition of a CADE respondent, and include only those items which were applicable to and answered for at least 1000 students, and in which more than 5 percent of the responses were “Data Not Available.”

<sup>a</sup>This excludes cases for which the element was not applicable.

<sup>b</sup>Percentages are based on the number of applicable cases for the row under consideration; the numerator of the percentages is not provided.

Table 4.11—Institutional original and final choices of record abstraction method

Type of institution <sup>a</sup>	Total participating institutions	Original abstraction method <sup>b</sup>				Final Abstraction Method <sup>c</sup>			
		Self-CADE		Field-CADE		Self-CADE		Field-CADE <sup>d</sup>	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	836	663	79.3	173	20.7	474	56.7	362	43.3
Institutional level									
Less-than-2-year	100	73	73.0	27	27.0	51	51.0	49	49.0
2-year	238	206	86.6	32	13.4	143	60.1	95	39.9
4-year non-doctorate-granting	242	200	82.6	42	17.4	139	57.4	103	42.6
4-year doctorate-granting	256	184	71.9	72	28.1	141	55.1	115	44.9
Institutional control									
Public	434	334	77.0	100	23.0	246	56.7	188	43.3
Private, not-for-profit	274	223	81.4	51	18.6	157	57.3	117	42.7
Private, for-profit	128	106	82.8	22	17.2	71	55.5	57	44.5
Institutional sector									
Public, less-than-2-year	31	25	80.6	6	19.4	19	61.3	12	38.7
Public, 2-year	159	135	84.9	24	15.1	98	61.6	61	38.4
Public, 4-year non-doctorate-granting	122	89	73.0	33	27.0	65	53.3	57	46.7
Public, 4-year doctorate-granting	122	85	69.7	37	30.3	64	52.5	58	47.5
Private, not-for-profit, 2-year or Less	42	35	83.3	7	16.7	21	50.0	21	50.0
Private, not-for-profit, 4-year non-doctorate-granting	102	90	88.2	12	11.8	60	58.8	42	41.2
Private, not-for-profit, 4-year doctorate-granting	130	98	75.4	32	24.6	76	58.5	54	41.5
Private, for-profit, less-than-2-year	62	43	69.4	19	30.6	30	48.4	32	51.6
Private, for-profit, 2-year or more	66	63	95.5	3	4.5	41	62.1	25	37.9
Institutional size									
1,500 or fewer students	188	153	81.4	35	18.6	100	53.2	88	46.8
1,501 to 14,999 students	406	337	83.0	69	17.0	241	59.4	165	40.6
15,000 or more students	242	173	71.5	69	28.5	133	55.0	109	45.0
Institutional sample size									
55 or fewer students	287	236	82.2	51	17.8	176	61.3	111	38.7
56 to 85 students	290	236	81.4	54	18.6	172	59.3	118	40.7
86 or more students	259	191	73.7	68	26.3	126	48.6	133	51.4

Note: Statistics are presented for all participating institutions. Choices included: (1) “Self-CADE,” abstraction by the staff of the participating institution and (2) “field-CADE,” abstraction by contractor field interviewers. A total of 199 institutions changed choices during CADE operations, 194 changed to field-CADE and 5 changed to self-CADE. All percentages are based on the sample size for the row under consideration.

<sup>a</sup>Institution classification for this table was verified by the participating institutions.

<sup>b</sup>This choice was made by the institutional coordinator or chief administrator prior to any attempts at record abstraction.

<sup>c</sup>Final method is the procedure through which record abstraction was completed at the institution; the initial method may have been used to collect some data.

<sup>d</sup>Included in this category are eight institutions that provided photocopies of applicable institutional records to the NPSAS:96 contractor; these records were then entered into CADE by contractor central staff.

### 4.3.5 Timeliness of Record Abstraction

CADE systems were prepared on an institution-by-institution basis. The first CADE systems were shipped to self-CADE institutions in early March of 1996 and CADE systems continued to be sent to the field until early September, when the final sampling and CPS-matching were completed. Although the CADE data collection was more than 90 percent complete by the end of August,<sup>11</sup> the remaining CADE systems that were ultimately received arrived between September 1 and December 12, 1996. All but eight of the outstanding CADE systems were received before the end of October; the eight were returned in early December. Figures 4.2 and 4.3 summarize the overall flow of completed CADE abstractions at the institutional and student levels, respectively.

An indication of the duration of CADE activities, in days, by type of institution is provided in Table 4.12. The proxy measure used for time of abstracting is the number of calendar days between the date on which the CADE system for a institution was initialized at the main campus of the contractor and the date on which the completed and returned CADE data file was successfully read and loaded onto the master CADE data set at the contractor's main campus. This measure is a relatively good index for self-CADE institutions, for which the CADE package was typically sent to the institution within the week it was initialized. For field-CADE institutions, however, the measure typically represents a major overestimation of time needed, since most institutional CADE packages were sent to the field abstractors well in advance of their visit to the involved institution. The table provides minimum days, maximum days, and median days of CADE duration in total and for different institution characteristics.

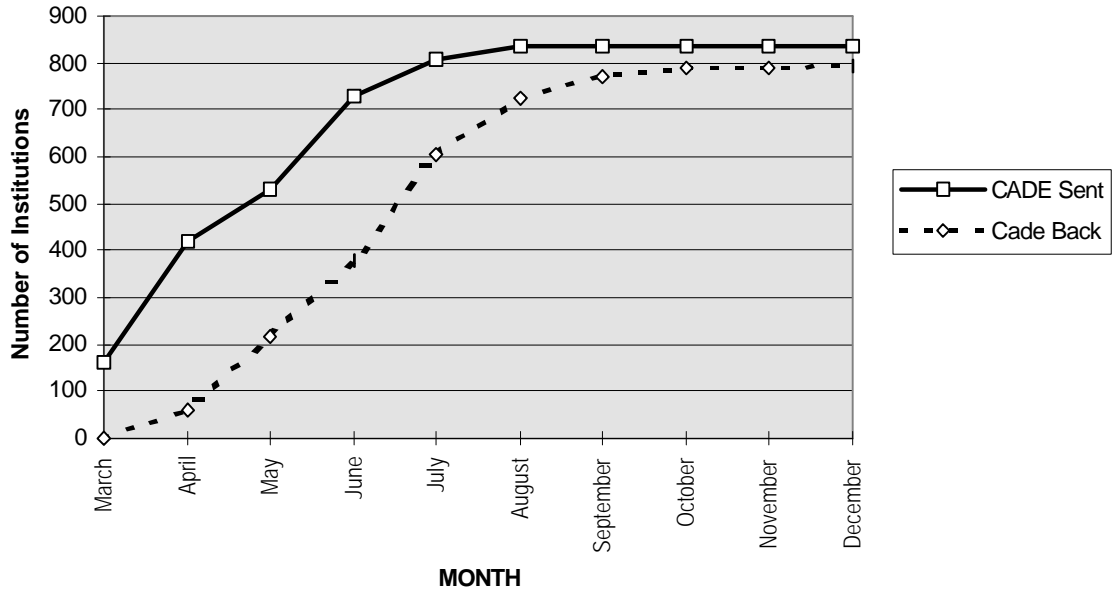
Considerable variation was experienced in CADE duration (from 5 days to 222 days, as is shown in the table). The median number of days to complete CADE was about seven weeks (50 days). Considering both median and maximum statistics, duration was greatest at 4-year institutions not offering doctorate and first-professional programs and least at private, for-profit institutions offering only programs of less than two years. While size of institution is positively related to duration of the CADE effort, the relationship with sample size is restricted to differences of 5 percentage points or less. Major differences (over 20 percentage points) in median CADE duration are associated with method of abstraction. Even though the duration measurement overestimates field-CADE duration (see above), duration was still lowest among institutions choosing this method initially and staying with that choice. Also, for institutions that started with self-CADE and subsequently decided that field-CADE was preferable, the duration statistics are comparable to those for institutions completing under self-CADE.

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<sup>11</sup>Of the 792 institutions that ultimately provided data for at least one CADE respondent, 725 (91.5 percent) had returned the CADE system on or before August 31, 1996. Of the 55,665 cases ultimately determined to be CADE respondents, 51,444 (92.4 percent) were received at RTI on or before August 31, 1996.



**Figure 4.2. Cumulative Institutional Flow of CADE**



**Figure 4.3. Cumulative Student Flow of CADE**

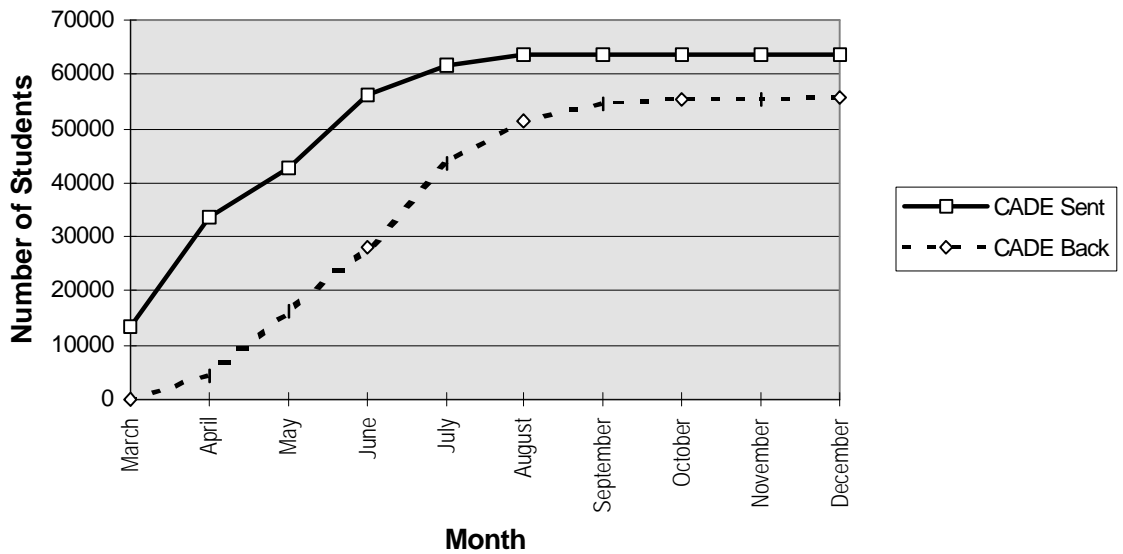


Table 4.12—CADE duration statistics by institution type

Type of institution	Total participating institutions <sup>b</sup>	CADE duration in days <sup>a</sup>		
		Minimum	Median	Maximum
Total	804	5	50	222
Institutional level				
Less-than-2-year	93	5	35	152
2-year	229	7	49	222
4-year non-doctorate-granting	237	8	56	217
4-year doctorate/first-professional	245	7	51	201
Institutional control				
Public	424	7	51	222
Private, not for profit	261	8	50	202
Private, for profit	119	5	39	152
Institutional sector				
Public, less than 2-year	31	11	48	143
Public, 2-year	155	8	50	222
Public, 4-year non-doctorate-granting	117	10	53	217
Public, 4-year doctorate/first-professional	121	7	53	201
Private, not-for-profit, 2-year or Less	38	13	40	183
Private, not-for-profit, 4-year non-doctorate-granting	100	8	57	202
Private, not-for-profit, 4-year doctorate-granting	123	11	50	154
Private, for-profit, less-than-2-year	56	5	33	152
Private, for-profit, 2-year or more	63	7	52	144
Abstraction method				
Self-CADE	455	8	54	201
Always field-CADE <sup>c</sup>	161	5	31	167
Eventually field-CADE <sup>d</sup>	188	7	55	222
School size				
1,500 or fewer students	117	5	40	202
1,501 to 14,999 students	394	10	51	217
15,000 or more students	233	7	53	222
Sample size				
55 or fewer students	274	5	48	222
56 to 85 students	280	9	53	217
86 or more students	250	7	49	201

Note: Statistics are based on the 804 institutions returning CADE data.

<sup>a</sup>The duration of CADE data abstraction for a given institution is defined as the number of calendar days between the date the CADE system was initialized at the contractor's main campus and the date the completed CADE data file was returned and

successfully read and loaded into the master CADE data set at the contractor's main office.

<sup>b</sup>The count of participating institutions includes twelve institutions that provided only a minimal amount of data, thus resulting in no completed CADE cases from these institutions.

<sup>c</sup>Because appointment dates were established for field-CADE institutions, the CADE system was sometimes initialized well in advance of the CADE appointment data; consequently, the upper values of these duration statistics considerably overestimate the actual abstracting period.

<sup>d</sup>The "Eventually field-CADE" category represents institutions initially indicating a willingness to perform the

data abstraction and subsequently requesting a field data collector.

## 4.4 Individual Tracing and Interviewing

### 4.4.1 CATI External Tracing and Locating Operations

The NPSAS:96 data collection included several tracing procedures as well as the use of a modified “locating” module in the CATI system, which allowed greater flexibility in recording (and subsequently reviewing) tracing history for a given case. In addition, a subcontractor (FastData) was used to provide directory assistance database matches, and tracing procedures were also established to use a subcontractor (EQUIFAX) to assist in intensive locating of cases that could not be traced through more routine tracing approaches.<sup>12</sup>

Prior experience of the contractor demonstrated the potential cost effectiveness of utilizing a “data base search” approach for obtaining directory assistance. This approach was implemented for NPSAS. Rather than having telephone interviewers call directory assistance when available telephone numbers for a case had been exhausted, the case was automatically labeled as needing directory assistance lookup. These cases, stored in a standard format within a computer file, were regularly shipped as a batch to FastData. For a minor cost per “hit”, FastData returned the cases the following morning with up to six new phone numbers.

Of the 51,195 students that were sampled for NPSAS CATI, 9,689 required FastData services at least once. For 5,053 (over half) of these case, no additional information was found; however, at least one new phone number was obtained for the remaining 4,636 cases (48 percent), and for 2,109 of these (22 percent of the total), two or more phone numbers were returned from FastData.

A total of 6,884 cases received intensive tracing effort. While EQUIFAX was the primary mechanism by which intensive tracing was implemented, a portion of the CATI cases were also worked by a staff of specialized in-house tracers within the contractor telephone survey facility-- 5,002 of the intensive tracing were submitted to EQUIFAX, 1,192 were turned over to in-house tracers, and 690 cases were submitted to both EQUIFAX and the in-house tracing team.

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<sup>12</sup>CATI locating efforts are typically categorized as either “routine” or “intensive”. Routine tracing efforts generally include calling all known phone numbers for the respondent, and contacting directory assistance to obtain additional phone numbers which may reach a subject. Intensive tracing efforts, such as performing data base searches and employing field staff to contact friends and neighbors, are more expensive due to their labor-intensive nature. An optimal tracing and locating strategy generally involves a sequential combination of routine followed by intensive tracing efforts.

Table 4.13 shows the breakdown of intensive tracing cases by institution and student characteristics. Because these tracing efforts were focused to a large extent on cases sampled as potential FTBs<sup>13</sup>, an artifactual difference in tracing requirements is shown between undergraduate students and graduate and first-professional students. Consistent with results from prior NPSAS implementations, a relatively higher proportion of students from private, for-profit institutions required intensive tracing. This reflects the overwhelming percentage of undergraduate students within these institutions, but also reflects the previously demonstrated greater mobility among such students.

Of the 5,692 cases referred to EQUIFAX, new phone and address information was returned for 2,494 (44 percent) and address-only information for another 1,156 (20 percent). Ultimately, 2,406 (42 percent) of the intensive trace cases were successfully located and interviews were completed with 1,712 (71 percent) of those located.

Results were comparable for the 1,882 cases referred to the contractor's in-house tracing team (including the 690 cases that were also submitted to EQUIFAX); 880 (47 percent) were successfully located and interviews were completed with 579 (66 percent) of the located cases.

#### **4.4.2 CATI Tracing/Interviewing**

A separate CATI input file for students selected for Phase 1 interviewing was prepared for each institution, containing student-level and institution-level data values used to customize the flow and appearance of the CATI interview. This file included preloaded data from completed CADE records. The first CATI input files (for 1,320 students) were created and loaded on May 6, 1996; an additional 3,423 cases were loaded the following day. Loading of data into the CATI system continued on a flow bases until the final set of CATI input files were loaded on October 26, 1996. A total of 51,195 cases were selected for student CATI and loaded into the system, although a portion of these cases were not selected for Phase 2 interviewing. CATI data collection continued for 35 weeks, ending on December 31, 1996, yielding 31,328 full or partial interviews. The duration of the CATI survey was principally attributable to delays in receiving institution enrollment lists, which in turn delayed the CPS matching and CADE data collection and, thus the flow of cases from CADE to CATI.

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<sup>13</sup>This was partially due to the two-stage, sampling approach for locating/interviewing (see Chapter 2).

Table 4.13—Percentage of students requiring intensive tracing procedures

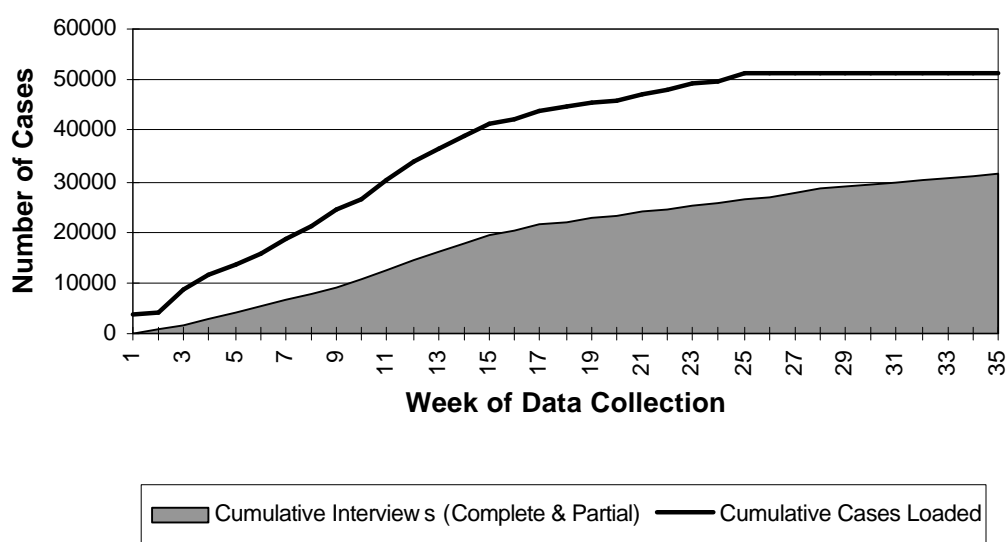
	Students sampled for CATI	Cases receiving intensive tracing efforts	
		Number	Percent
Total	51,195	6,884	13.4
Institutional level			
Less-than-2-year	4,233	1,027	24.3
2-year	10,992	1,940	17.6
4-year non-doctorate-granting	15,783	1,829	11.6
4-year doctorate-granting	20,187	2,088	10.3
Institutional control			
Public	28,422	3,600	12.7
Private, not-for-profit	16,893	1,973	11.7
Private, for-profit	5,880	1,311	22.3
Institutional sector			
Public, less-than-2-year	1,131	205	18.1
Public, 2-year	6,872	1,148	16.7
Public, 4-year non-doctorate-granting	8,703	997	11.5
Public, 4-year doctorate-granting	11,716	1,250	10.7
Private, not-for-profit, 2-year or Less	2,295	444	19.3
Private, not for-profit, 4-year non-doctorate-granting	6,158	692	11.2
Private, not-for-profit, 4-year doctorate-granting	8,440	837	9.9
Private, for-profit, less than 2-year	2,697	733	27.2
Private, for-profit, 2-year or more	3,183	578	18.2
Student type <sup>a</sup>			
Undergraduate	43,872	6,412	14.6
Potential FTBs <sup>b</sup>	20,555	4,615	22.5
Graduate	4,956	345	7.0
First-professional	2,367	127	5.4

<sup>a</sup> Student type definition is based on the student's last term of enrollment at the NPSAS institution during the NPSAS year.

<sup>b</sup> “Potential FTBs” are those students who were classified as such following CADE and prior to CATI. This group is not mutually exclusive of other student type categories.

Figure 4.4 depicts the cumulative nature, over time, of loading cases into CATI and of completing interviews. As is typical for most CATI surveys, the interview completion rate decreases (i.e., the slope of the cumulative line flattens) during the later portions of the study.

**Figure 4.4** Cumulative cases loaded and completed by week of NPSAS:96 CATI data collection



This phenomenon results from the inevitable accumulation of refusal and unable-to-locate cases throughout the study. The approximately nine-week lag between the point at which the last cases were loaded into CATI and the end of data collection is not atypical.

#### 4.4.3 Length of Interview

The time needed to conduct a student interview is shown, by interview section and student type, in Table 4.14. The administrative timing statistics were computed from time stamps imbedded in the CATI instrument. To use the most timing data available, results were computed for all cases that completed each of the separate sections of the interview and the section times were then aggregated to obtain total administrative time. Sections are listed in the table in the order in which they were presented. The bulk of the differences in numbers of cases contributing to the timing results over sections reflects "break-off" interviews (which may have occurred with or without a scheduled call-back to complete the interview).

Table 4.14—Average minutes to complete NPSAS:96 student telephone interview by section and student type

Section	Student type <sup>a</sup>							
	All students		FTB students only		Other undergraduate students		Graduate/first-professional students	
	Number	Minutes	Number	Minutes	Number	Minutes	Number	Minutes
Total <sup>b</sup>	†	26.2	†	29.4	†	23.5	†	21.5
Section A: school enrollment	28,270	5.7	10,915	4.6	13,609	6.4	3,746	7.0
Section B: educational expenses	27,926	2.2	10,720	2.8	13,488	2.0	3,718	1.6
Section C: sources of support	27,724	2.3	10,626	2.7	13,399	2.2	3,699	2.0
Section D: financial aid	27,736	1.5	10,673	0.9	13,375	1.8	3,688	2.2
Section E: employment	27,144	3.6	10,465	3.6	13,094	3.8	3,585	3.3
Section F: financial status	27,278	2.3	10,458	2.1	13,170	2.4	3,650	2.4
Section G: student demographics	27,482	1.5	10,548	1.4	13,254	1.6	3,680	1.6
Section H: parental characteristics	27,270	2.1	10,426	2.7	13,176	2.0	3,688	1.1
Section I: educational experiences <sup>c</sup>	18,823	3.3	10,332	5.0	8,334	1.0	†	†
Section J: locating information	25,500	1.7	10,463	3.6	11,828	0.3	3,209	0.3

NOTE: Section times are based on the number of respondents completing each section, excluding those who completed an abbreviated interview.

<sup>a</sup> Student classifications reflect status as verified in CADE and CATI.

<sup>b</sup>Total is computed as the sum of individual section times.

<sup>c</sup>This section was only administered to FTBs and first and second year undergraduates.

†Not applicable.



Average administration time to complete the student interview was 26.2 minutes for all students. Administration time varied by student type with the BPS cohort members (i.e., verified FTBs) requiring 29.4 minutes on average, and other undergraduates and graduate/first-professional students requiring 23.5 minutes and 21.5 minutes, respectively. The additional time required for the BPS cohort is principally attributable to Section I (which was only completely administered to FTBs and partially to other first and second year undergraduate students) and the time required to obtain the much more comprehensive Section J locating information for the longitudinal study sample. Other differences in administration time among the student groups are relatively small.

Average administration times for the full scale interviews were considerably lower, across all student types, than were those for the field test versions of the interviews. This reflects both a shortening of the instrument and improvements in full-scale interviewer training procedures. Interview administration time, however, reflects only a small fraction of the time required to obtain a completed interview. Additional time is spent by interviewers in locating sample members, scheduling call-backs, attempting refusal conversion, and other related activities. This time is spent not only on cases that are ultimately interviewed but also on cases for whom no interviews are obtained. The average locator/interviewer time requirement for each completed interview is estimated to be about 2.0 hours.

Administration time for the parent interview is shown in Table 4.15. On average, a complete parent interview lasted about 12 minutes.

Table 4.15—Average minutes to complete the NPSAS:96 parent telephone interview, by section

Section	Number of parents	Minutes
Total <sup>a</sup>	†	12.2
Section L: financial support for education	3,351	5.0
Section M: household school enrollment	3,333	1.1
Section N: employment status and financial condition	3,312	4.1
Section Q: reasons for not seeking financial aid	3,297	1.2
Section P: parent demographics	2,384	0.8

NOTE: Section times are based on the number of respondents completing each section, excluding those with contaminated time stamps.

<sup>a</sup>Total is computed as the sum of individual section times.

†Not applicable.

#### 4.4.4 Number and Result of Calls Made to Sample Members

As indicated in the previous section, a large effort was devoted to locating, contacting, and recontacting sample members. In fact, the large majority of interviewer time was spent in activities other than actually administering the student or parent interview. A small portion of this other time was required to bring up a case, review its history, and close the case (with appropriate comment) when completed. The vast majority of the other time was devoted to contacting (or attempting to contact) the sample members. Table 4.16 shows the total number of telephone calls made to sample members and the outcome of these calls. Calls resulting in voice mail or answering machines are broken out separately in this table, since this type of “non-contact” is by far the most frequent and has both cost and procedural implications for future surveys with similar populations.

As shown in Table 4.16, the average number of calls made to all sample members was about 12 (although not shown in the table, this was also the average number of calls made to sample members who completed the interview). Locating calls typically represent about two-thirds of the total calls. About one-third of all calls resulted in reaching someone, one-third resulted in contact with voice mail or answering machines, and one-third resulted in some other type of non-contact (e.g., busy signal, no answer, non-working number). On average, graduate and first-professional students required fewer calls than did undergraduate students. On the other hand, calls to graduate and first-professional students were much more likely to have contacted voice mail or answering machines than were calls placed to undergraduate students. This finding is consistent with the relatively smaller percentages of answering machine calls among students from 2-year and less than 2-year institutions than among students at 4-year institutions.

#### 4.5 Identifying First Time Beginning Students (FTBs)

The NPSAS:96 study serves as the base year of a longitudinal study of students beginning their postsecondary education experience during one of the terms of the NPSAS sample year. Those determined to be such "First Time Beginners" (FTBs) will be followed at periodic intervals as part of the Beginning Postsecondary Students follow-up surveys (BPS:96), with the data collected during NPSAS:96 serving as the base year for the subsequent longitudinal studies.

NPSAS:96 is the second NPSAS to "spin off" a cohort of beginning students; NPSAS:90 was the first. Based on our experiences in the NPSAS:96 field test, RTI implemented sampling and screening procedures which were targeted to yield an adequate number of students *that are accurately identified as FTBs* for the BPS:96 longitudinal study. Procedures specific to this purpose were implemented at almost every step of full-scale study operations (e.g., detailed instructions for enrollment list requests; sample selection procedures; wording of CADE items asked specifically about potential FTBs; comprehensive BPS-eligibility questions in the student CATI instrument to make the final FTB determination; and extra locating/ interviewing efforts applied to the sample from the student stratum of potential FTBs). Because FTB determination rates were not available from the NPSAS:90/BPS:90 sampling process, FTB sampling rates were based primarily on NPSAS:96 field test results combined with expected improvements based on those results and BPS:92/94 experience. The two major challenges in achieving adequate FTB yields are: (1) proper identification of a sufficient base from which to obtain FTBs and (2) locating, identifying, and interviewing FTBs from that base in sufficient numbers.

Table 4.16—Number and result of calls made to sample members by type of institution and type of student

Category	CATI sample cases	Total calls to sample cases <sup>a</sup>	Calls per case <sup>a</sup>	Reached someone		Didn't reach anyone			
						Answering machine		Other non-contact	
				Number	Percent	Number	Percent	Number	Percent
Total	51,195	623,336	12.2	223,249	35.8	197,872	31.7	202,215	32.4
Institutional level									
Less than 2-year	4,233	57,469	13.6	20,682	36.0	15,332	26.7	21,455	37.3
2-year	10,992	139,845	12.7	51,453	36.8	42,427	30.3	45,965	32.9
4-year, non-doctorate-granting	15,783	180,854	11.5	65,656	36.3	55,893	30.9	59,305	32.8
4-year, doctorate-granting	20	245,168	12.1	85,458	34.9	84,220	34.4	75,490	30.8
Institutional control									
Public	28,422	342,528	12.1	123,762	36.1	108,620	31.7	110,146	32.2
Private, not-for-profit	16,893	198,186	11.7	70,258	35.5	65,389	33.0	62,539	31.6
Private, for-profit	5,880	82,622	14.1	29,229	35.4	23,863	28.9	29,530	35.7
Institutional sector									
Public, less than 2-year	1,131	12,728	11.3	4,715	37.0	3,493	27.4	4,520	35.5
Public, 2-year	6,872	84,242	12.3	31,449	37.3	25,961	30.8	26,832	31.9
Public, 4-year, non-doctorate-granting	8,703	101,933	11.7	37,496	36.8	31,002	30.4	33,435	32.8
Public, 4-year, doctorate-granting	11,716	143,625	12.3	50,102	34.9	48,164	33.5	45,359	31.6
Private, not-for-profit, 2-year or less	2,295	28,800	12.5	10,414	36.2	8,535	29.6	9,851	34.2
Private, 4-year, non-doctorate-granting	6,158	68,174	11.1	24,586	36.1	20,975	30.8	22,613	33.2
Private, not-for-profit, 4-year, doctorate-granting	8,440	101,212	12.0	35,258	34.8	35,879	35.4	30,075	29.7
Private, for-profit, less-than-2-year	2,697	40,423	15.0	14,375	35.6	10,768	26.6	15,280	37.8
Private, for-profit, 2-year or more	3,183	42,199	13.3	14,854	35.2	13,095	31.0	14,250	33.8
Student type <sup>b</sup>									
Undergraduate	43,872	556,235	12.7	201,271	36.2	170,412	30.6	184,552	33.2
Graduate	4,956	43,969	8.9	14,509	33.0	17,614	40.1	11,846	26.9
First-professional	2,367	23,132	9.8	7,469	32.3	9,846	42.6	5,817	25.1

Note: Statistics based on 51,195 cases loaded and worked in CATI, and restricted to calls made within the CATI facility. Percentages are based on total calls for row under consideration.

<sup>a</sup>Total calls and calls per case are biased downward because of the two-phase CATI sampling design, which sampled out some cases after a maximum of phase one calls.

<sup>b</sup>Student type is based on student's status during the last term of enrollment at the NPSAS institution.

The previously agreed upon definition of a *pure FTB* is: one who enrolled in postsecondary education for the first time after high school during the NPSAS year. This definition was refined for the NPSAS:96 full-scale study to include those who had previously enrolled but who *had not completed a postsecondary course for credit* prior to July 1 1995 (*effective FTBs*). This expanded definition shifts the requirement from the act of enrollment to successful completion of a postsecondary course.

#### 4.5.1 Sequential Procedures for Screening FTBs

Locating and interviewing potential FTBs is particularly important, since final FTB determination rests on student responses to specific questions.<sup>14</sup> Student records maintained at most postsecondary institutions do not contain all information necessary to make accurate FTB determinations. Insufficiency of institution-level information is quite obvious when considering students who move from one sector of postsecondary education to another (e.g., from a certificate-granting technical institution to a degree-granting academic institution, or *vice versa*), and who, consequently, bring no transfer credits (or other records of such prior education) with them to the new postsecondary environment.

Nonetheless, institutions can identify FTBs stochastically; however, instructions to institutions regarding preliminary identification of potential FTBs must also be sufficiently clear and viable that the institution can implement them correctly.<sup>15</sup> Sampling procedures implemented during NPSAS:96 accounted for potential definitional difficulties in a number of ways. As a first screening, institutions were asked to identify potential FTBs, using as criteria that such students be:

- *undergraduate* students,
- having a *first* enrollment at the institution *in a term starting during the NPSAS:96 year* (between May 1, 1995 and April 30, 1996),
- classified by the institution as *freshman, or first-year student* at the time of that first enrollment, and
- who had no transfer credits from another postsecondary institution.

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<sup>14</sup>A number of questions were contained in the student interview to screen for FTB status, including: when the student first attended a postsecondary institution; whether the student received any prior postsecondary degrees or certificates; and whether and when the student completed the first class toward a postsecondary degree or certificate after high school at a postsecondary institution.

<sup>15</sup>Simply asking the institution to identify students who enrolled in the institution for the first time is insufficient, since it can result in identification of undergraduate transfer students as well as first-time enrolling graduate and first-professional students.

Based on prior experience, it was anticipated that two types of errors would still exist in lists provided by the schools; specifically, (1) students listed as potential FTBs would not be actual FTBs (a false positive group) and (2) students not identified as potential FTBs would, in fact, prove to be FTBs (a false negative group). The actual BPS:96 cohort would thus consist of those in the potential FTB group *minus* the identified false positives in that group *plus* any false negatives identified in other student strata. Because experience with BPS:90 indicated that the false positive rate would exceed (considerably) the false negative rate, the potential FTB stratum was considerably oversampled (see Chapter 2).

A second stage of screening for FTB status occurred during record abstraction. Students who were classified as undergraduates at the conclusion of CADE were identified as potential FTBs for CATI subsampling if: the student graduated from high school in 1995 or 1996; the CPS year-in-school variable indicated that the student was an FTB; or high school graduation year and CPS year-in-school variables were missing, but the student was born in 1977 or later. Potential FTBs whose CADE data did not contradict the sampling list requirements (first-year students attending the NPSAS institution for the first time during the sample year, not transferring credits in) continued to be treated as potential FTBs for CATI subsampling. Other students were classified as "probable non-FTBs."<sup>16</sup> Classification at this stage was particularly important since potential FTBs were selected for CATI with certainty whereas subsampling occurred for other student strata (see Chapter 2).

The final (CATI interview) FTB screening, was accomplished very early in the interview (immediately following NPSAS study eligibility determination).<sup>17</sup> The FTB screening questions were asked of all interviewed students so that not only would false positives from the potential FTB stratum be eliminated from the BPS cohort but also false negatives from the other student strata would be identified and included in the BPS:96 cohort.

#### 4.5.2 Basic Results for Establishing the BPS:96 Cohort

As mentioned above, FTB determination was a three-stage process, including information gathered during: list acquisition; CADE data collection; and then CATI data collection. Table 4.17 provides results of CATI-based FTB determination based on student classification. Overall, 39 percent of the students interviewed (12,207 students) were determined to be FTBs. Among those initially sampled as potential FTBs based on the list acquisition process, 72.4 percent of those subsequently interviewed were determined to be FTBs, yielding a 27.6 percent false positive rate. The false negative rate was 29.3 percent for the students for whom FTB-likelihood was not established by the institution, 9.1 percent for those identified as non-FTB undergraduates and 0.2 percent or less for those sampled as graduates or first-professionals.

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<sup>16</sup>This indicator was temporary, since final FTB determination was not made until the student CATI interview.

<sup>17</sup>FTB status was determined at the start of the student CATI interview, since many subsequent questions were to be asked only of the *actual* BPS cohort.

The reasonably low false-negative rate results highlight the fact that, in general, schools were fairly successful in identifying students who were not likely to be FTBs. On the other hand, the high false positive rate revealed the difficulties that many schools experienced in accurately identifying FTBs.

Table 4.17 also displays the confirmed FTB rates based on the student re-classifications done subsequent to CADE and prior to CATI. The false positive rate reduced to 21.8 percent for potential FTBs among those interviewed. The false negative rate for other students was much lower as well: 4.3 percent for other undergraduate students, 0.1 percent for graduate students, and 0.0 percent for first-professional students. This second sampling stage was quite effective in reducing both the false negative rate and the false positive rate; however, the false positive rate was higher than anticipated. Institutions, in many cases, did not have the necessary information to be able to classify FTBs correctly.

Table 4.17—FTB determination by student classification

Student classification	Students interviewed	Known FTBs	
		Number	Percent
Total	31,328	12,207	39.0
List sampling stratum			
Potential FTBs	15,106	10,932	72.4
Undifferentiated undergraduates	785	230	29.3
Other undergraduates	11,436	1,039	9.1
Graduates	1,263	3	0.2
First-professionals	2,738	3	0.1
Post-CADE classification			
Potential FTBs	14,936	11,677	78.2
Other undergraduates	12,357	526	4.3
Graduates	2,835	4	0.1
First-professionals	1,200	0	0.0

Tables 4.18 and 4.19 show that the difficulty in identification of FTBs was markedly different for the various types of institutions. Table 4.18 reflects the results for those initially sampled as potential FTBs during list-sampling (incorrect classifications may be considered false positives) and Table 4.19 provides the results for students not sampled as potential FTBs (incorrect classifications may be considered false negatives). The 4-year institutions did much better than the less-than-4-year institutions in identifying potential FTBs. The FTB rate for potential FTBs at 4-year schools was more than 80 percent whereas it was less than 55 percent at other schools. Similarly, the false negative rate was much lower for 4-year schools. Private, for-profit schools had much higher false positive (only 55.3 percent confirmed FTBs among potential FTBs) and false negative (18.9 percent) rates than other institutions.

In viewing the results by institutional sector, some dramatic disparities are evident. The most successful sector in determining FTBs accurately was that of the public, 4-year, doctoral-granting institutions, where 90.9 percent of the potential FTBs were confirmed as such in CATI, and only 5.3 percent of those in other student strata were determined in CATI to be FTBs. Each of the 4-year sectors had false positive rates below 20 percent and false negative rates below 7 percent. All of the less-than-4-year sectors had false positive rates in excess of 43 percent and false negative rates above 10 percent. In particular, private-for-profit less than two year schools had a false positive rate of 43.8 percent and a false negative rate of 48.7 percent. Two other sectors (public, less-than-2-year; private, not-for-profit, 2-year or less) had false positive rates in excess of 50 percent.

Table 4.18—FTB determination for those identified by NPSAS institution as potential FTBs, by institution type

Type of institution	Students interviewed	Known FTBs	
		Number	Percent
<b>Institutional level</b>			
Less-than-2-year	2,020	1,056	52.3
2-year	3,935	2,140	54.4
4-year-non-doctorate-granting	4,519	3,666	81.1
4-year-doctorate-granting	4,632	4,070	87.9
<b>Institutional control</b>			
Public	8,299	6,305	76.0
Private, not-for-profit	4,343	3,265	75.2
Private, for-profit	2,464	1,362	55.3
<b>Institutional sector</b>			
Public, less-than-2-year	484	210	43.4
Public, 2-year	2,390	1,337	55.9
Public, 4-year, non-doctorate	2,599	2,190	84.3
Public, 4-year, doctorate	2,826	2,568	90.9
Private, not-for-profit, 2-year or less	822	376	45.7
Private, not-for-profit, 4-year, non-doctorate-granting	1,715	1,387	80.9
Private, not-for-profit, 4-year, doctorate-granting	1,806	1,502	83.2
Private, for-profit, less-than-2-year	1,446	812	56.2
Private, for-profit, 2-year or more	1,018	550	54.0

The inability of less-than-4-year institutions to identify FTBs, despite careful and comprehensive instructions provided to them, reflects the fact that these schools often do not have necessary information to make this determination. In many cases, students attend multiple schools without transferring credits from one institution to the next one. So, institutions would not know about such prior postsecondary experience. Four-year schools, on the other hand, have more information about prior institution attendance and student level, in general. If future BPS cohorts are planned, the NPSAS:96 experience will provide very good information for sampling potential FTBs in future NPSAS base year samples. For instance, it serves little purpose to ask less-than-2-year for-profit schools to attempt to identify separately their FTBs since both their false positive and false negative rates are around 50 percent. List acquisition procedures and sampling procedures may be refined to account for the disparate rates of actual FTBs across the various institutional sectors.

Table 4.19—FTB determination for those not identified by NPSAS institution as potential FTBs, by institution type

Type of institution	Students interviewed	Known FTBs	
		Number	Percent
<b>Institutional level</b>			
Less-than-2-year	401	129	32.2
2-year	2,524	344	13.6
4-year, non-doctorate-granting	5,630	345	6.1
4-year, doctorate-granting	7,667	457	6.0
<b>Institutional control</b>			
Public	9,147	672	7.3
Private, not-for-profit	6,011	402	6.7
Private, for-profit	1,064	201	18.9
<b>Institutional sector</b>			
Public, less-than-2-year	126	29	23.0
Public, 2-year	1,564	204	13.0
Public, 4-year, non-doctorate-granting	3,008	204	6.8
Public, 4-year, doctorate-for-profit	4,449	235	5.3
Private, not for-profit, less-than-2-year	513	55	10.7
Private, not-for-profit, 4-year, non-doctorate granting	2,303	125	5.4
Private, not-for-profit, 4-year, doctorate-granting	3,195	222	6.9
Private, for-profit, less-than-2-year	195	95	48.7
Private, for-profit, 2-year or more	869	106	12.2

### 4.5.3 Types of First Time Beginners

As mentioned above, FTBs included those identified as pure (began postsecondary education for the first time during the NPSAS sample year) or effective (had not completed a postsecondary class prior to NPSAS sample year). In addition, a number of FTBs were identified as being FTBs, but attending another institution *during the NPSAS sample year* prior to attending the NPSAS institution. For instance, a student may have attended one institution during the summer of 1995 and then another institution beginning with the fall of 1995. Such students that were sampled at the second institution were appropriately treated during the NPSAS interview as FTBs. Institutional records, though, were only collected for the NPSAS sample institution, and not for the first institution.

Table 4.20 presents a distribution of FTBs by FTB type and whether or not the student was a FTB at the NPSAS institution. More than 95 percent of the known FTBs were pure FTBs who attended their NPSAS institution first. Nearly 99 percent of the students determined to be FTBs were pure or effective FTBs at the NPSAS institution. About 97 percent of the known FTBs were pure FTBs. For the BPS:96 cohort, all of the pure or effective FTBs who attended the NPSAS institution first will be included in the sample as NPSAS respondents known to be BPS-eligible (12,040 FTBs).



Table 4.20—Known FTBs by type of FTB and whether NPSAS institution was first institution attended

First institution attended	FTB Type					
	Total		Pure FTB		Effective FTB	
	Number	Percent <sup>a</sup>	Number	Percent <sup>a</sup>	Number	Percent <sup>a</sup>
Total	12,207	100.0	11,802	96.7	405	3.3
NPSAS institution attended first	12,040	98.6	11,639	95.3	401	3.3
Other institution attended first	167	1.4	163	1.3	4	0.0

<sup>a</sup>Of total known FTBs.

## 4.6 Quality and Completeness of NPSAS:96 Data

### 4.6.1 CATI Quality Control Monitoring

Monitoring CATI data collection in progress serves the dual purpose of (1) providing information about the overall level of error in the facility to ensure that the interviewing process remains in statistical control (and to keep overall error within acceptable limits), and (2) improving interviewer performance by reinforcing good interviewer behavior and discouraging poor behavior. The data reported in this section reflect the monitoring conducted during the NPSAS:96 data collection using the RTI telephone monitoring system. The system provides for sampling of interviewers and interview items during CATI operations. Monitors listen to sampled interviews and observe the data collection using remote monitoring telephone and computer equipment and software. They record their observations on laptop computers which contain computerized monitoring forms.

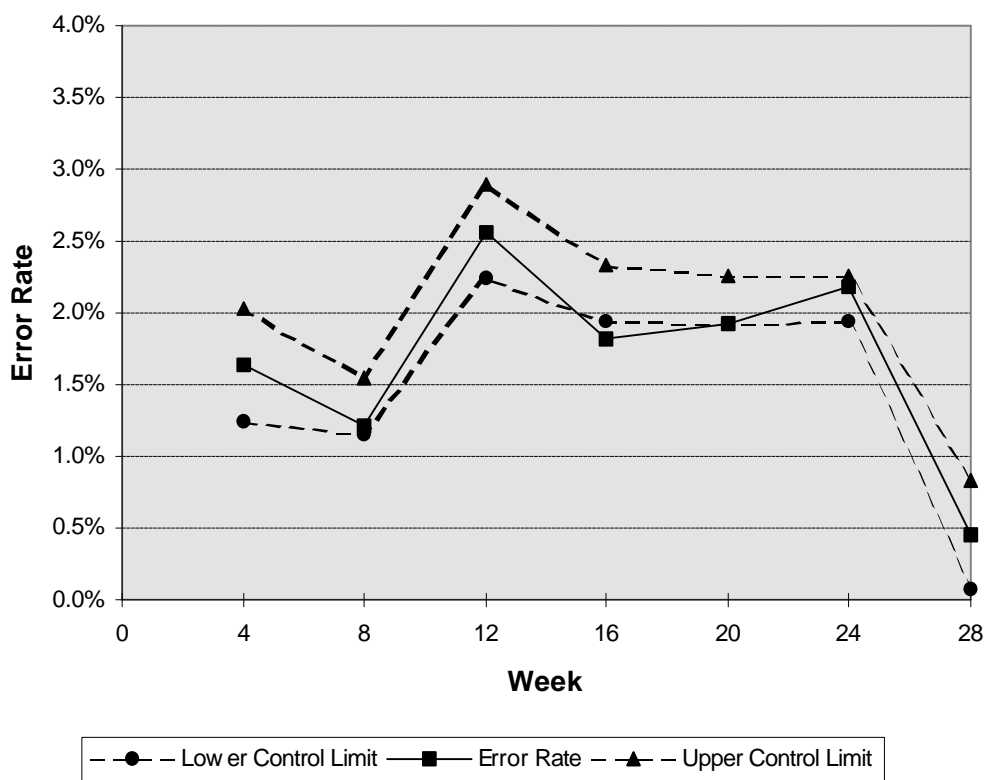
During the NPSAS:96 training sessions for interviewers and supervisors, selected staff received training on the monitoring system. Interviewers were informed of what types of interviewer behavior would be allowed and what types must be avoided. Supervisors, who served as monitors, were instructed on how to identify proper and improper interviewer behavior and how to record their observations on the laptop computers. In addition, all staff were told the purpose of the monitoring data and how the data were to be reported. Monitors were instructed to focus on two interviewer behaviors including:

- delivery of questionnaire text--to identify proper reading of the questionnaire text (verbatim) or appropriate modifications of the text based on prior statements made by the respondent, or improperly skipping over questions; and
- CATI entry--to identify correct recording of responses to interview questions.

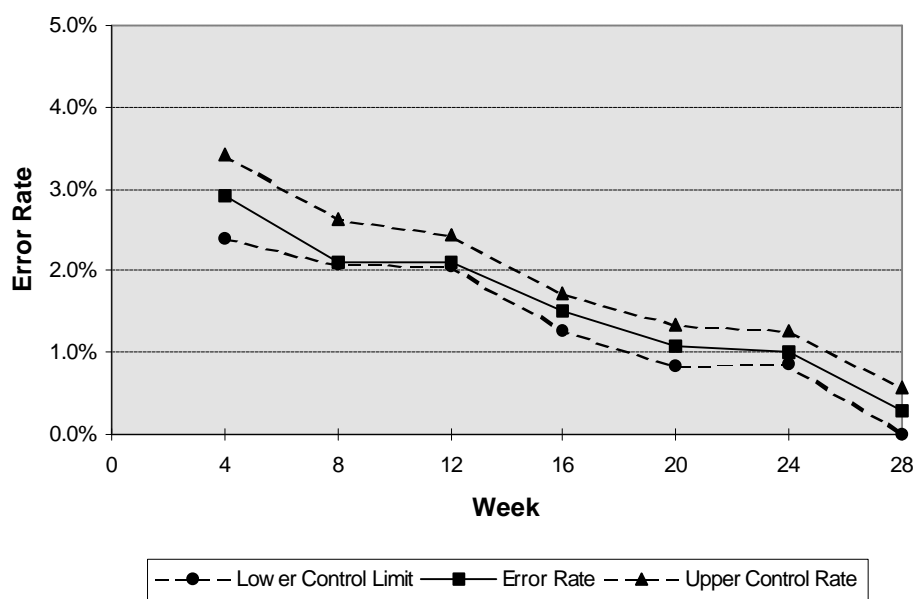
Twenty monitors were responsible for quality control monitoring. They recorded a total of 102,000 observations during the data collection period. Monitoring data were collected during the first 28 weeks of data collection. Monitoring efforts were eliminated for the last seven weeks of data collection, given the greater experience of the remaining interviewers and satisfaction by project staff that the process was in appropriate control.

The monitoring results are presented in Figures 4.5 and 4.6 for Question Delivery and Data Entry, respectively. Seven four-week periods of data collection are designated for each figure. On most studies, interviewers experience a *learning curve*, a short time at the beginning of their study efforts during which they are still developing their skills with a particular survey instrument and study procedures. This learning curve may not be clearly evidenced in these figures because the underlying data reflect attrition of some interviewers as well as the subsequent addition of new interviewers over time to accommodate that attrition.

**Figure 4.5. Monitoring error rates for CATI question delivery**



Note: Upper and lower limits were computed at 12 weeks and 28 weeks, with new cumulation of results beginning at those points, since the monitored error rate exceeded existing control limits.

**Figure 4.6. Monitoring error rates for CATI data entry**

The facility-level data shown in the figures include the percentage of instances where a behavior was observed.<sup>18</sup> A deviation outside of the control limits is indicative of an unexpected behavior pattern. These deviations can be explained either by a change in the interviewing process, a change in the monitoring process, or a problem with interviewer performance. In the discussion below, we summarize the monitoring data for the two behaviors that were observed.

**CATI Question Delivery.** NPSAS telephone interviewers were trained to employ a conversational style interviewing approach, which is intended to reduce respondent burden and thereby enhance survey response rates. This approach requires “active listening” by the interviewer and appropriate use of information received from the sample member as part of, or in addition to, an answer to a question asked previously. For example: to the question “What is your marital status?”, a person might say “I’m married and my wife and I have two daughters, ages eight and six.” In this case the respondent has provided a lot of information, in addition to the simple answer to the question posed, and this additional information can and should be used appropriately in the rest of the interview. For example, it would be awkward and inappropriate to then ask this person: “Do you have any children?” and, if so, “How many of your children under age 21 live with you?” Rather, adapting a conversational interviewing approach, the interviewer might say: “You said you had two young children living at home, right?”

<sup>18</sup>The upper and lower control limits were calculated as plus (for upper limit) and minus (for lower limit) three times the standard error associated with the cumulative proportion of errors to the number of questions observed for the given period. When operational changes were introduced into the system (e.g., major infusion of new interviewers), cumulative computation of limits was restarted.

Note, however, that the interviewer attempts to obtain responses to the current question by confirming information obtained in response to a prior question; however, this approach does not justify “skipping” questions that are applicable to the particular respondent.

Thus, given the conversational style interviewing approach used in NPSAS, the literal reading of the screen wording for each item, while acceptable, is not required for a question to be delivered correctly. However, any deviation from item wording that results in changing the intent of the question or obscuring the question meaning would constitute incorrect question delivery, as would skipping the question entirely. Figure 4.5 provides the monitored error rates, at four-week intervals, for CATI question delivery. As can be seen, errors of this type were quite low throughout the data collection period. The cumulative question delivery error rate, based on all observations across the 28-week monitoring period, was less than 2 percent.

**CATI Entry.** CATI entry error occurs when the response to a question is recorded incorrectly. The error rates of CATI entry are somewhat higher than might be expected for this study (Figure 4.6). This may be attributed to two factors. First, it is difficult for monitors to observe the recorded entries before the screen switches to the next question, so the error rates may be misreported. Second, CATI monitoring included all types of items and, therefore, some of the error reported is attributable to simple misspelling of open-ended (literal) responses by the interviewers. These behaviors were observed during the early stages of data collection and addressed both with the monitors and the interviewers. The effect of such retraining is reflected in Figure 4.6, which shows a consistent decline in data entry error rates over the data collection period. The facility average data entry error rate for the full data entry monitoring period was less than 2 percent.

#### **4.6.2 CATI On-line Coding**

The NPSAS CATI system included tools which allowed computer-assisted on-line assignment of codes to literal responses. On-line coding systems are designed to improve data quality by capitalizing on the availability of the respondent at the time the coding is performed. Interviewers can request clarification or additional information if a particular open-ended value or text string cannot be successfully coded on the first attempt, an advantage not afforded when coding occurs after the interview is complete. Because the literal string as well as code selected are both captured in the data file, subsequent quality control recoding by central office staff can be easily incorporated into data collection procedures. The on-line coding occurred in three substantive areas: postsecondary education institution, major field of study, and industry/occupation.

Institutional coding was needed to assign a six-digit Integrated Postsecondary Education Data System (IPEDS) identifier for institutions other than the sample institution that respondents reported attending during the 1995-96 year. The system relied on a look-up table, or coding dictionary, of institutions. The dictionary was constructed from the IPEDS institution database. Other information in the dictionary (institutional level of offering, institutional control, and annual undergraduate tuition information) was retrieved into CATI for later use (e.g., for branching or as prompts for certain questions), once the institution was identified and confirmed.

Major field of study coding and industry/occupation coding utilized a dictionary of word/code associations. The on-line procedures for these coding operations were the following:

(1) the interviewer keyed the verbatim text provided by the respondent; (2) standard descriptors associated with identified codes were displayed for the interviewer; and (3) the interviewer selected a listed standard descriptor.

Each coding operation was subjected to quality control monitoring. Although monitoring error rates were not maintained separately for the coding systems, they are reflected in the overall CATI monitoring error rates discussed above. In addition to the quality control monitoring, interviewers were routinely monitored specifically with regard to their performance in using the on-line coding software. Supervisors debriefed (and retrained when necessary) the interviewers based on this qualitative assessment. The coding systems also received prominent focus during the telephone interviewer quality circle meetings, with expert coders providing guidance regarding the appropriate coding of particularly difficult items. During these sessions, interviews were reminded to provide comprehensive information in the verbatim text, to facilitate any subsequent recoding.

Coding results were extracted and examined approximately every two weeks during data collection. The verbatim strings were evaluated for completeness, as well as for the appropriateness of the assigned codes. Approximately five to seven percent of the strings were recoded, although very few resulted in a shift across broad categories. Following each extraction/examination, the industry/occupation and major field of study coding dictionaries were expanded to include codes for descriptions collected in CATI interviews that were not previously represented in the dictionary. Table 4-21 shows the results of the NPSAS on-line coding procedures.

Table 4.21—Success rates for CATI on-line coding procedures

Coding procedure	Total coding attempts <sup>a</sup>	Total coded successfully	Percent coded successfully
IPEDS	14,521	12,071	83.1
Major field of study	26,372	26,061	98.8
Industry	23,901	23,177	97.0
Occupation	66,029	63,420	96.0

<sup>a</sup>The IPEDS, Industry, and Occupation coding could occur multiple times within any single interview. For example, occupation data was collected from students regarding their current jobs and career aspirations. Similarly, students were asked about up to four institutions (other than the sample institution) they attended during the NPSAS year, and were also asked about institutions from which they may have received a bachelors degree earlier in their academic career. All these entries were subjected to the IPEDS coding system.

As the table shows, interviewers experienced the most difficulty attempting to code institutions. The IPEDS coding system required the student to report the school name, as well as the city and state in which the school was located. An incorrect school name or city/state combination usually resulted in an unsuccessful coding of the institutions. Based on the relative completeness of the verbatim text available, 1,143 of the 2,450 unsuccessfully-coded cases were identified as candidates for post-data collection recoding and assigned to a team of expert coders. The team successfully coded 237 of the institutions, and another 737 institutions were in foreign

countries (i.e. “uncodable” was a correct entry). This activity raised the IPEDS coding success rate to just under 90 percent.

### 4.6.3 CATI Data Indeterminancies

A major goal of any survey is to minimize the amount of nonresponse to individual data elements as well as to entire survey instruments. For NPSAS:96, allowances were made in the CATI to accommodate responses of refusal and “don’t know” to every item, by special keyed entry by the interviewers. Refusal responses to interview questions are most common for items considered sensitive by the respondent, while “don’t know” responses may result from a number of potential circumstances. The most obvious reason a respondent will offer a “don’t know” response is that the answer is truly unknown or in some way inappropriate for the respondent. But, “don’t know” responses may also be evoked (1) when question wording is not understood by the respondent, without explanation by the interviewer; (2) when there is hesitancy on the part of the respondent to provide “best guess” responses, with insufficient prompting from the interviewer; and (3) as an implicit refusal to answer a question. Refusal and don’t know responses introduce Indeterminancies in the data set and must be resolved by imputation or subsequently dealt with during analysis.

Overall item nonresponse rates in the student CATI were fairly low, with only 54 of the over 1,000 variables included in the final CATI data set containing over 10 percent missing data. These items are shown in Table 4.22, grouped by interview section. Item nonresponse rates are calculated *only for those sample members for whom each item was applicable and asked*.

Reliability, as examined here, involves the stability of responses over time (i.e., temporal consistency); consequently, analyses generally focus on data items that are expected to be stable for the time period between the initial interview and the reinterview (e.g., factual rather than attitudinal data). The design of the reinterview study called for reinterviews to be conducted within one month of the initial interview; allowing enough time for respondents to forget their previous answers but not enough time so that actual changes in status would make truthful answering produce different answers (which would be indistinguishable from unreliability). Unfortunately, time delays in conducting reinterviews may have contributed to the occurrence of real change (between the initial interview and reinterview) in the status of the information requested of respondents.<sup>19</sup>

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<sup>19</sup>The bulk of the initial interviews were conducted prior to the end of the financial aid year (June 30, 1996 or current institution year); however, a number of questions use such time points as the end of a stated reference period, introducing the potential for real change during the time between the initial interview and the referenced time point. Also, some reinterview respondents were contacted up to six months after completing the main interview (in some cases after they had begun another year of school) and for questions with unspecified reference periods, potential for change obviously exists.

Table 4.22— Student interview item non-response for items with more than 10 percent “don’t know” or “refused”

Item	Item	Number asked	Percent don't know	Percent refused	Percent combined non-response
School enrollment					
SASMPGPA	Grade point average	3,925	15.0	0.3	15.0
SADROPMO	Month dropped out-first term	289	11.0	0.0	11.0
SAEXDGMN	Month degree is expected	18,987	11.0	0.0	
Exams and expenses					
SBSAT_R	SAT reasoning score	1,311	98.0	0.5	98.0
SBSAT_V	SAT verbal score	1,407	74.0	0.6	74.0
SBSAT_M	SAT math score	1,403	74.0	0.5	74.0
SBGRE_A	GRE analytic score	1,101	67.0	0.5	68.0
SBGRE_V	GRE verbal score	1,106	65.0	0.6	66.0
SBGRE_M	GRE math score	1,103	65.0	0.5	66.0
SBACT_S	ACT score	435	30.0	0.5	30.0
SBAP1S	Score of AP test	2,418	21.0	0.2	21.0
SBAP2S	Score of AP test	1,299	11.0	0.2	11.0
SBTUIFEE	Tuition/fees at all schools	4,254	9.9	0.3	10.0
Sources of support					
SCSUPAMT	Dollar value of other support	12,540	26.0	0.5	26.0
SCSUPEST	Estimated dollar value of other support	3,298	14.0	0.4	14.0
SCPRETYP	Type of prepayment plan used	1,320	13.0	0.2	13.0
SCALWAMT	Amount of allowance	6,136	9.4	1.6	11.0
Financial aid					
SDOAMT01	Amount of aid - other institution	651	12.0	0.6	13.0
SDREIMBR	Check reimbursement amount	1,913	11.0	0.5	12.0
Employment					
SECWSOFF	College work-study on/off-campus	858	13.0	2.6	15.0
SECWSTYP	College work-study type of employer	854	12.0	2.6	15.0
SECOMSRV	College work-study	852	11.0	2.2	14.0
Financial status					
SFBUSVAL	Total worth of business	635	32.0	11.0	43.0
SFFMVAL	Total worth of farm	134	25.0	6.7	31.0
SFBSVALE	Estimated value of business	200	25.0	1.0	26.0
SFTOT94	Total income for 1994	15,992	20.0	5.1	25.0
SFBSOWE	Amount owed on business	631	16.0	7.6	24.0
SFTOT95	Total income for 1995	28,450	18.0	4.2	23.0
SFCASH	Total cash/savings/checking	27,636	13.0	8.6	21.0
SFHMVALE	Estimated value of home	392	19.0	1.5	21.0
SFFMOWE	Amount owed on farm	134	15.0	6.0	21.0
SFCASHE	Cash/savings/checking over \$1K	3,543	19.0	1.7	20.0
SFRLEVAL	Total worth of real estate	491	13.0	7.1	20.0
SFHMOWE	Amount owed on home	4,645	9.7	7.7	17.0
SFHMVAL	Total worth of home	4,653	8.5	7.0	16.0
SFRLEOWE	Amount owed on real estate	489	8.2	5.9	14.0



Table 4.22—Student interview item non-response for items with more than 10 percent “don’t know” or “refused (continued)

Item	Item	Number asked	Percent don't know	Percent refused	Percent combined non-response
Parental characteristics					
SHIN94M	Estimated income 1994-more than \$30K	513	50.0	1.4	52.0
SHINC94	Parent income - 1994	9,234	43.0	8.7	51.0
SHINC95	Income 1995	18,127	43.0	6.5	50.0
SHINC294	Income 1994	420	43.0	6.9	50.0
SHIN94L	Estimated income 1994-less than \$30K	231	32.0	0.4	32.0
SHRNG295	Income range 1995	302	31.0	0.3	31.0
SHINC95E	Parent estimated income - 1995	7,911	28.0	1.2	29.0
SHRNG294	Income range 1994	252	25.0	0.0	25.0
SHINC95M	Estimated income 1995-more than \$30K	4,002	22.0	1.9	24.0
SHINC94E	Income range 1994	5,938	22.0	0.2	22.0
SHINC95L	Estimated income 1995-less than \$30K	1,585	17.0	0.5	17.0
SHDADAS	Father earned associates degree	1,960	13.0	0.1	13.0
SHMOMAS	Mother earned associates degree	2,649	11.0	0.0	11.0
Educational experiences					
SIREADHR	Remedial hours - reading	841	16.0	0.0	16.0
SIWRTHR	Remedial hours - writing	955	15.0	0.1	16.0
SISTUDHR	Remedial hours - study skills	596	14.0	0.0	14.0
SIMATHHR	Remedial hours - math	1,427	13.0	0.0	13.0
SILANGHR	Remedial course - Eng. lang.	611	13.0	0.0	13.0

Note: Statistics are based on student sample members for whom specific items were applicable and asked. Items applicable to less than 100 sample members were excluded from consideration.

Items with the largest amount of nonresponse were those pertaining to undergraduate and graduate entrance examination scores, with two-thirds or more of the students interviewed and reporting having taken the SAT or GRE unable to recall their scores on these exams. Questions most likely to evoke explicit refusals were concerning student and parent income, assets, and debt, which also provided high rates of “don’t know.” Many student respondents are reluctant to provide information about family finances and, among those who are not, many simply don’t know.

#### 4.6.4 Reliability of Interview Responses

The NPSAS:96 interview responses were also evaluated for reliability and validity, to estimate the consistency of the measurements. Reliability was assessed through reinterviews (see Section 3.5, above) using selected items of the full interview. Reinterviews were administered to a randomly selected subsample of *those who completed the full interview*; analyses were based on the 236 respondents to the reinterviews. The set of reinterview questions were chosen to broadly

represent the student interview; however they were most heavily weighted to cover financial aid, financial support for educational expenses from family, educational status of family members, and work experiences while enrolled in institution. Specific items selected were those that had not been evaluated in previous NPSAS studies or had previously proven problematic (and had been refined for the current study). A hard-copy facsimile of the reinterview is provided in Appendix D.

Given the relatively small size of the reinterview sample, it is difficult to determine the extent to which the length of time before reinterview affected the amount of true change; however, the period between initial interview and reinterview was substantially longer than in previous reinterview studies. Consequently, these analyses provide a more conservative test of temporal consistency and derived reliability indices should be considered lower-bound estimates.

#### 4.6.4.1 Analytic Method

Because not all items were applicable to all respondents (e.g., some questions were asked only of graduate/first-professional students, some only of dependent students) and because analyses were restricted to those cases with determinate responses in *both* interviews,<sup>20</sup> considerable variation exists in the number of cases on which reliability indices are based for the several items considered. Reliability indices computed for all paired responses were: (1) percent agreement between the two responses and (2) one or more relational measures of reliability.

**Percent Agreement.** Most examined paired responses can be classified as categorical variables; possessing either nominal or ordinal scale properties; however, some variables (such as dollar amounts, hours worked per week, or untruncated counts) possessed interval or ratio scale properties. For categorical variables, agreement was defined as an exact match between the two responses. For the free response, qualitative variables, some additional latitude was allowed (since failure to produce the exact same number would not be evidence of serious unreliability). For such items, the standard adopted for “agreement” (as used previously with NPSAS reliability analyses) was *within one standard deviation unit*.<sup>21</sup>

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<sup>20</sup>Additional restrictions existed for *item 23: About how much did you earn from all jobs while you were enrolled?*; the response to this item was qualified by the response to *item 24* which indicated the units (simultaneously chosen by respondent) in which the *item 23* was reported (amount per hour, per week, per month, per term, or for the entire enrollment period during that year). Only about half of those responding to these items used the same units in the initial interview and reinterview. Since conversion to a common metric would require considerably more information than was available in the reinterview, reliability analyses for *item 23* were further restricted to those who also responded consistently to *item 24*. Moreover, analyses were conducted separately for each reporting unit, since analyses across units would produce spuriously high reliability indices.

<sup>21</sup>This is equivalent to within one-half standard deviation of the average (best estimate of actual value) of the two responses.

Index of Reliability. An index of reliability, comparable to the interclass correlation coefficient used in assessing inter-rater reliability,<sup>22</sup> was computed for *all paired observations*, since it is defined for both categorical and quantitative items. For categorical items, the index can be computed for an entire item as well as for each response alternative of the item, which provides a mechanism whereby differential reliability of specific response alternatives can be evaluated. The reliability index is the additive inverse of the ratio of estimated error variance of an item to the total item variance, and the ratio estimate used here is *I*, the inconsistency index, which is widely used by the Census Bureau for test/retest reliability studies<sup>23</sup>. Consequently, the reliability index used here is given as  $1 - I$ . The index of reliability for categorical variables is algebraically equal to *kappa* ( $\kappa$ ); Fleiss<sup>24</sup> recommends the use of  $\kappa$  for categorical data because it represents a chance-corrected percent-agreement score (the number of actual consistent answers divided by the number expected by chance based on the marginal probability of each answer -- with the obvious implication that the raw percent agreement will always equal or exceed  $\kappa$ ) and it is the analog of the intraclass correlation coefficient for quantitative variables<sup>25</sup>.

Other Relational Indices. While the index of reliability can be applied to data with scale properties greater than nominal, it does not completely reflect the nature of ordinal, interval, or ratio scale properties. To accommodate such properties, more traditional relational measures consistent with prior NPSAS reliability analyses have been used. For questions that are answered using ordered categories (including truncated counts) the Kendall's tau-b ( $\tau_b$ ) statistic, which takes into account the obviously-present condition of tied rankings, has been used.<sup>26</sup> For items yielding interval or ratio scale responses (such as the amount earned), the Pearson product-moment correlation coefficient (*r*) is used. As would be expected, these relational statistics, which take into consideration the additional metric properties of the data, uniformly yielded estimates of reliability that were equal to, or greater than, that shown by the index of reliability.

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<sup>22</sup>c.f. Fleiss, J. 1986. *The Design and Analysis of Clinical Experiments*. New York: John Wiley & Sons, Inc., and Winer, B. 1962. *Statistical Principles in Experimental Design*, 2<sup>nd</sup> edition. New York: McGraw-Hill.

<sup>23</sup>c.f., U. S. Bureau of the Census. 1985. *Evaluating Censuses of Population and Housing: Statistical Training Document ISP-TR-5*. Washington, DC: Government Printing Office.

<sup>24</sup>Fleiss, J. 1981. *Statistical Methods for Rates and Proportions*, 2<sup>nd</sup> edition. New York: John Wiley & Sons, Inc.

<sup>25</sup>For quantitative items, the index of inconsistency is the mean squared difference between original interview and reinterview answers divided by an estimator of the item variance.

<sup>26</sup>c.f. Kendall, M. (1945). The treatment of ties in rank problems. *Biometrika*, 33, 81-93 and Agresti, A. (1984). *Analysis of Ordinal Categorical Data*. New York, NY: Wiley & Sons.

#### 4.6.4.2 Reliability Results

Results of the overall reliability analyses for the NPSAS:96 reinterview study, for specified content areas, are provided in Table 4.23 through Table 4.26; for the strictly nominal scale data items, this presentation provides only the aggregate (item level) value of the index of reliability. A copy of the reliability reinterview instrument and the variable names of the student CATI items associated with each reinterview item appear in Appendix D, starting on page D-111.

Reliability indices for the educational finance items, as shown in Table 4.23 are generally acceptable, but are somewhat mixed. While all such items show agreement over the two administrations exceeding 80 percent, the relational statistic only exceeds 0.80 for *item 18*, regarding receipt of aid from an employer, and *item 21*, regarding total amount borrowed for postsecondary education. This latter item, treated as a quantitative or continuous variable, shows the highest relational statistic in the set ( $r = 0.89$ )<sup>27</sup> but the lowest percent agreement (83 percent). The least reliable item in this set is *item 20* (regarding acceptance of all aid awarded), yielding an 85 percent agreement rate and a relational statistic near zero ( $\kappa = 0.16$ ); the disparity between the two reliability indices lies with the instability of “no” responses to this item.

Table 4.23— Reliability indices for education finance items

Item number and wording	Number of analysis cases <sup>a</sup>	Reliability indices	
		Percent agreement <sup>b</sup>	Relational statistic <sup>c</sup>
2 Did you get any grants, scholarships, assistantships, loans, or any other financial aid in 1994-95?	115	87.0	0.71
11 During 1995-96, did your [parent/guardians] pay for any or your tuition or fees?	183	85.8	0.72
12 During 1995-96, did your [parent/guardians] pay for any or your room and board?	57	86.0	0.62
13 During 1995-96, did your [parent/guardians] pay for any or your books or equipment?	183	84.7	0.69
18 Did you receive tuition reimbursement from your employer?	182	96.7	0.82
20 Did you accept all of the aid you were awarded for the year?	146	85.2	0.16
21 Including [FILL AMT] from [parents/guardians], and all other sources, how much have you borrowed for your education since you left high school?	126	82.5 <sup>d</sup>	0.89 <sup>e</sup>

NOTE: Analyses are based on 236 respondents to the reliability interview.

<sup>a</sup>Analyses were conducted only for respondents with determinate responses on both the initial interview and the reinterview; not all questions were applicable to all respondents.

<sup>b</sup>Unless otherwise indicated, this percentage reflects an exact match of the paired responses.

<sup>c</sup>Unless otherwise indicated, this measure is the aggregate reliability index,  $\kappa$ .

<sup>d</sup>Agreement was determined as response differences not exceeding 1 standard deviation unit.

<sup>e</sup>Relational statistic used here is the Pearson product moment correlation coefficient,  $r$ .

<sup>27</sup>The value of  $\kappa$  for this item was also 0.89; however, the variability of amounts reported is quite large; this large variability also increases the value of the reliability index with all other things being equal.

Such negative responses are rare (between five and 10 percent for initial administration and reinterview), and reported quite inconsistently; of the 24 individuals who responded negatively in *either* administration, only 3 responded consistently in *both*<sup>28</sup>.

A similar (but less extreme) situation, i.e., lower frequency of “no” responses that are relatively instable, applies to *item 2* and *item 12*, and consequently depresses the consistency statistic. Even for the most reliable of the categorical items in the educational finance set (for which the percent agreement is 97 percent), the value of  $\kappa$  has been similarly depressed to 0.82; in this case, due to the instability of the infrequent (only about 10 percent of respondents) “yes” responses. Although time referents were explicitly or implicitly (through prior “set up” questions) available for all items in this set, some inconsistencies still may have resulted from confusions on the part of respondents (e.g., assuming, during reinterview, that the 1995-96 school year included the spring term of 1996). Also, there is possibility for real change between the initial interview and reinterview. Both such cases, however, would typically result in changes of responses from “no” to “yes,” but no such trend was noted. In fact, for this set of items, response changes were generally more heavily weighted in the opposite direction.

As presented in Table 4.24, two of the three items related to work experience, show only marginally acceptable reliability; agreement of initial and reinterview responses for these two items is less than 70 percent, and relational statistics ( $\tau_b$ ) are less than 0.65 (in one case less than 0.50). However, the remaining item in this set, *item 22*, regarding average hours worked per week, shows good reliability; 83 percent agreement and a Pearson correlation of 0.89.

Table 4.24—Reliability indices for work experience items

Item number and wording	Number of analysis cases <sup>a</sup>	Reliability indices	
		Percent agreement <sup>b</sup>	Relational statistic <sup>c</sup>
17 Between July 1, 1995 and June 30, 1996, how many jobs did you have?	232	67.7	0.61
22 About how many hours did you work per week while you were enrolled July 1, 1995 through June 30, 1996?	183	83.1 <sup>d</sup>	0.89 <sup>e</sup>
25 Did you work for all or most of the weeks while you were enrolled?	155	67.7	0.48

NOTE: Analyses are based on 236 respondents to the reliability interview.

<sup>a</sup>Analyses were conducted only for respondents with determinate responses on both the initial interview and the reinterview; not all questions were applicable to all respondents.

<sup>b</sup>Unless otherwise indicated, this percentage reflects an exact match of the paired responses.

<sup>c</sup>Unless otherwise indicated, this measure is Kendall’s  $\tau_b$ .

<sup>d</sup>Agreement was determined as response differences not exceeding one standard deviation unit.

<sup>e</sup>Relational statistic used here is the Spearman product moment correlation coefficient,  $r$ .

<sup>28</sup>The basic instability of negative responses to this item suggests that its meaning is being misunderstood; the wording should be reworked before the item is used again and interviewers should be better trained on administration of the item.

For *item 17*, regarding number of jobs, and *item 25*, regarding frequency of work during enrollment periods, percent agreement between the two responses was about 68 percent. The relational statistics ( $\tau_b$  was used in both cases to accommodate the ordinal properties of the response option sets) were 0.61 and 0.48, respectively. The reliability index ( $\kappa$ ) was lower in both cases, 0.51 and 0.42, respectively, suggesting that error accounts for about half (or more) of the observed variation of individuals' responses. For *item 17*, however, the value obtained is considered to be depressed due to real change that took place between the initial interview and January 30, 1997; namely, taking a summer job after the spring term of the 95-96 school year. The micro data are consistent with this hypothesis, since they show that the predominant (but not all) change involved an increase in number of jobs reported during the reinterview.

The inconsistency of responses to *item 25* (*Did you work for all or most of the weeks you were enrolled?*) are probably traceable to respondent (or interviewer) confusion with the compound nature of the question posed, particularly in interpreting the meaning of the available response alternatives<sup>29</sup> in relation to that question. The most inconsistent response alternative was "about half" the weeks enrolled (among the eleven respondents who chose that response alternative in either administration, only one consistently gave this response) and the next most inconsistent response was "most of the time" while enrolled. The consistency index for these two response options were 0.14 and 0.37, respectively, probably reflecting the difficulty of determining the desired range for the two responses (e.g., is working 5 weeks out of 9 "most of the time" or "about half").<sup>30</sup>

The items related to income were somewhat mixed (Table 4.25). The single categorical variable in this set yielded a percent agreement of slightly over 80 percent, but the reliability index was only 0.60, indicating that an estimated 40 percent of total item variance is attributable to error. The error is directional (a notable increase in "yes" responses during the reinterview), which is consistent with a relaxation in parental requirements of repayment, but there is no plausible reason to hypothesize such change from one school year to the next. Because the question is so straightforward, it seems more likely that the inconsistency is related to either: (1) misreporting (or misrecording) or (2) differential interpretation due to differences between the two interviews in the interview context, as established by preceding items, within which the item was embedded.

The two items relating to personal (plus spouse's, where applicable) income during previous years (*item 26* and *item 27*) seem acceptably reliable, particularly for reported income values, which are notoriously unreliable. Agreement of the paired quantitative responses to these items exceeds 87 percent, and the values of  $r$  are between 0.74 and 0.79. The discrepancy, for *item 23*, between the overall agreement of 78 percent and the Pearson correlation of near unity (0.99) is somewhat artifactual, resulting from a spuriously high correlation. Recall that this item

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<sup>29</sup>Response alternatives to the question were: (1) Yes, every week while enrolled; (2) Yes, most of the time while enrolled; (3) No, only about half the weeks while enrolled; and (4) No, less than half the weeks while enrolled.

<sup>30</sup>The lack of consistency in this item (and particularly its nature) strongly suggests that the item be reworked prior to additional use and/or that training of interviewers in administering this question be improved.

was analyzed separately within groups that reported the same referent unit (e.g., per hour, per month) in both interviews (which also accounts for the relatively small analysis group). While the correlations within the smaller analysis groups were also reasonably high (ranging from 0.77 to 0.98),<sup>31</sup> the analysis of the combined groups (each with a different unit of measurement) creates a natural clustering of the reporting unit groups to produce an artificially high relationship. Although based on a relatively small number of cases, this item is considered acceptably reliable.

Table 4.25—Reliability indices for income

Item number and wording	Number of analysis cases <sup>a</sup>	Reliability indices	
		Percent agreement <sup>b</sup>	Relational statistic <sup>c</sup>
14 Did your [parents/guardians] give you an allowance that you don't have to repay?	182	82.4 <sup>d</sup>	0.60 <sup>e</sup>
23 About how much did you earn from all jobs while you were enrolled?	68	77.9	0.99 <sup>f</sup>
26 What was your [and spouse's] total income from all sources, prior to taxes and deductions, excluding any financial aid you have received for 1995?	147	88.4	0.74
27 What was your [and spouse's] total income from all sources, prior to taxes and deductions, excluding any (student) financial aid you have received for 1994?	71	87.3	0.79

NOTE: Analyses are based on 236 respondents to the reliability interview.

<sup>a</sup>Analyses were conducted only for respondents with determinate responses on both the initial interview and the reinterview; not all questions were applicable to all respondents.

<sup>b</sup>Unless otherwise indicated, agreement was determined as response differences not exceeding one standard deviation unit.

<sup>c</sup>Unless otherwise indicated, this measure is the Pearson product moment correlation coefficient,  $r$ .

<sup>d</sup>This percentage reflects an exact match of the paired responses

<sup>e</sup>Relational statistic used here is the aggregate reliability index,  $\kappa$ .

<sup>f</sup>This value is artifactually inflated because of the clustering of the values provided by their unit of reference (i.e., from per hour to for the total time of enrollment); within specific unit-of-reference groups, however, the correlations were still high, ranging from 0.77 for those reporting earnings per week to 0.98 for those reporting a grand total.

Reliability indices for items related to personal and family educational experiences are provided in Table 4.26. With one exception, *item 4* (related to extent of completion of all requirements for degree among graduate and first-professional students), these items are acceptably reliable. While reliability estimates for this item are based on less than 30 cases, they are nonetheless quite low (about 61 percent agreement among the paired responses and a  $\tau_b$  of 0.22). The reliability index for the item was also low ( $\kappa = 0.21$ ), indicating that about 80 percent of total variance is attributable to error. The reinterview item was asked retrospective to a specific date, which, for effectively all of these students, was toward the end of the final term of the 95-96 regular school year (the initial interview couched the question in terms of “currently”).

<sup>31</sup>The computed values of  $r$  were: 0.97 for those reporting amount per hour, 0.77 for those reporting amount per week, 0.92 for those reporting amounts per month, and 0.98 for those reporting total amounts for the time they were enrolled.

Table 4.26— Reliability indices for personal and family educational experience items

Item number and wording	Number of analysis cases <sup>a</sup>	Reliability indices	
		Percent agreement <sup>b</sup>	Relational statistic <sup>c</sup>
3 As of [main interview date] had you completed your program of study and received your [Certificate/Degree]?	148	91.9	0.72
4 As of [main interview date] had you completed your course work and all other requirements for your degree? (G1P only)	28	60.7	0.22
7 While enrolled during 95-96, where did you live?	233	86.3	0.79 <sup>d</sup>
28 What was the highest grade or level of education your father ever completed?	209	77.5	0.83
29 What was the highest grade or level of education your mother ever completed?	218	83.9	0.83
30 How many of your other family members ever attended a postsecondary institution?	230	77.4	0.72

NOTE: Analyses are based on 236 respondents to the reliability interview.

<sup>a</sup>Analyses were conducted only for respondents with determinate responses on both the initial interview and the reinterview; not all questions were applicable to all respondents.

<sup>b</sup>All percentages are based on exact matches of the paired responses.

<sup>c</sup>Unless otherwise indicated, this measure is Kendall's  $\tau_b$ .

<sup>d</sup>Relational statistic used here is the aggregate reliability index,  $\kappa$

It is quite conceivable that in the reinterview, the students interpreted the date as “at the close of the term,” in which case the potential for real change exists. There is fairly strong indication that a considerable part of the “error” may be in actuality attributable to such real change, since the preponderance (but not all) of the response changes are in the direction that would be expected<sup>32</sup>. Nonetheless, the item remains potentially problematic; since error may be introduced by confusion on the part of either the respondent or interviewer, the item should be tested further.

A similar question (*item 3*) was asked of undergraduates. While similar arguments can be made regarding confusion of time points, distributional properties of this item do not support an hypothesis of real change, since net change was (slightly) in the direction of less completion reported in the reinterview. Again, however, the bulk of the inconsistency is traceable to the “intermediate” response option -- in this case “No, completed program but have not yet received degree.” The reliability index for this resource option was 0.12, and of the 10 individuals choosing this option in either the initial interview or the reinterview, only 1 chose it consistently;

<sup>32</sup>That is, responses generally changed from “not completed course work” to “completed course work but not all requirements” and from this latter category to “completed all requirements.”



suggesting that the intermediate options in both this item and *item 4* could either be misunderstood by the respondents or miscoded by the interviewers. Even with this problem, however, *item 3* yielded acceptable reliability (92 percent agreement,  $\tau_b = 0.72$ , and  $\kappa = 0.68$ ).

The *items 7, 28, and 29* also showed acceptable (but not high) reliability, and for all such items, the principal inconsistencies could be traced to specific response alternative sets. (It is considered unlikely that real change could have affected the reliability estimates of any of these items.) The major inconsistency in *item 7* (related to living arrangements while going to school) lay in the “non-standard” living quarters response options (i.e., “off-campus in school-owned housing,” “with relatives other than parents,” and “some place else”). Although these options were combined into a single category for purposes of analysis, the index of reliability for the combined response options was only 0.37 (of the 20 respondents who chose any of these three options in either the initial interview or the reinterview, only 5 consistently chose one of the three).

The reduction in reliability for *item 28* and *item 29*, which are quite similar items related to father and mothers highest level of education, generally stemmed from quite similar sources. Specifically, response options were unstable if they indicated that the parent had completed some postsecondary education *but* had not completed at least a 4-year program.<sup>33</sup> Such response options (see Table G.3 in Appendix G) required differentiation of how many years of postsecondary education the parent had completed as well as the type of postsecondary education involved (i.e., college or technical/ business institution), and such distinctions seemed to be too difficult for the respondents and interviewers to consistently determine. In all but one case (mother completing 2 or more years of college; reliability index of .73), the reliability index for these response options were less than 0.50, estimating that over half of the observed variance for all such response options was attributable to response error.<sup>34</sup>

*Item 30* (regarding the number of “other” family members yielded only moderately acceptable reliability indices (77 percent agreement,  $\kappa = 0.67$ , and  $\tau_b = 0.72$ ). While real change over time is possible (i.e., more family members attending postsecondary education), the crosstabular data do not fully support such a contention, since the changes in numbers reported are mostly reductions from what was initially reported. It seems most likely that the inconsistencies of responses to this item are due to differential interpretations on the part of respondents as to what “other” family members to consider in the count. As posed, the question does not necessarily exclude parents (although in the context of *items 28* and *29* this may be assumed implicit) and provides nothing in the way of limiting the extent of family considered (e.g., Is this immediate family only?; Are grandparents, aunts, uncles included? For non-traditional students, are children included?), even though the presumed focus of the question (for traditional postsecondary students) is siblings.

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<sup>33</sup>For mother, the category of advanced professional degree was also very unstable, but only 2 respondents ever chose that category; for the father, the same category was quite stable (index of reliability of 0.91).

<sup>34</sup>The overall reliability of these two items could be improved dramatically by consolidating some of the response options yielding low reliability indices and/or through better training of interviewers on how to elicit consistent responses.



# Chapter 5

## Variable Construction and File Development

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### 5.1 Overview of the NPSAS Files

The NPSAS:96 data files contain student-level and school-level data collected from institutions records, government databases, and student and parent interviews. The primary analysis file, from which the study Data Analysis Systems (DASs) were constructed, contains data for a total of 48,389 students, including data for 31,328 students with whom a telephone interview was conducted, and an additional 17,061 students who were selected for, but did not complete, a telephone interview but whose CADE data record was essentially complete<sup>1</sup>.

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<sup>1</sup>A student could be represented on the study analysis file if selected for Phase 1 of CATI, determined to be eligible for NPSAS (or imputed to be so), and either of the following conditions was satisfied:

- The items in Section A of the Student CATI that are needed to identify first-time, beginning students (“pure” FTBs) were completed, or an abbreviated version of the questionnaire was completed (mail, Spanish, or nonresponse conversion instrument), or
- CADE was essentially complete (Sections CHAR, ENR, TUI, and FINAID completed).

The definitions of "complete" for the four CADE sections are::

CHAR - complete if we have a valid responses to gender, date-of-birth, marital status, and race in CADE. The first three items have CPS equivalent variables, and these are considered as well. Some valid responses could be -1's.

ENR - complete if we have a valid responses to Beginning Month/Year, Ending Month/Year, and Enrollment Status for at least one term. Some valid responses could be -1's.

TUI - complete if we have a valid response to the total tuition item. Some valid responses could be 0 or -1.

FINAID - complete if we have a valid response (Y or N) to the Financial Aid gate question, or match to Pell or NSLDS.

The analysis file contains over 1,000 variables, most of which were derived from multiple NPSAS:96 data sources. The NPSAS:96 data sources, along with the corresponding numbers of sample students for which data were obtained, appear in Table 5.1. Most, but not all, of the students for whom some data were obtained from one or more sources appear on the analysis files.

Table 5.1—Record counts from NPSAS: 96 data sources

Data source	Totals	Number of students <sup>a</sup>		
		UG	FTB <sup>b</sup>	GIP
CADE	55,665	44,468	11,765	11,197
Student CATI	31,328	27,311	12,207	4,017
Parent CATI	3,352	3,349	1,872	3
CPS 95-96	29,892	26,158	8,560	3,734
CPS 96-97	22,261	19,563	6,754	2,698
Pell file	13,268	13,237	3,973	31 <sup>c</sup>
NSLDS file	29,049	22,811	5,981	6,238

<sup>a</sup>Student Type is based on the student's last term of enrollment at the NPSAS school.

<sup>b</sup>Counts of first-time beginning students include only those students determined conclusively to be FTB's based on CATI interview data. FTB counts are included in the counts of undergraduates.

<sup>c</sup>Because the student type classification is based on the student's last term of enrollment at the NPSAS school, a small number of graduate/first professional students who were undergraduates at a postsecondary institution sometime during the NPSAS year were found on the ED Pell payment files.

A preliminary DAS was prepared, adjudicated by U.S. Department of Education staff and released in October of 1996, prior to the end of CATI data collection. This DAS included variables derived from data collected from institutional records, the CPS, the ED Pell Payment File, and the NSLDS. No CATI data were included in this DAS, and only the NPSAS sample students determined at that time to be recipients of federal financial aid were included.

Following completion of all study data collection, separate Data Analysis System files were created for undergraduate and graduate/first professional students. In total, 41,359 of the analysis file cases were undergraduate students during their last term of enrollment at the NPSAS institution, and the remaining 7,030 cases were graduate or first professional students during their last term of enrollment. Because a portion of the 7,030 graduate/first professional students were undergraduates during their first term of enrollment (i.e. college senior in the Fall term but started a graduate program in the Spring), these students appear on both the undergraduate and graduate/first professional DASs. Of the 41,359 students on the undergraduate DAS, 12,207 are first time beginning students (FTBs).

Complete data obtained through the NPSAS:96 are contained on the Electronic Codebook (ECB) files, which are available to researchers who have applied for and received authorization from NCES to access restricted research files. The NPSAS:96 ECB contains the following files:

- NPSAS Analysis File — Contains analytic variables derived from all NPSAS data sources as well as selected direct CATI variables for 48,389 students. This file also includes the 1995-96 financial aid application data and/or the 1996-97 application data for the students on this file who were successfully matched to the CPS data base.
- CADE Data File — Contains raw data collected from institutional records for 55,665 students with sufficient data to be considered CADE respondents. This file excludes any “verbatim” CADE variables such as responses to “Other, specify” items. These variables appear on the separate Verbatim Data File.
- Student CATI Data File — Contains raw data collected from 31,328 students who responded to the student interview. This file excludes any Student CATI items which already appear on the analysis file. The file also excludes CATI verbatim items, which are on the Verbatim Data File.
- Parent CATI Data File — Contains raw data collected from 3,352 parents of students who responded to the student interview. This file excludes any Parent CATI items which already appear on the analysis file. The file also excludes CATI verbatim items, which are on the Verbatim Data File.
- NSLDS Data File — Contains raw loan-level data received from the National Student Loan Data System for the 29,049 who appear on *either* the analysis file or the CADE file.

- CATI Coding Results File — Contains the verbatim text and resulting code for student field-of-study, and (for employed students) industry and occupation. These values exist for the 31,328 students on the student CATI data file.
- Verbatim Data File — Contains item-level records (i.e. one record per variable) for text variables collected in either CADE or CATI (student and parent interviews). There are multiple records per student for most of the students who appear on either the analysis file or the CADE file.
- Jackknife Replicate Weights File — Contains all the Jackknife replicate weights created for NPSAS:96
- Institution Data File — Contains selected institution-level variables for sample institutions from which one or more students, appear on any of the student-level files mentioned above. This file may be linked to student-level files by the IPEDS number, which appears on all ECB files.

## 5.2 Data Coding and Editing

### 5.2.1 Coding

Most of the NPSAS:96 coding activities were completed during telephone interviewing. The NPSAS:96 CATI system included software components for use in coding student major field-of-study, and industry/occupation data for both students and parents. An IPEDS coding routine retrieved institution characteristics for postsecondary schools other than the NPSAS institution the student reported attending during the NPSAS year. Interviewer proficiency at using the online coding routines was monitored and retraining was conducted as necessary.

Selected variables containing text responses were up-coded into response categories following data collection. These included both CADE and CATI items. Other, Specify responses for student and parent Race, Asian Status, and Hispanic Status were up-coded wherever possible, as were the names of admissions exams. A total of 420 “other student race” and 93 “other parent race” responses were successfully up-coded for CATI respondents. Hispanic Status was up-coded for 58 student CATI cases and Asian Status was up-coded for 307 student CATI cases. Approximately 400 CATI cases in which the IPEDS coding routine had flagged an other postsecondary institution as “Not Found” were examined and recoded where possible.

Since the CADE software did not include an on-line coding routine for student field-of-study, responses to this CADE item were subsequently coded using the CATI coding system. Results from this activity were used in the construction of the final field-of-study variables derived for the DAS.

### 5.2.2 Editing

Following the completion of data collection, all CADE and CATI data were edited to ensure adherence to range and consistency checks. Range checks are summarized in the variable descriptions contained in the ECB and DAS data. Inconsistencies, either between or within data sources, were resolved in the construction of the derived variables. Protocol for resolving these discrepancies are described in the variable descriptions for the derived variables found in the ECB and DAS.

There are a variety of explanations for missing data within individual data elements. For example, an item may not be applicable to certain students, a respondent may refuse to answer a particular item, or the respondent may not know the answer to the question. To assist analysts in understanding the nature of missing data associated with NPSAS:96 data elements, a set of missing data codes were developed. These codes were applied to blank responses in the analysis file, as well as the CADE and CATI data files, Table 5.2 lists the missing data codes and their meanings.

Table 5.2—Description of missing data codes

Missing data code	Description
-1	Don't know (CATI variables) Data not available (CADE variables)
-2	Refused (CATI variables only)
-3	Legitimate skip (item was intentionally not collected because variable is not applicable to this student -- CADE and CATI variables only)
-8	Data source not available (the item is not applicable because data were not collected from this source for this student)
-9	Other missing (partial interview did not get this far, or item was simply left blank)

### 5.3 Composite and Derived Variable Construction

Analytic variables were created by examining the data available for each student from the various data sources, establishing relative priorities of the data sources, on an item-by-item basis and reconciling discrepancies within and between sources. In some cases the derived or composite variables were created by simply assigning a value from the available source of information given the highest priority. In other cases, raw interview items were recoded or otherwise summarized to create a derived variable. A listing of the set of analysis variables derived for NPSAS:96 appears in Appendix H. Specific details regarding the creation of each variable appear in the variable descriptions contained in the ECB and DAS.

### 5.4 Statistical Imputations

After the editing process (which included logical imputations), the remaining missing values for 22 analysis variables were statistically imputed. The imputations were performed primarily to reduce the bias of survey estimates caused by missing data. The imputed data also makes the data complete and easier to analyze. The variables were imputed using a weighted hot deck procedure,<sup>2</sup> with the exception of estimated family contribution (EFC), which was imputed through a multiple regression approach. Table 5.3 lists the variables by the percentage of missing data imputed.

#### 5.4.1 Hot Deck Imputation

It is easier to describe the weighted hot deck imputation procedure by first describing unweighted hot deck imputation. The unweighted procedure partitions the sample into imputation classes based on auxiliary data available for both nonrespondents and respondents. Within these classes, it is assumed the nonrespondents would have answered in a similar manner to the respondents. Also, the data records are often sorted within the classes to place individuals that share additional characteristics closer to each other. The procedure is implemented by sequentially processing the database and replacing missing responses with the response from the previous respondent within each imputation class.

The unweighted hot deck procedure reduces nonresponse bias if the response distributions differ *across* the imputation classes. However, by ignoring the sample weights, bias may remain in the survey estimates due to the weighted distribution of the imputed data *within* the classes being different from the weighted distribution of the respondent data.

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<sup>2</sup>Cox, B.G. (1980). "The Weighted Sequential Hot Deck Imputation Procedure." Proceedings of the American Statistical Association Section on Survey Research Methods, pp. 721-726.



Table 5.3—The statistically imputed variables and the amount of data imputed

Statistically imputed variable	Study respondent data used in imputation	Number statistically imputed	Percent statistically imputed
Estimated family contribution (EFC3)	All (48,389)	17,016	35.2%
Student income (Stuinc94)	All (48,389)	12,928	26.7%
Parent income (Parinc94)	Dependents (24,218)	5,889	24.2%
Number of dependents (Ndepend)	Independents (24,171)	4,749	19.6%
Parent family size (Pfamnum)	Dependents (24,218)	4,375	18.0%
Dependents indicator (Anydep)	Independents (24,171)	4,306	17.8%
Parent marital status (Pmarital)	Dependents (24,218)	3,775	15.5%
High school degree (Hsdeg)	All (48,389)	2,561	5.3%
High school graduation year (Hsgradyy)	Students with HS degree (47,508)	2,557	5.3%
Student marital status (Smarital)	All (48,389)	2,211	4.6%
Citizenship (Citizen2)	All (48,389)	2,084	4.3%
Student level, last term (Levlast)	All (48,389)	2,073	4.3%
Student level, first term (Levfirst)	All (48,389)	2,063	4.3%
Race (Race)	All (48,389)	1,704	3.5%
Local residence (Localres)	All (48,389)	1,259	2.6%
Age (Age)	All (48,389)	456	0.9%
Attendance intensity in fall (Attend)	Students enrolled in fall (40,058)	314	0.6%
Dependency status (Depend/Depend2)	All (48,389)	283	0.6%
Fall enrollment (Fall)	All (48,389)	164	0.3%
Gender (Gender)	All (48,389)	96	0.2%
Degree program, last term (Deglast)	All (48,389)	92	0.2%
Degree program, first term (Degfirst)	All (48,389)	74	0.2%

The weighted hot deck procedure is an extension of the hot deck procedure which does consider the weighted distribution. The procedure takes into account the unequal probabilities of selection by using the student weights to specify the expected number of times that a particular respondent's answer will be used to replace missing data. By using these expected selection frequencies, the weighted distribution of the imputed data will replicate the weighted distribution of the respondent data. Hence, the weighted hot deck imputation is designed so that, within each imputation class, the weighted survey estimates based on the imputed data will be equal in expectation to the weighted survey estimates based on the respondent data.

To implement the weighted hot deck procedure, imputation classes and sorting variables that were relevant for each item being imputed were defined. If more than one sorting variable was chosen, a serpentine sort was performed where the direction of the sort (ascending or descending) changes each time the value of a variable changes. The serpentine sort minimizes the change in the student characteristics every time one of the variables changes its value.

The respondent data for six of the items being imputed was modeled using a CHAID (Chi-squared Automatic Interaction Detector) analysis to determine the imputation classes. These items were:

- Race/ethnicity,
- Parent income (imputed for dependent students only),
- Student income,
- Student marital status,
- Dependents indicator, and
- Number of dependents.

A CHAID analysis was performed on these variables because of their importance to the study and the large number of candidate variables available to form imputation classes. Also, for the income variables, trying to define the best possible imputation classes was important due to the large amount of missing data.

The CHAID analysis divided the respondent data (of each of these six items) into segments which differ with respect to the item being imputed. The segmentation process first divided the data into groups based on categories of the most significant predictor of the item being imputed. It then split each of these groups into smaller subgroups based on other predictor variables. It also merged categories of a variable that were found insignificant. This splitting and merging process continued until no more statistically significant predictors were found (or until some other stopping rule was met). The imputation classes from the final CHAID segments were then defined.

Appendix I presents the imputation classes and sorting variables used for all of the variables imputed by the hot deck approach.

#### **5.4.2 Imputation for EFC**

The federal methodology Expected Family Contribution (EFC) was available for 65 percent of the students in the NPSAS:96 sample. In 90 percent of the cases where a recorded EFC was available, the source for the EFC was the student financial aid record (ISIR) reported in the federal central processing system (CPS) for the 1995-96 academic year. Other less frequently used sources were the student aid report (SAR) at the institution, the 1996-97 central processing record, or the EFC recorded on the 1995-96 Pell Grant payment file. For Pell Grant recipients, the EFC in the Pell Grant file was always used if there was a discrepancy.

In the NPSAS:96 analysis file the variable for the recorded EFC is called EFC3. These EFC's were imputed for 35 percent of the 48,389 students on the file. This included approximately 31 percent of the dependent students, 41 percent of the independent students without dependents, and 36 percent of the independent students with dependents. Imputation regression equations were developed separately for dependent and independent students using the data and EFC formula types (CPS160) available in the 1995-96 CPS student records. Details of the various EFC imputations are provided in Appendix I.



## Chapter 6

# Weighting and Variance Estimation

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The NPSAS:96 data base contains a total of eight analysis weights associated with the CADE respondents, Study respondents, and CATI respondents. This includes weights for separate analyzes on all students, undergraduate students, graduate students, and first-time-beginning (FTB) students. The weight names and associated data bases are as follows:

- CADEWT: for all CADE respondents (55,665)
- DASWT0: for all students on the restricted-use analysis file (48,389)
- DASWT1: for Study respondents who were undergraduates in first term (41,482). These students are included in the undergraduate Data Analysis System.
- DASWT2: for Study respondents who were graduate/first-professional students in last term (7,030). These students are included in the graduate Data Analysis System
- CATIWT0: for all CATI respondents on the restricted analysis files (31,328)
- CATIWT1: for CATI respondents who were undergraduates in first term (27,414). These students were included in the undergraduate Data Analysis System.
- CATIWT2: for CATI respondents who were graduate/first-professional students in last term (4,017). These students were included in the graduate Data Analysis System.
- BPSWT: for CATI respondents who were FTB students (12,040).

Students who went from an undergraduate student in the first term to a graduate or first-professional student in the last term have both positive undergraduate and graduate/first-professional weights.



The CADE and CATI weights apply to the respondents from the CADE and CATI data collection procedures. The Study respondents apply to students who responded to specified CADE or CATI data items. The definitions of these three types of respondents are summarized below.

- CADE respondents: students whose CADE data indicated they were enrolled in the institutions and their aid status was known either from their CADE data or from their data obtained from the Pell payment file or the National Student Loan Data System.
- Study respondents: students selected for CATI who either had complete CADE data or had completed enough of Section A of the CATI interview to determine their FTB status.
- CATI respondents: students who had completed enough of Section A of the CATI interview to determine their FTB status.

## 6.1 Study and CATI Weight Components

The Study weights and CATI weights were calculated as the product of 14 weight components, each representing either a probability of selection or a weight adjustment. The weight adjustments included nonresponse and poststratification adjustments to compensate for potential nonresponse bias and frame errors (differences between the survey population and the ideal target population, as discussed in Section 2.1.1). Also, multiplicity and trimming adjustments were performed.

Since the Study weights were restricted to students selected for CATI, the first nine weight components (WT1-WT9) of the Study weights and CATI weights were identical, which represent the sample selection and adjustment components through the first phase of CATI. The remaining weight components (WT10-WT14) are the same steps, but are performed separately because of the different response definitions.

(1) Institution Sampling Weight (WT1)

The sampling weight for each sample institution is the reciprocal of the probability of selection. As shown in Section 2.2.1, the probability of selection for institution-I is

$$\pi_r(i) = \begin{cases} \frac{n_r S_r(i)}{S_r(+)} & \text{for non-certainty selections} \\ 1 & \text{for certainty selections.} \end{cases}$$

Therefore, the institution sampling weight was assigned as follows:

$$WT1 = 1 / \pi_r(I)$$

(2) Adjustment for Institution Multiplicity (WT2)

During institution recruitment, seven sample schools that had two records listed on the IPEDs frame were found. In most cases, it was caused by two schools that had recently merged. If both records were sampled, then one record was retained for tracking survey results and the other record was classified as ineligible.

To account for the two chances that a school could be selected, a multiplicity adjustment was performed by first calculating the probability that either record could be selected, or

$$P(A \text{ or } B) = P(A) + P(B) - P(A)P(B).$$

Then, the new sampling weight was calculated as the reciprocal of this probability, or

$$NEW\_WT1 = 1 / P(A \text{ or } B).$$

Finally, the multiplicity adjustment factor was derived by dividing the new sampling weight by the old sampling weight, or

$$WT2 = NEW\_WT1 / WT1.$$

Note that the product of WT1 and WT2 equals NEW\_WT1.



## (3) Adjustment for Institution Nonresponse (WT3)

For weighting purposes, a school was considered a responding school if it provided an enrollment list and then, after the student sample was selected, provided sufficient CADE data for locating at least one sample student. If sufficient CADE data could not be obtained for any of the sample students, the school was still considered a respondent if at least one sample student could be matched to the Central Processing System (CPS) file.

A weighting class adjustment was performed to compensate for nonresponding institutions using institution type as the weighting class. The calculated response rates were enhanced by multiplying the institution's weight by its size measure, or

$$R_c = \frac{\sum_{i \in \text{Resp}(c)} W_i \cdot S_i}{\sum_{i \in \text{Elig}(c)} W_i \cdot S_i}$$

where

$c$  = the weighting class,

$W_i$  = the cumulative institution weight (WT1•WT2), and

$S_i$  = the institution's size measure.

The weight adjustment factor was then the reciprocal of this response rate. This enhancement forced the estimated total measure of size (roughly the population total of eligible students) to be the same for the responding institutions as it was for the eligible institutions.

Table 6.1 presents the response rates and the resulting adjustment factors by institution type. Note that all the response rates are high except for the private, for-profit, less than 2-year schools. The response rate for those schools was 78.7 which resulted in an adjustment factor of 1.27.

Table 6.1 Weight adjustment factors for institution nonresponse

Weighting class (institution level)	Number of respondents	Weighted response rate	Weight adjustment factor (WT3)
Total	832	93.8	†
Public, less-than-2-year	31	94.0	1.06
Public, 2-year	158	95.8	1.04
Public, 4-year, non-doctorate-granting	122	96.9	1.03
Public, 4-year, doctorate-granting	122	98.5	1.02
Private, not-for-profit, less-than-4 year	41	91.6	1.09
Private, not-for-profit, 4-year, non-doctorate-granting	102	88.7	1.13
Private, not-for-profit, 4-year, doctorate-granting	130	91.9	1.09
Private, for-profit, less-than-2-year	60	78.7	1.27
Private, for-profit, 2-year	44	87.7	1.14
Private, for-profit, 2-year-or-more	22	95.8	1.04

†Not applicable.

#### (4) Student Sampling Weight (WT4)

The overall student sampling strata were defined by crossing the institution sampling strata with the student strata within institutions. The overall sampling rates for these sampling strata can be found in Chapter 2. The sample students were systematically selected from the enrollment lists at institution-specific rates which were inversely proportional to the institution's probability of selection. Specifically, the sampling rate for student stratum-*s* within institution-*I* was calculated as the overall sampling rate divided by the institution's probability of selection, or

$$f_{s|i} = \frac{f_s}{\pi_r(i)} ,$$

where

$f_s$  = the overall student sampling rate, and

$\pi_r(I)$  = the institution's probability of selection.

As discussed in Chapter 2, the institution-specific rates were designed to obtain the desired sample sizes and achieve nearly equal weights within the overall student strata.

If the institution's enrollment list was larger than expected based on the IPEDS data, the preloaded student sampling rates would yield larger than expected sample sizes. Likewise, if the enrollment list was smaller than expected, the sampling rates would yield smaller than expected sample sizes. To maintain control on the sample sizes, the sampling rates were adjusted, if necessary, so that the number of students selected did not exceed by more than 50 students the estimate reported to the school based on the IPEDS data. A minimum sample size constraint of 40 students was also imposed so that at least 30 respondents from each participating institution could be expected.<sup>1</sup>

The student sampling weight was then the reciprocal of the institution-specific student sampling rates, or

$$WT4 = 1 / f_{st} .$$

(5) Student Subsampling Weight (WT5)

When schools provided hard-copy lists for student sampling, they often did not provide separate lists by strata (e.g., potential FTBs and other undergraduate students were on the same list). When that happened, the combined list was sampled at the highest of the sampling rates for the strata contained within the list. Strata with the lower sampling rates were then subsampled to achieve the desired sampling rates. The student subsampling weight adjustment factor, WT5, is the reciprocal of this subsampling rate. This weight factor is unity (1.00) for most students because this subsampling was not necessary for most institutions.

(6) Adjustment for Student Multiplicity (WT6)

Students who attended more than one eligible institution during the NPSAS year had multiple chances of being selected. That is, they could have been selected from any of the institutions they attended. Therefore, these students had a higher probability of being selected than was represented in their sampling weight. Adjustment for this multiplicity was made by dividing their sampling weight by the number of eligible institutions attended. Specifically, the student multiplicity weight adjustment factor was defined as

$$WT6 = 1 / M,$$

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<sup>1</sup> NCES confidentiality guidelines require at least 30 respondents before NCES can send the school a statistical report on their sample students.

where M is the multiplicity, or number of institutions attended. The multiplicity was determined from the CATI interview, the Pell payment file, and the National Student Loan Data System. Unless there were evidence to the contrary, the student multiplicity was presumed to be unity (1.00).

(7) Adjustment for Unknown Eligibility Status (WT7)

After abstracting the student record data using CADE, a weight of zero was assigned to students determined ineligible. A sample of students was selected for CATI from the students who were not classified as ineligible. The final eligibility status was then determined from the CATI interviews. However, for the students whom RTI staff were unable to contact, the final eligibility status could not be determined. These students were treated as eligible and their weights were adjusted to compensate for the small portion of students that were actually ineligible.

Weighting classes were defined by the cross of institution type and the students' matching status to financial aid files (CPS, Pell, and Stafford). The first two columns of Table 6.2 present the weight adjustment factors applied to the students with unknown eligibility. These weight adjustment factors were simply the eligibility rate estimated among students with known eligibility status. For the eligible students, the weight adjustment factor was set equal to one.

(8) Adjustment for Insufficient CADE or CPS Data (WT8)

The students who had sufficient locating data from the CADE data or from the CPS file were subsampled for CATI interviewing. To adjust for students without sufficient locating data, a weighting class adjustment was performed using the cross of institution type and the students' matching status to financial aid files as weighting classes (the same classes used for WT7). The last two columns of Table 6.2 present the weight adjustment factors.

Since the response rates were quite high, most of the weight adjustment factors are near one. The only exception was for students from public, less than 2-year schools that had no matches to the financial aid files. For these students, the weight adjustment factor was 1.30 (response rate was 76.8 percent).

Table 6.2—Weight adjustment factors for unknown student eligibility status and for insufficient student CADE/CPS data

Weighting class (institution level by student type by matching status to financial aid files)	Adjustment for unknown eligibility		Adjustment for insufficient student CADE/CPS data	
	Number adjusted for unknown eligibility	Weight adjustment factor (WT7)	Number with sufficient CADE/CPS data	Weight adjustment factor (WT8)
Total	28,339	†	58,267	†
Public, less-than-2-year				
Matched Pell or Stafford file	98	0.90	312	1.02
Matched CPS file only	41	0.87	120	1.00
No matches	529	0.74	745	1.30
Public, 2-year				
Matched Pell or Stafford file	623	0.98	1,910	1.00
Matched CPS file only	249	0.94	757	1.00
No matches	2,609	0.85	4,561	1.04
Public, 4-year, non-doctorate-granting				
Undergraduates: Matched Pell or Stafford file	1,215	0.99	4,071	1.00
Matched CPS file only	315	0.95	996	1.00
No matches	1,939	0.95	3,598	1.03
Graduates: Matched Pell or Stafford file	92	1.00	216	1.00
Matched CPS file only	40	0.98	86	1.00
No matches	1,190	0.95	1,441	1.06
Public, 4-year, doctorate-granting				
Undergraduates: Matched Pell or Stafford file	1,331	0.99	4,180	1.00
Matched CPS file only	312	0.98	1,106	1.00
No matches	2,414	0.96	4,101	1.05
Graduates: Matched Pell or Stafford file	640	1.00	1,410	1.00
Matched CPS file only	81	0.98	199	1.00
No matches	2,279	0.95	2,789	1.07
Private, not-for-profit, less-than-4-year				
Matched Pell or Stafford file	511	0.98	1,364	1.00
Matched CPS file only	82	0.87	202	1.00
No matches	493	0.85	808	1.03
Private, not-for-profit, 4-year, non-doctorate-granting				
Undergraduate: Matched Pell or Stafford file	951	0.99	3,264	1.00
Matched CPS file only	183	0.99	554	1.00
No matches	1,029	0.96	1,759	1.03
Graduates: Matched Pell or Stafford file	102	0.99	304	1.00
Matched CPS file only	23	1.00	62	1.00
No matches	1,050	0.96	1,358	1.00
Private, not-for-profit, 4-year, doctorate-granting				
Undergraduates: Matched Pell or Stafford file	1,104	1.00	3,272	1.00
Matched CPS file only	190	0.99	633	1.00
No matches	1,693	0.97	2,548	1.08

Table 6.2—Weight adjustment factors for unknown student eligibility status and for insufficient student CADE/CPS Data (continued)

Weighting class (institution level by student type by matching status to financial aid files)	Adjustment for unknown eligibility		Adjustment for insufficient student CADE/CPS data	
	Number adjusted for unknown eligibility	Weight adjustment factor (WT7)	Number with sufficient CADE/CPS data	Weight adjustment factor (WT8)
Graduates: Matched Pell or Stafford file	688	1.00	1,466	1.00
Matched CPS file only	75	0.95	155	1.00
No matches	1,612	0.96	1,925	1.08
Private, for-profit, less than 2-year				
Matched Pell or Stafford file	675	0.96	1,929	1.00
Matched CPS file only	61	0.87	153	1.00
No matches	334	0.92	662	1.02
Private, for-profit, 2-year				
Matched Pell or Stafford file	558	0.97	1,596	1.00
Matched CPS file only	65	0.88	129	1.00
No matches	292	0.93	430	1.04
Private, for-profit, 4-year				
Undergraduates: Matched Pell or Stafford file	224	0.99	535	1.00
Matched CPS file only	30	0.86	64	1.00
No matches	178	0.97	278	1.02
Graduates: Matched Pell or Stafford file	18	1.00	57	1.00
Matched CPS file only	4	0.90	10	1.00
No matches	117	0.97	152	1.00

†Not applicable.

(9) Phase One CATI Sampling Weight (WT9)

As CADE data were received from each institution, students were sampled for phase one of CATI on a flow basis. The students were sampled at a fixed rate by generating a random number for each student and then comparing it against the sampling rate. In the middle of this process, some slight adjustments were made to the fixed sampling rates to stay on target for the desired total sample sizes. The rates were adjusted after accounting for the sample yield from institutions already processed and the expected yield from the remaining institutions. The first column of Table 6.3 presents the average of the phase one sampling rates over all the institutions. The phase one sampling weights were defined to be the reciprocals of these average sampling rates.

## (10) Phase Two CATI Sampling Weight (WT10)

A subsample of the nonrespondents in phase one of CATI were selected for phase two of CATI. These students were subjected to intensive tracing and numerous callbacks to maximize the sample yield and increase the overall response rate. As in phase one, the students were sampled at a fixed rate on a flow basis with midstream adjustments to the fixed rates as institutions were processed. Students who had a firm appointment or had a completed parent interview at the conclusion of the sixth call were selected with certainty.

Table 6.3—Average sampling rates for selection into Phase One and Phase Two of CATI

Student stratum	Phase one	Phase two: CATI weights	Phase two: study weights
Potential FTBs	1.00	1.00	1.00
Other undergraduate, aid applicant	1.00	0.25	0.19
Other undergraduate, not aid applicant	0.70	0.25	0.24
Graduate, aid applicant	1.00	0.28	0.23
Graduate, not aid applicant	0.42	0.25	0.25
First-professional, aid applicant	1.00	0.21	0.19
First-professional, not aid applicant	0.69	0.35	0.43

It is at this point where the weight components for the Study weights and CATI weights are calculated separately because of the different response definitions. For the CATI weights, the average sampling rates were simply the number of students selected for phase two divided by the total number of CATI nonrespondents in phase one. For the Study weights, however, students who were selected for CATI and had complete CADE data were considered Study respondents regardless of their CATI outcome. Thus, the average sampling rates associated with the Study weights were calculated after excluding the students with complete CADE data.

The last two columns of Table 6.3 present the average phase two sampling rates associated with the CATI weights and Study weights. The phase two sampling weights were then defined as the reciprocals of these average sampling rates. The students selected with certainty were assigned a sampling weight equal to one.

(11) Adjustment for Not Locating Student (WT11)

The first type of student nonresponse was not being able to locate (contact) the student. Adjustments for this type of nonresponse were made to compensate for the potential nonresponse bias. Adjustment factors were used that were inverses of predicted response propensities derived from a logistic regression model. The logistic procedure, developed by Folsom (1991), adjusts the weights of respondents so that the adjusted weight sums of respondents reproduce the unadjusted weight sums of respondents and nonrespondents for the predictor variables included in the model.<sup>2</sup> In addition, the procedure provides a formal setting for evaluating variables believed to related to response. To avoid excessive weight variation, the procedure can also constrain the adjustment factors by specifying lower and upper bounds if the bounds are not set too tightly.

Because a much larger number of students was to be used for the CATI weight adjustment, a model for the CATI weights was first determined and then a similar model was used for the Study weights. Candidate predictor variables were chosen that were thought to be predictive of response and were nonmissing for most of the nonrespondents. The candidate predictor variables included

- Number of phone numbers obtained for student,
- Institution type,
- Region,
- Student type,
- Age group,
- Attendance status, and
- Aid status.

Other variables that were considered but were dropped because of too many missing values for the nonrespondents (at the time we were performing the weight adjustments) included

- Race/ethnicity,
- Dependency status,
- Grade point average, and
- Family income.

To detect important interactions for the logistic models, a CHAID (Chi-squared Automatic Interaction Detector) analysis was performed on the predictor variables. The CHAID analysis divided the data into segments which differ with respect to the response variable, ability to locate. The segmentation process first divided the sample into groups based on categories of the most significant predictor of response. It then split each of these groups into smaller

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<sup>2</sup> Folsom, R.E. (1991). "Exponential and Logistic Weight Adjustments for Sampling and Nonresponse Error Reduction." Proceedings of the Social Statistics Section of the American Statistical Association, pp. 197-202.



subgroups based on other predictor variables. It also merged categories of a variable that were found insignificant. This splitting and merging process continued until no more statistically significant predictors were found (or until some other stopping rule was met). The interactions from the final CHAID segments were then defined.

The interaction segments and all the main effect variables were then subjected to variable screening in the logistic procedure. Variables significant at the 10 percent level were retained, with the exception of institution type and student type which were retained regardless of their significance.

Table 6.4 presents the final predictor variables used in the logistic model to adjust the CATI weights and the average weight adjustment factors resulting from these variables. For the Study weights adjustment model, there were not enough students to include the segment interactions. Therefore, the segment variable was replaced with the main effect variable for the number of phone numbers. The predicted probability of locating student-j from the logistic models is given by:

$$\hat{p}_{Lj} = [1 + \exp(-\mathbf{x}_j\boldsymbol{\beta})]^{-1} ,$$

where

$\mathbf{x}_j$  = the row vector of predictor variables, and  
 $\boldsymbol{\beta}$  = the column vector of regression coefficients.

The logistic adjustment factor is then simply the reciprocal of this predicted probability of locating the student, or

$$WT11 = 1 / \hat{p}_{Lj} .$$

The weight adjustment factors from the logistic adjustment are summarized below, and were constrained to not exceed the maximum shown.

Weight Set	Minimum	Median	Maximum
Study weights	1.03	1.14	2.47
CATI weights	1.01	1.22	3.89

Table 6.4— Average weight adjustment factors from logistic model used to adjust CATI weights for student location nonresponse

Logistic model predictor variables	Number of location respondents in phase two	Weighted response rate	Average weight adjustment factor (WT11)
Total	27,385	84.8	1.18
Institutional sector			
Public, less-than-2-year	598	81.6	1.23
Public, 2-year	3,707	84.1	1.19
Public, 4-year, non-doctorate-granting	4,877	84.5	1.18
Public, 4-year, doctorate-granting	5,927	87.5	1.14
Private, not-for-profit, less-than-4 year	1,271	78.2	1.28
Private, not-for-profit, 4-year, non-doctorate-granting	3,255	86.3	1.16
Private, not-for-profit, 4-year, doctorate-granting	4,263	84.1	1.19
Private, for-profit, less-than-2-year	1,779	77.2	1.30
Private, for-profit, 2-year	1,267	78.0	1.28
Private, for-profit, 4-year	441	83.6	1.20
Region			
Plains	2,118	89.3	1.12
Far West	3,915	80.3	1.25
AK, HI, PR	584	75.2	1.33
Other	20,768	85.0	1.18
Student type			
FTBs	13,940	83.8	1.19
Other undergraduates	10,875	85.3	1.17
Graduates	1,698	83.9	1.19
First-professionals	872	87.7	1.14
Age group			
15-23	17,810	86.1	1.16
24-29	4,168	81.4	1.23
30 or older	5,407	85.1	1.18
CHAID segments			
1 = Zero phone numbers	261	36.6	2.73
2 = One phone number, 2-year-or-less schools	199	52.2	1.92
3 = One phone number, 4-year-or-more schools	739	76.0	1.32
4 = Two or more phone numbers, less-than-2-year schools, FTBs	1,380	73.7	1.36
5 = Two or more phone numbers, less-than-2-year schools, not FTBs	1,076	88.0	1.14
6 = Two or more phone numbers, 4-year-non-postdoctoral schools	14,111	86.6	1.15
7 = Two or more phone numbers, 4-year, doctoral school	4,709	92.3	1.08
8 = Two or more phone numbers, doctoral schools, not FTBs	4,910	88.1	1.14

(12) Adjustment for CATI Nonresponse (WT12)

The second type of student nonresponse was if the student refused to be interviewed given that the student was located. The candidate predictor variables were the same candidate variables used in the location nonresponse adjustment (WT11). As in the location adjustment a CHAID analysis was performed on the predictor variables to detect important interactions. The resulting segment interactions and all the main effect variables in the logistic modeling at the 10 percent significance level were then screened.

Table 6.5 presents the final predictor variables used in the logistic model to adjust the CATI weights and the average weight adjustment factor resulting from these variables. The Study weights adjustment used the same model except replaced the segment variable with the aid status main effect variable. As in the location adjustment, the weight adjustment factor for student-j was the reciprocal of the predicted response probability, or

$$WT12 = 1 / \hat{p}_{rj}$$

The resulting weight adjustment factors are summarized below.

Weight Set	Minimum	Median	Maximum
Study weights	1.10	1.20	1.77
CATI weights	1.01	1.19	1.78

Demographic characteristics of CATI respondents and nonrespondents are compared in the table in Appendix J. This table shows that the distributions of demographic characteristics, such as age, race, income, and receipt of aid are significantly different for CATI respondents and nonrespondents. Some of the statistically significant differences are not large differences, but aid recipients are clearly more likely to be respondents. Therefore, the statistical weight adjustments for CATI locating and nonresponse are definitely important for reducing the potential for nonresponse bias due to these types of differences between the CATI respondents and CATI nonrespondents.

Table 6.5—Average weight adjustment factors from logistic model used to adjust CATI weights for student interview nonresponse

Logistic model predictor variables	Number of interview respondents in phase two	Weighted response rate	Average weight adjustment factor (WT11)
Total	23,386	82.1	1.22
Institutional sector			
Public, less-than-2-year	503	85.8	1.17
Public, 2-year	3,704	78.8	1.27
Public, 4-year, non-doctorate-granting	4,204	83.5	1.20
Public, 4-year, doctorate-granting	5,077	82.9	1.21
Private, not-for-profit, less-than-4 year	1,066	83.0	1.20
Private, not-for-profit, 4-year, non-doctorate-granting	2,841	85.4	1.17
Private, not-for-profit, 4-year, doctorate-granting	3,601	81.8	1.22
Private, for-profit, less-than-2-year	1,543	85.2	1.17
Private, for-profit, 2-year	1,094	86.1	1.16
Private, for-profit, 4-year	383	85.5	1.17
Region			
AK, HI, PR	572	97.7	1.02
Other	22,814	82.0	1.22
Student type			
FTBs	11,918	85.5	1.17
Other Undergraduates	9,366	80.4	1.24
Graduates	1,382	81.5	1.23
First-Professionals	720	84.7	1.18
CHAID segments			
1. Applied for aid, FTB, less than 24 years old	8,038	90.6	1.10
2. Applied for aid, FTB, 24-29 years old	412	76.8	1.30
3. Applied for aid, FTB, 30+ years old	527	83.9	1.19
4. Applied for aid, not FTB	7,296	86.2	1.16
5. Did not apply for aid, less-than-2 year school, less than 24 years old	141	66.2	1.51
6. Did not apply for aid, less-than-2 year school, 24+ years old	370	84.9	1.18
7. Did not apply for aid, 2-year school, FTB	808	78.7	1.27
8. Did not apply for aid, 2-year school, not FTB	1,038	72.4	1.38
9. Did not apply for aid, 4-year or higher school	4,756	79.8	1.25

(13) Weight Trimming Adjustment (WT13)

All of the nonresponse weight adjustments were performed to reduce potential nonresponse bias. Also, to a smaller extent, the multiplicity adjustments reduce potential bias by accounting for the actual probabilities of selection. However, the cumulative effect of all the adjustment factors can cause excessive weight variation causing inflated sampling variances which then increases the mean square error.

The mean square error of an estimate,  $\hat{\theta}$ , is defined as the expected value of the squared total error, or

$$MSE(\hat{\theta}) = E(\theta - \hat{\theta})^2 .$$

This can be rewritten as

$$MSE(\hat{\theta}) = E[\hat{\theta} - E(\hat{\theta})]^2 + [E(\hat{\theta}) - \theta]^2 ,$$

where the first term is the sampling variance and the second term is the bias squared.

By truncating some of the largest weights and smoothing (distributing) the truncated portions over all the weights, the mean square error can usually be reduced by substantially reducing the variance and slightly increasing the bias.

To evaluate the weight variation, the unequal weighting effects on the variance by the cross of institution type and student type were computed as

$$UWE = n \Sigma w^2 / (\Sigma w)^2.$$

When the cumulative effect of the weight adjustment factors caused the unequal weighting effects to be unreasonably large, an upper limit was established for truncation of the largest weights. To distribute the truncated portions, a smoothing adjustment ratio was calculated as the sum of the original weights over the sum of the truncated weights for each class as follows:

$$S_c = \frac{\sum_{icc} W_o(i)}{\sum_{icc} W_T(i)}$$

where  $W_o(I)$  = the original weight (WT1•WT2•...•WT12), and

$W_T(I)$  = the truncated weight (the minimum of the original weight and the upper limit).

The truncation and smoothing steps were then combined into one adjustment factor by defining the weight component as

$$WT13 = \frac{W_t(i)}{W_o(i)} \cdot S_c \quad .$$

(14) Poststratification Adjustment (WT14)

To ensure population coverage, the sampling weights were adjusted to control totals with a generalized raking procedure, that derives adjustment factors from an exponential regression model (Folsom 1991).<sup>3</sup> The algorithm for this procedure is similar to the algorithm used in the logistic procedure for the nonresponse adjustments.

Control totals were established for annual student enrollment; number and amount of Pell grants awarded; and number and amount of Stafford loans awarded. The annual student enrollment was controlled by

- institution type, and
- student type.

The Pell grants were controlled by

- number of Pell grants awarded by institution type,
- number of Pell grants awarded by dependency status, and
- total amount of Pell grant dollars awarded by institution type.

And finally, the Stafford loans were controlled by

- number of Stafford loans by institution type, and
- total amount of Stafford dollars by institution type.

The annual enrollment control totals were estimated by multiplying the “known” fall enrollment totals from the 1995-96 Fall Enrollment Survey by the ratio estimate (based on NPSAS:96 data) of annual enrollment over fall enrollment. Specifically, the annual enrollment

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<sup>3</sup> Folsom, R.E. (1991). “Exponential and Logistic Weight Adjustments for Sampling and Nonresponse Error Reduction.” Proceedings of the Social Statistics Section of the American Statistical Association, pp. 197-202.

control totals were computed as

$$A_{control} = \frac{A_{npsas}}{F_{npsas}} \cdot F_{known} \quad ,$$

where

- $A_{control}$  = annual enrollment control total,
- $A_{npsas}$  = annual enrollment estimated from NPSAS:96,
- $F_{npsas}$  = fall enrollment estimated from NPSAS:96, and
- $F_{known}$  = fall enrollment from the 1995-96 Fall Enrollment Survey.

The exponential adjustment was performed on both the Study weights and the CATI weights. The exponential adjustment satisfies the following constraints:

$$\sum_j W_j \lambda_j \mathbf{x}_j^T = \boldsymbol{\eta}_o^T$$

where

- $W_j$  = the cumulative weight (WT1•WT2•....•WT13),
- $\lambda_j = \exp(\alpha + \mathbf{x}_j\beta)$ ,
- $\mathbf{x}_j$  = the vector of regressors associated with the domains to be controlled, and
- $\boldsymbol{\eta}_o$  = the set of control totals.

The exponential adjustment factor for student-j is then simply

$$WT14 = \lambda_j \quad .$$

Table 6.6 presents the variables associated with the student enrollment control totals and the average weight adjustment factors by these variables. Similarly, Table 6.7 presents the variables associated with the Pell grant and Stafford loan control totals and the average weight adjustment factors. The weight adjustment factors from the exponential adjustment are summarized below, and were constrained to not exceed the maxima shown.

Weight set	Minimum	Median	Maximum
Study weights	0.48	1.10	2.75
CATI weights	.25	1.08	3.25

After performing this last weight adjustment, the final Study weights and final CATI weights were computed as the product of the 14 weight components and then rounded to the

nearest integer.

Table 6.6— Average weight adjustment factors from exponential model for poststratifying to student enrollment control totals

Exponential model variable	Fall enrollment from 1995-96 fall enrollment survey	Control total for annual enrollment	Average weight adjustment factor (wt14): CATI weights	Average weight adjustment factor (wt14): study weights
Total	15,182,774	19,375,346	1.19	1.19
Student type				
Undergraduate	13,105,442	16,677,555	1.16	1.20
Graduate	1,769,623	2,377,541	1.15	1.16
First-professional	307,709	320,255	1.03	1.07
Institutional sector				
Public, less-than-2-year	140,038	207,617	2.97	2.65
Public, 2-year	5,357,811	7,631,925	1.26	1.30
Public, 4-year, non-doctorate-granting	2,013,174	2,446,951	1.01	1.08
Public, 4-year, doctorate-granting	3,839,249	4,332,172	1.05	1.11
Private, not-for-profit, less-than-4 year	170,620	223,510	1.16	1.24
Private, not-for-profit, 4-year, non-doctorate-	1,538,354	1,840,856	1.19	1.18
Private, not-for-profit, 4-year, doctorate-	1,501,877	1,720,128	1.08	1.07
Private, for-profit, less-than-2-year	275,677	477,817	1.87	1.85
Private, for-profit, 2-year	223,702	346,011	1.33	1.26
Private, for-profit, 4-year	122,272	148,359	0.88	0.84

## 6.2 FTB Weights

Since FTB status is known only for CATI respondents, the CATI weights are the analysis weights for students who are known to be FTBs. However, FTBs whose first postsecondary institution was not the NPSAS sample institution will not be followed longitudinally in the BPS:96 study. Therefore, the FTB weights were computed by making a final weighting class adjustment to the CATI weights by institution type to compensate for excluding FTBs whose first school was not the sample institution. All the adjustment factors were close to one ranging from 1.00 to 1.02.





Table 6.7—Average weight adjustment factors from exponential model for poststratifying to Pell grant and Stafford loan control total

Exponential model variable	Control total for <i>number</i> awarded	Control total for <i>dollars</i> awarded	Average weight adjustment factor, WT14: CATI weights ( <i>number, dollars</i> )	Average weight adjustment factor, WT14: study weights ( <i>number, dollars</i> )
<b>Pell grants/institutional level</b>				
Total	3,609,752	5,450,732,592	†	†
Public, less-than-2-year	53,154	66,817,833	(2.86, 2.67)	(2.38, 2.30)
Public, 2-year	1,143,481	1,596,097,492	(1.00, 0.97)	(0.96, 0.99)
Public, 4-year only	229,070	364,590,952	(0.77, 0.77)	(0.84, 0.84)
Public, 5-years or more	1,077,024	1,716,099,421	(1.15, 1.17)	(1.12, 1.14)
Private, not-for-profit, less than 4-year	85,969	130,830,185	(1.08, 1.01)	(1.12, 1.10)
Private, not-for-profit, 4-year only	310,817	501,865,411	(1.22, 1.25)	(1.13, 1.14)
Private, not-for-profit, 5-years or more	238,750	393,263,456	(0.73, 0.75)	(0.78, 0.78)
Private, for-profit, less than 2-year	282,493	416,342,096	(1.62, 1.52)	(1.61, 1.54)
Private, for-profit, 2- year	144,388	202,058,750	(1.39, 1.33)	(1.26, 1.25)
Private, for-profit, 4-years or more	44,606	62,766,996	(1.22, 1.17)	(1.08, 1.08)
<b>Pell grants/student dependency</b>				
Total	3,609,752	†	†	†
Dependent	1,514,937	†	(1.01, †)	(1.03, †)
Independent, no dependents	673,045	†	(1.06,-†)	(0.98, †)
Independent, with dependents	1,421,770	†	(1.15, --)	(1.08, †)
<b>Stafford loans/institutional level</b>				
Total	6,335,963	24,738,435,300	†	†
Public, 2-year or less	607,137	1,451,663,706	(1.01, 1.03)	(1.03, 1.06)
Public, 4-year or more	2,926,964	11,374,603,646	(1.29, 1.52)	(1.23, 1.32)
Private, not-for-profit, 2-year or less	117,835	369,257,211	(1.01, 1.05)	(1.01, 1.02)
Private, not-for-profit, 4-year or more	1,888,104	9,219,303,534	(0.86,1.00)	(0.91, 1.04)
Private, for-profit	795,923	2,323,607,270	(1.20, 1.16)	(1.21, 1.22)

†Not applicable.

### 6.3 CADE Weights

The development of all the CADE weight components was similar to their counterparts in the Study weights and CATI weights. The only differences were that they applied to a different set of respondent data and did not include the CATI weight components. As mentioned earlier, students were considered CADE respondents if their CADE data indicated they were enrolled at the sample institution and their aid status was known either from their CADE data or from their data obtained from the Pell payment file or the National Student Loan Data System. The weight components were as follows:

1. Institution Sampling Weight (WT1),
2. Adjustment for Institution Multiplicity (WT2),
3. Adjustment for Institution Nonresponse (WT3),
4. Student Sampling Weight (WT4),
5. Student Subsampling Weight (WT5),
6. Adjustment for Student Multiplicity (WT6),
7. Adjustment for Student CADE nonresponse (WT7),
8. Weight Trimming Adjustment (WT8), and
9. Poststratification Adjustment (WT9).

### 6.4 Variance Estimation

For probability-based sample surveys, most estimates are nonlinear statistics. Hence, the variances of the estimates cannot be expressed in closed form. For example, a mean or proportion, which is expressed as  $\sum w_y / \sum w$ , is nonlinear because the denominator is a survey estimate of the (unknown) population total. Two common procedures for estimating variances of survey statistics are the Taylor series linearization procedure and the Jackknife replicate procedure, which are both available for NPSAS:96. Section 6.4.1 discuss the analysis strata and replicates created for the Taylor series procedure and Section 6.4.2 discusses the replicate weights created for the Jackknife procedure.

Also, to measure the effects the complex sample design features had on the variances of survey estimates, Section 6.4.2 presents design effect estimates for several analysis domains.

### 6.4.1 Taylor Series

The Taylor series variance estimation procedure is a well-known technique to estimate the variances of nonlinear statistics. The procedure takes the first-order Taylor series approximation of the nonlinear statistic and then substitutes the linear representation into the appropriate variance formula based on the sample design. Woodruff (1971) presents the mathematical formulation of this procedure and presents an example of the technique to sample surveys.<sup>4</sup>

For stratified multistage surveys, the Taylor series procedure requires analysis strata and analysis replicates defined from the sampling strata and PSUs used in the first-stage of sampling. For NPSAS:96, analysis strata and replicates for three separate data bases were defined: all students, all undergraduate students, and all graduate/first-professional students.

The first step was identify the sampling PSUs. As discussed in Section 2.2.1, the PSUs included the 842 noncertainty institutions. For the 131 certainty institutions, however, the students represent the first-stage of sampling. To resemble the noncertainty institution PSUs, two pseudo-PSUs were created within each certainty institution by randomly assigning sample students into two equal-sized groups.

The next step was to sort the PSUs and pseudo-PSUs by the nine institutional strata and then by the implicit stratification variables used to select the noncertainty institutions. These variables were institution sector, region, and the institution's size measure. From this sorted list, an analysis stratum was then defined each time the value of region (the last discrete sorting variable) changed. Regions were collapsed or split to create approximately the same size analysis strata. This process resulted in 51 analysis strata for all students, 51 analysis strata for undergraduate students, and 42 analysis strata for graduate/first-professional students.

The analysis replicates were then defined within the analysis strata by collapsing the PSUs and pseudo-PSUs as required so each replicate did not contain less than four CADE, Study, or CATI respondents. This sample size requirement will ensure stable variance estimates.

The names of the analysis strata and replicates and the associated data bases are as follows:

- ANALSTR, ANALREP: Analysis strata and replicates for all students,
- UANALSTR, UANALREP: Analysis strata and replicates for undergraduates, and
- GANALSTR, GANALREP: Analysis strata and replicates for graduate/first-professional students.

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<sup>4</sup> Woodruff, R.S. (1971). "A Simple Method for Approximating the Variance of a Complicated Estimate." *Journal of the American Statistical Association*, Vol. 66, pp. 411-414.

## 6.4.2 Jackknife Replication

The Jackknife procedure is another available variance estimation procedure that computes the variance based on a set of “sample” replicates. A sample replicate is created by randomly removing an analysis PSU within an analysis stratum (as if that PSU had not been selected) and adjusting the weights of the remaining PSUs to preserve the stratum weight total. Typically, the Jackknife procedure assumes two analysis PSUs for each analysis stratum so that the number of replicate weights equals the number of analysis strata.

For Jackknife variance estimation, thirty to sixty replicate weights are usually recommended (Rust, 1986).<sup>5</sup> Adhering to this general recommendation, the Jackknife analysis strata were defined to be the same as the analysis strata defined for the Taylor series procedure. This included

- 51 Jackknife strata for all students,
- 51 Jackknife strata for undergraduate students, and
- 42 Jackknife strata for graduate students.

Then, two Jackknife PSUs were created within each stratum by collapsing the Taylor series analysis replicates.

Based on the Jackknife strata and replicate definitions, we created replicate weights associated with the Study weights, CATI weights, and CADE weights. For the Study and CATI weights, this included separate replicate weights for all students, undergraduates only, and graduates only. Thus, a total of seven replicate weight sets were created:

- JDWT1-JDWT51: Study replicate weights for all students,
- JDUWT1-JDUWT51: Study replicate weights for undergraduates,
- JDGWT1-JDGW42: Study replicate weights for graduate/first-professional students,
- JCWT1-JCWT51: CATI replicate weights for all students,
- JCUWT1-JCGWT51: CATI replicate weights for undergraduates,
- JCGWT1-JCGWT42: CATI replicate weights for graduate/first-professional students, and

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<sup>5</sup> Rust, K. (1986). “Efficient Replicated Variance Estimation.” Proceedings of the American Statistical Association Section of Survey Research Methods, pp. 81-87.

- JCADEW1-JCADEW51: CADE replicate weights for all students.

To create the replicate weights, institution-level replicate weights were defined. For each replicate set, institution weights of one PSU within an analysis stratum were set to zero and the institution weights of the other PSU were ratio-adjusted to preserve the analysis stratum weight total. The institution weights in the other strata remained unchanged. Therefore, the number of replicates is identical to the number of analysis strata.

Then for each set of institution-level replicate weights, all the sampling weight components and weight adjustments were computed as described in the previous sections. Therefore, the Jackknife replicate weights produce variance estimates which incorporate the variance components associated with the nonresponse weight adjustments.

### 6.4.3 Design Effects

The survey design effect for a statistic is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical). It is often used to measure the effects that sample design features have on the precision of survey estimates. For example, stratification tends to decrease the variance, but multistage sampling and unequal probabilities of selection usually increase the variance. Also, weight adjustments for nonresponse, which are performed to reduce nonresponse bias, increase the variance by increasing the weight variation. Because of these effects, most complex multi-stage sampling designs, like NPSAS:96, result in a design effects greater than one. That is, the design-based variance is larger than the simple random sample variance.

Specifically, the survey design effect for a given estimate,  $\hat{\theta}$ , is defined as

$$Deff(\hat{\theta}) = \frac{Var_{design}(\hat{\theta})}{Var_{srs}(\hat{\theta})} .$$

Also, the square root of the design effect is another useful measure, which can also be expressed as the ratio of the standard errors, or

$$Deft(\hat{\theta}) = \frac{SE_{design}(\hat{\theta})}{SE_{srs}(\hat{\theta})} .$$

In Appendix F, design effect estimates are presented to summarize the effects of stratification, multistage sampling, unequal probabilities of selection, and the nonresponse weight adjustments. These design effects were estimated using SUDAAN, which uses the Taylor series variance estimation procedure.<sup>6</sup> Appendix F presents 50 tables of design effect estimates for important survey estimates among undergraduate students, graduate students, and first-professional students. The tables include design effects based on the Study weights and on the CATI weights. The Tables are presented as follows:

- Tables F.1-F.19: Design effects for undergraduates based on Study weights,
- Tables F.20-F.38: Design effects for undergraduates based on CATI weights,
- Tables F.39-F.41: Design effects for graduates (excluding FPs) based on Study weights,
- Tables F.42-F.44: Design effects for graduates (excluding FPs) based on CATI weights,
- Tables F.45-F.47: Design effects for first-professionals based on Study weights, and
- Tables F.48-F.50: Design effects for first-professionals based on CATI weights.

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<sup>6</sup> Shah, B.V., Barnwell, B.G., and Bieler, G.S. (1995). *SUDAAN User's Manual*. Research Triangle Institute, Research Triangle Park, NC.

# Appendix A

## NPSAS Sampling Details

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# Appendix A

## NPSAS Sampling Details

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### I. Target Population

The ideal target population for NPSAS:96 consists of all students who were enrolled for in postsecondary institutions in the United States or Puerto Rico at any time during the 1995-96 federal financial aid award year, excluding students who were enrolled solely in a GED program or who were concurrently enrolled in high school. As such, the terms of instruction involved would be those beginning between July 1, 1995 and June 30, 1996; however, using this time period to define the survey population would mean that final sampling could not be attempted for many institutions until after the first 1996 summer session began. Consequently, the survey population was defined as those students who were enrolled in any term *beginning* between May 1, 1995 and April 30, 1996.

Both the survey and target populations cover a full 12 months of student enrollment, and most members of the target population are also members of the survey population; however, the adopted definition of the survey population allowed the student lists needed for sample selection to be obtained in January or February for most institutions (e.g., those on a semester calendar system). This definition of the survey population is also completely consistent with that used for NPSAS:93. It also provides substantial comparability with the survey populations for NPSAS:90 and NPSAS:87. (For NPSAS:90, the students sampled were those enrolled on August 1, 1989, October 15, 1989, February 15, 1990, or June 15, 1990 (however, the June 15 enrollees were not sampled for 4-year institutions because of budgetary limitations); for NPSAS:87, only Fall 1986 enrollees were sampled.) Additional sampling constraints were applied, as discussed subsequently in this Appendix.

## **II. Sample Design Overview**

Area-clustered, three-stage sampling designs were used for all previous NPSAS studies, including as stages: (1) geographic areas constructed from 3-digit postal Zip code areas; (2) institutions within sample areas; and (3) students within sample institutions. An area clustered design was necessary for NPSAS:87 because a complete instruction frame was not available at that time, and the frame was supplemented with local sources. An area clustered design was used for the 1990 and 1993 studies to reduce the costs associated with sending field staff to sample institutions to abstract registration and financial aid data for sample students.

As part of the NPSAS:96 field test activities, the feasibility of increasing precision of study estimates by eliminating the geographic area stage of sampling was examined. Both a clustered sample of institutions and an unclustered sample of institutions were selected for NPSAS:96. (The field test sample of institutions was selected from the institutions that were in neither of the institutional samples selected for the full-scale study, to insure that no institution would be burdened by participation in both the field test and full scale surveys). A comparison of expected costs and precision for these two sampling designs (i.e., three-stage vs. two-stage) indicated that: (1) the expected difference in cost between the two designs was not substantial and (2) standard errors for important estimates were expected to be 10 to 25 percent smaller with the two-stage design than those with the three-stage design.

The relatively small cost differential between the two approaches results from greater use of two new procedures for collecting student financial aid information and other information from institutional records. The first of these procedures, introduced in the NPSAS:96 Field Test, involved collecting, through Electronic Data Interchange (EDI), student aid data from the ED central processing system (CPS) prior to any data collection at the involved institution. The second procedure, which was introduced in NPSAS:93, was the use of remote CADE, by institutional staff at most schools and by field staff only at the remainder, to obtain information from school records. Since a two-stage design can only improve precision and the cost penalty

did not appear to be substantial, the two-stage design was fielded for the full-scale NPSAS:96. Comparisons of cost and precision estimates under the two sampling approaches are provided in Tables A.1 and A.2; greater detail on comparisons of cost and precision estimates under the two sampling approach procedures are provided in the NPSAS:96 *Field Test Methodology Report*.<sup>1</sup>

A schematic overview of the sequential statistical sampling process for NPSAS:96 is provided in Figure A.1. The goal of all sampling activities was to attain NCES-required numbers of eligible sample postsecondary students (within specified student and institution types). An important domain of the required student sample was the set of students identified as first-time, beginning students (FTBs), that is, students who began their postsecondary education during the NPSAS year. These students would comprise the baseline cohort for the BPS longitudinal study. Accounting for expected (from prior NPSAS studies) rates of ineligibility among sample students and rates of FTB misclassification, the desired number of sample students were initially determined as shown, by type of institution and type of student classification, in Table A.3. Since it was necessary to select the student samples on a flow basis as sample institutions provided their enrollment lists (in order to meet the data collection schedule), the students were sampled at fixed rates. Under this approach, the actual numbers of students sampled are random variables; however, the sampling rates were set to meet or exceed, in expectation, the sample sizes shown in Table A.3.

The NPSAS:96 sample was also designed to achieve at least 30 student CATI respondents from each sample institution that had at least that many eligible students enrolled during the NPSAS year. This was to allow NCES to send each participating institution a report using the results of the interviews with their students without violating confidentiality requirements. Consequently, institution sample sizes were determined to achieve an average of approximately 50 or more sample students per institution within each institutional stratum.

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<sup>1</sup>Research Triangle Institute, *National Postsecondary Student Aid Study: 1996--Field Test Methodology Report*, (Working Paper No. 96-17). National Center for Education Statistics: Washington, DC; Author; July 1996.

Table A.1—Estimated costs for implementing CADE student record abstractions for the full-scale NPSAS:96 under two sampling designs and two levels of field-CADE schools

School CADE cost category	Assuming 35 percent field-CADE				Assuming 55 percent field-CADE			
	2-stage design		3-stage design		2-stage design		3-stage design	
	Number of schools	Cost estimate	Number of schools	Cost estimate	Number of schools	Cost estimate	Number of schools	Cost estimate
Total	850	780,757	850	760,986	850	1,123,659	850	1,103,796
Self-CADE <sup>a</sup> (subtotal)	553	161,895	553	161,895	383	112,174	383	112,174
Low maintenance	442	94,799	442	94,799	306	65,630	306	65,630
High maintenance	111	67,096	111	67,096	77	46,544	77	46,544
Field-CADE <sup>b</sup> (subtotal)	297	618,862	297	599,091	467	1,011,485	467	991,622
Hard copy	42	42,043	42	42,043	65	65,067	65	65,067
Local (<50 miles)	161	285,987	174	309,080	234	415,659	252	447,632
Auto (50-200 miles)	59	166,385	45	126,904	63	177,655	47	132,544
Air (>200 miles)	37	124,447	36	121,064	105	353,104	103	346,379

NOTE: Number of schools was derived as follows: initial school sample size=973; total eligible schools=895 (92 percent); and estimated number responding schools=850 (95 percent). Costs were estimated directly for the self-CADE schools from past experience, but were modeled for the field-CADE schools in 300 simulations. For each simulation, field-CADE schools were randomly allocated from the simulated sample, a fixed percentage (based on past experience) of these were then allocated to the hard-copy category. Among the remainder, distances were computed from FI home bases and cases assigned to other field-CADE categories as appropriately and differential costs applied. Results shown here reflect averages of the simulation. Estimated costs exclude fixed costs associated with project and task management/oversight, production reporting, secretarial/clerical support, etc.

<sup>a</sup>Schools agreeing to have their own staff perform the CADE record abstraction (with reimbursement where requested).

<sup>b</sup>Schools requiring that CADE abstraction be performed by contractor field interviewer staff.

SOURCE: National Center for Education Statistics. *National Postsecondary Student Aid Study:1996--Field Test Methodology Report* (Working Paper Series). Washington, D.C: Author, July 1996.

Table A.2— Estimated standard errors for selected NPSAS:93 estimates under two NPSAS:96 sampling designs

Data element	Student type	NPSAS:93 estimate <sup>a</sup>	Estimated NPSAS:96 standard error <sup>b</sup>		
			Under 3-stage	Under 2-stage	Percent reduced <sup>c</sup>
Any aid receipt (percent)	Undergraduate	41.4	1.1	0.9	21.8
	Graduate	38.8	1.4	1.1	16.2
Amount of all aid received (average)	Undergraduate	4,171	121	101	17.1
	Graduate	8,497	335	295	11.8
Federal aid receipt (percent)	Undergraduate	32.1	1.1	0.9	23.3
	Graduate	19.4	1.2	1.1	13.7
Amount of federal aid received (average)	Undergraduate	3,556	63	62	0.9
	Graduate	8,548	286	261	8.9
Loan receipt (percent)	Undergraduate	19.8	1.0	0.8	16.0
	Graduate	18.9	1.2	1.0	14.6
Loan amount (average)	Undergraduate	3,266	51	46	8.9
	Graduate	9,231	329	291	11.8
Receipt of federal grant aid (percent)	Undergraduate	22.6	1.0	0.8	15.6
Amount of federal grants (average)	Undergraduate	1,679	22	19	16.5

NOTE: NPSAS:93 estimates and estimated NPSAS:96 errors, reported in this table, were computed for eligible CADE respondents under two assumed sampling designs: the 3-stage sample design used in all prior NPSAS waves and a 2-stage sample design with institutions sampled as the first stage. Reported aid receipt percentages (and associated standard errors) were computed from all cases with determinate data on receipt *or* non-receipt of aid. Averages, however, were computed using only those cases who received the specific type of aid and had a determinate aid amount.

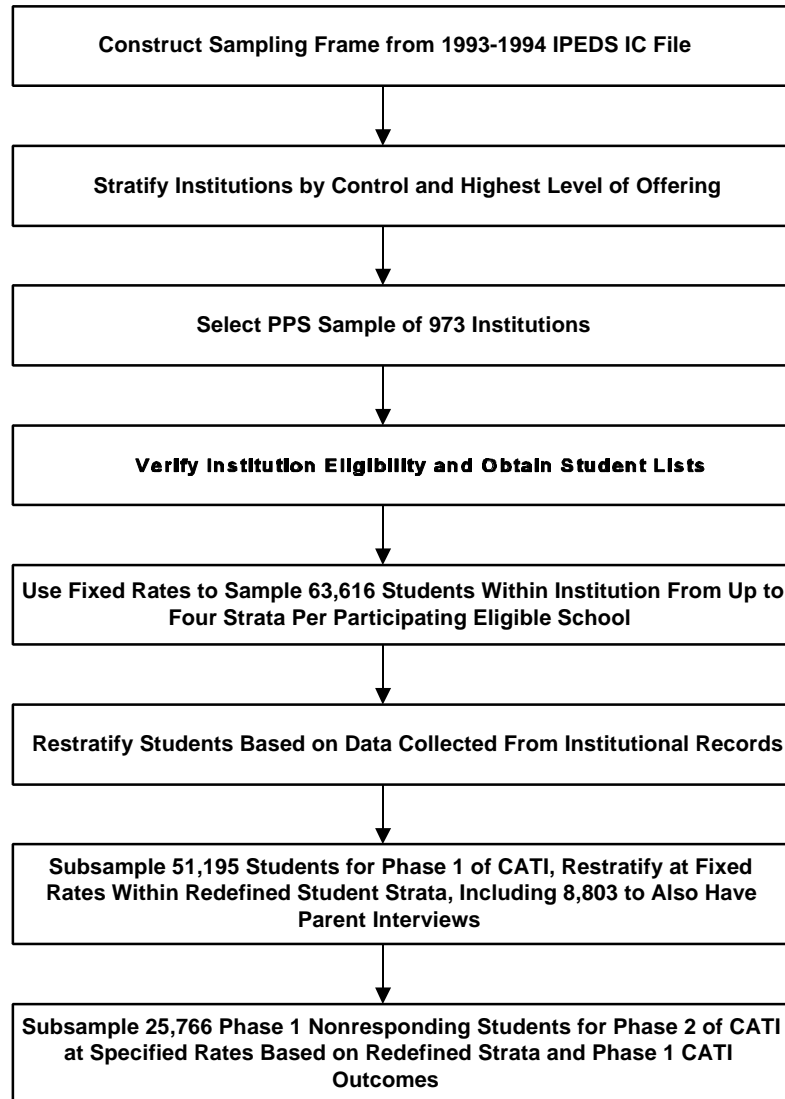
<sup>a</sup>Actual computation from NPSAS:93 CADE data.

<sup>b</sup>Computed using values obtained from NPSAS:93 data, but imposing NPSAS:96 institutional and student sample sizes.

<sup>c</sup>Percentage reflects ratio (before rounding) of the difference (between 3- and 2-stage estimates) to the 3-stage estimate.

SOURCE: National Center for Education Statistics. *National Postsecondary Student Aid Study:1996--Field Test Methodology Report* (Working Paper Series). Washington, D.C.: Author, July 1996.

Figure A.1--Schematic of sequential NPSAS:96 sampling operations



Given these student sample size goals, it was determined that the survey should be based on approximately 850 participating institutions. Based on on projected institutional eligibility and participation rates obtained in prior NPSAS implementations and the NPSAS:96 field test, an initial sample of 973 institutions was selected to yield at least the targeted 850 eligible and participating schools.

Table A.3—Desired total numbers of sample students by institutional stratum and type of student

Institutional stratum	Student stratum				
	Total	Potential FTBs	Other undergraduates	Graduate students <sup>a</sup>	First-Professional students <sup>a</sup>
Total	59,509	22,677	23,908	9,924	3,000
Public, less-than-2-year	1,674	1,575	99	†	†
Public, 2-year	7,761	4,345	3,416	†	†
Public, 4-year, non-doctorate	9,656	2,896	4,860	1,900	†
Public, 4-year, doctorate	13,043	2,471	5,685	3,803	1,084
Private, not-for-profit, less-than-4-year	2,301	1,485	816	†	†
Private, not for profit, non-doctorate	7,918	2,528	3,490	1,900	†
Private, not for profit, 4-year, doctorate	10,691	2,588	4,031	2,198	1,874
Private, not-for-profit, less-than-2-year	3,455	3,318	137	†	†
Private, for-profit, 2-year or more <sup>a</sup>	3,010	1,471	1,374	†	†

<sup>a</sup> Entries do not sum to total because a small sample of graduate and first-professional students was expected from private, for-profit institutions.

† Not applicable.



### **III. The Institutional Sample**

The target population for NPSAS:96 includes nearly all postsecondary institutions in the 50 states, the District of Columbia, and Puerto Rico. Specifically, to be eligible for NPSAS:96 an institution is required, during the 1995-96 academic year, to:

- offer an educational program designed for persons who have completed secondary education; and
- offer more than just correspondence courses; and
- offer at least one academic, occupational, or vocational program off study lasting at least 3 months or 300 clock hours; and
- offer courses that are open to more than the employees or members of the company or group (e.g., union) that administers the institution; and
- be located in the 50 states, the District of Columbia, or Puerto Rico; and
- be other than a U.S. Service Academy (which are not eligible for this financial aid study because of their unique funding/tuition base).

Institutions providing only avocational, recreational, or remedial courses or only in-house courses for their own employees are excluded. The listed eligibility requirements are consistent with those used in previous NPSAS implementations.

#### **A. Sample Frame Construction**

The institution-level sampling frame for NPSAS:96 was constructed from the 1993-94 Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics (IC) file. This data base is considered to provide nearly complete coverage of the institutions in the target population. Listings include: (a) all institutions whose primary purpose is the provision of postsecondary education; (b) all branches of colleges, universities, and other institutions, as long as the branch offers a full program of study (not just courses); (c) free-standing medical schools, as well as schools of nursing, schools of radiology, etc., within hospitals; and (d) schools offering occupational and vocational training with the intent of preparing students for work (e.g., a modeling school training for professional modeling--not just a charm school). The IPEDS files do not include: (a) schools not open to the general public (i.e, training sites a prisons, military installations, corporations); (b) hospitals offering internships or residency programs only; or hospitals that only

offer training as part of a medical school program at an institution of higher education; (c) organizational entities providing only noncredit continuing education (CEUs); (d) schools whose only purpose is to prepare students to take a particular test, (e.g., CPA examination or Bar exams); or (e) branch campuses of U.S. institutions in foreign countries.

The IPEDS IC file exclusions, themselves, eliminate some categories of ineligible institutions; however, additional deletion from this file was required. Starting with the 10,651 “institutions” on this database, records were deleted to yield a sampling frame containing 9,468 institutions *appearing* to be eligible for NPSAS:96 based on their 1993-94 IPEDS IC data. Deletions included: (1) administrative units; (2) U.S. Service academies; (3) schools outside of U.S. and Puerto Rico; (4) institutions offering no programs of at least 300 content hours, six semesters/trimesters, or 12 quarter hours and for which the highest level of offering was a certificate or diploma of less than one academic year; (5) Institutions offering only correspondence courses; and 12 institutions with reported, non-imputed zero enrollment for the 1992-93 academic year.

Because enrollment data were needed to compute measures of size for sample selection, IPEDS “unduplicated count” enrollment data were edited and/or imputed to eliminate missing data. Missing graduate and first-professional enrollments were set to zero for institutions that did not offer that level of instruction. For institutions that provided only undergraduate instruction, missing undergraduate enrollment was obtained from the fall enrollment variables, if those were nonmissing. If summer session enrollment was reported and flagged as not included in the unduplicated head counts, it was added to the unduplicated head counts. Finally, sets of records were identified for which the enrollment data either: (a) were reported with another institution’s , or (b) contained combined data. In such cases, the combined enrollment data were allocated equally to all institutions in the set. For the remaining 108 records with missing enrollment data, imputation classes (defined by institutional sector (level and control) and first-professional offering (yes or no), were created and missing enrollment data were imputed for such cases as the imputation class mean. This approach avoids imputing unusually large or unusually small enrollments.

The remaining institutions were then partitioned into nine institutional strata based on institutional control and highest level of offering:

- (1) Public, less-than-2-year;
- (2) Public, 2-year;
- (3) Public, 4-year, non-doctorate;
- (4) Public, 4-year, doctorate;
- (5) Private, not-for-profit, less-than-4-year;
- (6) Private, not-for-profit, 4-year, non-doctorate;
- (7) Private, not-for-profit, 4-year, doctorate;
- (8) Private, for-profit, less-than-2-year; and
- (9) Private, for-profit, 2-year or more.

A stratified sample of 973 institutions was then selected with probabilities proportional to size (pps); some of these institutions subsequently proved to be ineligible and others failed to participate.

## **B. Selecting Sample Institutions**

It was necessary to allocate the student sample to the separate applicable institutional (defined above) and student sampling strata. The student sampling strata used were:

- (1) potential first-time, beginning students (FTBs)
- (2) other undergraduate students.
- (3) graduate students; and
- (4) first-professional students.

In determining the allocation, the below listed notation is used:

- (1)  $r = 1, 2, \dots, 9$  indexes the previously defined institutional strata;
- (2)  $s = 1, 2, 3, 4$  indexes the previously defined initial student strata;
- (3)  $j = 1, 2, \dots, J(r)$  indexes the institutions within stratum “ $r$ .”

- (4)  $M_{rs}(j)$  = number of students enrolled during the NPSAS year who belong to student stratum “s” at the j-th institution in institutional stratum “r.”
- (5)  $m_{rs}$  = number of students to be selected from student stratum “s” within the r-th institutional stratum (referred to henceforth as student stratum “rs”); and
- (6)  $\pi_r(j)$  = probability of selecting the j-th institution in institutional stratum “r.”

The overall population sampling rate ( $f_{rs}$ ) for student stratum “rs” is given by

$$f_{rs} = m_{rs} / M_{rs} (+) ,$$

where

$$M_{rs}(+) = \sum_{j=1}^{J(r)} M_{rs}(j).$$

The initially computed stratum-level student sampling rates,  $f_{rs}$  (used to define institution measures of size) are shown in Tables A.4 and A.5. Table A.4 presents the sampling rates for the three student domains consisting of undergraduate, graduate, and first-professional students based on the 1993-94 IPEDS IC file counts and the required sample sizes previously presented in Table A.3. The IPEDS files do not provide separate counts for “potential FTB” students; consequently, the partitioning of total undergraduate enrollment into potential FTBs and other undergraduate students was modeled to arrive at the sampling rates for these strata that are shown in Table A.5. The assumptions used to divide the undergraduate student totals into the two sampling strata was conditional on institutional level.

- For less than-2-year institutions, 75 percent of the undergraduate students were assumed to be first-year students, and 90 percent of these first-year students were expected to be classified by the institutions (for sample selection) as potential FTBs.
- For 2-year institutions, 50 percent of the undergraduate students were modeled as first-year students, and 85 percent of those as being classified as potential FTBs.
- For 4-year institutions, the model assumed 30 percent of the undergraduate students would be first-year students and that 75 percent of those would be classified as potential FTBs.

Table A.4—Student sampling rates used in determining measures of size by institutional stratum and type of student

Institutional stratum	Undergraduate students			Graduate students			First-professional students		
	Size of universe <sup>a</sup>	Sample size <sup>b</sup>	Sampling rate	Size of universe <sup>a</sup>	Sample size <sup>b</sup>	Sampling rate	Size of universe <sup>a</sup>	Sample size <sup>c</sup>	Sampling rate
Total	20,295,890	46,585	0.0023	2,523,029	9,924	0.0039	334,838	3,000	0.0090
1. Public, less-than-2-year	420,218	1,674	0.0040	†	†	†	†	†	†
2. Public, 2-year	9,732,504	7,761	0.0008	†	†	†	†	†	†
3. Public, 4-year, non-doctorate	2,365,866	7,756	0.0033	455,236	1,900	0.0042	†	†	†
4. Public, 4-year, doctorate	3,484,229	8,156	0.0023	1,099,384	3,803	0.0035	120,981	1,084	0.0090
5. Private, not-for-profit, less-than-4-year	269,512	2,301	0.0085	†	†	†	†	†	†
6. Private, not-for-profit, 4-year, non-doctorate	1,646,320	6,018	0.0037	297,523	1,900	0.0064	†	†	†
7. Private, not-for-profit, 4-year, doctorate	1,105,601	6,619	0.0060	635,349	2,198	0.0035	209,155	1,874	0.0090
8. Private, for-profit, less-than-2-year	697,373	3,455	0.0050	†	†	†	†	†	†
9. Private, for-profit, 2-year or more <sup>c</sup>	574,267	2,845	0.0050	35,537	†	0.0035	4,702	†	0.0089

<sup>a</sup>Based on 1993-94 IPEDS IC file.

<sup>b</sup>Inflated to account for ineligible students.

<sup>c</sup>Entries do not sum to total because a small sample of graduate and first-professional students was expected from private, for-profit institutions.

†Not applicable.

Table A.5—Sampling rates used in determining measures of size for potential FTB and other undergraduates by institutional stratum

Institutional stratum	Potential FTB's			Other Undergraduates		
	Size of universe <sup>a</sup>	Sample size <sup>b</sup>	Sampling rate	Size of universe <sup>a</sup>	Sample size <sup>b</sup>	Sampling rate
Total	7,167,463	20,561	0.0029	13,128,427	25,982	0.0020
1. Public, less-than-2-year	283,647	1,278	0.0045	136,571	452	0.0033
2. Public, 2-year	4,136,314	3,666	0.0009	5,596,190	4,053	0.0007
3. Public, 4-year, non-doctorate	532,320	2,849	0.0054	1,833,546	4,865	0.0027
4. Public, 4-year, doctorate	783,952	2,996	0.0038	2,700,277	5,116	0.0019
5. Private, not-for-profit, less-than-4-year	134,585	1,306	0.0097	134,927	1,094	0.0081
6. Private, not-for-profit, 4-year, non-doctorate	370,422	2,210	0.0060	1,275,898	3,775	0.0030
7. Private, not-for-profit, 4-year, doctorate	248,760	2,431	0.0098	856,841	4,152	0.0048
8. Private, for-profit, less-than-2-year	470,727	2,474	0.0053	226,646	981	0.0043
9. Private, for-profit, 2-year or more	206,736	1,351	0.0065	367,531	1,494	0.0041

<sup>a</sup>Based on 1993-94 IPEDS IC file, assuming:

- (1) Less-than-2-year: 75 percent of undergraduates are first-year and 90 percent of those are potential FTBs;
- (2) 2-year: 50 percent of undergraduates are first-year and 85 percent of those are potential FTBs;
- (3) 4-year: 30 percent of undergraduates are first-year and 75 percent of those are potential FTBs.

<sup>b</sup>Inflated to account for ineligible students.

The composite measure of size for the j-th institution in stratum “r” was then defined to be

$$S_r(j) = \sum_{s=1}^4 f_{rs} M_{rs}(j),$$

which is the number of students that would be selected from the j-th institution if all institutions on the frame were to be sampled.

An independent sample of institutions was selected for each institutional stratum using Chromy’s<sup>2</sup> sequential, pmr sampling algorithm to select institutions with probabilities proportional to their measures of size. However, rather than allow multiple selections of sample institutions, those with expected frequencies of selection greater than unity (1.00) were selected with certainty. (By precluding institutions with multiple selections at the first stage of sampling, it was unnecessary to select multiple second-stage samples of students.) The remainder of the institutional sample was selected from the remaining institutions within each stratum. Therefore, the probability of selection for the j-th institution in institutional stratum “r” is given by

$$\pi_r(j) = \begin{cases} \frac{n_r^* S_r(j)}{S_r(+)} & \text{for non-certainty selections,} \\ 1 & \text{for certainty selections} \end{cases},$$

where

$$S_r(+) = \sum_{j=1}^{J(r)} S_r(j) \quad ,$$

and  $n_r^*$  is the number of non-certainty selections from stratum "r." The sampling algorithm was implemented with a random start for each institutional stratum to ensure the positive pairwise probabilities of selection that are needed for proper variance estimation.<sup>3</sup> The numbers of certainty and uncertainty schools selected, within each of the nine institutional strata, are shown in Table A.6.

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<sup>2</sup>Chromy, J.R. (1979). “Sequential Sample Selection Methods.” *Proceedings of the American Statistical Association Section on Survey Research Methods*, 401-406.

<sup>3</sup>c.f., Williams, R.L. and Chromy, J.R. (1980). “SAS Sample Selection MACROS.” *Proceedings of the fifth Annual SAS Users Group International Conference*, 392-396.

Table A.6 —Number of certainty and non-certainty institutions sampled, by institutional stratum

Institutional stratum <sup>a</sup>	Sample institutions		
	Total	Certainty	Non-certainty
Total	973	131	842
1. Public, less-than-2-year	39	10	29
2. Public, 2-year	165	7	158
3. Public, 4-year, non-doctorate	125	14	111
4. Public, 4-year, doctorate	124	29	95
5. Private, not-for-profit, less-than-4-year	56	6	50
6. Private, not-for-profit, 4-year, non-doctorate	120	2	118
7. Private, not-for-profit, 4-year, doctorate	143	54	89
8. Private, for-profit, less-than-2-year	120	2	118
9. Private, for-profit, 2-year or more	81	7	74

<sup>a</sup> Stratum reflects institutional categorization as determined from the 1993-94 IPEDS IC file; some errors in this classification were uncovered when institutions were contacted.

Within each of the "r" institutional strata, additional implicit stratification was accomplished by sorting the stratum "r" sampling frame in a serpentine manner<sup>4</sup> by: (a) institutional level of offering (where strata had been collapsed one level); (b) the IPEPS IC-listed OBE Region (with Alaska and Hawaii moved to Region 9) with Puerto Rico; and (c) the institution measure of size. The objectives of this additional, implicit stratification were to approximate proportional representation of institutions on these measures. Table A.7, shows that the geographic distribution of the sample is consistent with that of the subset of institutions from which the sample was selected.

<sup>4</sup>*c.f.*, Chromy, J.R. (1981). "Variance Estimators for a Sequential Sample Selection Procedure." In: D. Krewski, R. Platek, and J.N.K. Rao (Eds.), *Current TopIMS in Survey Sampling*. New York: Academic Press, 329-347.



Table A.7— Distribution of NPSAS:96 institutional sample by OBE region

OBE region <sup>a</sup>	Sample institutions		IPEDS institutions <sup>b</sup>	
	Number	Percent	Number	Percent
1. New England	62	6.4	542	5.7
2. Mid-East	181	18.6	1,557	16.4
3. Great Lakes	150	15.4	1,486	15.7
4. Plains	70	7.2	801	8.5
5. Southeast	194	19.9	2,105	22.2
6. Southwest	89	9.1	878	9.3
7. Rocky Mountains	34	3.5	322	3.4
8. Far West	170	17.5	1,622	17.1
9. Outlying areas	23	2.4	155	1.6

<sup>a</sup> 1 includes CT, ME, MA, NH, RI, VT; 2 includes DE, DC, MD, NJ, NY, PA; 3 includes IL, IN, MI, OH, WI; 4 includes IA, KS, MN, MO, NE, ND, SD; 5 includes AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV; 6 includes AZ, NM, OK, TX; 7 includes CO, ID; 8 includes MT, UT, WY; 9 includes AK, CA, HI, NV, OR, WA; and 9 includes PR.

<sup>b</sup> Counts obtained from the 1993-94 IPEDS IC file, subsetted to those from which the sample was selected.

#### IV. The Student Samples

The initial student sample was selected from lists provided by 836 of the 900 institutions (from the original sample) that proved to be eligible. In addition to this initial (basic) student sampling, additional student subsampling was implemented in NPSAS:96. Because of budgetary constraints, only a subsample of students were selected for interviewing; moreover, interviewing was conducted in two phases, and only a subsample of first phase nonrespondents were selected for the second interviewing phase. Additionally, certain students were selected for whom an interview with their parents would be required to obtain certain data elements. Finally, a small subsample of students was selected for reliability interviews.

## A. Basic Student Sample

The postsecondary students eligible for NPSAS:96 were those who attended a NPSAS-eligible institution during the previously defined NPSAS year and who were:

- enrolled in *either* (a) an academic program; (b) at least one course for credit that could be applied toward fulfilling the requirements for an academic degree; *or* (c) occupational or vocational program that required at least 3 months or 300 clock hours of instruction to receive a degree, certificate, or other formal award;
- not concurrently enrolled in high school; and
- not enrolled *solely* in a GED or other high school completion program.

### 1. Construction of Initial Sampling Frames

Each of the 900 sampled institutions that were verified to be eligible for NPSAS:96 was asked to provide lists of all its students who satisfied all the NPSAS eligibility conditions, preferably nonduplicated, machine-readable lists (diskette, magnetic tape, or electronic mail file), together with identifying and classifying information (see section 2.3.2 below). Although machine-readable files were preferred, the preferences of sample institutions were accommodated, and whatever type(s) of student list(s) they were able to provide were accepted. (Final 1995-96 enrollment lists were available from some institutions as early as February, 1996; however, other institutions could not provide final lists until August, 1996.) Separate, unduplicated lists (in which each student's name appears only once) were requested for first-time beginning other undergraduate, graduate, and first-professional students (the basic student strata) were requested of those providing hard copy lists. As expected, however, many institutions sent separate lists for each term or course of instruction; in which cases an individual student's name could appear on more than one list. In such cases, sampling procedures were used to "unduplicate" the sample, to ensure that each student received only one chance of selection.

### 2. Student Sample Selection

Students were sampled on a flow basis as student lists were received. Stratified systematic sampling was used to ensure comparable sampling procedures for both hard-copy and machine-readable lists. For each institution, the student sampling rates, rather than the student sample sizes, were set to fixed values:

- to facilitate sampling students on a flow basis as student lists were received;
- to facilitate the procedures used to “unduplicate” the samples selected from (duplicated) hard-copy lists; and
- because sampling at a fixed rate based on the overall stratum sampling rates and the institutional probabilities of selection results in approximately equal overall probabilities of selection within the ultimate institution-by-student strata.

Machine-readable lists were unduplicated by sorting on the student ID number and deleting duplicates prior to sample selection. In the case of duplicated hard-copy lists, a stratified systematic sample was selected from each list provided (typically separate lists by term). For unduplication, all students in the sample selected from the fall list were retained for the sample, and the *samples* selected from all other lists were “unduplicated” against the fall list. (The fall term was given precedence in this process for comparability with NPSAS:87, in which only fall enrollees were sampled.) If the institution did not have standard terms, other orderings of the student lists were used to achieve unduplication of the sample. Any students sampled from the next list who were on the full fall list were deleted since they already had a chance of selection from the fall list. In the same manner, samples from subsequent lists were compared to the full lists of *all* lists from which previous samples had been drawn.

After the sample of students had been selected for an institution, the social security numbers of the sample students were compared to those of students who had already been selected from other institutions. When duplicates were detected, the duplicate was eliminated from the sample from the current institution. Multiplicity adjustments in the sample weighting (see below, Chapter 6) accounted for the fact that any students who attended more than one institution in the NPSAS population had more than one chance of selection.

The development of student sampling rates within student stratum  $r$ s (i.e., the  $r$ th institutional stratum and the  $s^{\text{th}}$  student stratum within institutional stratum) were previously discussed in section III.B, and the notation used in that development will be used here. For graduate and first-professional students, these overall student sampling rates were shown in Table A.4. However, for potential FTB students and other undergraduate students, the data from the NPSAS:96 field test (as

adjusted to accommodate the more refined full-scale study rules for institutional identification of potential FTBs, which information was unavailable when the institutional sample was selected) were used to update previous assumptions regarding the proportion of undergraduate students who would be classified by the institutions as potential FTBs and the proportion of potential FTBs who would ultimately be determined to be actual FTBs. Revised estimated percentages of undergraduate students who would be classified as potential FTBs by the sample institutions and percentages of those who would ultimately be classified as true FTBs are shown in Table A.8. These estimates were used to revise student sampling rates for the two undergraduate sampling strata, shown in Table A.9.

Table A.8—Revised sampling design assumptions for undergraduate students strata, based on NPSAS:96 field test

Institutional stratum	Percent eligible <sup>a</sup>	Percent of undergraduates who are potential FTBs <sup>b</sup>	Percent of potential FTBs who actually are FTBs <sup>b</sup>
1. Public, less-than-2-year	91	90	60
2. Public, 2-year	93	40	60
3. Public, 4-year, non-doctorate	98	18	90
4. Public, 4-year, doctorate	98	13	85
5. Private, not-for-profit, less-than-4-year	94	45	65
6. Private, not-for-profit, 4-year, non-doctorate	97	22	80
7. Private, not-for-profit, 4-year, doctorate	97	18	80
8. Private, for-profit, less-than-2-year	94	95	65
9. Private, for-profit, 2-year or more	94	45	65

<sup>a</sup> Based primarily on NPSAS:93 experience.

<sup>b</sup> Based on NPSAS:96 Field Test Results, modified to account for more precise full-scale study rules for institutional identification of FTBs.

Table A.9—Revised potential FTB and other undergraduate sampling rates by institutional stratum

Institutional stratum	Potential FTBs			Other undergraduates		
	Estimated size of universe <sup>a</sup>	Sample size <sup>b</sup>	Sampling rate	Estimated size of universe <sup>a</sup>	Sample size <sup>b</sup>	Sampling rate
Total	6,757,074	22,667	0.0034	13,538,816	23,908	0.0018
1. Public, less-than-2-year	378,196	1,575	0.0042	42,022	99	0.0024
2. Public, 2-year	3,893,002	4,345	0.0011	5,893,502	3,416	0.0006
3. Public, 4-year, non-doctorate	425,856	2,896	0.0068	1,940,010	4,860	0.0025
4. Public, 4-year, doctorate	452,950	2,471	0.0055	3,031,279	5,685	0.0019
5. Private, not-for-profit, less-than-4-year	124,948	1,485	0.0119	144,564	816	0.0056
6. Private, not-for-profit, 4-year, non-doctorate	362,190	2,528	0.0070	1,284,130	3,490	0.0027
7. Private, not-for-profit, 4-year, doctorate	199,008	2,588	0.0130	906,593	4,031	0.0044
8. Private, for-profit, less-than-2- year	662,504	3,318	0.0050	34,869	137	0.0039
9. Private, for-profit, 2-year or more	258,420	1,471	0.0057	315,847	1,374	0.0044

<sup>a</sup> Based on 1993-94 IPEDS student counts and NPSAS:96 field test experience, as modified to account for the more precise full-scale study rules for institutional identification of FTBs.

<sup>b</sup> Inflated to account for ineligible students.

For the unconditional probability of selection to be a constant for all eligible students in stratum “rs,” the overall probability of selection should be the overall student sampling fraction,  $f_{rs}$ ; i.e., we must require that

$$\frac{m_{rs}(j)}{M_{rs}(j)} \pi_r(j) = f_{rs} \quad ,$$

or equivalently,

$$m_{rs}(j) = f_{rs} \frac{M_{rs}(j)}{\pi_r(j)} \quad .$$

Thus, the conditional sampling rate for stratum "rs," given selection of the j-th institution, becomes

$$f_{rs|j} = f_{rs} / \pi_r(j).$$

It should be noted that, in this case, the desired overall student sample size,  $m_s$ , is achieved only *in expectation* over all possible samples.

Achieving the desired sample sizes with equal probabilities within strata in the particular sample that has been selected and simultaneously adjusting for institutional nonresponse and ineligibility requires that

$$\sum_{j \in R} m_{rs}(j) = m_{rs},$$

where "R" denotes the set of eligible, *responding* institutions. Letting the conditional student sampling rate for stratum "rs" in the j-th institution be

$$\hat{f}_{rs|j} = \hat{f}_{rs} / \pi_r(j) \quad ,$$

then requires

$$\sum_{i \in R} \hat{f}_{rs} \frac{M_{rs}(j)}{\pi_r(j)} = m_{rs} \quad ,$$

or equivalently,

$$\hat{f}_{rs} = m_{rs} / \hat{M}_{rs} \quad ,$$

where

$$\hat{M}_{rs} = \frac{\sum_{j \in R} M_{rs}(j)}{\pi_r(j)} .$$

Since it was necessary to set student sampling rates before complete information on institutional eligibility and response status was available,  $\hat{M}_{rs}$  was calculated as follows:

$$\hat{M}_{rs} = \sum_{j \in S} \frac{M_{rs}(j)}{\pi_r(j)} * E_r * R_r * E_{rs} ,$$

where “S” denotes the set of all sample institutions,

- $E_r$  = the institutional eligibility factor for institutional stratum “r,”
- $R_r$  = the institutional response factor for institutional stratum “r,”
- $E_{rs}$  = the student eligibility factor for student stratum “rs.”

These factors were the proportions of institution or students, respectively, expected to be eligible or responding within the defined strata. Since this determination was made after eligibility status had already been determined for some institutions, values of 0 (known not eligible) or 1 (known eligible) were used, if known at that time.

Initial student sampling rates were calculated in this manner for each sample institution; these rates were designed to achieve equal probabilities of selection within the ultimate institution-by-student sampling strata. However, these rates were sometimes modified for reasons listed below.

- The student sampling rates were increased, as needed, so that the sample size achieved at each sample institution would be at least 40 sample students, where possible (The reason for this constraint was to facilitate obtaining at least 30 responding students for most participating institutions, enabling NCES to send a report to the institution regarding its sample students, as a “Thank You” for participation without violating NCES confidentiality guidelines).
- The student sampling rates were decreased if the sample size was more than 50 greater than the institution had been told to expect (This was to facilitate continued participation by the institutions for CADE data abstraction).
- The sample yield was monitored throughout the several months during which student lists were received, and the student sampling rates were adjusted periodically to ensure that the desired student sample sizes were achieved.

These adjustments to the initial sampling rates (especially the first two types of adjustments) resulted in some additional variability in the student sampling rates, and, hence, in some increase in survey design effects.

The actual sample sizes achieved in total and within each institutional and student stratum, are shown in Table A.10. In general, institutions classified fewer students than expected as potential FTBs; consequently, sampling rates for FTBs were increased to obtain the needed sample yield (For 35 four-year institutions, this rate was increased by selecting a supplemental sample). By comparing Table A.10 with Table A.1, it can be seen that the rate adjustment procedures were generally effective; the overall sample yield was actually greater than expected (63,616 students as compared to the target of 59,509).



Table A.10—Realized student sample, by institutional and student strata

Institutional stratum	Total	Student stratum			
		Potential FTBs	Other undergraduates	Graduate students	First-professional students
Total	63,616	23,612	27,536	9,689	2,779
1. Public, less-than-2-year	1,662	1,016	646	†	†
2. Public, 2-year	8,476	4,434	4,042	†	†
3. Public, 4-year, non-doctorate	10,891	3,629	5,454	1,805	†
4. Public, 4-year, doctorate	14,751	3,631	6,228	3,757	1,135
5. Private, not-for-profit, less-than-4-year	2,507	1,404	1,103	†	†
6. Private, not-for-profit, 4-year, non-doctorate	7,734	2,253	3,614	1,857	†
7. Private, not-for-profit, 4-year, doctorate	10,668	2,639	4,353	2,049	1,627
8. Private, for-profit, less-than-2-year	3,414	2,933	481	†	†
9. Private, for-profit, 2-year or more	3,513	1,673	1,615	221	4

Note: The student sample was drawn from 836 schools determined to be eligible and providing lists.

<sup>a</sup>Totals shown include a small number of first-professional students, not shown separately.

†Not applicable

## B. Student Interview Subsample

To accommodate budget constraints, the student interview sampling design for NPSAS:96 required subsampling of those eligible students for whom CADE data had been obtained.

Because subsampling was necessary, an attempt was made to maximize sample yield (completed interviews) without sacrificing response rates by using a two-phase, nonresponse subsampling design. Previously collected student record data (CADE and CPS) were used to partition the basic student sample into nine strata for the Phase 1 CATI subsampling:

- (1) potential FTBs.
- (2) other undergraduate students who were financial aid applicants;
- (3) other undergraduate students who were not financial aid applicants;
- (4) graduate students who were financial aid applicants;
- (5) graduate students who were not not financial aid applicants;
- (6) first-professional students who were financial aid applicants;
- (7) first-professional students who were not financial aid applicants;
- (8) CADE/CPS nonrespondents; and
- (9) students identified as NPSAS-ineligible based on CADE data.

No students were selected from the last two listed strata; however, students were subsampled for CATI at fixed positive rates within each of the remaining (first seven) strata (potential FTBs and federal aid applicants were selected with certainty).

When CPS matching and CADE data collection were completed for a sample institution, the students who had not been identified as ineligible through previously collected data, and for whom such previously collected data were sufficient, were considered eligible for CATI. For the few institutions that either provided no records data or provided them only after the interview subsamples, this determination of eligibility was based on CPS data alone. Basically, all eligible sample students from schools that provided institutional records data were eligible for Phase 1 interviewing. Among the institutions that did not provide institutional record data (or provided them late), most sample students with CPS matches were eligible for interviews. The weight adjustment for records data/CPS nonresponse accounts for the fact that only students with CPS matches (aid applicants) were eligible for interviewing in these institutions (see Chapter 6).

In defining the seven sampling strata from which students were eligible, students were classified as federal aid applicants if either: (a) a match was obtained for the student in the CPS search of 1995-96 federal aid applications, or (b) a Student Aid Report (SAR) was found at the school during record abstraction. Students were classified as undergraduate, graduate, or first-professional students based on their sampling strata with any appropriate revisions based on the institutional records data for their last term of enrollment during the NPSAS year (The last term was used for consistency with the sampling strata used for the basic student sample).

Students who were classified as undergraduate students at the conclusion of CADE were further classified (modeled) as potential FTBs for this subsampling if: (a) either the records data or the SAR indicated that the student graduated from high school in 1995 or 1996; (b) the CPS year-in-school variable indicated that the student was an FTB; or (c) the student's high school graduation year and CPS year-in-school variables were both missing or had undetermined levels, but the student was 18 years of age or younger on December 31, 1995 (i.e., the student's year of

birth was 1977 or later). All *other* students who were classified as undergraduate students at the conclusion of record abstraction were classified for student interview subsampling as indicated below.

- If they *were not* sampled as potential FTBs, they were classified as other undergraduate students for CATI sampling.
- If they *were* sampled as potential FTBs, they also were classified as potential FTBs for student CATI sampling unless:
  - ▶ the records data indicated that the student was not a first-year student during the first term of enrollment during the NPSAS year,
  - ▶ the records data indicated that the student attended the sample institution prior to the NPSAS year, or
  - ▶ the records data indicated that the student had transfer credits from another postsecondary institution;
- Otherwise, they were reclassified as other undergraduate students.

The students, within a particular institution, were then subsampled for Phase 1 of interviewing as shown in Table A.11. Potential FTBs and federal aid applicants were selected for Phase 1 interviewing with certainty. All potential FTBs were also retained for both Phase 1 and Phase 2 because of the need to obtain as many interviews with FTBs as possible for the BPS longitudinal follow-up study. For Phase 1 (and subsequent Phase 2), subsampling rates in other student sampling strata were set to yield an appropriate compromise between high sample yield (high Phase 1 sampling rates and low Phase 2 sampling rates) and low variance inflation (comparable Phase 1 and Phase 2 sampling rates).

Table A.11—Phase 1 student interview subsampling

Student interview sampling stratum <sup>a</sup>	Number eligible for phase 1 <sup>b</sup>	Sampling rate <sup>c</sup>	Number selected
All Students	59,593	0.859	51,195
Potential FTB	20,555	1.000	20,555
Other undergraduate, federal aid applicant	13,758	1.000	13,758
Other undergraduate, not federal aid applicant	13,554	0.703	9,532
Graduate student, federal aid applicant	2,065	1.000	2,065
Graduate student, not federal aid applicant	7,202	0.416	2,999
First-professional, federal aid applicant	1,893	1.000	1,893
First-professional, not federal aid applicant	566	0.694	393

<sup>a</sup> Reflects student reclassification as a result of records data.

<sup>b</sup> Excludes 1,593 CADE nonrespondents and 2,403 sample members determined ineligible for NPSAS, from records data.

<sup>c</sup> Reflects average rate across all sequential samples implemented.

Phase 1 of CATI was defined to end when six telephone calls had been attempted without obtaining a completed interview, or the student:

- or his/her parent had been interviewed;
- was determined to be ineligible for NPSAS;
- initially refused to participate;
- required intensive tracing procedures, or
- was determined to be in a special population (i.e., deaf or language barrier).

All students for whom the sixth call in Phase 1 resulted in a “hard” appointment or for whom a partial interview had been completed (with either the sample student or the student’s parent—see Chapter 3) were retained for Phase 2 with certainty, as were all students in the potential FTB stratum. The remaining Phase 1 nonrespondents, who had not been determined ineligible or exclusions during Phase 1, were subsampled for Phase 2, using specified rates. The numbers of eligible cases for Phase 2 numbers of certainty selections, sampling rates for noncertainty selections, and total Phase 2 selections are shown in Table A.12.

Table A.12—Phase 2 student interview subsampling

Student interview sampling stratum <sup>a</sup>	Number eligible <sup>b</sup>	Certainty selection	Sampling rate <sup>c</sup>	Total selection
All Students	37,814	23,402	0.262	27,178
Potential FTB	14,248	14,248	†	14,248
Other undergraduate, federal aid applicant	10,515	4,312	0.264	5,952
Other undergraduate, not federal aid applicant	7,544	2,733	0.261	3,989
Graduate student, federal aid applicant	1,493	598	0.287	855
Graduate student, not federal aid applicant	2,220	864	0.255	1,210
First-professional, federal aid applicant	1,479	540	0.213	740
First-professional, not federal aid applicant	320	107	0.362	184

<sup>a</sup> Reflects student reclassification as a result of records data.

<sup>b</sup> Excludes Phase 1 respondents and sample members determined to be NPSAS ineligible (N=521) or exclusions (N=57) during Phase 1.

<sup>c</sup> Reflects average rate across all samples implemented, excluding certainty selections.

† Not applicable.

## C. Other Student Subsamples

Some additional subsampling of students, was accomplished during the course of NPSAS:96 in order to: (a) complete important gaps in available data about the student's family financial information, or (b) provide the basis for methodological studies.

### 1. Reliability Reinterview Subsample

Among eligible sample members who *completed* the NPSAS:96 interview, a subsample was selected to participate in a reliability reinterview (containing a small subset of the interview items and to be conducted 3 to 4 weeks after the initial interview—see Chapter 3). The random selection algorithm was programmed directly into the CATI instrument so that selected respondents could be informed of their selection and allowed an opportunity to agree to (and schedule) the reinterview or to refuse it at that time.

The selection rate was set to yield a sample of approximately 300 students among the expected respondents during the first 3 months of interviewing; the time factor was based on the built-in delay in administering the reinterview and the need to complete reinterviews within the same time frame as other interviews. Consequently, the sample was obviously most heavily weighted with students: (a) from institutions at which prior sequential operations (initial sampling, record abstraction) were completed earlier, and (b) who completed the first interview relatively early during the data collection period. Since fewer completion than anticipated were experienced during the first 3 months (see Chapter 3), the sample yield during that period was 256 students.

### 2. Parent Interview Subsample

A subsample of the students selected for Phase 1 of student interviewing also were selected to have their parents interviewed, in order to obtain valid data regarding parents' financial resources (typically not well known by the student). The main purpose of the parent interview was to reduce the number of students, especially dependent students, for whom the parents' income would otherwise have to be imputed. An important historical gap in NPSAS student data has been the income of parents of dependent students who do not apply for financial

aid; among those applying for (and/or receiving) aid, these data are usually obtained from existing records.

Another purpose was to collect parent income data for students who had recently become independent students (for the purposes of federal financial aid applications) as a result of recently becoming 24 years old. Parent data for these students will reduce reliance on imputed parent incomes when analyzing the effect that becoming classified as an independent student has on financing postsecondary education.

Consequently, all the students in the three below-listed student sampling strata were selected with certainty for parent interviews.

- Dependent undergraduate students, not receiving federal aid.
- Dependent undergraduate students, receiving federal aid, whose parents' adjusted gross income was missing in CADE.
- Twenty-four and 25-year-old (newly independent) undergraduate students.

The strata were developed at the conclusion of institutional records collection, and the parent interview subsample was identified among those students selected for Phase 1 interviewing. When the student had been selected for parent interview and either a student interview had been completed in Phase 1 or the student had been selected for Phase 2, the parent interview was attempted throughout the remainder of CATI the interview period. The numbers of students selected for parent interviewing in Phase 1 and in Phase 2, are shown in Table A.13 for each of the three parent sampling strata.

Table A.13—Numbers of students selected for parent interviewing

Parent sampling stratum <sup>a</sup>	Phase 1			Phase 2		
	Number of students eligible <sup>b</sup>	Number of students selected	Effective sampling rate <sup>c</sup>	Number of students eligible <sup>d</sup>	Number of students selected <sup>e</sup>	Effective sampling rate <sup>f</sup>
Total	9,251	8,803	.952	7,687	6,197	0.806
Dependent undergraduate students not receiving financial aid	4,195	4,117	.981	3,520	2,991	0.850
Dependent undergraduate students, receiving financial aid, whose parents' adjusted gross income was missing from institutional records	1,731	1,710	.988	1,439	1,271	0.856
24- and 25-year-old (newly independent) undergraduate students	3,325	2,976	.895	2,728	1,935	0.709

<sup>a</sup>Reflects student reclassification as a result of records data.

<sup>b</sup>This represents all eligible students in defined strata prior to Phase 1 sampling.

<sup>c</sup>This rate reflects only the overall Phase 1 student sampling (average rate across all sequential sampling implemented); all students within these defined strata, who were selected for Phase 1, were designated with certainty for parent interview.

<sup>d</sup>Excludes Phase 1 respondents and sample members determined to be NPSAS ineligible or exclusions during Phase 1.

<sup>e</sup>Includes certainty selections.

<sup>f</sup>Reflects average rate across all samples implemented (consequently, this rate includes Phase 2 certainty selections).





## Appendix B

# Notification Letters to Sample Members

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U. S. DEPARTMENT OF EDUCATION  
OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT

NATIONAL CENTER FOR EDUCATION STATISTICS

Dear Chief Administrator:

Your institution has been selected to participate in the 1996 National Postsecondary Student Aid Study (NPSAS:96), a major nationwide study conducted for the U.S. Department of Education of how students and their families finance education after high school. Thank you for your past participation in the study.

Please appoint a NPSAS Coordinator for your institution to help provide information required for successful conduct of this study. The NPSAS Coordinator should be someone who can orchestrate the information gathering between various staff and departments within your school to identify and pull together information on the enrollment status, financial assistance, and demographic characteristics for each student that is sampled. Because your previous coordinator is familiar with NPSAS, we ask that you appoint the same person, if appropriate, and provide the information on the enclosed reply sheet.

The person you appoint as coordinator of the study will be asked to send the enrollment lists/files for all students enrolled in 1995-96 to our contractor, Research Triangle Institute (RTI). After RTI has identified a sample of students from the enrollment lists provided by your coordinator, institutional records data on enrollment status and information on any financial aid data awarded to the sampled students will be collected. Technical staff from RTI will work with your NPSAS institution coordinator to arrange for data collection in an efficient and convenient manner.

During the past year, the National Center for Education Statistics (NCES) tested procedures for the full-scale study, which will include a sample of approximately 950 institutions, 60,000 students, and 10,000 parents. Further details on the data collection procedures, our assurance of confidentiality, a listing of national organizations that have endorsed the study, and estimates of time commitments for your institution are enclosed.

An RTI representative will contact your coordinator to answer any questions and to discuss the best method of data collection for your institution. If you have any questions about the study or procedures involved prior to this contact, please call Educational Analyst, Katy Ong (1-800-334-8571) at RTI or the NCES Project Officer, Drew Malizio (202-219-1448).

Thank you for your continued cooperation and prompt return of the enclosed reply sheet.

Sincerely,

Jeanne E. Griffith  
Acting Commissioner

WASHINGTON, D.C. 20208- \_\_\_\_\_





U. S. DEPARTMENT OF EDUCATION  
OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT

NATIONAL CENTER FOR EDUCATION STATISTICS

Dear Chief Administrator:

Your institution has been selected to participate in the 1996 National Postsecondary Student Aid Study (NPSAS:96), a major nationwide study, conducted for the U.S. Department of Education, of how students and their families finance education after high school. I am asking that you appoint a NPSAS coordinator for your institution, and provide the information on the enclosed reply sheet. Your institution's participation in NPSAS:96 is very important to the continued success of this study.

NPSAS was first conducted by the National Center for Education Statistics (NCES) during 1986-87. The second and third cycles of NPSAS, completed during 1989-90 and 1992-93, enhanced the basic data collected to meet more fully the needs of the student financial aid community. The National Education Statistics Act of 1994 authorizes NCES to continue conducting this study in response to the need for information on postsecondary students, including financial aid data.

During the past year, NCES tested procedures for the full-scale study which will include a sample of approximately 950 institutions, 60,000 students, and 10,000 parents. Further details on the data collection procedures, our assurance of confidentiality, a listing of national organizations that have endorsed the study, and estimates of time commitments for your institution are enclosed.

We ask that you appoint as NPSAS Coordinator someone who can orchestrate the information gathering between various staff and departments within your school to identify and pull together information on the enrollment status, financial assistance, and demographic characteristics for each student that is sampled. This person will be asked to send the enrollment lists/files for all students enrolled in 1995-96 to our contractor, Research Triangle Institute (RTI). After RTI has identified a sample of students from the enrollment lists provided by your coordinator, institutional records data on the enrollment status and any financial aid data awarded to the sampled students will be collected. Technical staff from RTI will work with your NPSAS institution coordinator to arrange for data collection in an efficient and convenient manner.

An RTI representative will contact your coordinator to answer any questions and to discuss the best method of data collection for your institution. If you have any questions about the study or procedures involved prior to this contact, please call Educational Analyst, Katy Ong (1-800-334-8571) at RTI or the NCES Project Officer, Drew Malizio (202-219-1448).

Thank you for your cooperation and prompt return of the enclosed reply sheet.

Sincerely,

Jeanne E. Griffith  
Acting Commissioner

WASHINGTON, D.C. 20208- \_\_\_\_\_



Center for Research in Education

Dear NPSAS Coordinator:

The Chief Administrator of your institution has appointed you as Coordinator for the 1996 National Postsecondary Student Aid Study (NPSAS:96). NPSAS is being conducted by Research Triangle Institute (RTI) for the National Center for Education Statistics (NCES) of the U.S. Department of Education. During 1996, NCES will conduct the fourth cycle of NPSAS, a major study on how students and their families finance postsecondary education. In response to the continuing need for the data provided by NPSAS, Congress has mandated that NCES conduct this study periodically; prior NPSAS studies were conducted in 1987, 1990, and 1993.

The Chief Administrator of your institution was sent a packet of information describing the study's background, purposes, and processes. In the enclosed binder, we have provided copies of the information the Chief Administrator was sent as well as more detailed information about the specific processes of the study and your important role as the NPSAS Coordinator.

Information from institutions will be gathered in two stages. The first step is to obtain an enrollment file from which RTI will select a sample of students. After RTI has determined a sample of students from your institution, data abstraction of student records will begin. Abstracting student data involves entering data such as locating, demographic, and financial aid information from the sampled students' records using a Computer Assisted Data Entry (CADE) software program. Most NPSAS Coordinators will prefer to delegate this task to an appropriate institution staff member or to allow an RTI field staff member perform this work. To assist you in these tasks, the following items are enclosed:

- General information that describes the institutional component of the study;
- A Coordinator Response Sheet to be returned to RTI;
- Specifications for preparing enrollment files;
- Administrative aids:
  - A Transmittal Sheet for returning the enrollment files;
  - A prepaid Federal Express label for returning the enrollment files; and
  - Labels to be attached to enrollment files for identification purposes.

Please return the completed Coordinator Response Sheet to us at your earliest convenience. You may either FAX it to us or return it to us by mail in the enclosed postage paid envelope.

A member of our staff will be contacting you shortly to verify that you have received this package, to discuss options for providing the enrollment files and the record abstraction process (CADE), and to answer any questions that you may have about the enclosed materials.

If you have any questions prior to our conversation, please do not hesitate to call Katy Ong at 1-800-875-2050. Thank you again for your cooperation.

Sincerely,

John Riccobono, Ph.D.  
Project Director  
Research Triangle Institute

3040 Cornwallis Road • Post Office Box 12194 • Research Triangle Park, North Carolina 27709-2194 USA  
Telephone 919 541-6334 • Fax 919 541-6854









U. S. DEPARTMENT OF EDUCATION  
OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT

NATIONAL CENTER FOR EDUCATION STATISTICS

Spring 1996

Dear Student:

You have been selected to participate in an important study of students who continued their education beyond high school. Research Triangle Institute (RTI), a nationally recognized research company located in North Carolina is conducting the 1996 National Postsecondary Student Aid Study (NPSAS:96) for the United States Department of Education. NPSAS collects information on student demographics, family income, education expenses, employment, living expenses, education aspirations and how students and their families meet the costs of their education beyond high school. In addition to describing characteristics of students enrolled in postsecondary education, the results will be used, in part, to help determine future federal student financial aid policy.

*Because only about one of every 1500 students who were enrolled during 1995-96 has the opportunity to participate in this study, your experiences and opinions are very important to its success. Your responses will represent thousands of students like yourself.*

An interviewer from RTI will contact you by telephone sometime in the near future to ask you some questions about your postsecondary education experiences, especially for the 1995-96 school year. Based on prior studies, you can shorten the interview time if you have any documents about your income and any financial aid you may have received during 1995-96 available at the time of the interviewer's call.

Students enrolled in less-than-2-year institutions, community colleges, 4-year colleges, and major universities in the United States and Puerto Rico, including those who do not receive financial aid and those who do receive aid participate in NPSAS. If you did not receive financial aid, we would like to know how you met the costs of attending school during the 1995-96 year. For example, did you take out any private loans, receive any employer tuition assistance or parental support? If you received student financial aid, did you receive enough to meet your education expenses? If not, did you borrow additional money from relatives? Your data, when combined with that of all students participating in the study, will be used by policymakers when they consider how much federal grant, loan, and work-study aid will be available in the future.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 1830-0666.

WASHINGTON, D.C. 20208- \_\_\_\_\_



The time required to gather the information needed and complete the telephone interview is estimated to vary from 20 to 45 minutes, with an average of about 35 minutes per telephone interview. If you have any comments concerning the accuracy of the time estimates or suggestions for improving the collection of information, write directly to: U.S. Department of Education, National Center for Education Statistics, NPSAS Project Officer #1850-0666, 555 New Jersey Ave NW D.C. 20208.

I want to assure you that NCES and its contractors adhere to the highest standards in protecting the privacy of individuals involved in the studies it undertakes. *Only a limited number of researchers may be authorized by NCES to access information that may identify individuals. They may use the data only for statistical purposes and are subject to fines and imprisonment for misuse. Data will be combined to produce statistical reports for Congress and others. No individual data that links your name, address, telephone number, or student identification number with your responses will be reported. Your participation in NPSAS is strictly voluntary; however, your responses are necessary to make the results of this study accurate and timely.*

Additional information explaining how you were selected and some of the information we have collected from the school you attended during 1995-96 is enclosed. If you have any questions about this study prior to your call from RTI, or if you would like to set up an appointment to be interviewed, please call Marty Nash at RTI. The toll-free number is 1-800-472-6094.

Thank you very much. Your cooperation is greatly appreciated.

Sincerely,



Jeanne E. Griffith  
Acting Commissioner

NOTE: Arrangements have been made to allow the participation of persons who are hearing or speech impaired. Call us (toll free) at 1-800-647-9659 (TDD).

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 1850-0666.

Enclosure



[Letter to Students, from Commissioner--Spanish version]



U. S. DEPARTMENT OF EDUCATION  
OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT

NATIONAL CENTER FOR EDUCATION STATISTICS

Primavera, 1996

Estimado Estudiante,

Usted ha sido seleccionado para tomar parte en un estudio importante acerca de los estudiantes que continuaron su educación después de terminar la escuela superior o la "high school". Research Triangle Institute (RTI), localizada en el estado de Carolina del Norte en los EE.UU., y reconocida a través del país como una compañía encuestadora, está llevando a cabo el Estudio Nacional Sobre Asistencia Económica de Estudiantes de Pos-Secundaria 1996 (NPSAS:96) el cual es patrocinado por el Departamento de Educación Federal de los EE. UU. El estudio recolecta información sobre varios temas tales como: estadísticas demográficas sobre los estudiantes, ingresos de familia, gastos educacionales, empleo, costo de vida, aspiraciones educacionales y los medios por los cuales los estudiantes y sus familias logran pagar el costo de su educación pos-secundaria. Además de proveer las características de los estudiantes que esten matriculados en escuelas pos-secundarias, los resultados serán usados, en parte, para determinar el futuro de la política federal acerca de los recursos para ayuda financiera.

*Dado que solamente 1 de cada 1,500 de los estudiantes que estuvieron matriculados durante el año escolar 1995-96 tendrán la oportunidad de participar en este estudio, la información que usted nos provea sobre sus experiencias y opiniones será muy importante para el éxito del estudio. Sus respuestas representaran a miles de estudiantes como usted.*

Un entrevistador de RTI lo llamará por teléfono en los próximos días para hacerle algunas preguntas acerca de su educación pos-secundaria, específicamente durante el año escolar 1995-96. En base a experiencia obtenida por medio de este estudio en años pasados, sabemos que la entrevista puede hacerse un poco más breve si tiene a la mano documentos sobre sus ingresos y cualquier asistencia económica que haya recibido durante el año escolar 1995-96 cuando se le haga la llamada telefónica.

Estudiantes que esten matriculados en instituciones con programas educativos de menos de 2 años, escuelas comunitarias ("community colleges"), escuelas de 4 años, y universidades principales en los Estados Unidos y Puerto Rico, participarán en NPSAS:96 --incluyendo a esos estudiantes que no reciben ayuda financiera como también aquellos que sí la reciben. Si usted no recibió ayuda financiera, quisieramos saber también cómo pagó los gastos de asistir a la escuela durante el año escolar 1995-96. Por ejemplo, ¿tuvo que hacer un préstamo personal o recibió ayuda de su empleador o de sus padres para pagar la matrícula? Si recibió ayuda financiera para estudiantes, quisieramos saber si recibió suficiente dinero para cubrir sus gastos educacionales. Si no, ¿tuvo que tomar prestado el dinero adicional a un miembro de su familia? La información suya, cuando se combine con las de todos los demás estudiantes que tomen parte en este estudio, ayudará a determinar cuánta ayuda económica federal habrá disponible en el futuro por medio de becas, préstamos, o programas de estudio y trabajo.

De acuerdo con la regla federal "Paperwork Reduction Act of 1995", a ninguna persona se le requiere responder a una recopilación de información sin que se muestre un número válido de control del OMB (Consejería de Presupuestos y Administración Federal). El número válido de control del OMB para esta recopilación de información es 1850-0666.

WASHINGTON, D.C. 20208- \_\_\_\_\_



El tiempo necesario para recopilar la información y completar la entrevista puede ser entre 20 a 45 minutos; el promedio es de 35 minutos por cada entrevista hecha por teléfono. Si usted tiene algún comentario acerca de la exactitud del tiempo estimado para ser entrevistado o alguna sugerencia sobre como mejorar la recopilación de esta información, escribanos directamente al: U.S. Department of Education, National Center for Education Statistics (NCES), NPSAS Project Officer #1850-0666, 555 New Jersey Avenue NW, Washington, DC 20208.

Le aseguramos que NCES y sus representantes siguen las más estrictas normas para proteger los derechos de privacidad de las personas que participan en estudios que se hacen bajo su dirección. *Solamente un número limitado de personas serán autorizadas por NCES para tener acceso a la información que pudiera identificar a un individuo. Estas personas pueden usar los datos únicamente para propósitos estadísticos y están expuestos a ser multados y encarcelados por mal uso de los datos. Toda la información obtenida se unirá para producir reportes estadísticos para el Congreso de los EE. UU. u otras agencias que requieran esta información. La información individual que podría identificar su nombre, dirección, número telefónico, o número de identificación de estudiante, nunca será relacionada con sus respuestas en ningún informe. Su participación en NPSAS:96 es completamente voluntaria, aún así sus respuestas son necesarias para lograr que los resultados de este estudio sean precisos y actualizados.*

Encontrará adjunto información adicional donde se le explica cómo usted fue seleccionado para este estudio y también algunos informes que recopilamos sobre la escuela que usted asistió en el año escolar 1995-96. Si tiene alguna pregunta sobre este estudio antes de recibir la llamada de RTI, o si usted desea hacer una cita previa para dejarnos saber cuando nos podemos comunicar con usted para ser entrevistado, por favor comuníquese con la Sra. Marty Nash al número telefónico, libre de cargos ("toll free"), 1-800-472-6094.

Muchas gracias por su participación. Le agradecemos su cooperación.

Sinceramente,

Pascal D. Forgione  
Comisionado

NOTA: Tenemos disponibles un servicio para personas con impedimentos de audición o del habla-- en inglés solamente. Si usted requiere de este servicio, llámenos, libre de cargos, al 1-800-647-9659 (SRT).

De acuerdo con la regla federal "Paperwork Reduction Act of 1995", a ninguna persona se le requiere responder a una recopilación de información sin que se muestre un número válido de control del OMB (Consejería de Presupuestos y Administración Federal). El número válido de control del OMB para esta recopilación de información es 1850-0666.





U. S. DEPARTMENT OF EDUCATION  
OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT

NATIONAL CENTER FOR EDUCATION STATISTICS -

Spring 1996

Dear Parent:

You have been selected to participate in an important study of parents of students who continued their education beyond high school. Research Triangle Institute (RTI), a nationally recognized research company located in North Carolina, is conducting the 1996 National Postsecondary Student Aid Study (NPSAS) for the National Center for Education Statistics of the United States Department of Education. This study provides critical information for policymakers about the costs and financing of postsecondary education in the United States and Puerto Rico.

NPSAS collects information on student demographics, family income, education expenses, employment, living expenses, education aspirations, and how students and their families meet the costs of their education beyond high school. Your family's experiences, when combined with those of all students and parents participating in the study, will be used, in part, to help determine how much federal grant, loan, and work-study aid will be available in the future.

*Because the parents of only about one of every 4000 students who were enrolled during 1995-96 have the opportunity to participate in this study, the information you provide on how you helped finance your child's postsecondary education is very important to its success. Your responses will represent thousands of parents like yourself.*

An interviewer from RTI will contact you by telephone sometime in the near future to ask you some questions about your experiences in financing your child's postsecondary education, especially for the 1995-96 school year. Based on prior studies, you can shorten the interview time if you have any documents about your income available at the time of the interviewer's call.

Parents of students enrolled in less-than-2-year institutions, community colleges, 4-year colleges, and major universities in the United States and Puerto Rico, including those who do not receive financial aid and those who do receive aid, participate in NPSAS. If your child did not receive financial aid, we would like to know how you may have helped your child meet the costs of attending school during the 1995-96 year. For example, if you provided some financial support, did you take out private loans or use money that you may have set aside for other purposes? For families that received student financial aid, we want to know whether students received enough to meet their education expenses. If not, where did the additional money come from?

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 1850-0666.

WASHINGTON, D.C. 20208- \_\_\_\_\_



The time required to gather the information needed and complete the telephone interview is estimated to vary from about 10 to 25 minutes, with an average of about 15-20 minutes per telephone interview. If you have any comments concerning the accuracy of the time estimates or suggestions for improving the collection of information, write directly to: U.S. Department of Education, National Center for Education Statistics, NPSAS Project Officer #1850-0666, 555 New Jersey Avenue, NW, Washington, DC 20208.

I want to assure you that NCES and its contractors adhere to the highest standards in protecting the privacy of individuals involved in the studies it undertakes. *Only a limited number of researchers may be authorized by NCES to access information that may identify individuals. They may use the data only for statistical purposes and are subject to fines and imprisonment for misuse. Data will be combined to produce statistical reports for Congress and others. No individual data that link your name, address, telephone number, or your child's student identification number with your responses will be reported. Your participation in NPSAS is strictly voluntary; however, your responses are necessary to make the results of this study accurate and timely.*

Additional information explaining how you were selected and some of the information we have collected from the school your child attended during 1995-96 is enclosed. If you have any questions about this study prior to your call from RTI, or if you would like to set up an appointment to be interviewed, please call Marty Nash at RTI. The toll-free number is 1-800-472-6094.

Thank you very much. Your cooperation is greatly appreciated.

Sincerely,

Jeanne E. Griffith  
Acting Commissioner

NOTE: Arrangements have been made to allow the participation of persons who are hearing or speech impaired. Call us (toll free) at 1-800-647-9659 (TDD).

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Enclosure





U. S. DEPARTMENT OF EDUCATION  
OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT

NATIONAL CENTER FOR EDUCATION STATISTICS

[Letter to Parents, from Commissioner--Spanish version]

Primavera, 1996

Estimado Padre/Madre,

Usted ha sido seleccionado para tomar parte en un estudio importante acerca de los padres de estudiantes que continuaron su educación después de terminar la escuela superior o la "high school". Research Triangle Institute (RTI), localizada en el estado de Carolina del Norte en los EE.UU., y reconocida a través del país como una compañía encuestadora, está llevando a cabo el Estudio Nacional Sobre Asistencia Económica de Estudiantes de Pos-Secundaria 1996 (NPSAS:96) el cual es patrocinado por el Departamento de Educación Federal de los EE.UU. El estudio recolecta información sobre varios temas tales como: estadísticas demográficas sobre los estudiantes, ingresos de familia, gastos educacionales, empleo, costo de vida, aspiraciones educacionales y los medios por los cuales los estudiantes y sus familias logran pagar el costo de su educación pos-secundaria. La información suya, cuando se combine con la de todos los demás estudiantes y padres de familia que tomen parte en este estudio, será usada, en parte, para determinar cuánta ayuda económica federal habrá disponible en el futuro por medio de becas, préstamos, o programas de estudio y trabajo.

*Dado que los padres de solamente 1 de cada 4,000 de los estudiantes que estuvieron matriculados durante el año escolar 1995-96 tendrán la oportunidad de participar en este estudio, la información que usted nos provea sobre cómo le ayudo a su hijo(a) a pagar los gastos de su educación pos-secundaria es muy importante para el éxito del estudio. Sus respuestas representaran a miles de padres de familia como usted.*

Un entrevistador de RTI lo llamará por teléfono en los próximos días para hacerle algunas preguntas acerca de su experiencia financiera--es decir, cómo pagó por la educación pos-secundaria de su hijo(a)-- específicamente durante el año escolar 1995-96. En base a experiencia obtenida por medio de este estudio en años pasados, sabemos que la entrevista puede hacerse un poco más breve si tiene a la mano documentos sobre sus ingresos cuando se le haga la llamada telefónica.

Los padres de estudiantes que esten matriculados en instituciones con programas educativos de menos de 2 años, escuelas comunitarias ("community colleges"), escuelas de 4 años, y universidades principales en los Estados Unidos y Puerto Rico, participarán en NPSAS:96 --incluyendo a esos estudiantes que no reciben ayuda financiera como también aquellos que sí la reciben. Si su hijo(a) no recibió ayuda financiera, quisieramos saber cómo le pudo ayudar a su hijo(a) a pagar los gastos para poder asistir a la escuela durante el año escolar 1995-96. Por ejemplo, si logró ayudarle economicamente, ¿tuvo que hacer un préstamo personal o usar dinero que había ahorrado para otros propósitos? Para las familias de estudiantes que recibieron ayuda financiera, quisieramos saber si recibieron suficiente dinero para cubrir los gastos educacionales. Si nó, ¿cómo y dónde consiguieron el dinero adicional ?

De acuerdo con la regla federal "Paperwork Reduction Act of 1995", a ninguna persona se le requiere responder a una recopilación de información sin que se muestre un número válido de control del OMB (Consejería de Presupuestos y Administración Federal). El número válido de control del OMB para esta recopilación de información es 1850-0666.

WASHINGTON, D.C. 20208



El tiempo necesario para recopilar la información y completar la entrevista puede ser entre 10 a 25 minutos; el promedio es de 15-20 minutos por cada entrevista hecha por teléfono. Si usted tiene algún comentario acerca de la exactitud del tiempo estimado para ser entrevistado o alguna sugerencia sobre como mejorar la recopilación de esta información, escribanos directamente al: U.S. Department of Education, National Center for Education Statistics (NCES), NPSAS Project Officer #1850-0666, 555 New Jersey Avenue NW, Washington, DC 20208.

Le aseguramos que NCES y sus representantes siguen las más estrictas normas para proteger los derechos de privacidad de las personas que participan en estudios que se hacen bajo su dirección. *Solamente un número limitado de personas seran autorizadas por NCES para tener acceso a la información que pudiera identificar a un individuo. Estas personas pueden usar los datos únicamente para propósitos estadísticos y están expuestos a ser multados y encarcelados por mal uso de los datos. Toda la información obtenida se unirá para producir reportes estadísticos para el Congreso de los EE. UU. u otras agencias que requieran esta información. La información individual que podría identificar su nombre, dirección, número telefónico, o número de identificación de estudiante de su hijo(a), nunca será relacionada con sus respuestas en ningún informe. Su participación en NPSAS:96 es completamente voluntaria, aún así sus respuestas son necesarias para lograr que los resultados de este estudio sean precisos y actualizados.*

Encontrará adjunto información adicional donde se le explica cómo usted fue seleccionado para este estudio y también algunos informes que recopilamos sobre la escuela a la cual asistió su hijo(a) en el año escolar 1995-96. Si tiene alguna pregunta sobre este estudio antes de recibir la llamada de RTI, o si usted desea hacer una cita previa para dejarnos saber cuando nos podemos comunicar con usted para ser entrevistado, por favor comuníquese con la Sra. Marty Nash al número telefónico, libre de cargos ("toll free"), 1-800-472-6094.

Muchas gracias por su participación. Le agradecemos su cooperación.

Sinceramente,

Jeanne E. Griffith  
Comisionado Interino

NOTA: Tenemos disponibles un servicio para personas con impedimentos de audición o del habla-- en inglés solamente. Si usted requiere de este servicio, llámenos, libre de cargos, al 1-800-647-9659 (SRT).

De acuerdo con la regla federal "Paperwork Reduction Act of 1995", a ninguna persona se le requiere responder a una recopilación de información sin que se muestre un número válido de control del OMB (Consejería de Presupuestos y Administración Federal). El número válido de control del OMB para esta recopilación de información es 1850-0666.

# Appendix C

## CADE Facsimile

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1996 NATIONAL POSTSECONDARY STUDENT AID STUDY  
Computer-Assisted-Data-Entry Instrument





For each eligible student, please provide the following data.

### I. REGISTRATION/ADMISSIONS

#### A. Locating Information Subsection

Question Number	Description	Variable
Question 1.	Student's PERMANENT phone number [area code+prefix +number] Student's PERMANENT address Student's PERMANENT city Student's PERMANENT state Student's PERMANENT zip code Student's PERMANENT country (if not USA)	AADRPMAC, AADRPMTE, AADEPMTN AADPMAD1 & ANDPMAD2 AADRPMCY AADRPMST AAPRPMZP, AADPMZPE AADPMCTY
Question 2.	Is the student's LOCAL address same as the PERMANENT address? [y/n]	AAPMISLC
Question 3.	Student's LOCAL phone number [area code +prefix + number] Student's LOCAL address Student's LOCAL city Student's LOCAL state Student's LOCAL zip code	AAPRLCAC, AADRLCTE, AADRLCTN AADLCAD1, AADLCAD2 AADRLCCY AADRLCST AADRLCZP, AADLCZPE
Question 4.	Is address/phone information available for parents of the student? [y/n]	AADPALOC
Question 5.	LAST NAME, FIRST NAME and MIDDLE initial of parent for whom locating information is available.	AAPALAST, APAFIRST, AAPAMIDD
Question 6.	For parent named in Question 5. PARENT'S phone number [ area code + number]  PARENT'S address PARENT'S city PARENT'S state PARENT'S zip code PARENT'S country (if not USA)	AADRPAAC, AADRPAATE, AADRPAATN AADPAAD1, AADPAAD2 AADRPACY AADRPAST AADRPAZP, AADPAZPE AADPACTY
Question 7.	Is other phone/address information available for a DIFFERENT parent at a DIFFERENT address? [y/n]	AADRPTPA
Question 8.	Is other phone/address information available for a relative or friend of the student? [y/n]	AADROTRF
Question 9.	LAST NAME, FIRST NAME and MIDDLE Initial of Question 7 <i>parent</i> OR Question 8 <i>relative/friend</i> for whom locating information is available.	AAOTLAST, AOTFIRST, AOTMIDD



Question Number	Description	Variable
Question 9.	Student's Race/Ethnicity (Use key below) 1. White 2. Black 3. American Indian/Alaska Native 4. Asian or Pacific Islander 5. Other (Specify)	ASTHRACE  ASRACESP
Question 10.	Is the student a U.S. Citizen or U.S. National? [y/n]	ACITIZEN
Question 11.	Is the student a Veteran of the U.S. Armed Forces? [y/n]	AVETERAN

## C. Admissions Information Subsection

*For Undergraduates:*

Question 1.	Is an SAT score available? [y/n] If yes: Student's SAT Verbal Score Student's SAT Math Score Student's SAT Reasoning Score Year SAT taken	ASTSATAV ASTUSATV ASTUSATM ASTUSATR ASTUSATY
Question 2.	Is an ACT score available? [y/n] If yes: Student's Composite ACT Score Year ACT taken	ASTACTAV ASTUACTS ASTUACTY
Question 3.	Is other admissions test scores available? [y/n]	AOTHADMU
Question 4.	Select the test from the list below; provide the SCORE(s) and YEAR TAKEN: 1. ASSET      2. CPAT      3. CPP 4. CPT        5. PAR        6. PSAT 7. TABE       8. TALS (Form A or B) 9. WONDERLIC (Scholastic Level) 10. WONDERLIC (Personnel Level) 11. TOEFL 12. Other Test (Specify)	ADADMTU  AOTHADMU  AOTADTXU

*For Graduate, Doctoral, and First Professional Students:*

Question 1.	Are scores from the Graduate Record Exam (GRE) available for this student? [y/n] If yes: Student's GRE Verbal Score Student's GRE Quantitative Score Student's GRE Analytic Score Year GRE taken	ASTGREAV ASTGRESV ASTGRESM ASTGRESA ASTGGREY
Question 2.	Is other admissions test scores available? [y/n]	AOTHADMG



Question Number	Description	Variable
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## II. ENROLLMENT/TUITION SECTION

A. Enrollment Term Sub-Section *[MUST BE COMPLETED BEFORE TUITION SUB-SECTION]*

	<p>If student was enrolled in a course for credit during the study period (all terms that began between May 1, 1995, and April 30, 1996, should be included), list all terms for which the student was enrolled and provide the following information for each term:</p> <p>Name of Term or Payment Period [EX: Fall, 1994]  Start date of that Term/Period [mm/yr]  End date of that Term/Period [mm/yr]  Attendance Status (use key below):  1 = Full-time  2 = Half-time or more, but less than Full-time  3 = Less than Half-time  Credit or Clock Hours [number]</p>	<p>BTMNM_1-BTMNM_12  BTBMN_1-12/BTBYR_1-12  BTEMN_1-12/BTEYR_1-12  BTATN_1-BTATN_12</p> <p>BTMHR_1-BTMHR_12</p>
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*For Undergraduates Only:*

Question 1.	<p>During [FIRST TERM ENROLLED], in what type of degree program was the student enrolled (Use key below):</p> <p>1 = Associate's Degree Program  2 = Bachelor's Degree Program  3 = Undergraduate Certificate or Other Formal Award  4 = Undergraduate, Non-degree Program  5 = Graduate/Post-Baccalaureate Certification Program (including Teacher Certification)  6 = Master's Degree Program  7 = Doctoral or First Professional Degree Program  8 = Graduate, Other (including non-degree programs)</p>	BENFRDEG
Question 3.	<p>During [FIRST TERM ENROLLED], what was this student's level? (Use key below)</p> <p>1 = 1<sup>st</sup> Year/Freshman  2 = 2<sup>nd</sup> Year/Sophomore  3 = 3<sup>rd</sup> Year/Junior  4 = 4<sup>th</sup> Year/Senior  5 = 5<sup>th</sup> Year or Higher Undergraduate  6 = Undergraduate (unclassified)  7 = Student with advanced degree taking undergraduate courses</p>	BENFRLVL

**NPSAS:96 CADE FACSIMILIE**

Question Number	Description	Variable
Question 6.	During [LAST TERM ENROLLED], in what type of degree program was the student enrolled (Use key below). 1 = Associate's Degree Program 2 = Bachelor's Degree Program 3 = Undergraduate Certificate or Other Formal Award 4 = Undergraduate, Non-degree Program 5 = Graduate/Post-Baccalaureate Certification Program (including Teacher Certification) 6 = Master's Degree Program 7 = Doctoral or First Professional Degree Program 8 = Graduate, Other (including non-degree programs)	BENLADEG
Question 6b	Cumulative GPA	BENNFPGA
Question 6c.	What is the student's current or most recent major or field of study?	BECREMJR
Question 7.	When did this student FIRST enroll at [YOUR INSTITUTION]? (mm/yr)	BEEVERMM/BEEVERY
Question 7b	Was this student enrolled at [YOUR INSTITUTION] at anytime during the 1994-1995 year? [y/n]	BENRLAYR
Question 7c	Was this student ever enrolled at [YOUR INSTITUTION] prior to May 1, 1995? [y/n]	BEENREVR
Question 8.	Did this student transfer any credits from another postsecondary institution? [y/n]	BCRETRAN
Question 9.	Has this student completed the requirements for the [DEGREE]? [y/n]	BDEGCOMP
Question 10.	If the requirements have been completed, will the [DEGREE] be awarded on or before August 31, 1996? [y/n]	BEDEGAWD

*For Graduate Students Only*

Question 1.	During [FIRST TERM ENROLLED], in what type of degree program was the student enrolled? (Use key below)  1 = Associate's Degree Program 2 = Bachelor's Degree Program 3 = Undergraduate Certificate or Other Formal Award 4 = Undergraduate, Non-degree Program 5 = Graduate/Post-Baccalaureate Certification Program (including Teacher Certification) 6 = Master's Degree Program 7 = Doctoral or First Professional Degree Program 8 = Graduate, Other (including non-degree programs)	BENFRDEG
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Question Number	Description	Variable
Question 2.	<p>Which of the following Masters degrees was the student working toward during [FIRST TERM ENROLLED]? (Use key below)</p> <ol style="list-style-type: none"> <li>1. Masters of Business Administration (MBA)</li> <li>2. Masters of Science (MS)</li> <li>3. Masters of Arts (MA)</li> <li>4. Masters of Education (M.Ed)</li> <li>5. Masters of Public Administration (MPA)</li> <li>6. Masters of Arts in Library Sciences (MALS)</li> <li>7. Masters of Public Health (MPH)</li> <li>8. Masters of Fine Arts (MFA)</li> <li>9. Masters of Applied Arts (MAA)</li> <li>10. Masters of Arts in Teaching (MAT)</li> <li>11. Masters of Divinity (M.Div)</li> <li>12. Masters of Social Work (MSW)</li> <li>13. Masters of Landscape Architecture (MLA)</li> <li>14. Masters of Professional Management (MPM)</li> <li>15. Other Masters Degree; not listed above</li> </ol>	BENFRWMA
Question 3.	<p>During [FIRST TERM ENROLLED], what was this student's level? (Use key below)</p> <p>8 = 1<sup>st</sup> Year Graduate/professional  9 = 2<sup>nd</sup> year Graduate/professional  10 = 3<sup>rd</sup> year Graduate/professional  11 = Beyond 3<sup>rd</sup> year Graduate/professional</p>	BENFRLVL
Question 4.	<p>During [LAST TERM ENROLLED], in what type of degree program was the student enrolled (Use key below):</p> <ol style="list-style-type: none"> <li>1 = Associate's Degree Program</li> <li>2 = Bachelor's Degree Program</li> <li>3 = Undergraduate Certificate or Other Formal Award</li> <li>4 = Undergraduate, Non-degree Program</li> <li>5 = Graduate/Post-Baccalaureate Certification Program (including Teacher Certification)</li> <li>6 = Master's Degree Program</li> <li>7 = Doctoral or First Professional Degree Program</li> <li>8 = Graduate, Other (including non-degree programs)</li> </ol>	BENLADEG



NPSAS:96 CADE FACSIMILIE

Question Number	Description	Variable
Question 5.	<p>Which of the following Masters degrees was the student working toward during [LAST TERM ENROLLED]? (Use key below)</p> <p>16. Masters of Business Administration (MBA)            17. Masters of Science (MS)            18. Masters of Arts (MA)            19. Masters of Education (M.Ed)            20. Masters of Public Administration (MPA)            21. Masters of Arts in Library Sciences (MALS)            22. Masters of Public Health (MPH)            23. Masters of Fine Arts (MFA)            24. Masters of Applied Arts (MAA)            25. Masters of Arts in Teaching (MAT)            26. Masters of Divinity (M.Div)            27. Masters of Social Work (MSW)            28. Masters of Landscape Architecture (MLA)            29. Masters of Professional Management (MPM)            30. Other Masters Degree; not listed above</p>	BENLAWMA
Question 5b.	Master's Degree Field of Study.	BENMAFOS
Question 6.	<p>During [LAST TERM ENROLLED], what was this student's level? (Use key below)</p> <p>8 = 1<sup>st</sup> year Graduate/professional            9 = 2<sup>nd</sup> year Graduate/professional            10 = 3<sup>rd</sup> year Graduate/professional            11 = Beyond 3<sup>rd</sup> year Graduate/professional</p>	BENLALVL
Question 6b.	Cumulative GPA	BENNFPGA
Question 7.	When did this student FIRST enroll at [YOUR INSTITUTION]? [mm/yr]	BEEVERMM/BEEVEYYY
Question 7b.	Was this student enrolled at [YOUR INSTITUTION] at anytime during the 1994-1995 year? [y/n]	BENRLAYR
Question 7c.	Was this student ever enrolled at [YOUR INSTITUTION] prior to May 1, 1995? [y/n]	BEENREVR
Question 8.	Did this student transfer any credits from another postsecondary institution? [y/n]	BCRETRAN
Question 9.	Has this student completed the requirements for the [DEGREE]? [y/n]	BDEGCOMP
Question 10.	If the requirements have been completed, will the [DEGREE] be awarded on or before August 31, 1996? [y/mm]	BEDEGAWD

Question Number	Description	Variable
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*For Doctoral First-Professional Students Only.*

Question 1.	<p>During [FIRST TERM ENROLLED], in what type of degree program was the student enrolled? (Use key below)</p> <p>1 = Associate's Degree Program  2 = Bachelor's Degree Program  3 = Undergraduate Certificate or Other Formal Award  4 = Undergraduate, Non-degree Program  5 = Graduate/Post-Baccalaureate Certification Program (including Teacher Certification)  6 = Master's Degree Program  7 = Doctoral or First Professional Degree Program  8 = Graduate, Other (including non-degree programs)</p>	BENFRDEG
Question 2.	<p>Which of the following Doctoral or First Professional degrees was the student working toward during [FIRST TERM ENROLLED]? (Use key below)</p> <p><b>DOCTORAL DEGREES</b></p> <p>1. Doctor of Philosophy (PhD)  2. Doctor of Education (Ed.D)  3. Doctor of Theology (ThD)  4. Doctor of Business Administration (DBA)  5. Doctor of engineering (D.Eng)  6. Doctor of Fine Arts (DFA)  7. Doctor of Public Administration (DPA)  8. Doctor of Science (Dsc/ScD)  9. Other Doctoral Degree  SPECIFY: _____</p> <p><b>FIRST PROFESSIONAL DEGREES</b></p> <p>10. Chiropractic (DC or DCM)  11. Dentistry (DDS or DMD)  12. Medicine (MD)  13. Optometry (OD)  14. Osteopathic Medicine (DO)  15. Pharmacy (Pharm. D)  16. Podiatry (DPM or Pod. D)  17. Veterinary medicine (DUM)  18. Law (LLB or JD)  19. Theology (M.Div., MHL, BD)</p>	<p>BENFRWDF</p> <p>BEFRWDFS</p>
Question 3.	<p>During [FIRST TERM ENROLLED], what was this student's level? (Use key below):</p> <p>8 = 1<sup>st</sup> year Graduate/professional  9 = 2<sup>nd</sup> year Graduate/professional  10 = 3<sup>rd</sup> year Graduate/professional  11 = Beyond 3<sup>rd</sup> year Graduate/professional</p>	BENFRLVL

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Question Number	Description	Variable
Question 4.	<p>LAST TERM ENROLLED], in what type of degree program was the student enrolled (Use key below);</p> <p>1 = Associate’s Degree Program                      2 = Bachelor’s Degree Program                      3 = Undergraduate Certificate or Other Formal Award                      4 = Undergraduate, Non-degree Program                      5 = Graduate/Post-Baccalaureate Certification Program (including Teacher Certification)                      6 = Master’s Degree Program                      7 = Doctoral or First Professional Degree Program                      8 = Graduate, Other (including non-degree programs)</p>	BENLADEG
	<p>Which of the following doctoral or First Professional degrees was the student working toward during [LAST TERM ENROLLED]? (Use key below);</p> <p>DOCTORAL DEGREES</p> <p>1. Doctor of Philosophy (PhD)                      2. Doctor of Education (Ed.D)                      3. Doctor of Theology (ThD)                      4. Doctor of Business Administration (DBA)                      5. Doctor of engineering (D.Eng)                      6. Doctor of Fine Arts (DFA)                      7. Doctor of Public Administration (DPA)                      8. Doctor of Science (Dsc/ScD)                      9. Other Doctoral Degree                      SPECIFY: _____</p> <p>FIRST PROFESSIONAL DEGREES</p> <p>10. Chiropractic (DC or DCM)                      11. Dentistry (DDS or DMD)                      12. Medicine (MD)                      13. Optometry (OD)                      14. Osteopathic Medicine (DO)                      15. Pharmacy (Pharm. D)                      16. Podiatry (DPM or Pod. D)                      17. Veterinary medicine (DVM)                      18. Law (LLB or JD)                      19. Theology (M.Div., MHL, BD)</p>	<p>BENLAWDF</p> <p>BELAWDFS</p>
Question 5b.	Field of Study.	BEG1PFOS

Question Number	Description	Variable
Question 6.	During [LAST TERM ENROLLED], what was this student's level? (Use key below)  8 = 1 <sup>st</sup> year Graduate/professional 9 = 2 <sup>nd</sup> year Graduate/professional 10 = 3 <sup>rd</sup> year Graduate/professional 11 = Beyond 3 <sup>rd</sup> year Graduate/professional	BENLALVL
Question 6b.	Cumulative GPA.	BENNFPGA
Question 7	When did this student FIRST enroll at [YOUR INSTITUTION]? [mm/yr]	BEEVERMM/BEEVERYY
Question 7b.	Was this student enrolled at [YOUR INSTITUTION] at anytime during the 1994-1995 year? [y/n]	BENRLAYR
Question 7c.	Was this student ever enrolled at [YOUR INSTITUTION] prior to May 1, 1995? [y/n]	BEENREVR
Question 8.	Did this student transfer any credits from another postsecondary institution? [y/n]	BCRETRAN
Question 9.	Has this student completed the requirements for the [DEGREE]? [y/n]	BDEGCOMP
Question 10	If the requirements have been completed, will the [DEGREE] be awarded on or before August 31, 1996? [y/mm]	BEDGAWD

*For CLOCK HOUR Institutions ONLY.*

Question 11.	What is the name of the current or most recent program in which this student is enrolled?	BECLKPRG
Question 12.	What is the total length of the program in clock/contact hours? [Specify hours]	BECLKHRS
Question 13.	How many hours (lab and classroom) are required per week? (Specify hours)	BENCLKWK

## B. Tuition Charges

Question 1.	For each term attended by the student (those terms identified in the Enrollment/Term Sub-section above), specify amounts of tuition and fees charged. Please provide separate amounts for each term, if available.	BTUAMT01-BTUAMT12
Question 2.	Total tuition and fees charged for all terms.	BTURN TTL (IF BY TERM) BTUITOT (IF NOT BY TERM)
Question 3.	For tuition purposes, this student was classified as: (Use key below)  1. In jurisdiction (e.g., in-state, in-district, etc.) 2. Out-of-jurisdiction (e.g., out-of-state, out-of-district, etc.)	BTUNJURI

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Question Number	Description	Variable
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III. FINANCIAL AID INFORMATION

A. Financial Aid Awards

Question 1.	<p>Did the student receive any financial aid, such as:</p> <ul style="list-style-type: none"> <li>- assistantships</li> <li>- grants</li> <li>- scholarships</li> <li>- loans</li> <li>- fellowships</li> <li>- tuition waivers</li> <li>- tuition discounts</li> <li>- veterans benefits</li> <li>- employer aid</li> <li>- other financial aid</li> </ul> <p>for terms or courses that BEGAN between May 1, 1995, and April 30, 1996? [y/n]</p>	CFACVANS
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IF NO, YOU HAVE COMPLETED THIS SUBSECTION

Question 2.	<p>Please enter the amounts of financial aid received by the student within each program?</p> <p style="text-align: center;"><u>Federal Aid Programs</u></p> <ul style="list-style-type: none"> <li>B. Pell Grant Program</li> <li>C. FFEL Stafford Loan - Subsidized</li> <li>D. FFEL Stafford Loan - Unsubsidized</li> <li>E. Direct Loan - Subsidized</li> <li>F. Direct Loan - Unsubsidized</li> <li>G. FFEL PLUS Loan</li> <li>H. Direct PLUS Loan</li> <li>I. FSEOG</li> <li>J. Federal Perkins Loan</li> <li>K. FWS (Federal Work Study)</li> </ul> <p><i>NOTE: Pell Grant Program (item A above) will be asked only for undergraduate students; this item is not applicable for Graduate, Doctoral and First-Professional Students.</i></p>	<p>CFADPELL CFASTAFS CFASTAFU CFADIREU CFADIREU CFADPLUS CDIRPLUS CFAFSEOG CPERKINS CFATDFWS</p>
	<p style="text-align: center;"><u>State Aid Programs</u> (List up to 4 awards)</p> <ul style="list-style-type: none"> <li>A. Customized for each state</li> <li>B. Customized for each state</li> <li>C. Customized for each state</li> <li>D. Customized for each state</li> </ul> <p><i>NOTE: State Aid Programs vary by state. Please refer to CADE for the specific items which should be included here for your institution.</i></p>	<p>CFSTATE1 CFSTATE2 CFSTATE3 CFSTATE4</p>

Question Number	Description	Variable
	<p><u>Institutional Grants and Scholarships</u></p> <p>A. Customized for each institution            B. Customized for each institution            C. Customized for each institution            D. Athletic Scholarship            E. Tuition Waivers (employees/dependents)            F. Tuition and Fee Waivers/Discounts            G. Teaching Assistantships/Stipends            H. Research Assistantships/Stipends            I. Graduate Assistantships/Stipends            J. Graduate Fellowships</p> <p><i>NOTE: Institutional Grants and Scholarships - Items A, B, and C, vary by institution. Please refer to CADE for the specific items which should be included here for your institution</i></p> <p><i>ALSO NOTE: Items A, B, C, D, and E are requested for Undergraduates. All items are requested for Graduates, Doctoral, and First-Professional Students.</i></p>	<p>CFAINSTA            CFAINSTB            CFAINSTC            CFATHSCH            CFEMPWAI            CFWAIIDIS            CFTEAASS            CFRESASS            CFGRDASS            CFGRDFEL</p>
	<p><u>Other Awards</u></p>	
	<p>Please also report any other financial aid awarded to the student, provide:</p> <ol style="list-style-type: none"> <li>1. the <i>name</i> of the award</li> <li>2. the <i>type</i> of award (Use key below)           <ol style="list-style-type: none"> <li>1. Grant or scholarship</li> <li>2. Loans</li> <li>3. Work Study</li> <li>4. Assistantship</li> <li>5. Veteran Benefits</li> <li>6. Vocational Rehabilitation</li> <li>7. Tuition Reimbursement</li> <li>8. Other</li> </ol> </li> <li>3. whether the award is <i>need based</i>, <i>merit based</i>, or both <i>need/merit based</i> (Use key below)           <p>N Need based            M Merit based            B Both need and merit based            U Unknown</p> </li> <li>4. the <i>source</i> of the award (Use key below)           <ol style="list-style-type: none"> <li>1. Federal</li> <li>2. State</li> <li>3. Institution</li> <li>4. Employer</li> <li>5. Other</li> </ol> </li> <li>5. the <i>amount</i> of the award</li> </ol>	<p>CFNAME1-CFNAME5            CFATYPE1-CFATYPE5</p> <p>CFANMB1-CFANMB5</p> <p>CFAHSRC1-CFAHSRC5</p> <p>CFAHAMT1-CFAHAMT5</p>

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Question Number	Description	Variable
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**B. Needs Analysis**

Question 1.	Is there financial aid budget information or an Expected Family Contribution (EFC) value available for the student? [y/n]	CBUNFANS
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IF NO, YOU HAVE COMPLETED THIS SUB-SECTION

Question 2.	What was the student's dependency status during the study year for federal financial aid purposes? (Use key below)  1. Dependent 2. Independent 3. Independent, WITH dependents	CNDEPEND
Question 3.	For purposes of determining the student's financial aid budget, was the student's local residence ... ? (Use key below)  1. On-campus or School-Owned Housing 2. Off-Campus or on-School-Owned (without parents) 3. Off-Campus or Non-School-Owned (with parents)	CNCLRES
Question 4.	Please provide the Expected Family Contribution (EFC) amount for the student.	CCADEEFC
Question 5.	Is there a Cost of Attendance or Student Expense Budget available for this student? [y/n]	CNEAVAIL
Question 6.	Please provide line-item budget amounts (if only a total budget amount is available, please provide the total amount; line-item amounts are preferred over a total amount).  1. Tuition and Fees 2. Books and Supplies 3. Room and Board 4. Transportation 5. All Other Expenses <u>OR</u> Total Cost of Attendance	CTUITION CNEBOOKS CNESROOM CNETRANS CNEOTHER  CTOTLCOA

**C. Student Aid Report**

1.	Is there a Student Aid Report (SAR) or computerized SAR data available for this student (y/n)?	CSAVLANS
2.	Student's State of Legal Residence:	CSARLGST
3.	First Bachelor's Degree by 7/1/95: 1. Yes 2. No	CSFSTDEG

Question Number	Description	Variable
4.	College Grade Level in 1995-96: 1. 1st Yr, Never Attended 2. 1st Yr, Attended Before 3. 2nd Yr/Sophomore 4. 3rd Yr/Junior 5. 4th Yr/Senior 6. 5th Yr/Other Undergraduate 7. 1st Yr Graduate/professional 8. 2nd Yr Graduate/professional 9. 3rd Yr Graduate/professional 10. Beyond 3rd Yr Graduate/professional	CSARYEAR
5.	Child Care Paid for How Many Children:	CNUMCHCR
6.	Born Before 1-1-72?  1. Yes 2. No	CSABEF72
7.	Orphan or Ward of Court? 1. Yes 2. No	CSORPHAN
8.	Have Dependents Other than Spouse? 1. Yes 2. No	COTHPND
9.	Number of Family Members in 1995-96: Allowable Range: 0 thru 99	CSSTNFAM
10.	Number in College in 1995-96: Allowable Range: 0 thru 9	CSTNCOLL
11.	Number of Members in Parents family in 1995-96: Allowable Range: 0 thru 99	CSPANFAM
12.	Number in Parents' family in College in 1995-96: Allowable Range: 0 thru 9	CPANCOLL
13	Type of 1994 Tax Form used: 1. Completed 1040A/1040 EZ 2. Completed 1040 3. Estimated 1040A/1040 EZ 4. Estimated 1040 5. Will Not File	CSSTFORM
14.	Exemptions Claimed: Allowable Range: 0 thru 99	CSTNEXEM
15.	Adjusted Gross Income from IRS form: Allowable Range: -999999 thru 999999	CSASTAGI



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Question Number	Description	Variable
16.	U.S. Income Tax Paid: Allowable Range: -99999 thru 99999	CSASTTAX
17.	Student's Income Earned from Work: Allowable Range: -999999 thru 999999	CSSTWORK
18.	Spouse's Income Earned from Work: Allowable Range: -999999 thru 999999	CSSPWORK
19.	Annual Social Security Benefits: Allowable Range: -99999 thru 99999	CSASTSOC
20.	Annual AFDC/ADC: Allowable Range: -99999 thru 99999	CSSTAFDC
21	Annual Child Support Received: Allowable Range: -99999 thru 99999	CSTCHILD
22.	Other Untaxed Income: Allowable Range: -99999 thru 99999	CSTOTHER
23.	Type of 1994 Tax Form used by parents: 1. Completed 1040A/1040 EZ 2. Completed 1040 3. Estimated 1040A/1040 EZ 4. Estimated 1040 5. Will Not File	CSPAFORM
24.	Exemptions Claimed by parents: Allowable Range: 0 thru 99	CPANEXEM
25	Adjusted Gross Income from parents' IRS form: Allowable Range: -999999 thru 999999	CSAPAAGI
26.	U.S. Income Tax Paid by parents: Allowable Range: -99999 thru 99999	CSAPATAX
27.	Father's Income Earned from Work: Allowable Range: -999999 thru 999999	CSFAWORK
28.	Mother's Income Earned from Work: Allowable Range: -999999 thru 999999	CSMOWORK
29.	Parents' Annual Social Security Benefits: Allowable Range: -99999 thru 99999	CSAPASOC
30.	Parents' Annual AFDC/ADC: Allowable Range: -99999 thru 99999	CSPAAFDC
31.	Parents' Annual Child Support Received: Allowable Range: -99999 thru 99999	CPACHILD
32.	Parents' Other Untaxed Income: Allowable Range: -99999 thru 99999	CPAOTHER
33.	Students' Cash, Savings, and Checking: Allowable Range: -999999 thru 999999	CSSTCASH

Question Number	Description	Variable
34.	Student's Other Investments Value: Allowable Range: -999999 thru 999999	CSTINVVL
35.	Student's Other Investments Debt: Allowable Range: -999999 thru 999999	CSTINVDB
36.	Student's Business Value: Allowable Range: -9999999 thru 9999999	CSTBUSVL
37.	Student's Business Debt: Allowable Range: -9999999 thru 9999999	CSTBUSDB
38.	Student's Farm Value: Allowable Range: -9999999 thru 9999999	CSTFRMVL
39.	Student's Farm Debt: Allowable Range: -9999999 thru 9999999	CSTFRMDB
40.	Parents' Cash, Savings, and Checking: Allowable Range: -999999 thru 999999	CSPACASH
41.	Parents' Other Investments Value: Allowable Range: -999999 thru 999999	CPAINVVL
42.	Parents' Other Investments Debt: Allowable Range: -999999 thru 999999	CPAINVDB
43.	Parents' Business Value: Allowable Range: -9999999 thru 9999999	CPABUSVL
44.	Parents' Business Debt: Allowable Range: -9999999 thru 9999999	CPABUSDB
45.	Parents' Farm Value: Allowable Range: -9999999 thru 9999999	CPAFRMVL
46.	Parents' Farm Debt: Allowable Range: -9999999 thru 9999999	CPAFRMDB



## Appendix D

### Student and Parent Interviews

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Student CATI .....	D-3
Student CATI Section A .....	D-3
Student CATI Section B .....	D-13
Student CATI Section C .....	D-21
Student CATI Section D .....	D-27
Student CATI Section E .....	D-33
Student CATI Section F .....	D-41
Student CATI Section G .....	D-49
Student CATI Section H .....	D-55
Student CATI Section I .....	D-63
Student CATI Section J .....	D-69
Parent CATI .....	D-75
Parent CATI Section L .....	D-75
Parent CATI Section M .....	D-81
Parent CATI Section N .....	D-85
Parent CATI Section P .....	D-93
Parent CATI Section Q .....	D-97
Abbreviated Hardcopy (English/Spanish) .....	D-101
Reinterview .....	D-111



Student CATI  
Section A

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<p>SAENROL1</p> <p>According to our information, you were enrolled, and completed at least one term at [NPSAS school] between July 1, 1995 and June 30, 1996. Is that correct? (1=YES 2=NO 3=DROPPED OUT)</p> <p>IF THE RESPONDENT REFUSES USE ESC KEY FOR A BREAKOFF ENTER 3 IF R DROPPED OUT BEFORE COMPLETING A TERM</p> <p>If SAENROL1=1, goto SACERTIF; if SAENROL1=2 or -1, goto SAENROL2. If SAENROL1=3 then goto SADROPMO.</p> <p>SAENROL2</p> <p>Were you enrolled at [NPSAS school] in a term that began between May 1, 1995 and June 30, 1995? (1=YES 2=NO 3=DROPPED OUT)</p> <p>NOTE: THAT IS, ENROLLED ANYTIME BETWEEN MAY 1, 1995 AND JUNE 30, 1995 INTERVIEWER: IF RESPONDENT ANSWERS NO, PROBE IF THEY DROPPED OUT ENTER 3 IF R DROPPED OUT BEFORE COMPLETING A TERM</p> <p>If SAENROL2=1, goto SACERTIF If SAENROL2=2 or -1, goto SAAIDTUI If SAENROL2=3, goto SADROPMO</p> <p>SADROPMO/SADROPYR</p> <p>When did you leave [NPSAS school]?</p> <p>MONTH (1-12) \</p> <p>YEAR (95-96) \</p> <p>SADROPRE</p> <p>Did you receive a full refund of your tuition when you left?</p> <p>1= YES 2= NO</p> <p>If SADROPRE=1, go to A_END If SADROPRE=2 or -1, goto SACERTIF</p>	<p>SACERTIF</p> <p>If level is 2-year or higher, goto SADEGREE.</p> <p>While you were enrolled at [NPSAS school], were you enrolled in a program or taking courses leading to a certificate?</p> <p>1 = YES 2 = NO</p> <p>IF THE RESPONDENT REFUSES USE ESC KEY FOR A BREAKOFF</p> <p>If SACERTIF=1 goto SACLKHSR; if SACERTIF=2, goto SATRNSCR</p> <p>SACLKHSR</p> <p>Did your program of study require at least 300 clock hours of instruction in order for a certificate to be awarded?</p> <p>1 = YES 2 = NO</p> <p>IF THE RESPONDENT REFUSES USE ESC KEY FOR BREAKOFF</p> <p>If SACLKHSR=1, goto SADOBMO; if SACLKHSR=2, goto SATRNSCR</p> <p>SADEGREE</p> <p>While you were enrolled at [NPSAS school], were you enrolled in a program or taking courses leading to a degree, (such as an associate's, bachelor's, or an advanced degree) or a certificate?</p> <p>1 = YES 2 = NO</p> <p>IF THE RESPONDENT REFUSES USE ESC KEY FOR A BREAKOFF</p> <p>If SADEGREE=1, goto SADOBMO; if SADEGREE=2, goto SATRNSCR</p>
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<p>SATRNSCR</p> <p>At anytime between [May 1, 1995 and June 30, 1996,/July 1, 1995 and June 30, 1996] were you enrolled in a course bearing credits that could be transferred to another school?</p> <p>1 = YES 2 = NO</p> <p>IF THE RESPONDENT REFUSES USE ESC KEY FOR A BREAKOFF</p> <p>If SATRNSCR=1, goto SADOBMO; if SATRNSCR=2, goto SAAIDTUI</p> <p>SAAIDTUI</p> <p>If SZFEDAID gt 0</p> <p>According to our records you received financial aid to attend [NPSAS school]. Did you pay tuition to [NPSAS school] for the 95-96 school year?</p> <p>1 = YES 2 = NO</p> <p>IF THE RESPONDENT REFUSES USE ESC KEY FOR A BREAKOFF</p> <p>If SAAIDTUI =1, goto SADOBMO If SAAIDTUI=2, goto SAEVREN</p> <p>SAEVREN</p> <p>Have you ever attended or were you ever enrolled at [NPSAS school]?</p> <p>1 = YES 2 = NO</p> <p>IF THE RESPONDENT REFUSES USE ESC KEY FOR A BREAKOFF AND CODE AS A REFUSAL</p> <p>If SAEVREN=1, goto SALSTENM If SAEVREN=2, goto SAWHYSMP</p> <p>SALSTENM/SALSTENY</p> <p>When were you last enrolled at [NPSAS school]?</p> <p>MONTH: 1 - 12 , -1=DK -2=RE YEAR: 20-96 -1=DK -2=RE</p>	<p>SAWHYSMP</p> <p>Do you know of any reason why my information shows that you were enrolled at [NPSAS school] at some time during the period on or after May 1, 1995?</p> <p>Goto A_END</p> <p>SADOBMO/SADOBDA/SADOBYR</p> <p>If preloaded and SZSTDOB(YY) lt 1950 or gt 1979 goto SADOBVER; else store SZSTDOB in SADOBMO/DA/YR and goto SAHSDIPL.</p> <p>What is your birth date?</p> <p>-1=DK -2=RE MONTH/ DAY /YEAR</p> <p>Goto SAHSDIPL</p> <p>SAAGE</p> <p>Computed for all respondents based on SADOBMO/DA/YR</p> <p>SADOBVER</p> <p>INTERVIEWER: THE RESPONDENT IS OLDER THAN EXPECTED. PLEASE VERIFY THE BIRTHDATE.</p> <p>I have your date of birth as [fill DOB]. Is that correct?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p>
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<p>SAHSDIPL</p> <p>If SZHIGHYR gt 0 and lt 95 and SZHIGHSC eq 1, 2, or 3, store value of SZHIGHSC in SAHSDIPL and SZHIGHYR in SAHSDATE and goto SAHSTYPE. If SZGEDYR gt 0 and lt 95, store &lt;2&gt; in SAHSDIPL and value of SZGEDYR in SAHSDATE and goto SAHSTYPE. Else ask SAHSDIPL.</p> <p>Did you ...</p> <p>1 = receive a high school diploma,                  2 = pass a General Educational Development (GED) test, or                  3 = receive a high school completion certificate?                  4 = DID NOT COMPLETE HIGH SCHOOL OR HIGH SCHOOL EQUIVALENCY PROGRAM                  5 = ATTENDED FOREIGN HIGH SCHOOL                  -1 = DK -2 = RE</p> <p>If SAHSDIPL eq 1, 2, 3, or 5, goto SAHSDATE. If SAHSDIPL=4, -1, or -2, goto SAENRLHS.</p> <p>SAHSDATE</p> <p>When did you receive your [high school diploma/certificate]?</p> <p>YEAR: (30-96) -1=DK -2=RE \</p> <p>SAENRLHS</p> <p>If SAHSDIPL=1, 2, 3, or 5 and SAHSDATE ne 96, goto SAHSTYPE. Else ask SAENRLHS.</p> <p>Were you still completing high school requirements for the entire time you were enrolled in [NPSAS school] between May 1, 1995 and June 30, 1996?</p> <p>1 = YES                  2 = NO                  -1 = DK                  -2 = RE</p> <p>If SAENRLHS=1, then SANPELIG=4; goto A_END.</p>	<p>SAHSTYPE</p> <p>Was your high school a public or private school?</p> <p>INTERVIEWER: PROBE IF PRIVATE,</p> <p>Was it a catholic, other religious, or some other private high school?</p> <p>1 = PUBLIC                  2 = PRIVATE, CATHOLIC                  3 = PRIVATE, OTHER RELIGIOUS                  4 = PRIVATE, OTHER NON-RELIGIOUS                  5 = ATTENDED FOREIGN HIGH SCHOOL                  -1 = DK                  -2 = RE</p> <p>SAFSTSCH</p> <p>What was the first school you ever enrolled in after high school?</p> <p>ENTER 8 IF THE FIRST SCHOOL WAS [NPSAS school] OTHERWISE, DO THE IPEDS CODING IN THE USEREXIT</p> <p>8= THE FIRST SCHOOL IS [NPSAS school]                  1=ENTER/RE-ENTER USEREXIT                  2=SKIP OVER USEREXIT</p> <p>SAFSTMO/SAFSTYR</p> <p>When did you first attend [name of first postsecondary school attended] after high school?</p> <p>INTERVIEWER: IF RESP. SAYS "FALL TERM AFTER HIGH SCHOOL", THEN ENTER THE H.S. GRADUATION YEAR NOTED HERE AND AUGUST FOR MONTH -- CONFIRMING WITH RESPONDENT.</p> <p>H.S. DIPLOMA OR CERTIFICATE WAS RECEIVED IN: [fill SAHSDATE]</p> <p>ENTER MONTH \ YEAR (20-96) -1=DK -2=RE</p>
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<p>SABASCH</p> <p>Skip if STTYPE =1; goto SANPSMO</p> <p>Where did you earn your bachelor's degree?</p> <p>INTERVIEWER: ENTER[ 8 [N]IF THE BACHELOR'S DEGREE WAS EARNED AT [NPSAS school]. ENTER 9 IF THE BACHELOR'S DEGREE WAS EARNED AT [first PS school attended] OTHERWISE, DO THE IPEDS CODING IN THE USEREXIT BACHELOR'S DEGREE WAS EARNED AT...</p> <p>8= ...[NPSAS school] 9= ...[FILL name of first PS school attended]</p> <p>OTHERWISE, CODE THE SCHOOL IN THE USEREXIT.</p> <p>1=RE-ENTER USEREXIT 2=SKIP OVER USEREXIT 5=RESPONDENT DOES NOT HAVE A BACHELOR'S DEGREE 6=DK 7=RE</p> <p>SABA_YR</p> <p>What year did you earn your bachelor's degree?</p> <p>50-96</p> <p>SANPSMO/SANPSYR</p> <p>If SABASCH=8, goto SAENRLYR</p> <p>When did you first attend [NPSAS school] after high school?</p> <p>MONTH / YEAR (20-96) -1=DK -2=RE</p> <p>SAENRLYR</p> <p>Were you enrolled at [NPSAS school] for the 94-95 school year (1=YES 2=NO)? \</p> <p>If SAENRLYR=1 goto SAPRIAID; else goto SAANYLYR.</p> <p>SAANYLYR</p> <p>Were you enrolled at any postsecondary school for 94-95 (1=YES 2=NO)? \</p> <p>If SAANYLYR=1 goto SAPRIAID. Else goto SAENUX_1.</p>	<p>SAPRIAID</p> <p>Did you get any grants, loans, scholarships, assistantships, work-study, or any other financial aid in 1994-95 (1=YES 2=NO)? \</p> <p>SAENUX_1</p> <p>Next, I'll need to ask you about the dates of your enrollment during the 95-96 school year.</p> <p>INTERVIEWER: PLEASE ENTER THE RESPONSES IN THE USER EXIT. REMEMBER TO ASK ABOUT THE OTHER SCHOOLS THEY ATTENDED IN THE 95-96 SCHOOL YEAR</p> <p>1 = ENTER/RE-ENTER THE USEREXIT 2 = SKIP OVER THE USEREXIT</p> <p>SADEGRE1</p> <p>What type of degree or certificate program were you enrolled in during the first term at [NPSAS school] that began in [fill dates of first enrollment in NPSAS year]?</p> <p>1 = CERTIFICATE OR OTHER UNDERGRADUATE FORMAL AWARD 2 = ASSOCIATES DEGREE PROGRAM (AA, AAS, AS, ETC) 3 = BACHELOR'S DEGREE PROGRAM (BA, BS, ETC) 4 = UNDERGRADUATE SPECIAL STUDENT (NON-DEGREE OR NON-MATRICULATED) 5 = POST-BACCALAUREATE CERTIFICATE PROGRAM 6 = MASTER'S DEGREE PROGRAM (MA, MS, MBA, ETC) 7 DOCTORAL OR FIRST PROFESSIONAL DEGREE PROGRAM (PhD, EdD, JD, MD, DDS, DPA, ETC) 8 = GRADUATE SPECIAL STUDENT (NON-DEGREE OR NON-MATRICULATED) -1 = DK -2 = RE</p>
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<p>SADGTYP1</p> <p>If SADEGRE1 ne 7, goto SAMAJOR1</p> <p>Which doctoral or first professional degree were you working toward in your first term at [NPSAS school] in the 1995-96 school year?</p> <p>DOCTORAL/FIRST PROFESSIONAL DEGREES</p> <p>1= DOCTOR OF PHILOSOPHY (PHD)                  2= DOCTOR OF EDUCATION (EDD)                  3= DOCTOR OF THEOLOGY (THD)                  4= DOCTOR OF BUSINESS ADMIN                  5= DOCTOR OF ENGINEERING                  6= DOCTOR OF FINE ARTS (DFA)                  7= DOCTOR OF PUBLIC ADM. (DPA)                  8= DOCTOR OF SCIENCE (DSC/SCD)                  9= OTHER DOCTORAL DEGREE                  10= CHIROPRACTIC (DC OR DCM)                  11= DENTISTRY (DDS OR DMD)                  12= MEDICINE (MD)                  13= OPTOMETRY (OD)                  14= OSTEOPATHIC MEDICINE (DO)                  15= PHARMACY (PHARM. D)                  16= PODIATRY (DPM OR POD. D)                  17= VETERINARY MEDICINE (DVM)                  18= LAW (LLB OR JD)                  19= THEOLOGY (M.DIV., MHL, BD)                  -1= DK -2= RE</p> <p>SADGTYSP</p> <p>Specify degree type when SADGTYP1=9</p> <p>SAMAJOR1</p> <p>If SADEGRE1=7 and SADEGRE1 gt 1, goto SALEVUG1</p> <p>What was your major, or program of study, at [NPSAS school] during the first term in the 95-96 school year?</p> <p>INTERVIEWER: PLEASE ENTER THE INFO IN THE FOLLOWING SCREENS OF THE USEREXIT</p> <p>1 = ENTER/RE-ENTER THE USEREXIT                  2 = SKIP OVER THE USEREXIT                  3 = UNDECLARED</p>	<p>SALEVUG1</p> <p>During the first term you were enrolled at [NPSAS school] in 95-96, what was your level in the program?</p> <p>UNDERGRADUATE:</p> <p>0 = UNCLASSIFIED UNDERGRADUATE                  1 = FIRST YEAR/FRESHMAN                  2 = SECOND YEAR/SOPHOMORE                  3 = THIRD YEAR/JUNIOR                  4 = FOURTH YEAR/SENIOR                  5 = FIFTH YEAR OR HIGHER                  UNDERGRADUATE                  -1 = DK                  -2 = RE</p> <p>Goto SACHGPR1</p> <p>SAYRENRG</p> <p>What year did you begin your graduate program?</p> <p>NOTE: COLLECT THE DATE THE GRADUATE PROGRAM WAS BEGUN, REGARDLESS OF THE SCHOOL ATTENDED AT THE TIME. SOME STUDENTS MAY HAVE STARTED THEIR PROGRAMS AT ONE SCHOOL THEN TRANSFERRED TO THE NPSAS SCHOOL.</p> <p>(50-96)</p> <p>SALEVGR1</p> <p>During the first term you were enrolled at [NPSAS school] in 95-96, what was your level in the program?</p> <p>GRADUATE:</p> <p>6 = FIRST YEAR                  7 = SECOND YEAR                  8 = THIRD YEAR                  9 = FOURTH YEAR OR BEYOND                  -1 = DK -2 = RE</p>
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<p>SACHGPR1/SACHGPR2/SACHGPR3</p> <p>Did your degree program, major, or level change during the 95-96 school year while attending[NPSAS school]? If so, what changed?</p> <p>1 = YES - DEGREE PROGRAM CHANGED                  2 = YES - MAJOR OR PROGRAM OF STUDY CHANGED                  3 = YES - LEVEL (I.E. FIRST YEAR, SECOND YEAR) CHANGED                  4 = NO CHANGE                  -1 = DK -2 = RE</p> <p>INTERVIEWER: ENTER 0 TO EXIT OUT OF THE LAST TWO FIELDS</p> <p>SADEGRE2</p> <p>If SACHGPR1/2/3 ne 1, goto SAMAJOR2</p> <p>During the last term which ended in [fill dates of last term] at [NPSAS school]), what was your degree or certificate program?</p> <p>1 = CERTIFICATE OR OTHER UNDERGRADUATE FORMAL AWARD                  2 = ASSOCIATES DEGREE PROGRAM (AA, AAS, AS, ETC)                  3 = BACHELOR'S DEGREE PROGRAM (BA, BS, ETC)                  4 = UNDERGRADUATE SPECIAL STUDENT (NON-DEGREE OR NON-MATRICULATED)                  5 = POST-BACCALAUREATE CERTIFICATE PROGRAM                  6 = MASTER'S DEGREE PROGRAM (MA, MS, MBA, ETC)                  7 = DOCTORAL OR FIRST PROFESSIONAL DEGREE PROGRAM (PhD, EdD, JD, MD, DDS, DPA, ETC)                  8 = GRADUATE SPECIAL STUDENT (NON-DEGREE OR NON-MATRICULATED)                  -1 = DK                  -2 = RE</p>	
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<p>SADGTYP2</p> <p>If SADEGRE2 ne 7, goto SAMAJOR2</p> <p>Which doctoral or first professional degree were you working toward in your last term at [NPSAS school] in the 1995-96 school year?</p> <p>DOCTORAL/FIRST PROFESSIONAL DEGREES</p> <p>1= DOCTOR OF PHILOSOPHY (PHD)                  2= DOCTOR OF EDUCATION (EDD)                  3= DOCTOR OF THEOLOGY (THD)                  4= DOCTOR OF BUSINESS ADMIN                  5= DOCTOR OF ENGINEERING                  6= DOCTOR OF FINE ARTS (DFA)                  7= DOCTOR OF PUBLIC ADM. (DPA)                  8= DOCTOR OF SCIENCE (DSC/SCD)                  9= OTHER DOCTORAL DEGREE                  10= CHIROPRACTIC (DC OR DCM)                  11= DENTISTRY (DDS OR DMD)                  12= MEDICINE (MD)                  13= OPTOMETRY (OD)                  14= OSTEOPATHIC MEDICINE (DO)                  15= PHARMACY (PHARM. D)                  16= PODIATRY (DPM OR POD. D)                  17= VETERINARY MEDICINE (DVM)                  18= LAW (LLB OR JD)                  19= THEOLOGY (M.DIV., MHL, BD)                  -1= DK -2= RE</p> <p>SAMAJOR2</p> <p>What was your major (at [NPSAS school]) during your last term in the 95-96 school year?</p> <p>INTERVIEWER: PLEASE ENTER THE INFO IN THE FOLLOWING SCREENS OF THE USEREXIT</p> <p>1 =ENTER/ RE-ENTER THE USEREXIT                  2 = SKIP OVER THE USEREXIT                  3 = UNDECLARED</p> <p>SALEVUG2</p> <p>During the last term you were enrolled at [NPSAS school] in 95-96, what was your level in the program?</p> <p>UNDERGRADUATE:                  0 = UNCLASSIFIED UNDERGRADUATE                  1 = FIRST YEAR/FRESHMAN                  2 = SECOND YEAR/SOPHOMORE                  3 = THIRD YEAR/JUNIOR                  4 = FOURTH YEAR/SENIOR                  5 = FIFTH YEAR OR HIGHER                  UNDERGRADUATE                  -1 = DK -2 = RE</p>	<p>SALEVGR2</p> <p>During the last term you were enrolled at [NPSAS school] in 95-96, what was your level in the program?</p> <p>GRADUATE:                  6 = FIRST YEAR                  7 = SECOND YEAR                  8 = THIRD YEAR                  9 = FOURTH YEAR OR BEYOND                  -1 = DK                  -2 = RE</p> <p>SALEVGDN</p> <p>Have you completed the course work for [fill SADEGRE2] program (1=YES 2=NO)?</p> <p>SACMPLPR</p> <p>Have you completed your program of study and received your [certificate/degree]?</p> <p>1 = YES, ALREADY COMPLETED PROGRAM AND RECEIVED DEGREE                  2 = NO, COMPLETED PROGRAM BUT NOT YET RECEIVED DEGREE                  3 = NO, NOT COMPLETED PROGRAM YET.                  -1 = DK                  -2 = RE</p> <p>If SCMPLPR=1 goto SADEGMO; else goto SAEXDGMN</p> <p>SACMPCOR</p> <p>If SALEVGR1=6, SACMPCOR=0; goto SAEXDGMN</p> <p>Have you completed your coursework and all other requirements for your degree?                  0= NOT COMPLETED COURSEWORK.                  1= COMPLETED COURSEWORK, BUT NOT ALL REQUIREMENTS                  2= COMPLETED ALL REQUIREMENTS.</p> <p>If SACMPCOR ne 2 goto SAEXDGMN; else goto SADEGMO</p> <p>SADEGMO/SADEGYR</p> <p>When did you receive your [certificate/degree]?</p> <p>MONTH:                      YEAR:                  (1-12)                      (95-96)</p> <p>Goto SAYRG1P</p>
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SAEXDGMN/SAEXDGYR

When do you expect to receive your  
[certificate/degree]?

ENTER 13 IN THE MONTH FIELD IF STUDENT  
DOES NOT PLAN TO COMPLETE DEGREE

MONTH:           YEAR:  
(1-12)           (96-99)(00-05)

SAYRG1P

In what year did you begin your [fill SADEGRE1/2]  
program?

20-96 =  
-1 = DK  
-2 = RE

SATRNSFR

If SADEGRE1 ge 5 or SADEGRE2 ge 5, goto  
SASMPGPA. If SAFSTSCH = 8, goto SASMPGPA

Did you transfer to [NPSAS school] from another  
school for, or at any point during, 95-96 (1=YES  
2=NO)?

If SATRNSFR=1, goto SAAMTRNS; else goto  
SASMPGPA

SAAMTRNS

Did [NPSAS school] accept all, some, or none of the  
credits you wanted to transfer?

0= DID NOT TRY TO TRANSFER CREDITS.  
1= NONE  
2= SOME  
3= ALL

<p>SASMPGPA</p> <p>What is your cumulative GPA at [NPSAS school]?</p> <p>PROBE AS NEEDED : WOULD YOU SAY YOUR GRADES AT [NPSAS school] WERE:</p> <p>1 = MOSTLY A'S (3.75 AND ABOVE)                  2 = A'S AND B'S (3.25-3.74)                  3 = MOSTLY B'S (2.75-3.24)                  4 = B'S AND C'S (2.25-2.74)                  5 = MOSTLY C'S (1.75-2.24)                  6 = C'S AND D'S (1.25-1.74)                  7 = MOSTLY D'S OR BELOW (BELOW 1.24)                  8 = NO GRADES OR PASS/FAIL                  -1 = DK                  -2 = RE</p> <p>SANUMDEG</p> <p>[In addition to the [list known degrees] you just mentioned,] H/how many degrees or certificates have you earned from a postsecondary school?</p> <p>DO NOT INCLUDE THE DEGREE/CERTIFICATE EARNED OR BEING EARNED AT THE NPSAS SCHOOL.</p> <p>(0-10)                  -1 = DK                  -2 = RE</p> <p>SAOTHDG1/SAOTHDG2/SAOTHDG3/SAOTHDG4</p> <p>What degree(s) and certificate(s) have you earned?</p> <p>ENTER UP TO 4 DEGREES/CERTIFICATES. AT LEAST ONE MUST BE ENTERED ENTER 0 TO EXIT</p> <p>1 = CERTIFICATE OR OTHER UNDERGRADUATE FORMAL AWARD                  2 = ASSOCIATES DEGREE PROGRAM (AA, AAS, AS, ETC)                  3 = BACHELOR'S DEGREE PROGRAM (BA, BS, ETC)                  5 = POST-BACCALAUREATE CERTIFICATE PROGRAM                  6 = MASTER'S DEGREE PROGRAM (MA, MS, MBA, ETC)                  7 = DOCTORAL OR FIRST PROFESSIONAL DEGREE PROGRAM (PhD, EdD, JD, MD, DDS, DPA, ETC)</p>	
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<p>SAATT2YR</p> <p>Have you ever attended a two-year school, such as a community college or junior college?</p> <p>1= YES 2= NO</p> <p>SACMPCLS</p> <p>If BPS eligible</p> <p>Have you completed at least one class (or course offering) toward a degree, diploma, or formal award after high school at a postsecondary school (1=YES 2=NO)? \</p> <p>SACMPCLM/SACMPCLY</p> <p>When did you finish your first class or course offering at a postsecondary school after high school?</p> <p>MONTH (1-12):\ YEAR (20-96):\</p> <p>A_END</p>	
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**STUDENT CATI  
Section B**

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<p>SBHOURS</p> <p>If CLOCK=2, goto SBTUIFEE</p> <p>About how many hours of instruction were you scheduled to attend each week during the 95-96 school year?</p> <p>NOTE: THIS INCLUDES CLASSROOM PLUS ANY LAB HOURS</p> <p>0 - 80 HOURS -1 = DK -2 = RE</p> <p>SBTUIFEE</p> <p>If SASCHNUM=1 and SZTUITON gt 0, goto SBBOOKS</p> <p>How much were your tuition and fees at all other schools you attended in 95-96?</p> <p>0-60000 = -1 = DK -2 = RE</p> <p>SBOUST</p> <p>At [NPSAS school], did you pay out-of-state or out-of-district tuition or fees?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>SBBOOKS</p> <p>For the 95-96 school year, how much did you spend for... ANNUAL COSTS</p> <p>INTERVIEWER: IF THE ITEM WAS PAID FOR BY A SCHOLARSHIP ETC. ASK FOR AN ESTIMATE.</p> <p>...books and supplies? (0-3000)</p> <p>SBEQUIP</p> <p>...equipment, such as computers? (MICROSCOPES, TOOLS, INSTRUMENTS, OR SAFETY EQUIPMENT) (0-8000)</p>	
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<p><b>SBSCHRES</b></p> <p>While enrolled during 95-96, where did you live?</p> <p>1 = on-campus in school-owned housing,                  2 = off-campus in school-owned housing,                  3 = in an apartment or house other than with your parents or guardians (including houses owned by fraternities and sororities),                  4 = with your parents or guardians,                  5 = with other relatives, or                  6 = some place else?                  -1 = DK                  -2 = RE</p> <p>NOTE: IF MORE THAN ONE RESIDENCE, GIVE THE PLACE YOU LIVED THE LONGEST</p> <p><b>SBOTHRES</b></p> <p>If SBSCHRES lt 1 or SBSCHRES gt 3 or SAAGE ge 25, goto SBNPSED</p> <p>Who do you live with when you are not in school?</p> <p>1 = PARENT(S) / GUARDIAN(S)                  2 = IN AN APARTMENT OR HOUSE OTHER THAN WITH YOUR PARENTS OR GUARDIANS (INCLUDING HOUSES OWNED BY FRATERNITIES AND SORORITIES),                  3 = WITH OTHER RELATIVES                  4 = OTHER                  -1 = DK                  -2 = RE</p> <p>NOTE: IF MORE THAN ONE RESIDENCE, GIVE THE PLACE YOU LIVED THE LONGEST</p> <p>If SBOTHRES=1, goto SBPDBRD; else goto SBNPSED</p> <p><b>SBPDBRD</b></p> <p>Did you pay room and board while you lived there (1=YES 2=NO)?</p>	<p><b>SBNPSED</b></p> <p>If SADEGRE1=7 or SADEGRE2=7 then goto SBENRPUR</p> <p>What is the highest level of education you expect to complete at [NPSAS school]?</p> <p>0 = NO DEGREE OR CERTIFICATE EXPECTED AND NO TRANSFER                  1 = TRANSFERRING TO A 2-YEAR SCHOOL - NO DEGREE OR CERTIFICATE EXPECTED                  2 = TRANSFERRING TO A 4-YEAR SCHOOL - NO DEGREE OR CERTIFICATE EXPECTED                  3 = CERTIFICATE                  4 = ASSOCIATE'S DEGREE                  5 = BACHELOR'S DEGREE                  6 = COMPLETION OF POST-BACCALAUREATE PROGRAM                  7 = MASTER'S DEGREE                  8 = ADVANCED DEGREE -- DOCTORAL OR FIRST-PROFESSIONAL DEGREE (PH.D.,ED.D.,MD,JD,DDS,ETC.)                  -1 = DK                  -2 = RE</p> <p><b>SBENRPUR</b></p> <p>If LEVEL=1, got SBHIGHED</p> <p>[Are you enrolled for a job-related reason or some other reason?/ What is your primary reason for enrolling in this school?]</p> <p>1 = JOB SKILLS                  2 = DEGREE OR CERTIFICATE                  3 = TRANSFER TO A 2-YEAR SCHOOL                  4 = TRANSFER TO A 4-YEAR SCHOOL                  5 = TRANSFER, BUT NOT SURE WHERE                  6 = PERSONAL ENRICHMENT                  -1 = DK                  -2 = RE</p>
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<p>SBHIGHED</p> <p>If SBNPSED= 8, store 7 in SBHIGHED and goto SBDEGTYP</p> <p>If SADEGRE1= 7 or SADEGRE2=7, goto SBSAT</p> <p>What is the highest level of education you ever expect to complete?</p> <p>[1 = LESS THAN 4-YEARS -- NO DEGREE OR CERTIFICATE EXPECTED                  2 = CERTIFICATE                  3 = ASSOCIATE'S DEGREE]                  4 = BACHELOR'S DEGREE                  5 = COMPLETION OF POST-BACCALAUREATE PROGRAM                  6 = MASTER'S DEGREE                  7 = ADVANCED DEGREE -- DOCTORAL OR FIRST-PROFESSIONAL DEGREE (PH.D.,ED.D.,MD,JD,DDS,ETC.)                  -1 = DK                  -2 = RE</p> <p>If SBHIGHED=7, goto SBDEGTYP; else goto SBSAT</p> <p>SBDEGTYP</p> <p>What type of advanced degree do you expect to complete?</p> <p>Doctoral Degrees                  1= Doctor of Philosophy (PhD)                  2= Doctor of Education (EdD)                  3= Doctor of Theology (ThD)                  4= Doctor of Business Administration                  5= Doctor of Engineering                    6= Doctor of Fine Arts (DFA)                    7= Doctor of Public Adm. (DPA)                    8= Doctor of Science (DSC/ScD)                    9= Other Doctoral Degree</p> <p>First Professional Degrees                  10= Chiropractic (DC or DCM)                  11= Dentistry (DDS or DMD)                  12= Medicine (MD)                  13= Optometry (OD)                  14= Osteopathic Medicine (DO)                  15= Pharmacy (Pharm. D)                  16= Podiatry (DPM or Pod. D)                  17= Veterinary Medicine (DVM)                  18= Law (LLB or JD)                  19= Theology (M.Div., MHL, BD)                  -1= DK</p>	<p>-2= RE</p>
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<p>SBSAT</p> <p>If BPSELIG ne 1, goto SBGRE                  If SBHIGHED=1 or 2, goto SBTEST1                  If LEVEL ge 3, goto SBTEST1                  If SZSATAV = &lt;y&gt; or SZACTAV = &lt;y&gt;, goto SBAPTST</p> <p>Did you take the SAT (1=YES 2=NO)?</p> <p>If SBSAT=1, goto SBSAT_V; else goto SBACT</p> <p>SBSAT_V</p> <p>SAT Verbal Score:</p> <p>SBSAT_M</p> <p>SAT Math Score:</p> <p>SBSAT_R</p> <p>SAT Reasoning Score:</p> <p>SBSAT_YR</p> <p>Year Taken</p> <p>If SBSAT=1, goto SBTEST1; else goto SBACT</p> <p>SBACT</p> <p>Did you take the ACT (1=YES 2=NO)?</p> <p>If SBACT=1, goto SBACT_S; else goto SBTEST1</p> <p>SBTEST1</p> <p>Composite ACT score:</p> <p>SBACT_YR</p> <p>Year Taken:</p> <p>Goto SBTEST1</p>	<p>SBGRE</p> <p>If SADEGRE1 le 2, goto SBAPTST                  If SZGREAV = &lt;y&gt; and SZGRESV gt 0 or SZGRESM gt 0 or SZGRESA gt 0 then goto SBAPTST</p> <p>Did you take the GRE (1=YES 2=NO)?</p> <p>If SBGRE=1 goto SBGRE_V; else goto SBAPTST</p> <p>SBGRE_V</p> <p>GRE Verbal:</p> <p>SBGRE_M</p> <p>GRE Math:</p> <p>SBGRE_A</p> <p>GRE Analytic:</p> <p>SBGRE_YR</p> <p>Year GRE taken:</p> <p>SBTEST1--SBTEST4</p> <p>Any (other) [undergraduate/graduate] admissions tests?                  ENTER ALL THAT APPLY UP TO 4 ADDITIONAL TESTS</p> <p>[Undergraduate Tests                  1. ASSET (Forms A,B or C)                  2. CPAT                  3. CPP                  4. CPT                  5. P.A.R.                  6. PSAT                  7. TABE                  8. TALS (Forms A or B)                  9. WONDERLIC (Scholastic Level)                  10. WONDERLIC (Personnel test)                  11. TOEFL/                  Graduate Tests                  21. DAT                  22. GMAT                  23. LSAT                  24. MCAT                  25. Miller's Analogies                  31. Other Test, Specify      0= NONE/NO MORE</p> <p>If SBTEST*=0 or SBTEST4 gt 0, goto SBAPTST</p>
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	<p>SBAPTST</p> <p>If SBHIGHED=1 or 2, goto SBGRADRT          If BBSELIG ne 1, goto SBGRADRT          If LEVEL ge 3, goto SBGRADRT</p> <p style="padding-left: 40px;">Did you take any AP tests (advance placement tests)          (1=YES 2=NO)?</p> <p>If SBAPTST=1 goto SBAP1; else goto SBGRADRT</p> <p>SBAP1/SBAP1S -- SBAP6/SBAP6S</p> <p style="padding-left: 40px;">Which ones did you take and what was your score?          ENTER UP TO 6 TESTS. ENTER NA FOR NAME          TO EXIT THIS SCREEN</p> <p style="padding-left: 40px;">1= Art-History of Art          2= Art-Studio (Drawing/General Portfolio)          3= Biology          4= Chemistry</p> <p style="padding-left: 40px;">5= Computer Science-A          6= Computer Science-AB          7= Economics-Microeconomics          8= Economics-Macroeconomics          9= Eng -Language Composition          10= Eng -Lit and Composition          11= French-Language          12= French-Literature          13= German-Language          14= Govern and Politics-Comparative          15= Govern and Politics-US          16= History-European          17= History-United States          18= Latin-Virgil          19= Latin-Literature          20= Calculus-AB          21= Calculus-BC          22= Music Theory          23= Physics-B          24= Physics-C (Mechanics)          25= Physics-C(Electricity&amp;Magnetism)          26= Psychology          27= Spanish-Language          28= Spanish-Literature</p> <p>NAME OF TEST                      SCORE (1-5)</p>
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	<p>SBGRADRT</p> <p>If SADEGRE1=4 or SADEGRE2=4 goto SBRSN1          If CTSTTYPE gt 1, goto SBRSN1</p> <p style="padding-left: 40px;">In deciding to attend [NPSAS school], did you          consider the ...</p> <p style="padding-left: 40px;">INTERVIEWER: 1 = YES 2 = NO -1 = DK -2 =          RE</p> <p style="padding-left: 40px;">...graduation rate?</p> <p>If LEVEL=1 or 2 and control=1 or 2, goto SBCRIMRT;          else goto SBPLACRT</p> <p>SBCRIMRT</p> <p style="padding-left: 40px;">...crime rate?</p> <p>Goto SBRSN1</p> <p>SBPLACRT</p> <p style="padding-left: 40px;">...job placement rate?</p>
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<p>SBRSN1 -- SBRSN4</p> <p>If BPSELIG ne 1, goto B_END</p> <p>Why did you decide to attend [NPSAS school]?  INTERVIEWER: CODE ALL THAT APPLY  (ENTER 0 IF NONE, OR NO MORE)</p> <p>COSTS  1= SHORTER TIME TO FINISH  2= COSTS WERE LESS  3= GOT MORE FINANCIAL AID  4= TUITION WAS LOW  5= OTHER COST REASON</p> <p>INFLUENCE  6= PARENTS WENT THERE  7= FRIENDS/SPOUSE WENT THERE  8= PARENTS WANTED STUDENT TO GO  THERE  9= TEACHER/GUIDANCE COUNSELOR  RECOMMENDED  10= OTHER INFLUENCE FACTORS</p> <p>LOCATION  11= CLOSE TO JOB  12= COULD LIVE AT HOME  13= CLOSE TO HOME  14= OTHER LOCATION REASON</p> <p>REPUTATION / SCHOOL RELATED  15= LIKED THE CAMPUS  16= SCHOOL HAS GOOD REPUTATION  17= JOB PLACEMENT  18= FACILITIES/EQUIPMENT  19= FACULTY REPUTATION  20= OTHER REASON</p> <p>-1= DK  -2= RE</p> <p>If SBRSN1=-1, -2, or 0, goto B_END  If SBRSN2=-1, -2, or 0, goto B_END  Else goto SBRSNMST</p>	<p>SBRSNMST</p> <p>Which of the reasons you mentioned was most important to your selection of [NPSAS school]?</p> <p>1= SHORTER TIME TO FINISH  2= COSTS WERE LESS  3= GOT MORE FINANCIAL AID  4= TUITION WAS LOW  5= OTHER COST REASON  6= PARENTS WENT THERE  7= FRIENDS/SPOUSE WENT THERE  8= PARENTS WANTED STUDENT TO GO  THERE  9= TEACHER/GUIDANCE COUNSELOR  RECOMMENDED  10= OTHER INFLUENCE FACTORS  11= CLOSE TO JOB  12= COULD LIVE AT HOME  13= CLOSE TO HOME  14= OTHER LOCATION REASON  15= LIKED THE CAMPUS  16= SCHOOL HAS GOOD REPUTATION  17= JOB PLACEMENT  18= FACILITIES/EQUIPMENT  19= FACULTY REPUTATION  20= OTHER REASON</p> <p>B_END</p>
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STUDENT CATI  
Section C

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<p>SCCURMAR</p> <p>I have some questions about how you paid for your 95-96 educational expenses, but first I need to know... What's your marital status?</p> <p>1 = SINGLE, NEVER MARRIED                  2 = MARRIED                  3 = SEPARATED                  4 = DIVORCED                  5 = WIDOWED                  -1 = DK                  -2 = RE</p> <p>If SCCURMAR=1 or 2, goto SCCNTRY; else goto SCMARR95</p> <p>SCMARR95</p> <p>What was your marital status on July 1, 1995?</p> <p>1 = SINGLE, NEVER MARRIED                  2 = MARRIED                  3 = SEPARATED                  4 = DIVORCED                  5 = WIDOWED                  -1 = DK                  -2 = RE</p> <p>If BPSELIG=1 then goto SCMOMARR; else goto SCCNTRY</p> <p>SCMOMARR/SCYRMARR</p> <p>What month and year did you get [married/separated/ divorced/widowed]?</p> <p>MONTH: (1-12)</p> <p>YEAR: (00-96)</p>	<p>SCCNTRY</p> <p>In what country were you born?</p> <p>1 = UNITED STATES, INCLUDING PUERTO RICO AND ITS TERRITORIES                  2 = CANADA                  3 = CHINA                  4 = CUBA                  5 = EGYPT                  6 = FRANCE                  7 = GERMANY                  8 = HONG KONG                  9 = INDIA                  10 = INDONESIA                  11 = IRAN                  12 = ISRAEL                  13 = JAPAN                  14 = JORDAN                  15 = KOREA (REPUBLIC OF KOREA)                  16 = MALAYSIA                  17 = MEXICO                  18 = PAKISTAN                  19 = PHILIPPINES                  20 = SAUDI ARABIA                  21 = TAIWAN                  22 = THAILAND                  23 = UNITED KINGDOM (ENGLAND, SCOTLAND, WALES)                  24 = VENEZUELA                  25 = VIETNAM                  26 = OTHER COUNTRY (DO NOT SPECIFY)</p> <p>SCUS_CIT</p> <p>If SZUSCIT=1, store 1 in SCUS_CIT and goto CFILL1                  If SCCNTRY=1, store 1 in SCUS_CIT and goto CFILL1</p> <p>Are you a U.S. citizen?</p> <p>1 = YES, CITIZEN OR US NATIONAL.                  2 = NO, BUT IS A PERMANENT RESIDENT OR OTHER ELIGIBLE NON-CITIZEN WITH TEMPORARY RESIDENT'S CARD.                  3 = NO, IN THE COUNTRY ON F1 OR F2 STUDENT VISA OR ON A J1 OR J2 EXCHANGE VISITOR VISA.                  -1 = DK                  -2 = RE</p> <p>CFILL1</p>
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## SCPARMAR

If SAAGE ge 31, CWHPAR=4, CPARGRD=4,  
CFILL2=blank; goto SCUSBOND  
Are your parents...

INTERVIEWER: ADOPTIVE PARENTS ARE  
CONSIDERED PARENTS.

- 1 = married to each other,
- 2 = divorced,
- 3 = separated,
- 4 = never married to each other, or
- 5 = is either one (or both) of your parents deceased?
- 6 = NEVER KNEW PARENTS AND NO  
GUARDIANS.
- 7 = NEVER KNEW PARENTS AND HAS LEGAL  
GUARDIAN(S).
- 1 = DK
- 2 = RE

If SCPARMAR=5, goto SCPARDCS; else goto CFILL2

## SCPARDCS

Which of your parents is deceased?

INTERVIEWER: IF THE RESPONDENT DOES  
NOT WANT TO ANSWER FURTHER  
QUESTIONS ABOUT THE DECEASED PARENT,  
USE OPTIONS 4, 5 OR 6

- 1 = MOTHER
- 2 = FATHER
- 3 = BOTH
- 4 = SENSITIVE, MOTHER'S DEATH
- 5 = SENSITIVE, FATHER'S DEATH
- 6 = SENSITIVE, BOTH PARENTS' DEATH
- 1 = DK
- 2 = RE

## SCGUARD

If DPNDSTAT=2 goto CFILL2

Do you have any legal guardians (other than your  
parents)?

- 1 = YES
- 2 = NO
- 1 = DK
- 2 = RE

If SCGUARD=1 goto SCGRDTYP; else set SCGRDTYP=  
blank and goto CFILL2

<p>SCGRDTYP</p> <p>TYPE OF GUARDIAN. THIS SCREEN IS AN INTERVIEWER INSTRUCTION AND SHOULD NOT BE READ TO THE RESPONDENT. 1 = GUARDIANS 2 = FEMALE GUARDIAN ONLY 3 = MALE GUARDIAN ONLY. -1 = DK -2 = RE</p> <p>CFILL2 -- indicates fill text for questions about parents/guardians.</p> <p>SCPARLON</p> <p>To help meet your 95-96 school expenses, how much money did you borrow from your [fill CFILL2]?</p> <p>NOTE: THIS IS MONEY THE STUDENT EXPECTS TO REPAY</p> <p>0-80,000 DOLLARS -1 = DK -2 = RE</p> <p>SCOTHLON</p> <p>How much have you borrowed from friends and other family members? NOTE: DOES NOT INCLUDE SPOUSE, IF MARRIED</p> <p>0-80,000 DOLLARS -1 = DK -2 = RE</p> <p>If CFILL2 eq &lt;&gt;, goto SCUSBOND; else goto SCPARTUI</p> <p>SCPARTUI</p> <p>During 1995-96, did your [fill CFILL2] pay for any of your...</p> <p>...Tuition or fees (1=YES 2=NO)?</p> <p>SCPARRM</p> <p>If SBSCHRES eq &lt;1&gt; or &lt;2&gt;</p> <p>...Room and board (1=YES 2=NO)?</p>	<p>SCPARBK</p> <p>...Books or equipment (1=YES 2=NO)?</p> <p>SCPARALW</p> <p>Did your [fill CFILL2] give you an allowance that you don't have to repay (1=YES 2=NO)?</p> <p>If SCPARALW=1 goto SCALWAMT; else goto SCOTSUP</p> <p>SCALWAMT</p> <p>How much allowance did your [fill CFILL2] give you (1-80,000)?</p> <p>SCALWFRQ</p> <p>How often? 1= PER WEEK 2= PER MONTH 3= PER TERM/SEMESTER 4= PER YEAR</p> <p>SCOTSUP</p> <p>During 95-96,[in addition to] [tuition/fees, /room and board, /books/equipment, /allowance,] did your [fill CFILL2] provide you with [housing, meals, ] clothing, the use of charge cards, insurance, help with car payments, repairs, or any other support?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>If SCOTSUP=1, goto SCSUPAMT; else goto SCSUPHS</p> <p>SCSUPAMT</p> <p>How much would you say it was worth for the year (SINCE JULY 1, 1995) (1-80,000)? NOTE: PROMPT IF LESS THAN \$300 FOR THE YEAR.</p> <p>If SCSUPAMT=-1, goto SCSUPEST If SCSUPAMT ge 1000, goto SCSUPHS; else goto SCUSBOND</p>
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<p>SCSUPEST</p> <p>Would you say that it was more than \$1000 (1=YES 2=NO)?</p> <p>If SCSUPEST=1 goto SCSUPHS; else goto SCUSBOND</p> <p>SCSUPHS</p> <p>Did your [fill CFILL2] provide you with (1=YES 2=NO)...</p> <p>[...Housing?]</p> <p>SCSUPMLS</p> <p>[...Meals?]</p> <p>SCSUPCLS</p> <p>...Clothing?</p> <p>SCSUPCHG</p> <p>...Charge cards?</p> <p>SCSUPCAR</p> <p>...Help on car loan payments?</p> <p>SCSUPREP</p> <p>...Help on car repair bills?</p> <p>SCSUPINS</p> <p>...Help on any type of insurance, (CAR, HEALTH, OR LIFE INSURANCE)?</p> <p>SCSUPOTH</p> <p>...Any other type of assistance (SUCH AS AIR LINE TICKETS)?</p> <p>SCUSBOND</p> <p>To meet your 95-96 educational expenses, [did you or your [fill CFILL2]/did you]...</p> <p>...use U.S. savings bonds (1=YES 2=NO)?</p>	
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## SCHOMEQ

...take out a home equity loan, a second mortgage, or refinance any real estate (1=YES 2=NO)?

## SCPREPAY

...use a college tuition prepayment or guarantee program, or a tuition savings plan (1=YES 2=NO)?

If SCPREPAY=1 goto SCPRETYP; else goto SCOTPRLN

## SCPRETYP

What type of prepayment plan was it?

- 1 = STATE-SPONSORED
- 2 = SCHOOL-SPONSORED
- 3 = A PRIVATE PLAN
- 4 = OTHER TYPE
- 1 = DK -2 = RE

## SCOTPRLN

Ask if SAAGE le <23> and CFILL2 ne <>; else goto SCASST

Did your [fill CFILL2] take out any loans, other than a home equity loan, to help pay for your 95-96 school expenses (1=YES 2=NO)?

## SCASST

Ask if CTSTTYPE gt 1 and SZASSIST le 0; else goto SCWAIV

If CTSTTYPE =1 goto SCNUMJBS

Between July 1, 1995 and June 30, 1996, did you have a graduate, research or teaching assistantship (1=YES 2=NO)?

## SCWAIV

Did you receive any tuition waiver, discount, or reimbursement from your school in addition to the assistantship (1=YES 2=NO)?

SCNUMJBS

Between July 1, 1995 and June 30, 1996, how many jobs did you have (0-15)?

[NOTE: THE RESPONDENT HAD AN ASSISTANTSHIP OR A WORK-STUDY]

SCREIMB

Did you receive tuition reimbursement from your employer (1=YES 2=NO)?

If SCCURMAR=2, goto SCSPSEMP; else goto C\_END

SCSPSEMP

Was your spouse employed for pay (1=YES 2=NO)?

Goto C\_END

SCEMPJBP

INTERVIEWER:  
PLEASE VERIFY THAT THE RESPONDENT  
HAD [fill SCNUMJBS] JOBS BETWEEN JULY 1,  
1995 AND JUNE 30, 1996.

1 = YES, THAT'S CORRECT  
2 = NO, CHANGE THE NUMBER OF JOBS

C END

**STUDENT CATI  
Section D**





<p>SDRECVD1</p> <p>If SZTOTAID gt 0, goto SDRIGHT</p> <p>Did you receive any grants, scholarships, tuition waivers, discounts, fellowships, loans or any other financial aid for 95-96?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>If SDRECVD1 =1 goto SDAMT01 If SDRECVD1 ne 1, goto SDAPPLD</p> <p>SDRIGHT</p> <p>According to your school, you received: [ Pell Grant \$[fill SZPELL]/Supplemental Education Opportunity Grant \$[fill SZPELL]/some federal loans \$[fill SZLOANAM]/assistantships \$[fill SZASSIST]/tuition waivers \$[fill SZTUIWAV]/ Federal Work Study \$[fill SZFWS]/Veteran's Benefits \$[fill SZVETAID]/Some Aid from the Federal govt. \$[fill SZOFEDAM]/Some Aid from the Institution \$[fill SZOTINAM]/Aid from the State \$[fill SZSTAID]/Aid from some source \$[fill SZOTHAID]] for a total of about \$[fill DTOTAID]. Does that sound about right (1=YES 2=NO)?</p> <p>SDAMT01--10/SDTYP01--10/SDSRC01--10/SDNAM01--10</p> <p>Excluding gifts or loans from family and friends, [what financial aid did you receive/did you receive any other financial aid] while you were at [NPSAS school] during the 95-96 school year?</p> <p>Type of Award: 1=Grant or scholarship      2=Loans 3=Work Study                4=Assistantships 5=Veteran Benefits        6=Voc. Rehab. 7=Tuition Waiver            8=Other</p> <p>Source of Award: 1=Federal      2=State      3=Institution 4=Employer    5=Other</p>	<p>SDAPPLD</p> <p>Did you apply for any financial aid for the time you attended [NPSAS school] during the 95-96 school year?</p> <p>INCLUDE ANY FINANCIAL AID AWARDED FROM FEDERAL, STATE, OR INSTITUTIONAL SOURCES BUT EXCLUDE FINANCIAL ASSISTANCE FROM FAMILY OR FRIENDS, REGARDLESS OF WHETHER OR NOT ANY AID WAS AWARDED.</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>If SDAPPLD=1, goto SDAWARD If SDAPPLD=2, goto SDNVAP01 If SDAPPLD=-1 or -2, goto SDOAMT01</p> <p>SDAWARD</p> <p>[According to your school records, you applied for financial aid for 95-96.] Were you awarded any aid for the year?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>If SDAWARD=1, goto SDREFUS1; else goto SDOAMT01</p> <p>SDACCEPT</p> <p>Did you accept all of the aid you were awarded for the year?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>If SDACCEPT=2, goto SDREFUS1; else goto SDOAMT01.</p>
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<p>SDREFUS1</p> <p>What did you refuse?</p> <p>ENTER ALL THE CODES IN THE ORDER MENTIONED BY THE RESPONDENT. ENTER 0 TO EXIT</p> <p>1= GRANTS/SCHOLARSHIPS 2= LOANS 3= COLLEGE WORK STUDY [4= ASSISTANTSHIP (GRADUATE/FIRST PROF STUDENTS ONLY)] 5= OTHER</p> <p>SDNVAP01 -- SDNVAP10</p> <p>What were the reasons you and your family did not apply for financial aid? ENTER ALL THE CODES IN THE ORDER MENTIONED BY THE RESPONDENT. ENTER 0 TO EXIT</p> <ol style="list-style-type: none"> <li>1. FAMILY AND STUDENT COULD PAY</li> <li>2. NOT WILLING TO GO INTO DEBT</li> <li>3. FAMILY INCOME TOO HIGH TO QUALIFY</li> <li>4. GRADES/TEST SCORES TOO LOW TO QUALIFY</li> <li>5. AID APPLICATION PROCESS TOO DIFFICULT</li> <li>6. DID NOT WANT TO DISCLOSE FINANCIAL SITUATION</li> <li>7. PART-TIME STUDENT -- INELIGIBLE FOR AID</li> <li>8. NO MONEY WAS AVAILABLE</li> <li>9. MISSED APPLICATION DEADLINE</li> <li>10. OTHER REASON</li> </ol> <p>SDOAMT01--05/SDOTYP01--05/SDOSRC01--05/SDONAM01--05</p> <p>If SASCHNUM=1, goto SDASSIST</p> <p>Did you get any financial aid while attending schools other than [NPSAS school]in 1995-96; What financial aid did you receive?</p> <p>Options for Type of Award (Press F3 if not known)</p> <table style="width: 100%; border: none;"> <tr> <td>1=Grant or scholarship</td> <td>2=Loans</td> </tr> <tr> <td>3=Work Study</td> <td>4=Assistantships</td> </tr> <tr> <td>5=Veteran Benefits</td> <td>6=Voc. Rehab.</td> </tr> <tr> <td>7=Tuition Waiver</td> <td>8=Other</td> </tr> </table> <p>Options for source of Award (Press F3 if not known)</p> <table style="width: 100%; border: none;"> <tr> <td>1=Federal</td> <td>2=State</td> <td>3=Institution</td> </tr> <tr> <td>4=Employer</td> <td>5=Other</td> <td></td> </tr> </table>	1=Grant or scholarship	2=Loans	3=Work Study	4=Assistantships	5=Veteran Benefits	6=Voc. Rehab.	7=Tuition Waiver	8=Other	1=Federal	2=State	3=Institution	4=Employer	5=Other		<p>SDASTAMT</p> <p>For the 95-96 school year, how much aid did you receive in assistantships or fellowships (INCLUDE TEACHING AND RESEARCH ASSISTANTSHIPS) (0-999,999)?</p> <p>If SDASTAMT gt 0 goto SDTCHAMT; else goto SDREIMBR</p> <p>SDTCHAMT</p> <p>Of the \$[fill SDASTAMT], how much of it was through...</p> <p>...A teaching assistantship? (0-999,999)</p> <p>If SDTCHAMT = SDASTAMT, goto SDREIMBR; else goto SDRESAMT</p> <p>SDRESAMT</p> <p>...A research assistantship or fellowship? (0-999,999)</p> <p>If SDTCHAMT+SDRESAMT=SDASTAMT, goto SDREIMBR; else goto SDOTHAMT</p> <p>SDOTHAMT</p> <p>...Other kind of assistantship or fellowship? (0-999,999)</p> <p>SDREIMBR</p> <p>For the 95-96 school year, how much did you receive as employer provided tuition reimbursement (0-999,999)?</p> <p>SDEVRBOR</p> <p>If BPSELIG=1 goto SDFGNAID</p> <p>INTERVIEWER: ENTER 1 TO INDICATE "ALL OF IT"</p> <p>[Including the \$[fill SDTMPBOR] from[your [fill parents] and all other sources/all sources].] How much have you borrowed for your education since you left high school (0-200,000)?...</p> <p>If SDBOREVR gt 0, goto SDBORFED; else goto SDFGNAID</p>
1=Grant or scholarship	2=Loans														
3=Work Study	4=Assistantships														
5=Veteran Benefits	6=Voc. Rehab.														
7=Tuition Waiver	8=Other														
1=Federal	2=State	3=Institution													
4=Employer	5=Other														

	<p>SDBORFED</p> <p>Ask if SDEVRBOR gt &lt;0&gt; and SCUS_CIT ne &lt;3&gt;; else goto SDBORPER</p> <p>How much of the \$[fill SDEVRBOR:] was in Federal loans (0-200,000)?.....</p> <p>If gt 0, goto SDOWEFED; else goto SDBORPER</p> <p>SDOWEFED</p> <p>Of the \$[fill SDBORFED] in federal loans, how much do you still owe?.....</p> <p>SDBORPER</p> <p>How much of the \$[fill SDEVRBOR] was from friends and family including parents (0-200,000) (ENTER 3 FOR DIFF)?.....</p> <p>If SDBORPER gt 0 goto SDOWEPER; else gotoSDBORGRD</p> <p>SDOWEPER</p> <p>Of the \$[fill SDBORPER] from friends and family, how much do you still owe?.....</p> <p>SDDBORGRD</p> <p>Ask if SDEVRBOR gt 0 and CTSTTYPE gt 1; else goto SDOTHOWE</p> <p>How much of the \$[fill SDEVRBOR] you've borrowed was for graduate school (0-200,000)?.....</p> <p>SDOTHOWE</p> <p>You borrowed about \$[fill DIFF_INT] from sources other than the federal government and your family and friends. How much of that would you say you owe?</p> <p>THE DOLLAR AMOUNT SHOWN IS THE DIFFERENCE BETWEEN TOTAL BORROWED AND THE SUM OF FEDERAL AND FAMILY/ FRIEND LOANS JUST ENTERED. BACK UP TO CORRECT IF R DISAGREES WITH AMOUNT SPECIFIED.</p> <p>0-200,000 DOLLARS</p>
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SDFGNAID

If SCUS\_CIT=1, goto SDREPAY

During the 95-96 school year, did you receive any financial aid such as loans, scholarships or grants from your own country's government?

1= YES

2= NO

-1 = DK

-2 = RE

SDREPAY

If SDBORFED le <0> or SDBORFED=SDOWEFED,  
goto D\_END

Are you currently making payments on your  
education loans (1= YES 2= NO)?

If SDREPAY=1, goto SDREPAMT; else goto D\_END

SDREPAMT

About how much are your monthly payments  
(0-1000)?

D\_END



**STUDENT CATI**  
**Section E**

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<p>SESCHJOB -- indicator that student held work study job or assistantship</p> <p>If SZFWS gt 0 or SZASST gt 0 then SESCHJOB=1;          If SDAMT01-- SDAMT10 (any one of the variables in the set) ge 1 and the corresponding SDTYP01--SDTYP10 = 3 or 4, then SESCHJOB=1;          If SDOAMT01 -- SDOAMT05 (any one of the variables in the set) ge 1 and the corresponding SDOTYP01 -- SDOTYP05 = 3 or 4, then SESCHJOB=1.</p> <p>SEPRNOIN -- indicates entry into jobs UX</p> <p>Ask if SCNUMJBS GT 0; if SCNUMJBS=0, goto SEENRPLN.</p> <p>[You told me earlier that you had [fill SCNUMJBS] jobs during 95-96. I'd like you to tell me about your principal job./You told me earlier that you held a job during 95-96.] What did you do and what type of company did you work for?</p> <p>NOTE: PRINCIPAL JOB IS THE JOB HELD WHILE ENROLLED. IF NONE OR IF MORE THAN ONE, CHOOSE THE JOB WORKED THE LONGEST NUMBER OF HOURS, PAYING THE MOST, OR MOST LOSELY RELATED TO COURSE OF STUDY.</p> <p>INTERVIEWER: PLEASE ENTER THE INFO IN THE FOLLOWING SCREENS OF THE USEREXIT</p> <p>1 = RE-ENTER THE USEREXIT          [2 = SKIP OVER THE USEREXIT]</p> <p>SEONOFF</p> <p>JOB IN QUESTION: [fill SEPRNOCT]</p> <p>Was your principal job primarily on or off-campus?</p> <p>1 = ON-CAMPUS          2 = OFF-CAMPUS          3 = BOTH ON AND OFF CAMPUS</p>	<p>SESCHEMP</p> <p>Were you working for your school or for someone else?</p> <p>1 = SCHOOL          2 = SOMEONE ELSE</p> <p>If SESCHEMP=1; goto SESTMO.          Else goto SEORGTYP.</p> <p>SEORGTYP</p> <p>Is this a private, for-profit company?</p> <p>INTERVIEWER: DO NOT READ ALTERNATIVES. IF STUDENT SAYS "NO", PROBE. IF STUDENT JUST TOLD YOU THAT THEY WORK FOR THE COUNTY OR STATE OR FEDERAL GOVERNMENT---DON'T ASK IF IT'S PRIVATE, FOR PROFIT...JUST CONFIRM WHAT THEY SAID AND ENTER THE APPROPRIATE CODE.</p> <p>1= PRIVATE, FOR-PROFIT          2= PRIVATE, NOT-FOR-PROFIT OR NONPROFIT          3= LOCAL GOVERNMENT          4= STATE GOVERNMENT          5= FEDERAL GOVERNMENT          6= SELF-EMPLOYED IN YOUR OWN BUSINESS, PROFESSIONAL PRACTICE, OR FARM THAT IS NOTINCORPORATED          7= SELF-EMPLOYED IN YOUR OWN BUSINESS, PROFESSIONAL PRACTICE, OR FARM THAT IS INCORPORATED          8= OTHER          -1= DK          -2= RE</p> <p>SEST_MO          SEST_YR</p> <p>When did [your principal job/this job] start?          GET STARTING MONTH AND YEAR          IRRESPECTIVE OF THE NPSAS YEAR.</p> <p>MONTH:      YEAR:          (1-12)      (20-96)</p> <p>SESTLEMP</p> <p>Are you still working at this job (1=YES 2=NO)?</p> <p>If SESTLEMP=1 then goto SERELMAJ          If SESTLEMP=2 then goto SEEND_MO</p>
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	<p>SEEND_MO SEEND_YR</p> <p>When did the job end?</p> <p>MONTH:      YEAR: (1-12)      (94-96)</p> <p>SERELMAJ</p> <p>How closely was your principal job related to your [planned/current] major or field of study?</p> <p>1 = CLOSELY RELATED 2 = SOMEWHAT RELATED 3 = NOT RELATED -1 = DK -2 = RE</p> <p>If SZFWS le &lt;0&gt; or if SZASSIST le &lt;0&gt; and SCASST ne &lt;1&gt;, goto SEHOURS. If SDREFUS1 or SDREFUS2 or SDREFUS3 or SDREFUS4 or SDREFUS5 eq 3, then goto SEHOURS. Else goto SEPRNCWS</p> <p>SEPRNCWS</p> <p>Was the principal job you just told me about your [College Work Study job/assistantship] for 95-96?</p> <p>1= YES 2= NO</p> <p>If SEPRNCWS eq &lt;2&gt; and SZFWS gt 0 then goto SECWSOFF; else goto SEHOURS.</p> <p>SECWSOFF</p> <p>Was your College Work Study job primarily on or off-campus?</p> <p>1=ON-CAMPUS 2=OFF-CAMPUS 3=BOTH ON AND OFF-CAMPUS</p> <p>SECWSTYP</p> <p>Were you working for your school or someone else?</p> <p>1=SCHOOL 2=SOMEONE ELSE</p>
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<p>SECOMSRV</p> <p>Was your work study job part of a community service project (1=YES 2=NO)?</p> <p>SEHOURS</p> <p>About how many hours did you work per week while you were enrolled (July 1, 1995 through June 30, 1996)?</p> <p>0-99 -1 = DK -2 = RE</p> <p>SEENRAMT</p> <p>About how much did you earn from all jobs while you were enrolled?</p> <p>AMOUNT: (0-100,000)</p> <p>SEENRFRQ</p> <p>FREQUENCY: 1= PER HOUR 2= PER WEEK 3= PER MONTH 4= PER TERM 5= FOR THE YEAR 95-96</p> <p>SEENRWKS</p> <p>Did you work for all or most of the weeks while you were enrolled?</p> <p>1= YES, EVERY WEEK WHILE ENROLLED 2= YES, MOST OF THE WEEKS WHILE ENROLLED 3= NO, ONLY ABOUT HALF OF THE WEEKS WHILE ENROLLED 4= NO, LESS THAN HALF OF THE WEEKS WHILE ENROLLED -1= DK -2= RE</p> <p>If SEST_MO and SEST_YR ge 08/95 (later than Jul 95) then goto SESMRWRK; or if SESTLEMP ne 1 and SEEND_MO and SEEND_YR le 6/95 (earlier than Jul 95) then goto SESMRWRK. Otherwise goto SELICENS.</p>	
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<p>SESMRWRK</p> <p>Did you work during the summer of 1995?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>If SESMRWRK ne 1 then goto SELICENS; else goto SESMRHRS.</p> <p>SESMRHRS</p> <p>About how many hours did you work per week at the job held last summer?</p> <p>1-99 -1 = DK -2 = RE</p> <p>SELICENS</p> <p>For some jobs, licensing or certification is recommended or required. How many licenses or certifications do you have?</p> <p>(INCLUDE TEACHER'S CERTIFICATION, DAYCARE LICENSE, REAL-ESTATE LICENSE, PILOT'S LICENSE, ETC..)</p> <p>0-8 = -1 = DK -2 = RE</p> <p>INTERVIEWER: ENTER THE THREE MOST RECENT CERTIFICATES OR LICENSES OBTAINED IN THE NEXT SCREEN.</p> <p>If SELICENS ne 1-8, goto SEROLE.</p>	<p>SELIC1/SELIC2/SELIC3</p> <p>1 = AIR CONDITIONING/HEATING SYSTEMS 2 = ANIMAL CARE/VETERINARIAN ASSISTANT 3 = APPLIANCE REPAIR (WASHER, STOVE) 4 = ARCHITECTURE/DRAFTING 5 = AUTOMOTIVE MECHANIC/REPAIR 6 = BOOKKEEPING/ACCOUNTING (NOT CPA) 7 = BUSINESS/FINANCIAL (BROKER) 8 = CERTIFIED PUBLIC ACCOUNTANT 9 = CHILDCARE/DAYCARE 10 = COMMUNICATIONS LICENSE (HAM RADIO, FCC) 11 = COMPUTER PROGRAMMER/SYSTEMS TECHNICIAN 12 = COMPUTER REPAIR/ELECTRONICS/TV/VCR 13 = COSMETOLOGY/BEAUTICIAN/BARBER 14 = ELECTRICIAN 15 = ENGINEERING (P.E.) 16 = FIRST AID/CPR/LIFESAVING 17 = FOOD SERVICE 18 = INTERIOR DECORATING 19 = LAW ENFORCEMENT/PROTECTIVE SERVICE 20 = LEGAL ASSISTANT (PARA-LEGAL) 21 = MACHINIST 22 = MEDICAL/DENTAL TECHNICIAN 23 = MEDICAL/DENTAL (DENTIST/PHARMACIST) 24 = NURSING AIDE/HOME HEALTH AIDE 25 = NURSING (RN, LPN) 26 = PERSONAL SERVICES (MASSAGE THERAPY) 27 = PLUMBING/WELDING 28 = REAL ESTATE 29 = SECRETARIAL 30 = TEACHER'S AIDE 31 = TEACHER CERTIFICATION 32 = TRANSPORTATION/PILOT LICENSE 33 = VEHICLE LICENSE (TAXI,TRUCK) 34 = TRAVEL AGENT 40 = OTHER -1 = DK -2 = RE</p> <p>If SEHOURS eq 0, goto SEPROGRM Else goto SEROLE</p> <p>SEROLE</p> <p>While you were enrolled and working, would you say you were primarily...</p> <p>1 = ...a student working to meet expenses or 2 = ...an employee who's decided to enroll in school? -1 = DK -2 = RE</p> <p>If SEROLE eq 2 goto SEPERS; else goto SEMONEY</p>
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<p>SEMONEY/SEEXPENS/SEJOBEXP/SETIME/ SECHOICE/SESCHED/SECNTNT/SECAREER/ SELIBRY</p> <p>Were any of the following important considerations in your decision to work while in school (1=YES 2=NO)...</p> <ul style="list-style-type: none"> <li>...Providing spending money.</li> <li>...Paying for tuition and living expenses.</li> <li>...Gaining experience for future employment.</li> </ul> <p>Did having a job... (1=YES 2=NO)</p> <ul style="list-style-type: none"> <li>...Restrict your choice of classes.</li> <li>...Limit number of classes you could take.</li> <li>...Limit class schedules.</li> </ul> <ul style="list-style-type: none"> <li>...Assist with school subjects.</li> </ul> <ul style="list-style-type: none"> <li>...Help prepare for a career or occupation.</li> <li>...Limit your access to the library.</li> </ul> <p>Goto SEPROGRM</p> <p>SEPERS/SERECR/SEJOBREQ/SEJOBADV/ SENEWSKL/SEDEGREE</p> <p>If G/IP, goto SEPROGRM. If SEPRNCWS ne 2, goto SEPROGRM.</p> <p>Were each of the following important considerations in your decision to go to school while working (1=YES 2=NO)...</p> <ul style="list-style-type: none"> <li>...Personal enrichment or interest in the subject</li> <li>...Recreation.</li> <li>...Required for employment in your current job.</li> <li>...To gain skills for advancement in your current job.</li> <li>...To gain skills needed for a new job or career.</li> <li>...To complete a degree or certification program.</li> </ul>	<p>SEPROGRM</p> <p>During 95-96, did you participate in an internship, apprenticeship, or cooperative education program (1=YES 2=NO)?</p> <p>If SEPROGRM eq 1, goto SEPROG1; else goto SEENRPLN.</p> <p>SEPROG1/SEPROG2/SEPROG3</p> <p>Specify type of programs: 1 = INTERNSHIP 2 = APPRENTICESHIP 3 = COOPERATIVE EDUCATION PROGRAM</p> <p>If FTB, goto SEENRPLN; else goto SEVET</p> <p>SEENRPLN</p> <p>What are your plans for school in 96-97?</p> <p>Do you expect to be...</p> <ul style="list-style-type: none"> <li>0 = Not enrolled</li> <li>1 = Enrolled full-time</li> <li>2 = Enrolled part-time.</li> <li>-1 = DK</li> <li>-2 = RE</li> </ul> <p>SEEMPPLN</p> <p>What are your plans for work next year? Do you expect to be...</p> <ul style="list-style-type: none"> <li>0 = Not working.</li> <li>1 = Working full-time.</li> <li>2 = Working part-time.</li> <li>-1 = DK</li> <li>-2 = RE</li> </ul> <p>SEVET</p> <p>If SCUS_CIT NE 1 and SCUS_CIT ne 2 or SAAGE lt 18, then goto E_END.</p> <p>If SAAGE ge 20 and SZVETRAN not blank, then SEVET eq SZVETRAN; goto SEBRNCH. Otherwise, ask SEVET.</p> <p>If SAAGE eq 18 or 19, skip SEVET and goto SEACTDUT.</p> <p>INTERVIEWER: 1=YES 2=NO</p> <p>Are you a veteran of the U.S. military? If SEVET eq 1 goto SEBRNCH; else goto SEACTDUT.</p>
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SEACTDUT

Are you currently in the reserves or on active duty in the US Military?

If SEACTDUT eq 1, goto SEBRNCH; else goto E\_END

SEBRNCH

In which branch of the service[do/did] you serve?

1 = ARMY	4 = MARINES
2 = NAVY	5 = COAST GUARD
3 = AIR FORCE	6 = NATIONAL GUARD
-1 = DK	-2 = RE

If SEACTDUT eq 1, goto SEMILTYP; else goto E\_END

SEMILTYP

Is that...

1 = Active duty or	-1 = DK
2 = Reserves?	-2 = RE

E\_END.





**STUDENT CATI  
Section F**

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<p>SFTAX95</p> <p>If DPNDSTAT=2, goto SFSPSENR</p> <p>Did anyone claim you as a dependent on their 1995 taxes?</p> <p>0 = NO  1 = YES, PARENT(S)/GUARDIAN(S)  3 = YES, SPOUSE  4 = YES, ANOTHER INDIVIDUAL  -1 = DK    -2 = RE</p> <p>SFTAX94</p> <p>If DPNDSTAT=2, goto SFSPSENR</p> <p>Did anyone claim you as a dependent on their 1994 taxes?</p> <p>0 = NO  1 = YES, PARENT(S)/GUARDIAN(S)  3 = YES, SPOUSE  4 = YES, ANOTHER INDIVIDUAL  -1 = DK    -2 = RE</p> <p>SFSPSENR</p> <p>If SCCURMAR ne 2, goto SFDEPEND</p> <p>During the 1995-96 school year, was your spouse enrolled at a postsecondary school? (ENROLLED AT LEAST HALF-TIME)</p> <p>1 = YES  2 = NO  -1 = DK  -2 = RE</p> <p>If SFSPSENR = 1, goto SFSPSAID; else goto SFDEPEND</p> <p>SFSPSAID</p> <p>Did [she/he] receive any financial aid for [her/his] education that year?</p> <p>1 = YES  2 = NO  -1 = DK  -2 = RE</p>	
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<p>SFDEPEND</p> <p>Since July 1, 1995, have you provided at least half of the financial support for any children or other individuals [other than your spouse]?</p> <p>PLEASE INCLUDE CHILDREN AND ANY OTHER PEOPLE, [INCLUDING YOUR PARENTS,/ INCLUDING YOUR GUARDIANS,/INCLUDING YOUR PARENT,] WHO WERE RECEIVING MORE THAN HALF OF THEIR SUPPORT FROM YOU. PLEASE DO NOT INCLUDE YOURSELF [OR YOUR SPOUSE].</p> <p>1 = YES                  2 = NO                  -1 = DK                  -2 = RE</p> <p>If SFDEPEND=1 goto SFAGE1; else goto SFTOT95</p> <p>SFAGE1</p> <p>How many of your dependents were (SINCE JULY 1, 1995)...</p> <p>...under the age of 5</p> <p>SFAGE2</p> <p>...between 5 and 13</p> <p>SFAGE3</p> <p>...older than 13</p> <p>If SFAGE3 gt 0, goto SFDEPPAR; else goto SFDAYCAR</p> <p>SFDEPPAR</p> <p>Were you supporting your [parents/guardians/parent/parents or guardians] at that time?</p> <p>1 = YES                  2 = NO                  -1 = DK                  -2 = RE</p>	
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<p>SFDAYCAR/SFELSEC/SFPOSTSC/SFDEPCAR</p> <p>If SFAGE1 le 0 and SFAGE2 le 0 and SFAGE3 le 0, goto SFPRVTUI</p> <p>How many of these dependents were in...</p> <p>INTERVIEWER THE PROGRAM WILL NOT ACCEPT ENTRIES LARGER THAN THE NUMBER OF CHILDREN REPORTED EARLIER</p> <p>...daycare or pre-school? NUMBER OF CHILDREN = [fill SFAGE1]</p> <p>...a private elementary or secondary school? NUMBER OF DEPENDENTS = [fill SFAGE2] + [fill SFAGE3]</p> <p>...postsecondary school? NUMBER OF DEPENDENTS = [fill SFAGE3]</p> <p>...dependent care facility?</p> <p>(INCLUDE PARENTS OR GUARDIANS)?</p> <p>NUMBER OF DEPENDENTS = [fill SFAGE3]</p> <p>SFPRVTUI</p> <p>If SFELSEC lt 1, goto SFAMTCAR</p> <p>How much did you pay in tuition between July 1, 1995 and June 30, 1996 for the private elementary and secondary education of your dependent children?</p> <p>0-99999 = -1 = DK -2 = RE</p> <p>SFAMTCAR</p> <p>If SFDAYCAR lt 1 and SFDEPCAR lt 1, goto SFTOT95</p> <p>Between July 1, 1995 and June 30, 1996, how much were your average monthly expenses for daycare, babysitting, or elder care for parents? (EXCLUDE COSTS RELATED TO SCHOOL ATTENDANCE)</p> <p>0-5000 = -1 = DK -2 = RE</p>	<p>SFTOT95</p> <p>My next few questions have to do with your income from various sources for 1995 and 1994.</p> <p>INTERVIEWER: ENTER 1 FOR THE 1994 AMOUNT, IF 1994 AMOUNT IS SAME AS 1995. ENTER 2 FOR THE AMOUNT FROM JOBS, IF IT IS THE SAME AS THE TOTAL INCOME. ENTER 3 FOR THE SPOUSE'S INCOME, IF IT IS THE DIFFERENCE BETWEEN THE TOTAL INCOME AND RESPONDENT'S INCOME.</p> <p>What was your [and your spouse's] total income from all sources, prior to taxes and deductions, excluding any (student) financial aid you may have received... (EXCLUDE WORK STUDY &amp; ASSISTANTSHIPS) ...for 1995?</p> <p>If SFTOT95 = -1 goto SF95EST</p> <p>SFTOT94</p> <p>If SZSTAGI le 0 ...for 1994?</p> <p>If SFTOT94 =SFTOT95, SFTOT94E=1 If SFTOT94 = -1 goto SF94EST</p> <p>SFWAG95</p> <p>How much of that was from your job... ...in 1995?</p> <p>SFWAG94</p> <p>If SZSTAGI le 0 ...in 1994?</p> <p>If SFWAG94=SFWAG95, SFRW94E=1</p> <p>SFSPWG95</p> <p>If SCCURMAR=2</p> <p>How much of that was from your spouse's job... ...in 1995?</p> <p>If SFSPWG95 = -1 goto SF95ESTS</p>
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	<p>SFSPWG94</p> <p>If SCMARR95 eq 2 and SZSTAGI le 0</p> <p>...in 1994?</p> <p>If SFSOWG94=SFSWPWG95, SFSW94E=1 If SFSPWG94 =-1 goto SF94ESTS</p> <p>SF95EST</p> <p>Would you estimate that your 1995 employment income was more or less than \$30,000?</p> <p>1 = LESS THAN \$30,000 2 = MORE THAN \$30,000 -1 = DK -2 = RE</p> <p>If SF95EST=1, goto SF95LT; if SF95EST=2, goto SF95GT</p> <p>SF95LT</p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your employment income for 1995...</p> <p>1 = Less than 5,000 2 = 5 to 9 thousand (LESS THAN \$10,000) 3 = 10 to 19 thousand (LESS THAN \$20,000) 4 = 20 to 29 thousand (LESS THAN \$30,000) -1 = DK -2 = RE</p> <p>SF95GT</p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your employment income for 1995...</p> <p>1 = 30 to 39 thousand (LESS THAN \$ 40,000) 2 = 40 to 49 thousand (LESS THAN \$ 50,000) 3 = 50 to 59 thousand (LESS THAN \$ 60,000) 4 = 60 to 69 thousand (LESS THAN \$ 70,000) 5 = 70 to 79 thousand (LESS THAN \$ 80,000) 6 = 80 to 89 thousand (LESS THAN \$ 90,000) 7 = 90 to 99 thousand (LESS THAN \$100,000) 8 = \$100,000 or more -1 = DK -2 = RE</p>
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## SF94EST

Would you estimate that your 1994 employment income was more or less than \$30,000?

- 1 = LESS THAN \$30,000
- 2 = MORE THAN \$30,000
- 1 = DK
- 2 = RE

If SF94EST = 1 goto SF94LT;  
if SF94EST=2, goto SF94GT

## SF94LT

I'm going to read you some dollar ranges. Please tell me the range that best estimates your employment income for 1994...

- 1 = Less than 5,000
- 2 = 5 to 9 thousand (LESS THAN \$10,000)
- 3 = 10 to 19 thousand (LESS THAN \$20,000)
- 4 = 20 to 29 thousand (LESS THAN \$30,000)
- 1 = DK
- 2 = RE

## SF94GT

I'm going to read you some dollar ranges. Please tell me the range that best estimates your employment income for 1994...

- 1 = 30 to 39 thousand (LESS THAN \$ 40,000)
- 2 = 40 to 49 thousand (LESS THAN \$ 50,000)
- 3 = 50 to 59 thousand (LESS THAN \$ 60,000)
- 4 = 60 to 69 thousand (LESS THAN \$ 70,000)
- 5 = 70 to 79 thousand (LESS THAN \$ 80,000)
- 6 = 80 to 89 thousand (LESS THAN \$ 90,000)
- 7 = 90 to 99 thousand (LESS THAN \$100,000)
- 8 = \$100,000 or more
- 1 = DK
- 2 = RE

## SF95ESTS

Would you estimate that your spouse's 1995 employment income was more or less than \$30,000?

- 1 = LESS THAN \$30,000
- 2 = MORE THAN \$30,000
- 1 = DK
- 2 = RE

If SF95ESTS = 1 goto SF95LTS;  
if SF95ESTS=2, goto SF95GTS



## SF95LTS

I'm going to read you some dollar ranges. Please tell me the range that best estimates your spouse's employment income for 1995...

- 1 = Less than 5,000
- 2 = 5 to 9 thousand (LESS THAN \$10,000)
- 3 = 10 to 19 thousand (LESS THAN \$20,000)
- 4 = 20 to 29 thousand (LESS THAN \$30,000)
- 1 = DK
- 2 = RE

## SF95GTS

I'm going to read you some dollar ranges. Please tell me the range that best estimates your spouse's employment income for 1995...

- 1 = 30 to 39 thousand (LESS THAN \$ 40,000)
- 2 = 40 to 49 thousand (LESS THAN \$ 50,000)
- 3 = 50 to 59 thousand (LESS THAN \$ 60,000)
- 4 = 60 to 69 thousand (LESS THAN \$ 70,000)
- 5 = 70 to 79 thousand (LESS THAN \$ 80,000)
- 6 = 80 to 89 thousand (LESS THAN \$ 90,000)
- 7 = 90 to 99 thousand (LESS THAN \$100,000)
- 8 = \$100,000 or more
- 1 = DK
- 2 = RE

## SF94ESTS

Would you estimate that your spouse's 1994 employment income was more or less than \$30,000?

- 1 = LESS THAN \$30,000
- 2 = MORE THAN \$30,000
- 1 = DK
- 2 = RE

If SF94ESTS=1 goto SF94LTS

If SF94ESTS=2 goto SF94GTS

## SF94LTS

I'm going to read you some dollar ranges. Please tell me the range that best estimates your spouse's employment income for 1994...

- 1 = Less than 5,000
- 2 = 5 to 9 thousand (LESS THAN \$10,000)
- 3 = 10 to 19 thousand (LESS THAN \$20,000)
- 4 = 20 to 29 thousand (LESS THAN \$30,000)
- 1 = DK
- 2 = RE

	<p>SF94GTS</p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your spouse's employment income for 1994...</p> <p>1 = 30 to 39 thousand (LESS THAN \$ 40,000)  2 = 40 to 49 thousand (LESS THAN \$ 50,000)  3 = 50 to 59 thousand (LESS THAN \$ 60,000)  4 = 60 to 69 thousand (LESS THAN \$ 70,000)  5 = 70 to 79 thousand (LESS THAN \$ 80,000)  6 = 80 to 89 thousand (LESS THAN \$ 90,000)  7 = 90 to 99 thousand (LESS THAN \$100,000)  8 = \$100,000 or more  -1 = DK  -2 = RE</p> <p>SFUNTBEN</p> <p>Did you [and your spouse] receive any untaxed income or benefits in 1995 such as Social Security, [AFDC, child support,] Worker's comp, welfare or disability? (1=YES 2=NO)?</p> <p>If SFUNTBEN=1, goto SFSS95; else goto SFFOOD</p> <p>SFSS95</p> <p>Which ones did you receive (1=YES 2=NO):</p> <p>SOCIAL SECURITY BENEFITS?</p> <p>SFAFDC95</p> <p>If SFDEPEND eq 1</p> <p>AID TO FAMILIES WITH DEPENDENT CHILDREN?</p> <p>SFCHSP95</p> <p>If SFDEPEND eq 1</p> <p>CHILD SUPPORT</p> <p>SFCOMP95</p> <p>WORKER'S COMPENSATION?</p> <p>SFDIS95</p> <p>DISABILITY PAYMENTS?</p>
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<p>SFWELF95</p> <p>WELFARE PAYMENTS?</p>	<p>SFFOOD</p> <p>At any time since January 1994, have you [for your</p>
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<p>parents] received food stamps?</p> <p>NOTE: STUDENTS AND/OR PARENTS MAY HAVE BEEN UNEMPLOYED FOR SOME TIME SINCE JANUARY, 1994 EVEN THOUGH THEY MAY HAVE HAD HIGH INCOME.</p> <p>0= NO 1= YES, RESPONDENT ONLY [2= YES, PARENTS/GUARDIANS ONLY 3= YES, BOTH RESPONDENT AND PARENTS]</p> <p>SFCASH</p> <p>Next I would like to ask you about your assets [and those of your parents].</p> <p>Currently, what is the total worth of your [and your spouse's] cash, savings, and checking accounts?</p> <p>0-950000 -1 = DK -2 = RE</p> <p>If SfCASH=-1, goto SFCASHE Else goto SFPARHM</p> <p>SFCASHE</p> <p>Is it over \$1,000 (1=YES 2=NO)?</p> <p>SFPARHM</p> <p>If DPNDSTAT eq 2, goto SFHOME If CWHPAR eq 4, goto SFHOME</p> <p>Does/Do your [parents/parent/guardian] own ...</p> <p>INTERVIEWER: 1=YES 2=NO -1=DK -2=RE</p> <p>... a home or pay a mortgage on a home?</p> <p>SFPARBS</p> <p>... a business?</p>	<p>SFPARFM</p> <p>... a farm?</p> <p>SFPARRE</p> <p>... any other real estate?</p> <p>Goto F_END</p> <p>SFHOME</p> <p>Do you [or your spouse] either own your home or pay a mortgage on your home (1=YES 2=NO)?</p> <p>If SFHOME=1, goto SFHMVAL; else goto SFBSFMRE</p> <p>SFHMVAL</p> <p>Currently, what is the total worth of your [and your spouse's] home (0-950,000)?</p> <p>If SFHMVAL = -1, goto SFHMVALE Else goto SFHMOWE</p> <p>SFHMVALE</p> <p>Is it over \$100,000 (1=YES 2=NO)?</p> <p>SFHMOWE</p> <p>How much do you owe on your house (0-950,000)?</p> <p>If SFHMOWE=-1, goto SFHMOWEE Else gotoSFBSFMRE</p> <p>SFHMOWEE</p> <p>Is it over \$50,000 (1=YES 2=NO)?</p> <p>SFBSFMRE</p> <p>If DPNDSTAT=1 goto F_END</p> <p>Do you [or your spouse] own a business, farm, or any other real estate?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>If SFBSFMRE=1 goto SFBUSINS; else goto F_END</p>
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	<p>SFBUSINS</p> <p>Do you [or your spouse] own a business (1=YES 2=NO)?</p> <p>If SFBUSINS=1 goto SFBUSVAL; else goto SFFARM</p> <p>SFBUSVAL</p> <p>Currently, what is the total worth of your [and your spouse's] business (0-950,000)?</p> <p>If SFBUSVAL lt 0, goto SFBSVALE; else goto SFBSOWE</p> <p>SFBSVALE</p> <p>Is it over \$10,000 (1=YES 2=NO)?</p> <p>SFBSOWE</p> <p>How much do you currently owe on your business (0-950,000)?</p> <p>If SFBSOWE eq -1, goto SFBSOWEE; if eq -2, goto SFFARM;</p> <p>SFBSOWEE</p> <p>Is it over \$10,000 (1=YES 2=NO)?</p> <p>SFFARM</p> <p>Do you [or your spouse] own a farm (1=YES 2=NO)?</p> <p>If SFFARM=1 goto SFFMVAL; else goto SFOWNRLE</p> <p>SFFMVAL</p> <p>Currently, what is the total worth of your [and your spouse's] farm (0-950,000)?</p> <p>If SFFMVAL=-1, goto SFFMVALE Else goto SFFMOWE</p> <p>SFFMVALE</p> <p>Is it over \$10,000 (1=YES 2=NO)?</p>
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	<p>SFFMOWE</p> <p>How much do you currently owe on your farm (0-950,000)?</p> <p>If SFFMOWE=-1 goto SFREOWEE If SFFMOWE=-2, goto SFOWNRLE</p> <p>SFREOWEE</p> <p>Is it over \$10,000 (1=YES 2=NO)?</p> <p>Goto SFOWNRLE</p> <p>SFOWNRLE</p> <p>Do you [or your spouse] own any other real estate (1=YES 2=NO)?</p> <p>If SFOWNRLE=1 goto SFRLEVAL; else goto F_END</p> <p>SFRLEVAL</p> <p>Currently, what is the total worth of your [and your spouse's] other real estate (0-950,000)?</p> <p>If SFRLEVAL=-1, goto SFRLEEST Else goto SFRLEOWE</p> <p>SFRLEEST</p> <p>Is it over \$10,000 (1=YES 2=NO)?</p> <p>SFRLEOWE</p> <p>How much do you currently owe on this real estate (0-950,000)?</p> <p>If SFRLEOWE=-1, goto SFRLEEOW If SFRLEOWE=-2 goto F_END</p> <p>SFRLEEOW</p> <p>Is it over \$10,000 (1=YES 2=NO)?</p> <p>F_END</p>
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**STUDENT CATI**  
**Section G**

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<p>Next, I'd like to ask you a few questions about your background.</p> <p>SGSEX</p> <p>INTERVIEWER: ASK ONLY IF RESPONDENT'S GENDER IS NOT OBVIOUS OR HAS NOT BEEN REVEALED DURING THE INTERVIEW.</p> <p>Are you...</p> <p>1 = Male or 2 = Female? -1 = DK -2 = RE</p> <p>SGHISP</p> <p>If SZHISP=2, store 0 in SGHISP and goto SGRACE</p> <p>Are you of Hispanic origin (if yes, of which descent)?</p> <p>0 = NO 1 = Mexican, Mexican-American, or Chicano descent? 2 = Cuban descent? 3 = Puerto Rican descent? 4 = some other Hispanic origin? -1 = DK -2 = RE</p> <p>SGRACE</p> <p>If SZRACE ge 1 and le 2, store SZRACE in SGRACE and goto SGLANG</p> <p>What is your race?</p> <p>READ LIST AS A PROMPT</p> <p>1 = WHITE 2 = AFRICAN AMERICAN OR BLACK 3 = AMERICAN INDIAN OR ALASKAN NATIVE 4 = ASIAN OR PACIFIC ISLANDER 5 = OTHER -1 = DK -2 = RE</p> <p>If SGRACE=3 goto SGTRIBE If SGRACE=4 goto SGASIAN If SGRACE=5 goto SGRACESP Else goto SGLANG</p> <p>SGRACESP</p> <p>SPECIFY OTHER RACE.</p>	<p>SGTRIBE</p> <p>Are you enrolled in a state- or federally-recognized tribe?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>Goto SGLANG</p> <p>SGASIAN</p> <p>Are you...</p> <p>1 = Chinese 2 = Korean 3 = Filipino 4 = Japanese 5 = Vietnamese 6 = Asian Indian 7 = Thai 8 = Hawaiian 9 = Samoan 10 = Guamanian 11 = Other Asian or Pacific Islander?</p> <p>SGLANG</p> <p>What language was spoken most often in your home as you were growing up?</p> <p>1 = ENGLISH 2 = SPANISH 3 = ARABIC 4 = BAHASA 5 = CHINESE (MANDARIN) 6 = FARCEY (PHARSI) 7 = FRENCH AND CANADIAN FRENCH 8 = GAELIC 9 = GERMAN 10 = HEBREW 11 = HINDI 12 = JAPANESE 13 = KOREAN 14 = MALAYSIAN (BAHASA MALAY) 15 = PAKISTANI (PUNJABI) 16 = TGALOG 17 = THAI 18 = VIETNAMESE 19 = WELSH 20 = AMERICAN SIGN LANGUAGE OR OTHER SIGN LANGUAGE 21 = OTHER</p>
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<p>SGSTATE</p> <p>If SZLGST ne &lt;&gt;, store SZLGST in SGSTATE and goto SGGDISAB1</p> <p>What is your state of legal residence?</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">AL=Alabama</td> <td style="width: 50%;">NM=New Mexico</td> </tr> <tr> <td>AK=Alaska</td> <td>NY=New York</td> </tr> <tr> <td>AS=American Samoa</td> <td>NC=North Carolina</td> </tr> <tr> <td>AZ=Arizona</td> <td>ND=North Dakota</td> </tr> <tr> <td>AR=Arkansas</td> <td>OH=Ohio</td> </tr> <tr> <td>CA=California</td> <td>OK=Oklahoma</td> </tr> <tr> <td>CO=Colorado</td> <td>OR=Oregon</td> </tr> <tr> <td>CT=Connecticut</td> <td>PA=Pennsylvania</td> </tr> <tr> <td>DE=Delaware</td> <td>PR=Puerto Rico</td> </tr> <tr> <td>DC=District of Columbia</td> <td>RI=Rhode Island</td> </tr> <tr> <td>FL=Florida</td> <td>SC=South Carolina</td> </tr> <tr> <td>GA=Georgia</td> <td>SD=South Dakota</td> </tr> <tr> <td>GU=Guam</td> <td>TN=Tennessee</td> </tr> <tr> <td>HI=Hawaii</td> <td>TX=Texas</td> </tr> <tr> <td>ID=Idaho</td> <td>UT=Utah</td> </tr> <tr> <td>IL=Illinois</td> <td>VT=Vermont</td> </tr> <tr> <td>IN=Indiana</td> <td>VI=Virgin Islands</td> </tr> <tr> <td>IA=Iowa</td> <td>VA=Virginia</td> </tr> <tr> <td>KS=Kansas</td> <td>WA=Washington</td> </tr> <tr> <td>KY=Kentucky</td> <td>WV=West Virginia</td> </tr> <tr> <td>LA=Louisiana</td> <td>WI=Wisconsin</td> </tr> <tr> <td>ME=Maine</td> <td>WY=Wyoming</td> </tr> <tr> <td>MD=Maryland</td> <td>AA,AE,AP=Military</td> </tr> <tr> <td>MA=Massachusetts</td> <td>CN=Canada</td> </tr> <tr> <td>MI=Michigan</td> <td>FM=Federal States of Micronesia</td> </tr> <tr> <td>MN=Minnesota</td> <td>MH=Marshall Islands</td> </tr> <tr> <td>MS=Mississippi</td> <td>MX=Mexico</td> </tr> <tr> <td>MO=Missouri</td> <td>MP=Northern Mariana Islands</td> </tr> <tr> <td>MT=Montana</td> <td>PW=Palau Island</td> </tr> <tr> <td>NE=Nebraska</td> <td>FC=Foreign Country</td> </tr> <tr> <td>NV=Nevada</td> <td>-1=DK -2= RE</td> </tr> <tr> <td>NH=New Hampshire</td> <td></td> </tr> <tr> <td>NJ=New Jersey</td> <td></td> </tr> <tr> <td>NA=Not Available</td> <td></td> </tr> </table> <p>If SGSTATE ne CN goto SGGDISAB1</p>	AL=Alabama	NM=New Mexico	AK=Alaska	NY=New York	AS=American Samoa	NC=North Carolina	AZ=Arizona	ND=North Dakota	AR=Arkansas	OH=Ohio	CA=California	OK=Oklahoma	CO=Colorado	OR=Oregon	CT=Connecticut	PA=Pennsylvania	DE=Delaware	PR=Puerto Rico	DC=District of Columbia	RI=Rhode Island	FL=Florida	SC=South Carolina	GA=Georgia	SD=South Dakota	GU=Guam	TN=Tennessee	HI=Hawaii	TX=Texas	ID=Idaho	UT=Utah	IL=Illinois	VT=Vermont	IN=Indiana	VI=Virgin Islands	IA=Iowa	VA=Virginia	KS=Kansas	WA=Washington	KY=Kentucky	WV=West Virginia	LA=Louisiana	WI=Wisconsin	ME=Maine	WY=Wyoming	MD=Maryland	AA,AE,AP=Military	MA=Massachusetts	CN=Canada	MI=Michigan	FM=Federal States of Micronesia	MN=Minnesota	MH=Marshall Islands	MS=Mississippi	MX=Mexico	MO=Missouri	MP=Northern Mariana Islands	MT=Montana	PW=Palau Island	NE=Nebraska	FC=Foreign Country	NV=Nevada	-1=DK -2= RE	NH=New Hampshire		NJ=New Jersey		NA=Not Available		<p>SGCANADA</p> <p>SPECIFY CANADIAN PROVINCE</p> <p>AB= Alberta BC= British Columbia MB= Manitoba NB= New Brunswick NF= Newfoundland NS= Nova Scotia ON= Ontario PE= Prince Edward Island PQ= Quebec SK= Saskatchewan NT= Northwst Territories YT= Yukon Territory -1= Don't Know -2= Refused</p> <p>SGDISAB1/2/3/4/5/6</p> <p>Do you have any disabilities, such as a hearing, speech, or mobility impairment, a learning disability, or vision problems that can't be corrected with glasses?</p> <p>IF YES PROBE FOR ALL THAT APPLY READ LIST AS NEEDED ENTER 0 FOR NONE/NO MORE</p> <p>1 = A HEARING IMPAIRMENT 2 = A SPEECH DISABILITY OR LIMITATION 3 = AN ORTHOPEDIC OR MOBILITY LIMITATION 4 = A SPECIFIC LEARNING DISABILITY? 5 = LEGALLY BLIND OR HAVE A VISION IMPAIRMENT THAT CANNOT BE CORRECTED WITH EYEGLASSES 6 = OTHER DISABILITY OR LIMITATION</p> <p>SGDISABL</p> <p>If SGGDISAB1 lt 1, SGGDISABL=2; goto SGVOTE; else SGGDISABL=1 and goto SGHEAR</p> <p>SGHEAR</p> <p>If SGGDISAB1--6=1; else goto SGSPEECH</p> <p>Are you able to hear what is said in a normal conversation with another person, when using a hearing aid if you usually use one?</p> <p>1= YES, USING A HEARING AID 2= YES, WITHOUT A HEARING AID 3= NO -1 = DK -2 = RE</p>
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	<p>SGSPEECH</p> <p>If SGDISABL1--6 =2; else goto SGORTH01</p> <p>When having a conversation with another person, does the other person usually understand your speech?</p> <p>1 = YES                  2 = NO                  -1 = DK                  -2 = RE</p> <p>SGORTH01</p> <p>If SGDISAB1--6=3; else goto SGVISION</p> <p>Are you able to walk for a quarter mile or so without an assistive device or help of another person?                  INTERVIEWER: PROBE FOR THE KIND OF DEVICE IF THE ANSWER IS NO.</p> <p>1= YES                  2= NO, USE A WHEELCHAIR                  3= NO, USE A WALKER                  4= NO, USE SOME OTHER DEVICE</p> <p>SGORTH02</p> <p>If SGORTH01 gt &lt;&gt; and le 1</p> <p>Are you able to walk up a flight of stairs without resting (1=YES 2=NO)?</p> <p>SGORTH03</p> <p>If SGORTH01 gt &lt;&gt; and le 1</p> <p>Are you able to lift and carry something as heavy as 10 pounds, such as a full bag of groceries (1=YES 2=NO)?</p> <p>SGORTH04</p> <p>If SGORTH01 gt &lt;&gt;</p> <p>At [fill school], how difficult has it been for you to get in and out of buildings?</p> <p>1=VERY DIFFICULT                  2=SOMEWHAT DIFFICULT                  3=NOT AT ALL DIFFICULT</p>
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	<p>SGVISION</p> <p>Are you able to see words and letters in ordinary newspaper print when wearing glasses or contact lenses, if you usually wear them?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>SGVOTE</p> <p>If SCUS_CIT ne 1, goto SGCOMSRV</p> <p>Now I'd like to ask you about voting in recent elections...</p> <p>INTERVIEWER: 1=YES 2=NO</p> <p>Are you registered to vote in US elections?</p> <p>SGVOTEVR</p> <p>Have you ever voted in any national, state, or local election?</p> <p>If SAAGE le 20, goto SGVOTE96</p> <p>SGVOTE92</p> <p>Did you vote in the 1992 presidential election?</p> <p>SGVOTE96</p> <p>[Are you planning to/Did you] vote in the 1996 presidential election?</p> <p>SGPOLMTG</p> <p>INTERVIEWER: ENTER 1=YES 2=NO</p> <p>In the last two years, did you...</p> <p>...Go to any political meetings, rallies, or dinners, (or things like that)? DON'T COUNT CAMPUS ELECTIONS</p> <p>SGPOLLTR</p> <p>...Write letters to any public official to express your opinion?</p>
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SGCOMSRV

Did you do any community service or volunteer work during the past year, OTHER THAN COURT-ORDERED SERVICE?

- 1 = YES
- 2 = NO
- 1 = DK
- 2 = RE

If SGCOMSRVne1, goto G\_END

SGCOM1/2/3/4/5/6

What did you do? (What was the community service/work?) CODE ALL THAT APPLY

- 1 = WORKED WITH KIDS--PRIMARILY AS COACH OR ASSISTANT COACH/ SCOUTING, ( E.G., TEAM OR INDIVIDUAL SPORTS/BIG BROTHERS/BIG SISTERS)
- 2 = WORKED WITH KIDS--AS TUTOR/MENTOR, HOMEWORK HOTLINE (E.G., PTA, TUTORING, VOLUNTEER IN CLASSROOM)
- 3 = HELPED RAISE MONEY FOR A SPECIFIC PURPOSE (OTHER THAN POLITICAL) (E.G., GROUPS LIKE UNITED WAY, CANCER SOCIETY, SADD, MADD)
- 4 = HELPED RAISE MONEY OR VOLUNTEERED FOR A POLITICAL CAMPAIGN (E.G., LOCAL STATE OR NATIONAL ELECTIONS/ CAMPUS ELECTIONS)
- 5 = WORKED AT SHELTER FOR HOMELESS/ SOUP KITCHEN
- 6 = TELEPHONE CRISIS CENTER (SUCH AS RAPE/DRUG ABUSE)
- 7 = NEIGHBORHOOD IMPROVEMENT/ CLEANUP PROJECT(S)
- 8 = VOLUNTEERED AT HOSPITAL, NURSING HOME, GROUP HOME
- 9 = LITERACY PROJECT--PRIMARILY WITH ADULTS (E.G. HELPING ADULTS LEARN TO OR IMPROVE READING)
- 10= OTHER
- 0 = EXIT THIS SCREEN

SGCOMHRS

How much time did you volunteer?

NOTE: WE'D LIKE TO GET SOME IDEA ABOUT HOW MUCH TIME IS SPENT VOLUNTEERING AND WHETHER IT'S ON A REGULAR BASIS OR ONLY ONCE OR TWICE A YEAR. IF STUDENT INDICATES THEY VOLUNTEER ONLY ONCE OR TWICE A YEAR, ASK STUDENT TO PROVIDE TOTAL NUMBER OF HOURS PER YEAR

SGCOMFR1

SPECIFY FREQUENCY OF HOURS:

- 1= DAY                      2= WEEK
- 3= MONTH                4= YEAR

SGCOMFR2

How many [days/weeks/months] during the year?

SGCOMRQ

If CTSTTYPE gt 1, goto G\_END

Was this volunteer work required for graduation (1=YES 2=NO)? (COMMUNITY SERVICE OR VOLUNTEER WORK)

G\_END

**STUDENT CATI  
Section H**

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SHAGEDAD/SHAGEMOM

My next few questions are about your [father/male guardian] [and mother/female guardian].

[THIS IS A NON-BPS CASE. WE ARE ALMOST AT THE END OF THE INTERVIEW.]

If SAAGE gt 25 goto SHDADED

How old is your [father/male guardian]?

- 30-110 =
- 1 = DK
- 2 = RE

SHAGEMOM

How old is your [mother/female guardian]?

- 30-110 =
- 1 = DK
- 2 = RE

SHDADED

What was the highest grade or level of education your father ever completed?

- 1= DID NOT COMPLETE HIGH SCHOOL
- 2= COMPLETED HIGH SCHOOL OR EQUIVALENT
- POSTSECONDARY VOCATIONAL:
- 3= LESS THAN 1 YR OF OCCUPATIONAL/ TRADE/TECHNICAL OR BUSINESS SCHOOL
- 4= ONE BUT LESS THAN 2 YEARS OF OCCUPATIONAL/TRADE/TECHNICAL/ BUSINESS SCHOOL
- 5= 2 YEARS OR MORE OF OCCUPATIONAL/ TRADE/BUSINESS SCHOOL
- POSTSECONDARY ACADEMIC:
- 6= LESS THAN 2 YEARS OF COLLEGE
- 7= 2 OR MORE YEARS OF COLLEGE, INCLUDING 2-YR DEGREE
- 8= BACHELOR'S DEGREE - 4 OR 5 YEAR DEGREE
- 9= MASTER'S DEGREE OR EQUIVALENT
- 10= MD/DDS/LLB/OTHER ADVANCED PROFESSIONAL DEGREE
- 11= DOCTORATE DEGREE - PHD, EDD, DBA
- 1 DK -2 RE

<p>SHDADAS</p> <p>If SHDADED eq 7</p> <p>Did he earn an associate's degree?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>SHMOMED</p> <p>What was the highest grade or level of education your mother ever completed?</p> <p>1= DID NOT COMPLETE HIGH SCHOOL 2= COMPLETED HIGH SCHOOL OR EQUIVALENT POSTSECONDARY VOCATIONAL: 3= LESS THAN 1 YR OF OCCUPATIONAL/TRADE/TECHNICAL OR BUSINESS SCHOOL 4= ONE BUT LESS THAN 2 YEARS OF OCCUPATIONAL/TRADE/TECHNICAL/ BUSINESS SCHOOL 5= 2 YEARS OR MORE OF OCCUPATIONAL/TRADE/BUSINESS SCHOOL POSTSECONDARY ACADEMIC: 6= LESS THAN 2 YEARS OF COLLEGE 7= 2 OR MORE YEARS OF COLLEGE, INCLUDING 2-YR DEGREE 8= BACHELOR'S DEGREE - 4 OR 5 YEAR DEGREE 9= MASTER'S DEGREE OR EQUIVALENT 10=MD/DDS/LLB/OTHER ADVANCED PROFESSIONAL DEGREE 11= DOCTORATE DEGREE - PHD, EDD, DBA -1 DK -2 RE</p> <p>SHMOMAS</p> <p>If SHMOMED=7</p> <p>Did she earn an associate's degree?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p>	<p>SHOTPSE</p> <p>How many of your other family members ever attended a postsecondary school?</p> <p>INTERVIEWER: WE'RE INTERESTED IN BROTHERS AND SISTERS, NOT EXTENDED FAMILY.</p> <p>0-20= MEMBERS</p> <p>SHSTRES</p> <p>If DPNDSTAT eq 2 goto SHDADOCC</p> <p>What is your [parents'/guardians'/father's/male guardian's] state of legal residence?</p> <table style="width: 100%; border: none;"> <tr> <td>AL=Alabama</td> <td>NM=New Mexico</td> </tr> <tr> <td>AK=Alaska</td> <td>NY=New York</td> </tr> <tr> <td>AS=American Samoa</td> <td>NC=North Carolina</td> </tr> <tr> <td>AZ=Arizona</td> <td>ND=North Dakota</td> </tr> <tr> <td>AR=Arkansas</td> <td>OH=Ohio</td> </tr> <tr> <td>CA=California</td> <td>OK=Oklahoma</td> </tr> <tr> <td>CO=Colorado</td> <td>OR=Oregon</td> </tr> <tr> <td>CT=Connecticut</td> <td>PA=Pennsylvania</td> </tr> <tr> <td>DE=Delaware</td> <td>PR=Puerto Rico</td> </tr> <tr> <td>DC=District of Columbia</td> <td>RI=Rhode Island</td> </tr> <tr> <td>FL=Florida</td> <td>SC=South Carolina</td> </tr> <tr> <td>GA=Georgia</td> <td>SD=South Dakota</td> </tr> <tr> <td>GU=Guam</td> <td>TN=Tennessee</td> </tr> <tr> <td>HI=Hawaii</td> <td>TX=Texas</td> </tr> <tr> <td>ID=Idaho</td> <td>UT=Utah</td> </tr> <tr> <td>IL=Illinois</td> <td>VT=Vermont</td> </tr> <tr> <td>IN=Indiana</td> <td>VI=Virgin Islands</td> </tr> <tr> <td>IA=Iowa</td> <td>VA=Virginia</td> </tr> <tr> <td>KS=Kansas</td> <td>WA=Washington</td> </tr> <tr> <td>KY=Kentucky</td> <td>WV=West Virginia</td> </tr> <tr> <td>LA=Louisiana</td> <td>WI=Wisconsin</td> </tr> <tr> <td>ME=Maine</td> <td>WY=Wyoming</td> </tr> <tr> <td>MD=Maryland</td> <td>AA,AE,AP=Military</td> </tr> <tr> <td>MA=Massachusetts</td> <td>CN=Canada</td> </tr> <tr> <td>MI=Michigan</td> <td>FM=Fed States of Micronesia</td> </tr> <tr> <td>MN=Minnesota</td> <td>MH=Marshall Islands</td> </tr> <tr> <td>MS=Mississippi</td> <td>MX=Mexico</td> </tr> <tr> <td>MO=Missouri</td> <td>MP=Northern Mariana Islands</td> </tr> <tr> <td>MT=Montana</td> <td>PW=Palau Island</td> </tr> <tr> <td>NE=Nebraska</td> <td>FC=Foreign Country</td> </tr> <tr> <td>NV=Nevada</td> <td>-1=DK -2= RE</td> </tr> <tr> <td>NH=New Hampshire</td> <td></td> </tr> <tr> <td>NJ=New Jersey</td> <td></td> </tr> <tr> <td>NA=Not Available</td> <td></td> </tr> </table> <p>If SHSTRESne CN, goto SHPARST2</p>	AL=Alabama	NM=New Mexico	AK=Alaska	NY=New York	AS=American Samoa	NC=North Carolina	AZ=Arizona	ND=North Dakota	AR=Arkansas	OH=Ohio	CA=California	OK=Oklahoma	CO=Colorado	OR=Oregon	CT=Connecticut	PA=Pennsylvania	DE=Delaware	PR=Puerto Rico	DC=District of Columbia	RI=Rhode Island	FL=Florida	SC=South Carolina	GA=Georgia	SD=South Dakota	GU=Guam	TN=Tennessee	HI=Hawaii	TX=Texas	ID=Idaho	UT=Utah	IL=Illinois	VT=Vermont	IN=Indiana	VI=Virgin Islands	IA=Iowa	VA=Virginia	KS=Kansas	WA=Washington	KY=Kentucky	WV=West Virginia	LA=Louisiana	WI=Wisconsin	ME=Maine	WY=Wyoming	MD=Maryland	AA,AE,AP=Military	MA=Massachusetts	CN=Canada	MI=Michigan	FM=Fed States of Micronesia	MN=Minnesota	MH=Marshall Islands	MS=Mississippi	MX=Mexico	MO=Missouri	MP=Northern Mariana Islands	MT=Montana	PW=Palau Island	NE=Nebraska	FC=Foreign Country	NV=Nevada	-1=DK -2= RE	NH=New Hampshire		NJ=New Jersey		NA=Not Available	
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	<p>SHPARPR1</p> <p>SPECIFY CANADIAN PROVINCE</p> <p>AB= Alberta  BC= British Columbia  MB= Manitoba  NB= New Brunswick  NF= Newfoundland  NS= Nova Scotia  ON= Ontario  PE= Prince Edward Island  PQ= Quebec  SK= Saskatchewan  NT= Northwst Territories  YT= Yukon Territory  -1= Don't Know  -2= Refused</p> <p>SHPARST2</p> <p>What is your [mother's/female guardian's] state of legal residence?</p> <table border="0"> <tr> <td>AL=Alabama</td> <td>NM=New Mexico</td> </tr> <tr> <td>AK=Alaska</td> <td>NY=New York</td> </tr> <tr> <td>AS=American Samoa</td> <td>NC=North Carolina</td> </tr> <tr> <td>AZ=Arizona</td> <td>ND=North Dakota</td> </tr> <tr> <td>AR=Arkansas</td> <td>OH=Ohio</td> </tr> <tr> <td>CA=California</td> <td>OK=Oklahoma</td> </tr> <tr> <td>CO=Colorado</td> <td>OR=Oregon</td> </tr> <tr> <td>CT=Connecticut</td> <td>PA=Pennsylvania</td> </tr> <tr> <td>DE=Delaware</td> <td>PR=Puerto Rico</td> </tr> <tr> <td>DC=District of Columbia</td> <td>RI=Rhode Island</td> </tr> <tr> <td>FL=Florida</td> <td>SC=South Carolina</td> </tr> <tr> <td>GA=Georgia</td> <td>SD=South Dakota</td> </tr> <tr> <td>GU=Guam</td> <td>TN=Tennessee</td> </tr> <tr> <td>HI=Hawaii</td> <td>TX=Texas</td> </tr> <tr> <td>ID=Idaho</td> <td>UT=Utah</td> </tr> <tr> <td>IL=Illinois</td> <td>VT=Vermont</td> </tr> <tr> <td>IN=Indiana</td> <td>VI=Virgin Islands</td> </tr> <tr> <td>IA=Iowa</td> <td>VA=Virginia</td> </tr> <tr> <td>KS=Kansas</td> <td>WA=Washington</td> </tr> <tr> <td>KY=Kentucky</td> <td>WV=West Virginia</td> </tr> <tr> <td>LA=Louisiana</td> <td>WI=Wisconsin</td> </tr> <tr> <td>ME=Maine</td> <td>WY=Wyoming</td> </tr> <tr> <td>MD=Maryland</td> <td>AA,AE,AP=Military</td> </tr> <tr> <td>MA=Massachusetts</td> <td>CN=Canada</td> </tr> <tr> <td>MI=Michigan</td> <td>FM=Fed States of Micronesia</td> </tr> <tr> <td>MN=Minnesota</td> <td>MH=Marshall Islands</td> </tr> <tr> <td>MS=Mississippi</td> <td>MX=Mexico</td> </tr> <tr> <td>MO=Missouri</td> <td>MP=Northern Mariana Islands</td> </tr> <tr> <td>MT=Montana</td> <td>PW=Palau Island</td> </tr> <tr> <td>NE=Nebraska</td> <td>FC=Foreign Country</td> </tr> <tr> <td>NV=Nevada</td> <td>-1=DK -2= RE</td> </tr> <tr> <td>NH=New Hampshire</td> <td></td> </tr> <tr> <td>NJ=New Jersey</td> <td></td> </tr> <tr> <td>NA=Not Available</td> <td></td> </tr> </table> <p>If SHPARST2 ne CN, then goto SHDADOCC.</p>	AL=Alabama	NM=New Mexico	AK=Alaska	NY=New York	AS=American Samoa	NC=North Carolina	AZ=Arizona	ND=North Dakota	AR=Arkansas	OH=Ohio	CA=California	OK=Oklahoma	CO=Colorado	OR=Oregon	CT=Connecticut	PA=Pennsylvania	DE=Delaware	PR=Puerto Rico	DC=District of Columbia	RI=Rhode Island	FL=Florida	SC=South Carolina	GA=Georgia	SD=South Dakota	GU=Guam	TN=Tennessee	HI=Hawaii	TX=Texas	ID=Idaho	UT=Utah	IL=Illinois	VT=Vermont	IN=Indiana	VI=Virgin Islands	IA=Iowa	VA=Virginia	KS=Kansas	WA=Washington	KY=Kentucky	WV=West Virginia	LA=Louisiana	WI=Wisconsin	ME=Maine	WY=Wyoming	MD=Maryland	AA,AE,AP=Military	MA=Massachusetts	CN=Canada	MI=Michigan	FM=Fed States of Micronesia	MN=Minnesota	MH=Marshall Islands	MS=Mississippi	MX=Mexico	MO=Missouri	MP=Northern Mariana Islands	MT=Montana	PW=Palau Island	NE=Nebraska	FC=Foreign Country	NV=Nevada	-1=DK -2= RE	NH=New Hampshire		NJ=New Jersey		NA=Not Available	
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<p>SHINC95E</p> <p>Would you estimate that [their/his]1995 total income was more or less than \$30,000?  1 = LESS THAN \$30,000  2 = MORE THAN \$30,000  -1 = DK  -2 = RE</p> <p>If SHINC95E=1, goto SHINC95L  If SHINC95E=2, goto SHINC95M  Else goto SHINC94</p> <p>SHINC95L</p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your [parents'/guardians'/father's/male guardian's] income for 1995...</p> <p>1 = Less than 5,000  2 = 5 to 9 thousand (LESS THAN \$10,000)  3 = 10 to 19 thousand (LESS THAN \$20,000)  4 = 20 to 29 thousand (LESS THAN \$30,000)  -1 = DK  -2 = RE</p> <p>SHINC95M</p> <p>1 = 30 to 39 thousand (LESS THAN \$40,000)  2 = 40 to 49 thousand (LESS THAN \$50,000)  3 = 50 to 59 thousand (LESS THAN \$60,000)  4 = 60 to 69 thousand (LESS THAN \$70,000)  5 = 70 to 79 thousand (LESS THAN \$ 80,000)  6 = 80 to 89 thousand (LESS THAN \$ 90,000)  7 = 90 to 99 thousand (LESS THAN \$100,000)  8 = \$100,000 or more  -1 = DK  -2 = RE</p> <p>SHINC94</p> <p>If SAAGE gt 25, goto SHSIZE  If SZPAAGI gt 0, goto SHINC295</p> <p>What would you estimate it was for 1994?  ENTER 1 IF SAME AS 1995  0-3,000,000 =  -1 = DK  -2 = RE</p> <p>If SHINC94 ne -1, goto SHINC295</p>	<p>SHINC94E</p> <p>Would you estimate that [their/his]1994 total income was more or less than \$30,000?  1 = LESS THAN \$30,000  2 = MORE THAN \$30,000  -1 = DK  -2 = RE</p> <p>If SHINC94E=2 goto SHIN94M</p> <p>SHIN94L</p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your [parents'/guardians'/father's/male guardian's] income for 1994...</p> <p>1 = Less than 5,000  2 = 5 to 9 thousand (LESS THAN \$10,000)  3 = 10 to 19 thousand (LESS THAN \$20,000)  4 = 20 to 29 thousand (LESS THAN \$30,000)  -1 = DK  -2 = RE</p> <p>SHIN94M</p> <p>1 = 30 to 39 thousand (LESS THAN \$ 40,000)  2 = 40 to 49 thousand (LESS THAN \$ 50,000)  3 = 50 to 59 thousand (LESS THAN \$ 60,000)  4 = 60 to 69 thousand (LESS THAN \$ 70,000)  5 = 70 to 79 thousand (LESS THAN \$ 80,000)  6 = 80 to 89 thousand (LESS THAN \$ 90,000)  7 = 90 to 99 thousand (LESS THAN \$100,000)  8 = \$100,000 or more  -1 = DK  -2 = RE</p> <p>SHINC295</p> <p>If SAAGE gt 25, goto SHSIZE</p> <p>What is your estimate of your [mother's/female guardian's] total yearly income, for 1995?</p> <p>0-3,000,000 =  -1 = DK  -2 = RE</p> <p>If SHINC295 ne -1, goto SHINC294</p>
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<p>SHRNG295</p> <p>Would you estimate that her 1995 total income was more or less than \$30,000?</p> <p>1 = LESS THAN \$30,000                  2 = MORE THAN \$30,000                  -1 = DK                  -2 = RE</p> <p>If SHRNG295=1, goto SHIN2L95                  If SHRNG295=2, goto SHIN2M95                  Else goto SHINC294</p> <p>SHIN2L95</p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your [mother's/female guardian's] income for 1995...</p> <p>1 = Less than 5,000                  2 = 5 to 9 thousand (LESS THAN \$10,000)                  3 = 10 to 19 thousand (LESS THAN \$20,000)                  4 = 20 to 29 thousand (LESS THAN \$30,000)                  -1 = DK                  -2 = RE</p> <p>SHIN2M95</p> <p>1 = 30 to 39 thousand (LESS THAN \$ 40,000)                  2 = 40 to 49 thousand (LESS THAN \$ 50,000)                  3 = 50 to 59 thousand (LESS THAN \$ 60,000)                  4 = 60 to 69 thousand (LESS THAN \$ 70,000)                  5 = 70 to 79 thousand (LESS THAN \$ 80,000)                  6 = 80 to 89 thousand (LESS THAN \$ 90,000)                  7 = 90 to 99 thousand (LESS THAN \$100,000)                  8 = \$100,000 or more                  -1 = DK                  -2 = RE</p> <p>SHINC294</p> <p>If SAAGE gt 25, goto SHSIZE                  If SZPAAGI gt 0 goto SHSIZE</p> <p>What would you estimate it was for 1994?                  ENTER 1 IF THE SAME AS 1995</p> <p>0-999999 =                  -1 = DK                  -2 = RE</p> <p>If SHINC294 ne -1, goto SHSIZE</p>	<p>SHRNG294</p> <p>Would you estimate that her 1994 total income was more or less than \$30,000?</p> <p>1 = LESS THAN \$30,000                  2 = MORE THAN \$30,000                  -1 = DK                  -2 = RE</p> <p>If SHRNG294 =1 goto SHIN2L94                  If SHRNG294=2 goto SHIN2M94                  Else goto SHSIZE</p> <p>SHIN2L94</p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your [mother's/female guardian's] income for 1994...</p> <p>1 = Less than 5,000                  2 = 5 to 9 thousand (LESS THAN \$10,000)                  3 = 10 to 19 thousand (LESS THAN \$20,000)                  4 = 20 to 29 thousand (LESS THAN \$30,000)                  -1 = DK                  -2 = RE</p> <p>SHIN2M94</p> <p>1 = 30 to 39 thousand (LESS THAN \$ 40,000)                  2 = 40 to 49 thousand (LESS THAN \$ 50,000)                  3 = 50 to 59 thousand (LESS THAN \$ 60,000)                  4 = 60 to 69 thousand (LESS THAN \$ 70,000)                  5 = 70 to 79 thousand (LESS THAN \$ 80,000)                  6 = 80 to 89 thousand (LESS THAN \$ 90,000)                  7 = 90 to 99 thousand (LESS THAN \$100,000)                  8 = \$100,000 or more                  -1 = DK                  -2 = RE</p>
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	<p>SHSIZE</p> <p>If SAAGE gt 25, goto SHWRKEXP</p> <p>How many people did your [parents'/guardians'/ father's/ male guardian's] household support between July 1, 1995 and June 30, 1996?</p> <p>Please include anyone who received at least half of their support from your [parents/guardians/father/male guardian].</p> <p>[(Include yourself, your [father/male guardian], and your [mother/female guardian], if applicable.) / (Include yourself and your [father/male guardian].)] (0-20)</p> <p>If SHSIZE gt 0, goto SHPSENPS Else goto SHHHSIZ2</p> <p>SHPSENPS</p> <p>Of the [fill SHSIZE] people your [[parents/guardians] were / [father/male guardian] was] supporting during that time, how many were in a postsecondary school at least half-time (0-20)?</p> <p>SHHHSIZ2</p> <p>How many people did your [mother's/female guardian's] household support between July 1, 1995 and June 30, 1996?</p> <p>Please include anyone who received at least half of their support from your [mother/female guardian], and include yourself, [your [mother/female guardian], and your [father/male guardian], if applicable. / and your [mother/female guardian], if applicable.] 0-20 -1 = DK    -2 = RE</p> <p>If SHHHSIZ2 le 0, goto SHWRKEXP</p> <p>SHHHPSE2</p> <p>Of the [fill SHHHSIZ2] people your [mother/female guardian] was supporting during that time, how many were in a postsecondary school at least half-time? 0-20 -1 = DK -2 = RE</p>
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<p>SHWRKEXP</p> <p>If DPNDSTAT eq 2 goto SHEFFECT</p> <p>Did your [[father/male guardian] and [mother/female guardian] / [father/male guardian] / [mother/female guardian]] expect you to have a job for pay during the 1995-96 school year?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>If SHWRKEXP ne 1 goto SHEFFECT</p> <p>SHHRSEXP</p> <p>How many hours did [they/he/she] expect you to work in an average week?</p> <p>1-100 -1 = DK -2 = RE</p> <p>SHEFFECT</p> <p>If DPNDSTAT eq 2 goto H_END If SHHRSEXP lt 1 goto H_END</p> <p>You told me earlier that, on average, you worked about [fill SHHRSEXP] hours per week while you were also attending classes. Do you think the amount of time you were working had a positive effect, a negative effect, or no effect on your grades?</p> <p>1 = POSITIVE EFFECT 2 = NEGATIVE EFFECT 3 = NO EFFECT -1 = DK -2 = RE</p> <p>H_END</p>	
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**STUDENT CATI  
Section I**

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<p>If BPSELIG ne 1 and if CTSTTYPE eq 1 and if a_fstlvl le 2, goto SIREMED Else if BPSELIG ne 1 goto I_END.</p> <p>SINUMAPP</p> <p>Next I have a few questions about your experiences at [NPSAS school].</p> <p>Thinking back to when you applied to [NPSAS school]...</p> <p>How many schools did you apply to (0-99). (INCLUDING [NPSAS school])?</p> <p>SINUMACC</p> <p>How many of those schools accepted you (0-99)?</p> <p>SIFIRST</p> <p>Was [NPSAS school] your first choice for postsecondary school (1=YES 2=NO)?</p> <p>SIMILES</p> <p>How far (in miles) is [NPSAS school] from your permanent home (1-12450 MILES)?</p> <p>SITALK</p> <p>Random number start=SIRAND2</p> <p>I am now going to read you a list of school-related activities that you may have participated in during the 1995-96 school year, while you attended [fill name of NPSAS school]. Please tell me how often you participated in the activity.</p> <p>INTERVIEWER: ENTER 0=NEVER, 1=SOMETIMES, AND 2=OFTEN</p> <p>Talk with faculty about academic matters outside of class time?</p>	<p>SIMEET</p> <p>Meet with advisor concerning academic plans</p> <p>SISOCIAL</p> <p>Have informal or social contacts with advisor or other faculty members outside of classrooms and offices</p> <p>SISTUDGP</p> <p>Attend study groups outside of the classroom?</p> <p>SIFRIEND</p> <p>Go places with friends from school? (EG CONCERTS, MOVIES, RESTAURANTS, SPORTING EVENTS)</p> <p>SICLUBS</p> <p>Participate in school clubs? (EG STUDENT GOVERNMENT, RELIGIOUS CLUBS, SERVICE ACTIVITIES)</p> <p>SILECTUR</p> <p>During 95-96, how often did you...</p> <p>...attend academic or career-related lectures, conventions, or field trips?</p> <p>SIARTS</p> <p>If LEVEL It 3</p> <p>...attend music, choir, drama, or other fine arts activities?</p> <p>SIINTRAM</p> <p>If LEVEL It 3</p> <p>...participate in intramural or nonvarsity sports?</p>
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	<p>SIVARSTY</p> <p>If LEVEL It 3</p> <p>...participate in varsity or intercollegiate sports?</p> <p>SITEACH</p> <p>Please tell me if you were satisfied with the following at [fill name of NPSAS school].</p> <p>The teaching ability of most of the instructors?</p> <p>SISOCLIF</p> <p>Your social life?</p> <p>SIINTELL</p> <p>Your intellectual growth?</p> <p>SICOST</p> <p>The financial cost of attending?</p> <p>SIPRSTG</p> <p>The prestige of the school?</p> <p>SICLIMT</p> <p>Overall campus climate regarding students of different racial or ethnic backgrounds?</p> <p>SICLSIZE</p> <p>Class sizes?</p> <p>SICOURS</p> <p>The availability of courses?</p>
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<p>SIREMED</p> <p>If SAFSTLEV gt 2, goto SICNSL</p> <p>0= DID NOT USE; 1= ONCE; 2=SOMETIMES; 3=OFTEN/A LOT; 4=SERVICE UNAVAILABLE</p> <p>During 95-96, did you take remedial or developmental courses (0=NO 1=YES)?..</p> <p>(Note: format of the response options accommodates values of 1--3, all indicating "Yes.")</p> <p>If SIREMED ne 1--3 goto SICNSL</p> <p>SIREMEDS</p> <p>Were you satisfied with the services (1=YES 2=NO)?</p> <p>SICNSL</p> <p>During 95-96, how often did you...</p> <p>...use counseling services, FOR ACADEMIC/ FINANCIAL AID, OR PERSONAL ISSUES?</p> <p>If SICNSL ne 1--3 goto SIJOB</p> <p>SICNSLS</p> <p>Were you satisfied with the services (1=YES 2=NO)?</p> <p>SIJOB</p> <p>...use the job placement services?.....</p> <p>If SIJOB ne 1--3 goto SICULT</p> <p>SIJOBS</p> <p>Were you satisfied with the services (1=YES 2=NO)?</p>	<p>SICULT</p> <p>If LEVEL lt 3</p> <p>...participate in cultural activities including music, art, and drama?.....</p> <p>If SICULT ne 1--3 goto SISPRT</p> <p>SICULTS</p> <p>Were you satisfied with the activities (1=YES 2=NO)?</p> <p>SISPRT</p> <p>If LEVEL lt 3</p> <p>...use the sports or recreational facilities?.....</p> <p>If SISPRT ne 1--3, goto SIREAD</p> <p>SISPRTS</p> <p>Were you satisfied with the facilities (1=YES 2=NO)?</p> <p>SIREAD</p> <p>If SIREMED lt 1 or gt 3 goto SICAREER If SIFSTLEV gt 2, goto SICAREER</p> <p>INTERVIEWER: ENTER 1= YES 2 = NO</p> <p>You indicated that you had remedial instruction or developmental courses. Was this to improve your skills in...</p> <p>...reading</p> <p>If ne 1 goto SIWRIT</p> <p>SIREADHR</p> <p>How many hours of instruction did you have (1-500)?</p> <p>SIWRIT</p> <p>...writing</p> <p>If ne 1, goto SIMATH SIWRITHR</p> <p>How many hours of instruction did you have (1-500)?</p>
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	<p>SIMATH</p> <p>    ...math</p> <p>If ne 1, goto SISTUD</p> <p>SIMATHHR</p> <p>    How many hours of instruction did you have (1-500)?</p> <p>SISTUD</p> <p>    ...study skills</p> <p>If ne 1, goto SILANG</p> <p>SISTUDHR</p> <p>    How many hours of instruction did you have (1-500)?</p> <p>SILANG</p> <p>    ...English language skills</p> <p>If ne 1, goto SICAREER</p> <p>SILANGHR</p> <p>    How many hours of instruction did you have (1-500)?</p> <p>SICAREER</p> <p>If BPSELIG ne &lt;1&gt; goto I_END</p> <p>    What job, if any, do you expect to have when you finish your program?</p> <p>    INTERVIEWER: PLEASE ENTER THE OCCUPATION INFO ONLY IN THE FOLLOWING SCREENS OF THE USEREXIT</p> <p>    1 = ENTER/RE-ENTER THE USEREXIT     2 = SKIP OVER THE USEREXIT</p>
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<p>SIAUTH</p> <p>Are the following personal goals very important to you?</p> <p>INTERVIEWER: 1= YES 2= NO</p> <p>Becoming an authority in a field.</p> <p>SIINFL</p> <p>Influencing the political structure.</p> <p>SIFINC</p> <p>Being very well off financially.</p> <p>SIBUSIN</p> <p>Becoming successful in your own business.</p> <p>SISUCCAR</p> <p>Being successful in a particular career.</p> <p>SILEAD</p> <p>Being a leader in the community.</p> <p>SILIVCLS</p> <p>Living close to your parents and relatives.</p> <p>SIAWAY</p> <p>Getting away from the area where you were raised.</p> <p>SILEISR</p> <p>Having leisure time to enjoy personal interests.</p> <p>SIFAMILY</p> <p>Raising a family.</p> <p>SIBTROP</p>	<p>Being able to give your children better opportunities than you had.</p> <p>I_END</p>
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**STUDENT CATI  
Section J**

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<p>SJINTRO</p> <p>If bps_elig ne 1 goto SJSOCSEC</p> <p>You've been selected for a U.S. Department of Education study to determine what happens to students as they pursue their education. We would like to talk to you again in a couple years to see what you are doing and what has changed in your life. To find you, we need some locating information; which will be kept in strict confidence.</p> <p>SJBPSCON</p> <p>Would you please tell me the name, address, and phone number of a person -- preferably a relative other than your parents -- who lives at an address different from yours and who will always know where to get in touch with you?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>ENTER FIRST NAME. ENTER MIDDLE INITIAL. ENTER LAST NAME. ENTER LINE 1 OF ADDRESS. ENTER LINE 2 OF ADDRESS. ENTER CITY OF RESIDENCE. ENTER ALPHABETICAL CODE FOR STATE. ZIP CODE: ENTER PHONE NUMBER:</p> <p>If SJBPSCON = 2 then goto SJSPOUSE</p> <p>SJRELATN</p> <p>What is this person's relationship to you? 1 = MOTHER/FEMALE GUARDIAN 2 = FATHER/MALE GUARDIAN 3 = SISTER/BROTHER 4 = SPOUSE 5 = OTHER RELATIVE 6 = FRIEND 7 = OTHER SPECIFY -1 = DK -2 = RE</p> <p>If SJRELATN ne 7 goto SJSPOUSE</p> <p>SJOTHSPF</p> <p>SPECIFY RELATIONSHIP OF CONTACT.</p>	<p>SJSPOUSE</p> <p>If not married goto SJVERPRM else if married and SJBPSCON =4 goto SJVERPRM</p> <p>What is your spouse's full name (including maiden name)? ENTER FIRST NAME ENTER MIDDLE INITIAL ENTER LAST NAME ENTER MAIDEN NAME</p> <p>SJVERPRM</p> <p>We'd also like to verify your permanent address. Is it same or similar to:</p> <p>1.PERMANENT ADDRESS 1.PHONE: 1. ADDR: 1. 1. CITY: 1.STATE:</p> <p>2.PARENT ADDRESS 2.PHONE: 2. ADDR: 2. 2. CITY: 2.STATE:</p> <p>3.CURRENT RL ADDRESS 3.PHONE: 3. ADDR: 3. 3. CITY: 3.STATE: 9. Totally different address 0. RETURN TO MAIN MENU</p> <p>1 = PERMANENT ADDRESS FROM CADE 2 = PARENT ADDRESS FROM CADE 3 = ADDRESS FROM CURRENT ROSTER LINE 9 = DIFFERENT FROM ABOVE -1=DK -2=RE</p> <p>If SJVERPRM lt 0 goto SJVERLOC</p> <p>SJVERPR2</p> <p>DO YOU NEED TO CORRECT THE ADDRESS? 1 = YES 2 = NO</p> <p>If SJVERPRM = 2 goto SJVERLOC</p>
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SJPRMADR

INTERVIEWER: VERIFY AND/OR UPDATE THE PERMANENT ADDRESS.

- ENTER LINE 1 OF ADDRESS.
- ENTER LINE 2 OF ADDRESS.
- ENTER CITY OF RESIDENCE.
- ENTER ALPHABETICAL CODE FOR STATE.
- ZIP CODE:
- ENTER PHONE NUMBER:

SJVERLOC

And is your local address same or similar to:

1.PERMANENT ADDRESS

1.PHONE:

1. ADDR:

1.

1. CITY:

1.STATE:

2.LOCAL ADDRESS

2.PHONE:

2. ADDR:

2.

2. CITY:

2.STATE:

3.CURRENT RL ADDRESS

3.PHONE:

3. ADDR:

3.

3. CITY:

3.STATE:

9. Totally different address

0.RETURN TO MAIN MENU

1 = PERMANENT ADDRESS FROM PRMADD

2 = LOCAL ADDRESS FROM CADE

3 = ADDRESS FROM CURRENT ROSTER LINE

9 = DIFFERENT FROM ABOVE -1=DK -2=RE

If SJVERLOC lt 0 goto SJEMAIL

SJVERLO2

DO YOU NEED TO CORRECT THE ADDRESS?

1 = YES

2 = NO

If SJVERLO2 = 2 goto SJEMAIL

SJ\_LOCADR

INTERVIEWER: VERIFY AND/OR UPDATE THE LOCAL ADDRESS.

- ENTER LINE 1 OF ADDRESS.
- ENTER LINE 2 OF ADDRESS.
- ENTER CITY OF RESIDENCE.
- ENTER ALPHABETICAL CODE FOR STATE.
- ENTER ZIP CODE:
- ENTER PHONE NUMBER:

SJEMAIL

Do you have an e-mail (ELECTRONIC MAIL) address?

- 1 = YES
- 2 = NO
- 1 = DK
- 2 = RE

If SJEMAIL ne 1 goto SJNICK

SJEMADDR

What is it?

SJNICK

Do your parents, relatives, or friends know you by any other name other than [fill student]?

- 1 = YES
- 2 = NO
- 1 = DK
- 2 = RE

If SJNICK ne 1 goto SJDRVLIC

SJNAMSPF

What is that other name?

SPECIFY NAME:

<p>SJDRVLIC</p> <p>If z_drvlic gt &lt;&gt;, store z_drvlic in SJDRVLIC, goto SJFTRCTY</p> <p>To help us in locating you later, please tell me in what state your driver's license was issued.</p> <table border="0"> <tr><td>AL=Alabama</td><td>NM=New Mexico</td></tr> <tr><td>AK=Alaska</td><td>NY=New York</td></tr> <tr><td>AS=American Samoa</td><td>NC=North Carolina</td></tr> <tr><td>AZ=Arizona</td><td>ND=North Dakota</td></tr> <tr><td>AR=Arkansas</td><td>OH=Ohio</td></tr> <tr><td>CA=California</td><td>OK=Oklahoma</td></tr> <tr><td>CO=Colorado</td><td>OR=Oregon</td></tr> <tr><td>CT=Connecticut</td><td>PA=Pennsylvania</td></tr> <tr><td>DE=Delaware</td><td>PR=Puerto Rico</td></tr> <tr><td>DC=District of Columbia</td><td>RI=Rhode Island</td></tr> <tr><td>FL=Florida</td><td>SC=South Carolina</td></tr> <tr><td>GA=Georgia</td><td>SD=South Dakota</td></tr> <tr><td>GU=Guam</td><td>TN=Tennessee</td></tr> <tr><td>HI=Hawaii</td><td>TX=Texas</td></tr> <tr><td>ID=Idaho</td><td>UT=Utah</td></tr> <tr><td>IL=Illinois</td><td>VT=Vermont</td></tr> <tr><td>IN=Indiana</td><td>VI=Virgin Islands</td></tr> <tr><td>IA=Iowa</td><td>VA=Virginia</td></tr> <tr><td>KS=Kansas</td><td>WA=Washington</td></tr> <tr><td>KY=Kentucky</td><td>WV=West Virginia</td></tr> <tr><td>LA=Louisiana</td><td>WI=Wisconsin</td></tr> <tr><td>ME=Maine</td><td>WY=Wyoming</td></tr> <tr><td>MD=Maryland</td><td>AA,AE,AP=Military</td></tr> <tr><td>MA=Massachusetts</td><td>CN=Canada</td></tr> <tr><td>MI=Michigan</td><td>FM=Fed States of Micronesia</td></tr> <tr><td>MN=Minnesota</td><td>MH=Marshall Islands</td></tr> <tr><td>MS=Mississippi</td><td>MX=Mexico</td></tr> <tr><td>MO=Missouri</td><td>MP=Northern Mariana Islands</td></tr> <tr><td>MT=Montana</td><td>PW=Palau Island</td></tr> <tr><td>NE=Nebraska</td><td>FC=Foreign Country</td></tr> <tr><td>NV=Nevada</td><td>-1=DK -2= RE</td></tr> <tr><td>NH=New Hampshire</td><td></td></tr> <tr><td>NJ=New Jersey</td><td></td></tr> <tr><td>NA=Not Available</td><td></td></tr> <tr><td>NN=No driver's license</td><td></td></tr> </table> <p>If SJDRVLIC = CN goto SJPRVSPF else if SJDRVLIC = NA goto SJFTRCTY else if SJDRVLIC = NN goto SJFTRCTY else goto SJNUMBR</p>	AL=Alabama	NM=New Mexico	AK=Alaska	NY=New York	AS=American Samoa	NC=North Carolina	AZ=Arizona	ND=North Dakota	AR=Arkansas	OH=Ohio	CA=California	OK=Oklahoma	CO=Colorado	OR=Oregon	CT=Connecticut	PA=Pennsylvania	DE=Delaware	PR=Puerto Rico	DC=District of Columbia	RI=Rhode Island	FL=Florida	SC=South Carolina	GA=Georgia	SD=South Dakota	GU=Guam	TN=Tennessee	HI=Hawaii	TX=Texas	ID=Idaho	UT=Utah	IL=Illinois	VT=Vermont	IN=Indiana	VI=Virgin Islands	IA=Iowa	VA=Virginia	KS=Kansas	WA=Washington	KY=Kentucky	WV=West Virginia	LA=Louisiana	WI=Wisconsin	ME=Maine	WY=Wyoming	MD=Maryland	AA,AE,AP=Military	MA=Massachusetts	CN=Canada	MI=Michigan	FM=Fed States of Micronesia	MN=Minnesota	MH=Marshall Islands	MS=Mississippi	MX=Mexico	MO=Missouri	MP=Northern Mariana Islands	MT=Montana	PW=Palau Island	NE=Nebraska	FC=Foreign Country	NV=Nevada	-1=DK -2= RE	NH=New Hampshire		NJ=New Jersey		NA=Not Available		NN=No driver's license		<p>SJPRVSPF</p> <p>SPECIFY CANADIAN PROVINCE</p> <p>AB= Alberta BC= British Columbia MB= Manitoba NB= New Brunswick NF= Newfoundland NS= Nova Scotia ON= Ontario PE= Prince Edward Island PQ= Quebec SK= Saskatchewan NT= Northwst Territories YT= Yukon Territory -1= Don't Know -2= Refused</p> <p>SJNUMBR</p> <p>May I have your driver's license number?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>If SJNUMBR ne 1 goto SJFTRCTY</p> <p>SJNUMBRT</p> <p>ENTER DRIVER'S LICENSE NUMBER:</p> <p>SJFTRCTY</p> <p>In what city and state do you expect to be living two years from now?</p> <p>ENTER -2 FOR CITY FOR REFUSAL</p> <p>SPECIFY CITY ENTER ALPHABETICAL CODE FOR STATE</p> <p>SJSOCSEC</p> <p>If cpsmatch eq 1 goto SJCK_PAR</p> <p>Can you tell me your social security number (1=YES 2=NO)?</p> <p>If SJSOCSEC = 1 goto SJCORSSN else if SJSOCSEC = 2 goto SJSIDANS else goto SJCK_PAR</p>
AL=Alabama	NM=New Mexico																																																																						
AK=Alaska	NY=New York																																																																						
AS=American Samoa	NC=North Carolina																																																																						
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KY=Kentucky	WV=West Virginia																																																																						
LA=Louisiana	WI=Wisconsin																																																																						
ME=Maine	WY=Wyoming																																																																						
MD=Maryland	AA,AE,AP=Military																																																																						
MA=Massachusetts	CN=Canada																																																																						
MI=Michigan	FM=Fed States of Micronesia																																																																						
MN=Minnesota	MH=Marshall Islands																																																																						
MS=Mississippi	MX=Mexico																																																																						
MO=Missouri	MP=Northern Mariana Islands																																																																						
MT=Montana	PW=Palau Island																																																																						
NE=Nebraska	FC=Foreign Country																																																																						
NV=Nevada	-1=DK -2= RE																																																																						
NH=New Hampshire																																																																							
NJ=New Jersey																																																																							
NA=Not Available																																																																							
NN=No driver's license																																																																							

	<p>SJCORSSN</p> <p>What is your Social Security number?</p> <p>SJSSNSID</p> <p>Is your student ID number the same as your Social Security number (1=YES 2=NO)?</p> <p>If SJSSNSID eq 1 goto SJCK_PAR else goto SJSTDNUM</p> <p>SJSIDANS</p> <p>Can you tell me your student ID number (1=YES 2=NO)?</p> <p>If SJSIDANS ne 1 goto SJCK_PAR</p> <p>SJSTDNUM</p> <p>What is your student ID number?</p> <p>SJCK_PAR</p> <p>If SAAGE gt 29 goto J_END else if both parents are dead and there are no guardians goto J_END</p> <p>INTERVIEWER: THIS CASE NEEDS A PARENT INTERVIEW. CURRENT STATUS OF THE PARENT INTERVIEW IS: [fill pa_status].</p> <p>WE NEED TO GET LOCATING INFORMATION FROM THE RESPONDENT AND WILL DO SO IN THE NEXT COUPLE OF SCREENS.</p> <p>J_END</p>
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**PARENT CATI  
Section L**

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PLRELAT

I would like to ask some questions about your role in financing [student's name]'s expenses for the 1995-96 school year.

But before we begin, could you tell me your relationship to [student's name]?

- 1 = MOTHER
- 2 = STEP MOTHER
- 3 = OTHER FEMALE RELATIVE OR GUARDIAN
- 4 = FATHER
- 5 = STEP FATHER
- 6 = OTHER MALE RELATIVE OR GUARDIAN

PLMARST

What is your marital status?

- 1 = MARRIED
- 2 = SEPARATED
- 3 = DIVORCED
- 4 = WIDOWED
- 5 = SINGLE, NEVER MARRIED
- 2 = REFUSED

PLSTDDEP

Was [student's name] your dependent between July 1, 1995 and June 30, 1996. (A DEPENDENT IS SOMEONE WHO RECEIVES MORE THAN HALF OF HIS OR HER SUPPORT FROM YOU).

- 1 = YES
- 2 = NO
- 1 =DK
- 2 =RE

PLNUMDEP

How many people did [you/you and your spouse] support between July 1, 1995 and June 30, 1996?

PLEASE INCLUDE [student's name], YOURSELF, YOUR SPOUSE, AND ALL OF YOUR DEPENDENT CHILDREN. ALSO INCLUDE [YOUR/YOUR AND YOUR SPOUSE'S] PARENTS IF THEY RECEIVED MORE THAN HALF OF THEIR SUPPORT FROM YOU.

- 0-20 = DEPENDENTS
- 1 = DK
- 2 = RE

<p>PLPDSCH</p> <p>How much money have [you/you and your spouse] paid directly to [student's name]'s school for [his/her] educational expenses for the 1995-96 school year? (We mean only money that you do not expect to be paid back. Please include only expenses that are paid directly to the school.)</p> <p>0-80,000 = DOLLARS -1 = DK -2 = RE</p> <p>If -1, goto PLPDSCH; else goto PLPDSCTF</p> <p>PLPDSCH</p> <p>Would you estimate that [your/your and your spouse's] payments to the school for the year were...</p> <p>1 = ...less than 1,000 2 = ...1 to 4 thousand (LESS THAN \$5,000) 3 = ...5 to 9 thousand (LESS THAN \$10,000) 4 = ...10 to 19 thousand (LESS THAN \$20,000) 5 = ...or 20 thousand or more -1 = DK -2 = RE</p> <p>PLPDSCTF</p> <p>INTERVIEWER: 1=YES 2=NO</p> <p>Was that money for...</p> <p>...tuition and fees?</p> <p>PLPDSCBS</p> <p>...books and supplies?</p> <p>PLPDSCHS</p> <p>...for housing?</p> <p>PLPDSMCL</p> <p>...for meals?</p>	<p>PLGVAMT</p> <p>How much did [you/you and your spouse] give directly to [student's name] for [his/her] 1995-96 educational expenses, including any allowance?</p> <p>INCLUDE ONLY EXPENSES THAT ARE PAID DIRECTLY TO THE STUDENT AND WERE DIRECTLY RELATED TO [HIS/HER] ENROLLMENT IN SCHOOL SUCH AS RENT, FOOD, PERSONAL EXPENSES, AND TRANSPORTATION.</p> <p>0-80,000 = DOLLARS -1 = DK -2 = RE</p> <p>PLGVEST</p> <p>Would you estimate [your/your and your spouse's] payments to [student's name] were...</p> <p>1 = ...less than 1,000 2 = ...1 to 4 thousand (LESS THAN \$5,000) 3 = ...5 to 9 thousand (LESS THAN \$10,000) 4 = ...10 to 19 thousand (LESS THAN \$20,000) 5 = ...or 20 thousand or more -1 = DK -2 = RE</p> <p>PLGVTFEE</p> <p>Was that money intended for...</p> <p>INTERVIEWER: 1 = YES 2 = NO -1 = DK -2 = RE</p> <p>...tuition and fees?</p> <p>PLGVHOUS</p> <p>...housing or rent?</p> <p>PLGVFOOD</p> <p>...food or board?</p> <p>PLGVBOOK</p> <p>...books?</p> <p>PLGVTRNS</p> <p>...transportation expenses?</p> <p>PLGVOTH</p> <p>...other expenses?</p>
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<p>PLLNAMT</p> <p>How much money have [you/you and your spouse] loaned to [student's name] for the 1995-96 school year?</p> <p>BY LOAN, WE MEAN MONEY THAT YOU DO EXPECT [student's name] TO PAY BACK.</p> <p>PROBE: IF THE ANSWER GIVEN IS A RANGE, IT NEEDS TO BE NARROWED DOWN.</p> <p>0-80,000 = DOLLARS          -1 = DK          -2 = RE</p> <p>PLLNEST</p> <p>Would you estimate [your/your and your spouse's] loan to [student's name] was...</p> <p>1 = ...less than 1,000          2 = ...1 to 4 thousand (LESS THAN \$5,000)          3 = ...5 to 9 thousand (LESS THAN \$10,000)          4 = ...10 to 19 thousand (LESS THAN \$20,000)          5 = ...or 20 thousand or more          -1 = DK -2 = RE</p> <p>PLLNTFEE</p> <p>Was the loan money to be used for...</p> <p>INTERVIEWER: 1 = YES 2 = NO -1 = DK -2 = RE</p> <p>...tuition and fees?</p> <p>PLLNHOUS</p> <p>...books and supplies?</p> <p>PLLNFOOD</p> <p>...housing or rent?</p> <p>PLLNBOOK</p> <p>...meals?</p> <p>PLLNTRNS</p> <p>...transportation expenses?</p> <p>PLLNOTH</p> <p>...other personal expenses?</p>	
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<p>PLSAVNGS</p> <p>In order to contribute or lend money for [student's name]'s 1995-96 school year expenses, did [you/you and your spouse] use money from...</p> <p>INTERVIEWER: 1=YES 2=NO -1=DK -2=RE</p> <p>...Savings accounts, money market accounts, or certificates of deposits</p> <p>PLEEBOND</p> <p>...Series EE Bonds from the US Savings Bond Program</p> <p>PLOTHBND</p> <p>...Other stocks, bonds or mutual funds</p> <p>PLRETIRE</p> <p>...Funds previously set aside for retirement?</p> <p>PLLIFEINS</p> <p>...Life insurance policies?</p> <p>PLTRUST</p> <p>...A trust fund</p> <p>PLLOANS</p> <p>...Any loans including PLUS loan, home equity loan or a line of credit?</p> <p>PLMRTG</p> <p>...A second mortgage on real estate? (DON'T INCLUDE HOME EQUITY LOANS)</p> <p>PLRLEST</p> <p>...Real estate investments other than your home?</p> <p>PLRELMNY</p> <p>...Money from relatives, friends, or a former spouse?</p> <p>PLOTHSRC</p> <p>...Any other sources?</p> <p>PLOTSCSP</p> <p>OTHER SPECIFY:</p>	<p>PLLONAMT</p> <p>You said you took out personal loans to help pay [student's name]'s school expenses. About how much would you say you borrowed for 1995-96?</p> <p>0-80,000 -1 = DK -2 = RE</p> <p>PLLOAN1--PLLOAN5</p> <p>What kind of loans did you get ...READ LIST AS A PROMPT</p> <p>ENTER ALL THAT APPLY ENTER 0 TO EXIT</p> <p>1 = PLUS LOAN 2 = STATE SPONSORED PARENT LOAN 3 = SCHOOL SPONSORED PARENT LOAN 4 = SIGNATURE LOAN? 5 = HOME EQUITY LOAN? 6 = LINE OF CREDIT LOAN? 7 = LOAN AGAINST A LIFE INSURANCE POLICY 8 = COMMERCIAL LOAN? 9 = LOAN FROM A NON-PROFIT UNDERWRITER 10 = FAMILY EDUCATION LOAN FROM SALLIE MAE 11 = LOAN AGAINST A RETIREMENT FUND 12 = PERSONAL LOAN OR LOANS FROM A FORMER SPOUSE, OTHER RELATIVE, OR FRIEND 13 = LOANS FROM ANY OTHER SOURCES</p> <p>PLPREPAY</p> <p>Did you use a tuition prepayment or guarantee program or a tuition savings plan to pay [student's name]'s education expenses (1=YES 2=NO)?</p> <p>If PLPREPAY=1 goto PLPREAMT; else goto PLPARPAY</p> <p>PLPREAMT</p> <p>Approximately, how much did you spend on the prepayment plan (1-99,999)?</p> <p>PLPRETYP</p> <p>What type of prepayment plan was it?</p> <p>1 = STATE-SPONSORED 2 = SCHOOL-SPONSORED 3 = A PRIVATE PLAN 4 = OTHER TYPE</p>
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	<p>PLPARPAY</p> <p>To what extent have or will [you/you and your spouse] help repay the money that [student's name] has or will have borrowed for [his/her] education?</p> <p>Will [you/you and your spouse] help with...</p> <p>1 = all of it                  2 = some of it, or                  3 = none of it?                  4 = HASN'T AND WON'T BORROW ANY MONEY                  -1 = DK                  -2 = RE</p> <p>PLSTUPAY</p> <p>If PLLOAN1 is blank, goto L_END</p> <p>To what extent has or will [student's name] help repay the money [you/you and your spouse] borrowed for [his/her] 1995-96 school year expenses?</p> <p>Will [student's name] help with...</p> <p>1 = all of it                  2 = some of it, or                  3 = none of it?                  -1 = DK                  -2 = RE</p> <p>PLSTRTSV</p> <p>What grade was [student's name] in when [you/you and your spouse] first began to save for [his/her] postsecondary education?</p> <p>1 = BEFORE 1st GRADE                  2 = 1st TO 6th GRADE                  3 = 7th TO 9th GRADE                  4 = 10th TO 12th GRADE                  5 = AFTER HIGH SCHOOL                  6 = DID NOT SAVE                  -1 = DON'T KNOW                  -2 = REFUSED</p> <p>L_END</p>

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**PARENT CATI  
Section M**

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<p>PMNUMPSE</p> <p>How many of your dependents, were in college or other postsecondary school at least half time during the 1995-96 school year?</p> <p>0 = NO DEPENDENTS IN POSTSECONDARY SCHOOL HALF TIME          1-20 = DEPENDENTS IN POSTSECONDARY SCHOOL HALF TIME          -1 = DK          -2 = RE</p> <p>PMAMTOTH</p> <p>How much would you estimate you contributed or loaned to help meet their 1995-96 school expenses?</p> <p>YOUR ESTIMATE SHOULD INCLUDE TUITION AND FEES, ROOM AND BOARD, RENT, TRANSPORTATION, AND ANY OTHER EDUCATION RELATED EXPENSES.</p> <p>0-80000 = DOLLARS          -1 = DK          -2 = RE</p> <p>PMEVRPSE</p> <p>Including everyone [you/you and your spouse] have ever supported, how many have ever attended a postsecondary school? Please include [student's name], [and yourself/yourself and your spouse].</p> <p>1-20 = DEPENDENTS          -1 = DK          -2 = RE</p> <p>PMBORROW</p> <p>How much money have you borrowed for the postsecondary education of your children? Please include [student's name] in your estimate (if appropriate).</p> <p>NOTE: INCLUDE SPOUSE'S CHILDREN/STEPCHILDREN, IF APPLICABLE.</p> <p>0-300,000 DOLLARS</p>	<p>PMDEPOWE</p> <p>If PMBORROW le 0, goto M_END</p> <p>Of the \$[fill PMBORROW] you've borrowed, how much do you still owe?</p> <p>M_END</p>
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**PARENT CATI**  
**Section N**

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<p><b>PNWRKPAY</b></p> <p>My next few questions have to do with [your/your and your spouse's] employment. Are you currently working for pay?</p> <p>IF NO, PROBE TO DETERMINE IF R IS RETIRED OR NEVER WORKED</p> <p>1 = YES 2 = NO 3 = NEVER WORKED 4 = RETIRED -1 = DK -2 = RE</p> <p>If PNWRKPAY=2 or 3 then goto PNDISABL; else goto PNOCCUPC.</p> <p><b>PNDISABL</b></p> <p>Do you have a physical, mental, or other health condition that limits or prevents you from working?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>If PNWRKPAY=2, goto PNEMPL95 If PNWRKPAY=3, goto PNSKJOB</p> <p><b>PNOCCUPC</b></p> <p>Please give me your [previous] occupation.</p> <p>INTERVIEWER: PLEASE ENTER THE INFO IN THE FOLLOWING SCREENS OF THE USEREXIT</p> <p>1 = ENTER THE USEREXIT</p> <p>If PNWRKPAY=4, goto PNYRRET; else goto PNHRSWRK</p> <p><b>PNHRSWRK</b></p> <p>How many hours do you typically work per week?</p> <p>INCLUDE ALL HOURS, EVEN IF THEY WERE NOT PAID FOR THOSE HOURS</p> <p>0-80 = -1 = DK -2 = RE</p>	<p><b>PNYRRET</b></p> <p>When did you retire?</p> <p>GET THE CALENDAR YEAR</p> <p>60-96 = -1 = DK -2 = RE</p> <p><b>PNEMPL95</b></p> <p>Were you employed at any time during the 1995 calendar year?</p> <p>WE ARE SPECIFICALLY INTERESTED IN WORK FOR PAY, NOT VOLUNTEER WORK.</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>If PNWRKPAY=2, goto PNSKJOB; else goto PNSPWKPY</p> <p><b>PNSKJOB</b></p> <p>Are you currently looking for a job?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>If 1, goto PNDIFFEMP; else goto PNSPWKPY</p> <p><b>PNDIFFEMP</b></p> <p>Are you having trouble finding a job?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p>
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<p>PNSPWKPY</p> <p>If PLMARST ne 1, goto PNTOTL95 Is your spouse currently working for pay?</p> <p>IF NO, PROBE TO DETERMINE IF SPOUSE IS RETIRED OR NEVER WORKED</p> <p>1 = YES 2 = NO 3 = NEVER WORKED 4 = RETIRED -1 = DK -2 = RE</p> <p>If PNSPWKPY=2 or 3, goto PNDISWRK; else PNOCCSP</p> <p>PNDISWRK</p> <p>Does your spouse have a physical, mental, or other health condition that limits the amount or kind of work [he/she] can do?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>If PNSPWKPY=2, goto PNSPEM95 If PNSPWKPY=3, goto PNSKJBSP</p> <p>PNOCCSP</p> <p>Please give me your spouse's [previous] occupation.</p> <p>INTERVIEWER: PLEASE ENTER THE INFO IN THE FOLLOWING SCREENS OF THE USEREXIT</p> <p>1 = ENTER THE USEREXIT</p> <p>If PNSPWKPY=4, goto PNRETSP Else goto PNHRWKSP</p> <p>PNHRWKSP</p> <p>How many hours does your spouse typically work per week?</p> <p>INCLUDE ALL HOURS, EVEN IF THEY WERE NOT PAID FOR THOSE HOURS</p> <p>0-80 = -1 = DK -2 = RE</p>	<p>PNRETSP</p> <p>When did your spouse retire?</p> <p>GET THE CALENDAR YEAR</p> <p>60-96 = -1 = DK -2 = RE</p> <p>PNSPEM95</p> <p>Was [he/she] employed at any time during the 1995 calendar year?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>If PNSPWKPY=2, goto PNSKJBSP; else goto PNTOTL95</p> <p>PNSKJBSP</p> <p>Is [he/she] currently looking for a job?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>If PNSKJBSP=1, goto PNSPDFEM; else goto PNTOTL95</p> <p>PNSPDFEM</p> <p>Is [he/she] having trouble finding a job?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p>
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	<p>PNTOTL95</p> <p>My next few questions refer to your 1994 and 1995 income.</p> <p>INTERVIEWER: ENTER 1 FOR THE 1994 AMOUNT, IF 1994 AMOUNT IS SAME AS 1995. ENTER 2 FOR THE AMOUNT FROM JOBS, IF IT IS THE SAME AS THE TOTAL INCOME. ENTER 3 FOR THE SPOUSE'S INCOME, IF IT IS THE DIFF THE TOTAL AND R'S INCOME</p> <p>What was [your/your and your spouse's] total income from all sources, prior to taxes and deductions,...</p> <p>...for 1995</p> <p>PNTOTL94</p> <p>...for 1994</p> <p>PNWAGE95</p> <p>What is your estimate of your total income from all jobs...</p> <p>...in 1995?</p> <p>PNWAGE94</p> <p>...in 1994?</p> <p>PNSPWG95</p> <p>If PLMARST=1</p> <p>What was your spouse's income from all jobs...</p> <p>...in 1995?</p> <p>PNSPWG94</p> <p>If PLMARST=1</p> <p>...in 1994?</p> <p>PNUNTX95</p> <p>Income from AFDC, or other government welfare programs...</p> <p>...in 1995?</p> <p>PNUNTX94</p> <p>...in 1994?</p>
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<p><b>PNEST95</b></p> <p>Would you estimate that your 1995 employment income was more or less than \$30,000?</p> <p>1 = LESS THAN \$30,000                  2 = MORE THAN \$30,000                  -1 = DK                  -2 = RE</p> <p>If PNEST95=1, goto PNEST95L; if PNEST95=2, goto PNEST95M; else goto PNEST94</p> <p><b>PNEST95L</b></p> <p>Please tell me if your employment income for 1995 was...</p> <p>1 = Less than 5,000                  2 = 5 to 9 thousand (LESS THAN \$10,000)                  3 = 10 to 19 thousand (LESS THAN \$20,000)                  4 = 20 to 29 thousand (LESS THAN \$30,000)                  -1 = DK                  -2 = RE</p> <p><b>PNEST95M</b></p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your employment income for 1995...</p> <p>1 = 30 to 39 thousand (LESS THAN \$ 40,000)                  2 = 40 to 49 thousand (LESS THAN \$ 50,000)                  3 = 50 to 59 thousand (LESS THAN \$ 60,000)                  4 = 60 to 69 thousand (LESS THAN \$ 70,000)                  5 = 70 to 79 thousand (LESS THAN \$ 80,000)                  6 = 80 to 89 thousand (LESS THAN \$ 90,000)                  7 = 90 to 99 thousand (LESS THAN \$100,000)                  8 = \$100,000 or more                  -1 = DK                  -2 = RE</p> <p><b>PNEST94</b></p> <p>Would you estimate that your 1994 employment income was more or less than \$30,000?</p> <p>1 = LESS THAN \$30,000                  2 = MORE THAN \$30,000                  -1 = DK                  -2 = RE</p> <p>If PNEST94=1, goto PNEST94L; if PNEST94=2, goto PNEST94M; else goto PNSPE95</p>	<p><b>PNEST94L</b></p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your employment income for 1994...</p> <p>1 = Less than 5,000                  2 = 5 to 9 thousand (LESS THAN \$10,000)                  3 = 10 to 19 thousand (LESS THAN \$20,000)                  4 = 20 to 29 thousand (LESS THAN \$30,000)                  -1 = DK                  -2 = RE</p> <p><b>PNEST94M</b></p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your employment income for 1994...</p> <p>1 = 30 to 39 thousand (LESS THAN \$ 40,000)                  2 = 40 to 49 thousand (LESS THAN \$ 50,000)                  3 = 50 to 59 thousand (LESS THAN \$ 60,000)                  4 = 60 to 69 thousand (LESS THAN \$ 70,000)                  5 = 70 to 79 thousand (LESS THAN \$ 80,000)                  6 = 80 to 89 thousand (LESS THAN \$ 90,000)                  7 = 90 to 99 thousand (LESS THAN \$100,000)                  8 = \$100,000 or more                  -1 = DK                  -2 = RE</p> <p><b>PNSPE95</b></p> <p>If PLMARST ne 1, goto PNTOTSAV</p> <p>Would you estimate that your spouse's 1995 employment income was more or less than \$30,000?</p> <p>1 = LESS THAN \$30,000                  2 = MORE THAN \$30,000                  -1 = DK      -2 = RE</p> <p>If PNSPE95=1, goto PNSPE95L; if PNSPE95=2, goto PNSPE95M; else goto PNSPE94</p> <p><b>PNSPE95L</b></p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your spouse's employment ncome for 1995...</p> <p>1 = Less than 5,000                  2 = 5 to 9 thousand (LESS THAN \$10,000)                  3 = 10 to 19 thousand (LESS THAN \$20,000)                  4 = 20 to 29 thousand (LESS THAN \$30,000)                  -1 = DK      -2 = RE</p>
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<p><b>PNSPE95M</b></p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your spouse's employment income for 1995...</p> <p>1 = 30 to 39 thousand (LESS THAN \$ 40,000)                  2 = 40 to 49 thousand (LESS THAN \$ 50,000)                  3 = 50 to 59 thousand (LESS THAN \$ 60,000)                  4 = 60 to 69 thousand (LESS THAN \$ 70,000)                  5 = 70 to 79 thousand (LESS THAN \$ 80,000)                  6 = 80 to 89 thousand (LESS THAN \$ 90,000)                  7 = 90 to 99 thousand (LESS THAN \$100,000)                  8 = \$100,000 or more                  -1 = DK                  -2 = RE</p> <p><b>PNSPE94</b></p> <p>Would you estimate that your spouse's 1994 employment income was more or less than \$30,000?</p> <p>1 = LESS THAN \$30,000                  2 = MORE THAN \$30,000                  -1 = DK                  -2 = RE</p> <p>If PNSPE94=1, goto PNSPE94L; if PNSPE94=2, goto PNSPE94M; else goto PNTOTSAV</p> <p><b>PNSPE94L</b></p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your spouse's employment income for 1994...</p> <p>1 = Less than 5,000                  2 = 5 to 9 thousand (LESS THAN \$10,000)                  3 = 10 to 19 thousand (LESS THAN \$20,000)                  4 = 20 to 29 thousand (LESS THAN \$30,000)                  -1 = DK                  -2 = RE</p> <p><b>PNSPE94M</b></p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your spouse's employment income for 1994...</p> <p>1 = 30 to 39 thousand (LESS THAN \$ 40,000)                  2 = 40 to 49 thousand (LESS THAN \$ 50,000)                  3 = 50 to 59 thousand (LESS THAN \$ 60,000)                  4 = 60 to 69 thousand (LESS THAN \$ 70,000)                  5 = 70 to 79 thousand (LESS THAN \$ 80,000)                  6 = 80 to 89 thousand (LESS THAN \$ 90,000)                  7 = 90 to 99 thousand (LESS THAN \$100,000)                  8 = \$100,000 or more                  -1 = DK      -2 = RE</p>	<p><b>PNTOTSAV</b></p> <p>Currently, is the total worth of [your/your and your spouse's] cash, savings, and checking accounts more than \$10,000?</p> <p>1 = Yes                  2 = No                  -1 = DK    -2 = RE</p> <p><b>PNTOTRET</b></p> <p>Is the total worth of [your/your and your spouse's] retirement and/or pension accounts worth more than \$50,000?</p> <p>1 = Yes                  2 = No                  -1 = DK    -2 = RE</p> <p><b>PNOWNHM</b></p> <p>Do you own your home?</p> <p>INTERVIEWER: IF THE PARENT IS PAYING MORTGAGE, CODE IT AS YES...</p> <p>1 = YES, WE OWNED THE HOME OR WERE PAYING MORTGAGE                  2 = NO, WE WERE RENTING OR LIVING SOMEWHERE ELSE                  -1 = DK                  -2 = RE</p> <p><b>PNHMVAL</b></p> <p>What would you estimate is the total worth of [your/your and your spouse's] home?</p> <p>1-9500000 = Dollars                  -1 = DK                  -2 = RE</p> <p><b>PNHMVALE</b></p> <p>Would you say [your/your and your spouse's] home is worth...</p> <p>1 = Less than \$25,000                  2 = 25 to 49 thousand (LESS THAN \$ 50000)                  3 = 50 to 99 thousand (LESS THAN \$100000)                  4 = 100 to 249 thousand (LESS THAN \$250000)                  5 = ...or, \$250,000 or more                  -1 = DK                  -2 = RE</p>
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PNHMOWE

How much would you estimate you still owe?

- 0 = NONE
- 1-9500000 = Dollars
- 1 = DK
- 2 = RE

PNHMOWEE

Would you estimate the amount owed to be...

- 1 = Less than \$25,000
- 2 = 25 to 49 thousand (LESS THAN \$ 50000)
- 3 = 50 to 99 thousand (LESS THAN \$100000)
- 4 = 100 to 249 thousand (LESS THAN \$250000)
- 5 ...or, \$250,000 or more
- 1 DK
- 2 RE

PNOTHEQ

Currently, is the equity in [your/your and your spouse's] business, including farms, over \$50,000?

THE BUSINESS OR FARM MUST BE OWNED BY THE RESPONDENT OR SPOUSE

- 1 = YES
- 2 = NO - EQUITY IS NOT OVER 50,000
- 3 = NO - NO BUSINESS /FARM OWNED
- 1 = DK
- 2 = RE

PNINVEST

Not including your primary residence, is the current worth of [your/your and your spouse's] real estate, and investments, such as stocks and bonds more than \$50,000?

NOTE: DON'T INCLUDE INVESTMENTS ASSOCIATED WITH RETIREMENT/PENSION ACCOUNTS, IRAs, ETC.

- 1 = YES
- 2 = NO
- 1 = DK
- 2 = RE

N\_END

**PARENT CATI**  
**Section P**

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<p>PPNOAID</p> <p>If student has aid (SZTOTAID=1 or SDRECVD1=2 or SZPLUS gt 0) goto PPCONSDR</p> <p>Has [student's name] ever applied for financial aid for [his/her] education beyond high school?</p> <p>(FINANCIAL AID INCLUDES GRANTS, SCHOLARSHIPS, FELLOWSHIPS, LOAN OR WORK STUDY PROGRAM)</p> <p>1 = YES 2 = NO -2 = RE -1 = DK</p> <p>If PPNOAID=2 goto PPNOAID1; else goto PPCONSDR</p> <p>PPNOAID1--PPNOAID0</p> <p>Why did your family not apply for financial aid for [student's name]?</p> <p>ENTER ALL THE CODES IN THE ORDER MENTIONED BY THE RESPONDENT. ENTER 0 TO EXIT</p> <p>1 = FAMILY AND STUDENT COULD PAY 2 = NOT WILLING TO GO INTO DEBT 3 = FAMILY INCOME TOO HIGH TO QUALIFY 4 = GRADES/TEST SCORES TOO LOW TO QUALIFY 5 = AID APPLICATION PROCESS TOO DIFFICULT 6 = DID NOT WANT TO DISCLOSE FINANCIAL SITUATION 7 = PART-TIME STUDENT -- INELIGIBLE FOR AID 8 = NO MONEY WAS AVAILABLE 9 = MISSED APPLICATION DEADLINE 10 = OTHER REASON</p> <p>PPNEVSPF</p> <p>OTHER SPECIFY:</p> <p>PPCONSDR</p> <p>Did you and [student's name] consider the graduation rate, the campus crime rate or the job placement rate in deciding to attend the school (1=YES 2=NO)?</p>	<p>PPGRADRT</p> <p>Which ones did you consider?</p> <p>INTERVIEWER: 1= YES 2= NO</p> <p>GRADUATION RATE?</p> <p>PPCRIMRT</p> <p>CRIME RATE?</p> <p>PPPLACRT</p> <p>JOB PLACEMENT RATE?</p> <p>PPHLPSEL</p> <p>Did you help [student's name] select [NPSAS school]?</p> <p>1 = YES 2 = NO -1 = DK -2 = RE</p> <p>PPHELP1 -- PPHelp7</p> <p>How did you help?</p> <p>INTERVIEWER: CODE ALL THAT APPLY</p> <p>ENTER 0 TO EXIT THIS SCREEN</p> <p>1 =...VISIT THE CAMPUS. 2 =...SOLICIT LETTERS OF RECOMMENDATION. 3 =...PAY FOR STUDENT'S TRIPS TO VISIT CAMPUSES. 4 =...PURCHASE OR REVIEW REFERENCE GUIDES ABOUT SCHOOLS. 5 =...WRITE TO SCHOOLS FOR INFORMATION. 6 =...ASKED INFORMATION/QUESTIONS OF OTHERS WHO HAVE ATTENDED, OR WHOSE CHILDREN HAD ATTENDED THE SCHOOL. 7 =...OTHER (PLEASE SPECIFY)</p> <p>PPHELPSP</p> <p>Please specify:</p> <p>P_END</p>
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**PARENT CATI**  
**Section Q**

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<p><b>PQHISP</b></p> <p>Before we end the interview, I have a few questions about your background and education.</p> <p>Are you of Hispanic origin (if yes, of which descent)?</p> <p>0 = NO          1 = Mexican, Mexican-American, or Chicano descent?          2 = Cuban descent?          3 = Puerto Rican descent?          4 = some other Hispanic origin?          -1 = DK          -2 = RE</p> <p><b>PQRACE</b></p> <p>What is your race?</p> <p>READ LIST AS A PROMPT</p> <p>1 = WHITE,          2 = AFRICAN AMERICAN, BLACK,          3 = AMERICAN INDIAN, ALASKA NATIVE,          4 = ASIAN OR PACIFIC ISLANDER?          5 = OTHER          -1 = DK          -2 = RE</p> <p><b>PQRACSPF</b></p> <p>SPECIFY OTHER RACE.</p> <p>If PQRACE=3, goto PQTRIBE; if PQRACE=4, goto PQASIAN; else goto PQYOB</p> <p><b>PQTRIBE</b></p> <p>Are you enrolled in a state- or federally-recognized tribe?</p> <p>1 = YES          2 = NO          -1 = DK          -2 = RE</p>	<p><b>PQASIAN</b></p> <p>Are you...</p> <p>1 = Chinese          2 = Korean          3 = Filipino          4 = Japanese          5 = Vietnamese          6 = Asian Indian          7 = Thai          8 = Hawaiian          9 = Samoan          10 = Guamanian          11 = Other Asian or Pacific Islander?</p> <p><b>PQYOB</b></p> <p>What year were you born?</p> <p>00-78          -1 = DK          -2 = RE</p> <p><b>PQEDUCR</b></p> <p>What is the highest level of education you have completed?</p> <p>1= DID NOT FINISH HIGH SCHOOL          2= FINISHED HIGH SCHOOL EQUIVALENT          3= LESS THAN 1 YR OF OCCUPATIONAL, TRADE, TECHNICAL OR BUSINESS SCHOOL          4= ONE BUT LESS THAN 2 YEARS OF OCCUPATIONAL, TRADE, TECHNICAL, OR BUSINESS SCHOOL          5= 2 YEARS OR MORE OF OCCUPATIONAL, TRADE, OR BUSINESS SCHOOL          6= LESS THAN 2 YEARS OF COLLEGE          7= 2 OR MORE YEARS OF COLLEGE, INCLUDING 2-YR DEGREE          8= BACHELOR'S DEGREE - 4 OR 5 YEAR DEGREE          9= MASTER'S DEGREE OR EQUIVALENT          10= MD/DDS/LLB/OTHER ADVANCED PROFESSIONAL DEGREE          11= DOCTORATE DEGREE - PHD, EDD, DBA          -1 DK -2 RE</p> <p><b>PQYOBS</b></p> <p>If PLMARST ne 1, goto PQPSESEL</p> <p>What year was your spouse born?</p> <p>00-78          -1 = DK          -2 = RE</p>
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<p>PQEDUCS</p> <p>What is the highest level of education your spouse has completed?</p> <p>1= DID NOT FINISH HIGH SCHOOL                  2= FINISHED HIGH SCHOOL EQUIVALENT                  3= LESS THAN 1 YR OF OCCUPATIONAL, TRADE, TECHNICAL OR BUSINESS SCHOOL                  4= ONE BUT LESS THAN 2 YEARS OF OCCUPATIONAL, TRADE, TECHNICAL, OR BUSINESS SCHOOL                  5= 2 YEARS OR MORE OF OCCUPATIONAL, TRADE, OR BUSINESS SCHOOL                  6= LESS THAN 2 YEARS OF COLLEGE                  7= 2 OR MORE YEARS OF COLLEGE, INCLUDING 2-YR DEGREE                  8= BACHELOR'S DEGREE - 4 OR 5 YEAR DEGREE                  9= MASTER'S DEGREE OR EQUIVALENT                  10=MD/DDS/LLB/OTHER ADVANCED PROFESSIONAL DEGREE                  11= DOCTORATE DEGREE - PHD, EDD, DBA                  -1 DK -2 RE</p> <p>PQPSESEL</p> <p>If PQEDUCR le 2 and PQEDUCS le 2, goto PQSTATE</p> <p>How much have [you/you and your spouse] borrowed for your own postsecondary education?</p> <p>0-100,000 DOLLARS \</p> <p>If PQPSESEL le 0, goto PQSTATE</p> <p>PQPAROWE</p> <p>Of the \$[PSPSESEL] you've borrowed, how much do you still owe? \</p> <p>PQSTATE</p> <p>What is your state of legal residence? \</p> <p>ENTER STATE CODE</p>	<p>PQPRVRES</p> <p>If PQSTATE eq CN</p> <p>SPECIFY CANADIAN PROVINCE:</p> <p>AB= Alberta                  BC= British Columbia                  MB= Manitoba                  NB= New Brunswick                  NF= Newfoundland                  NS= Nova Scotia                  ON= Ontario                  PE= Prince Edward Island                  PQ= Quebec                  SK= Saskatchewan                  NT= Northwst Territories                  YT= Yukon Territory</p> <p>Q_END</p>
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Abbreviated Hardcopy (English/Spanish)

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# NATIONAL POSTSECONDARY STUDENT AID STUDY (NPSAS)

Instructions: Please answer each question by placing a check (✓) on the line next to the appropriate response or filling in the information requested. The NPSAS School referenced is the school shown on the label on this page. The study period of interest is the 1995-96 school year (between July 1, 1995 and June 30, 1996). If you do not know an exact dollar amount for an item, please try to estimate the amount.

Your participation in this study is completely voluntary and your decision to participate will not affect any financial aid or other benefits you are receiving. You may decline to answer any question. All information you provide is confidential.

When you have completed your self-administered interview, please return it within 2 weeks in the self-addressed, postage-paid return envelope provided. Thank you for participating in this very important study.

## A. YOUR ENROLLMENT AT THE NPSAS SCHOOL

1. Were you enrolled at the NPSAS school sometime between July 1, 1995 and June 30, 1996? *The NPSAS school is the school identified on the label shown on this page.*

1 Yes  
 2 No

2. While at the NPSAS school between July 1, 1995 and June 30, 1996, were you enrolled in a program or taking courses leading to a degree or certificate?

1 Yes  
 2 No

3. At anytime between July 1, 1995 and June 30, 1996, were you enrolled at the NPSAS school in a course bearing credits that could be transferred to another school?

1 Yes  
 2 No

4. Which of the following describes your high school experience?

1 Graduated from a public high school  
 2 Graduated from a private high school  
 3 Passed a GED test  
 4 Received a certificate of high school completion  
 5 Did not complete high school requirements

5. In what year did you graduate or complete your high school requirements? If you did not complete high school, in what year were you last enrolled in high school? \_\_\_\_\_ year

## B. YOUR BACKGROUND

6. What is your birth date? \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
month day year

7. Are you Hispanic?

1 Yes  
 2 No

8. What is your race?

1 American Indian or Alaskan native  
 2 Asian or Pacific Islander  
 3 Black  
 4 White  
 5 Other (*Please specify*) \_\_\_\_\_

9. What is your current marital status?

1 Single, never married → GO TO QUESTION 11  
 2 Married  
 3 Separated  
 4 Divorced  
 5 Widowed

PLEASE CONTINUE →

10. What was your marital status on July 1, 1995?

- 1 Single, never married
- 2 Married
- 3 Separated
- 4 Divorced
- 5 Widowed

11. As of July 1, 1995, how many children or other dependents (excluding your spouse if married) were living with you or receiving at least 50% of their support from you? *Please include your parents or guardians and other individuals if they received at least 50% of their support from you.* Enter 0 if none.

12. Are you currently in the reserves or on active duty in the U.S. military?

- 1 Yes
- 2 No

13. Are you a veteran of the U.S. military?

- 1 Yes
- 2 No

14. Do you have any disabilities or impairments? *Please check all that apply.*

- 0 No disabilities or impairments
- 1 A hearing impairment
- 2 A speech disability or limitation
- 3 An orthopedic or mobility limitation
- 4 A specific learning disability
- 5 A vision impairment that cannot be corrected with eyeglasses or legally blind
- 6 Other disability or limitation

15. During the 1995-96 school year, where did you live most of the time?

- 1 On-campus in school-owned housing
- 2 Off-campus in school-owned housing
- 3 In an apartment or house other than with parents/guardians
- 4 With parents/guardians
- 5 With other relatives
- 6 Other (*Please specify*) \_\_\_\_\_

16. In the last year, how many hours of community service or volunteer work did you perform, other than court-ordered service? Enter 0 if none.

**C. YOUR ENROLLMENT AFTER HIGH SCHOOL**

17. When did you first enroll in any college or other postsecondary school after high school? ..... / .....  
month year

18. How many colleges or other postsecondary schools did you attend between July 1, 1995 and June 30, 1996? *If the NPSAS school was the only school you attended during that time period, enter 1* .....

19. When did you first enroll in the NPSAS school after high school? ..... / .....  
month year

20. During the first term you were enrolled at the NPSAS school in the 1995-96 school year, what degree, certificate, or other award were you seeking? *Please choose only one.*

UNDERGRADUATE:

- 1 Bachelor's degree (BA, BS, etc.)
- 2 Associate's degree (AA, AAS, AS, etc.)
- 3 Certificate or other formal award not listed above
- 4 Special undergraduate student - not enrolled in a degree program

***If you checked one of the UNDERGRADUATE options above, GO TO QUESTION 22***

GRADUATE:

- 5 Post-baccalaureate certificate
- 6 Master's degree (MA, MS, MBA, etc.)  
*Please specify* \_\_\_\_\_
- 7 Advanced degree (PhD, MD, JD, EdD, etc.)  
*Please specify* \_\_\_\_\_
- 8 Special graduate student - not enrolled in a degree program

21. When did you first enroll in your current graduate program? (If you started your current program at another school, enter the date you enrolled in the program at that other school. .... / .....  
month year

22. What was your major or program of study during the first term of your enrollment at the NPSAS school in the 1995-96 school year?

Major: \_\_\_\_\_  
\_\_\_\_\_

23. During the first term you were enrolled at the NPSAS school in the 1995-96 school year, what was your level in the program?  
Please choose only one.

UNDERGRADUATE:

- 1 Freshman or first year undergraduate
- 2 Sophomore or second year
- 3 Junior or third year
- 4 Senior or fourth year
- 5 Fifth year or higher senior
- 6 Special student - no level

GRADUATE:

- 7 First year graduate student
- 8 Second year
- 9 Third year
- 10 Fourth year
- 11 Fifth year or higher
- 12 Special student - no level

**D. FINANCING YOUR EDUCATION**

24. How much did you spend for tuition, fees, and other expenses at all schools attended during the 1995-96 school year?

EXPENSES IN 1995-96	AMOUNT
Tuition and fees at the NPSAS school, prior to any discounts or waivers	\$
Tuition and fees at all other schools attended in the year, prior to any discounts or waivers	\$
Books and supplies	\$
Equipment (e.g., computers, microscopes, tools, or instruments)	\$

25. During the 1995-96 school year, did you receive any financial aid, such as grants, loans, scholarships, tuition waivers, assistantships, employer tuition reimbursement, etc.

- 1 Yes
- 2 No → GO TO QUESTION 27

26. Please list the sources, types, and amounts of aid you received to attend all schools during the 1995-96 school year.

SOURCE/TYPE	AMOUNT
Federal Pell grant	\$ 2000
Federal Stafford loan	\$ 2000
Institutional Research Assistantship	\$ 2500
	\$
	\$
	\$

27. Did you receive any loans from parents, relatives, or from any sources other than the federal government, state government, your employer, or your school, for the 1995-96 school year?

- 1 Yes  
 2 No → GO TO QUESTION 29

28. How much did you receive?

SOURCE	AMOUNT
Parents/Guardians	\$
Other relatives or friends	\$
Other loan source(s): (Please specify)	\$

29. Excluding any loans, how much money did you receive per month from your parents/guardians, relatives, and friends for your 1995-96 school expenses?

\$ \_\_\_\_\_ per month for \_\_\_\_\_ months

30. What is the total amount you have ever borrowed for your undergraduate and graduate (if applicable) education, including federal student loans and loans from all other sources? If you are a graduate student, how much have you borrowed for your graduate program? How much do you still owe? *Enter 0 to indicate no money borrowed or no money owed for your postsecondary education.*

BORROWING FOR YOUR EDUCATION	AMOUNT
Total amount EVER borrowed	\$
Amount borrowed for graduate school, if applicable	\$
Amount borrowed in federal student loans	\$
Total amount currently owed	\$
Amount owed on federal student loans	\$

**E. EMPLOYMENT AND INCOME**

31. Between July 1, 1995 and June 30, 1996, how many jobs did you have?

If 0, GO TO QUESTION 35. . . . .

32. About how many hours did you work per week while you were enrolled during the 95-96 school year. About how many weeks

did you work? *If you did not work while enrolled, enter 0 and GO TO QUESTION 33.*

Worked \_\_\_\_\_ hours per week for \_\_\_\_\_ weeks.

33. How much did you earn per hour while you were enrolled? ..... \$ \_\_\_\_\_ per hour

34. What was your principal job for pay while enrolled? *If you did not work while enrolled or if you held more than one job at that time, your principal job may be the job worked the longest number of hours per week, paying the highest wage, or most closely related to your course of study.*

Job Title:

\_\_\_\_\_

Duties: \_\_\_\_\_

\_\_\_\_\_

35. Please complete the following income matrix for the 1994 and 1995 calendar years (January 1 to December 31).

INCOME SOURCE	AMOUNT	
	1994	1995
Total income from all sources, EXCLUDING any financial aid you may have received	\$	\$
Your jobs, EXCLUDING any financial aid you may have received	\$	\$
Your spouse's jobs, EXCLUDING any financial aid.	\$	\$

36. Did you receive any untaxed income or benefits in 1995? *Please check all that apply.*

- 0 Did not receive any untaxed income or benefits
- 1 Social Security Benefits
- 2 Worker's Compensation
- 3 Disability payments
- 4 Welfare payments

**F. PARENT/GUARDIAN INFORMATION**

37. What was your parents'/guardians' marital status on July 1, 1995?

- 1 Married to each other
- 2 Divorced
- 3 Separated
- 4 Never married
- 5 One or both deceased
- 6 Never knew parents; no legal guardians →GO TO QUESTION 39
- 7 Never knew parents; raised by legal guardian(s)

38. What is the highest grade or level of education your parents/guardians ever completed?

*Circle the appropriate number in the **first column** for your mother/female guardian and in the **second column** for your father/male guardian.*

Mother/Female Guardian	Father/Male Guardian
1 . . . Did not complete high school . . . . .	1
2 . . . Completed high school or equivalent . . . . .	2
3 . . . Less than 1 yr of occupational, trade, technical, or business school . . . . .	3
4 . . . One to less than 2 years of occupational, trade, technical, or business school . . . . .	4
5 . . . 2 years or more of occupational, trade, technical, or business school . . . . .	5
6 . . . Less than 2 years of college . . . . .	6
7 . . . 2 or more years of college, including 2-yr degree . . . . .	7
8 . . . Bachelor's degree - 4 or 5 year degree . . . . .	8
9 . . . Master's degree or equivalent . . . . .	9
10 . . MD/DDS/JD/other advanced professional degree . . . . .	10
11 . . Doctorate degree - PhD, EdD, DBA . . . . .	11

39. Do you have an e-mail address?

What is it? \_\_\_\_\_

THANK YOU for participating in this important study. Please return this form in the enclosed, postage-paid envelope or mail to:

**Ms. Katy Ong**  
**Center for Research in Education**  
**Research Triangle Institute**  
**P.O. Box 12194**  
**Research Triangle Park, NC 27709.**

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# NATIONAL POSTSECONDARY STUDENT AID STUDY [NPSAS]

## Formulario para el encuestado

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### [ESTUDIO NACIONAL SOBRE ASISTENCIA ECONÓMICA PARA ESTUDIANTES EN ESCUELAS POS-SECUNDARIAS]

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**Instrucciones para completar esta encuesta:** Por favor conteste cada pregunta haciendo una marca (✓) en la línea al lado de la respuesta apropiada o llenando la información requerida. El concepto de Escuela NPSAS al cual nos referimos en varias preguntas es la escuela cuyo nombre esta en la etiqueta que se encuentra en esta página. El período que nos interesa para este estudio es el año escolar 1994-95 (entre las fechas del primero de mayo, 1994 hasta el 30 de junio, 1995). Si usted no sabe la cantidad exacta para una pregunta, favor de estimar la cantidad.

Su participación en este estudio es completamente voluntaria y su decisión de tomar parte no afectaría a ninguna de la asistencia económica la cual usted este recibiendo. Usted puede negarse a contestar cualquier pregunta. Toda la información que nos provea es confidencial.

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#### A. SU MATRICULACIÓN EN LA Escuela NPSAS

1. ¿Estaba usted matriculado en la Escuela NPSAS durante cualquier período académico entre las fechas del primero de mayo, 1994 y el 30 de junio, 1995? *La Escuela NPSAS es la escuela identificada en la etiqueta que se encuentra en esta página.*

- 1 Sí  
 2 No

2. Mientras asistía la Escuela NPSAS entre las fechas del primero de mayo, 1994 y el 30 de junio, 1995, ¿estaba matriculado en un programa o tomando cursos que resultarían en un diploma (título) o un certificado?

- 1 Sí  
 2 No

3. Durante cualquier período académico entre las fechas del primero de mayo, 1994 y el 30 de junio, 1995, ¿estaba matriculado en un programa o tomando cursos que resultarían en créditos que pudieran transferirse a otra escuela?

- 1 Sí  
 2 No

4. ¿Cuales de las siguientes mejor describe su experiencia en la escuela secundaria (superior)?

- 1 Graduado de una escuela secundaria pública  
 2 Graduado de una escuela secundaria privada  
 3 Aprobó el examen GED  
 4 Recibió un certificado por haber terminado la escuela secundaria

5 No terminé los requisitos para la escuela secundaria

5. ¿En qué fecha se graduó o terminó los requisitos para la escuela secundaria? Si no terminó la escuela secundaria, dé la fecha de la última vez que estuvo matriculado en una escuela secundaria.

\_\_\_\_\_/\_\_\_\_\_  
mes / año

6. ¿Estaba terminando usted los requisitos para la escuela secundaria durante todo el período que asistió la Escuela NPSAS entre las fechas del primero de mayo, 1994 y el 30 de junio, 1995?

- 1 Sí  
 2 No

**FAVOR CONTINUE →**

**B. SUS ANTECEDENTES**

7. ¿Cuál es la fecha de su nacimiento?  
\_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
mes día año

8. ¿Es usted hispano/latino?

- 1 Sí
- 2 No

9. ¿Cual es su raza?

- 1 Indio norte-americano o nativo de Alaska
- 2 Asiático o isleño del Pacífico
- 3 Negro
- 4 Blanco
- 5 Otro (*Por favor especifique*) \_\_\_\_\_

10. ¿Cuál es su estado civil actual?

- 1 Soltero, nunca casado → SALTE A LA PREGUNTA 12
- 2 Casado
- 3 Separado
- 4 Divorciado
- 5 Viudo

11. ¿Cuál era su estado civil el primero de julio, 1994?

- 1 Soltero, nunca casado
- 2 Casado
- 3 Separado
- 4 Divorciado
- 5 Viudo

12. Desde el primero de julio, 1994, ¿cuántos hijos u otros dependientes estaban viviendo con usted o recibiendo un 50% de apoyo financiero suyo? *Favor de incluir sus padres o tutores u otros individuos si ellos reciben un 50% apoyo financiero por cuenta suya.*

*Anote 0 si nadie* .....

13. Actualmente, ¿está en la reserva o es activo militar en las fuerzas armadas de los EE.UU.?

- 1 Sí
- 2 No

14. ¿Es usted veterano de las fuerzas armadas de los EE.UU.?

- 1 Sí
- 2 No

15. Durante el año escolar 1994-95, ¿dónde vivió la mayor parte del tiempo?

- 1 Una vivienda propiedad universitaria ubicada en el "campus"
- 2 Una vivienda propiedad universitaria no en el "campus"
- 3 En un apartamento or casa que no fuera de los padres/tutores
- 4 Con los padres/tutores
- 5 Con otros parientes
- 6 Otro (*Favor especifique*) \_\_\_\_\_

16. Entre el primero de julio, 1994 y el 30 de junio, 1995, a través del año, ¿por cuántas horas tomó parte en servicios comunitarios o como voluntario, sin tomar en cuenta servicio ordenado por las cortes?

*Anote 0 si ningunas* .....

**C. SU MARTICULACIÓN DESPUÉS DE LA ESCUELA SECUNDARIA**

17. ¿En que fecha se matriculó por primera vez en cualquier tipo de escuela pos-secundaria después de la escuela secundaria?

\_\_\_\_\_ / \_\_\_\_\_  
mes año

18. Además de la Escuela NPSAS, ¿asistió a cuántas escuelas pos-secundarias entre el primero de julio, 1994 y el 30 de junio, 1995? *Si la Escuela NPSAS fue la única escuela en la cual usted asistió durante ese período, anote 0* .....

19. ¿En que fecha se matriculó por primera vez en la ESCUELA NPSAS después de la escuela secundaria?

..... / \_\_\_\_\_  
mes año

20. Durante el primer período académico en que se matriculó en la Escuela NPSAS durante el año escolar 1994-95, ¿qué tipo de diploma (título), certificado u otra asignatura lograba obtener? *Favor de escoger solamente una opción.*

**BACHILLERATO (LICENCIATURA) :**

- 1 Bachillerato (BA, BS, etc.)
- 2 Grado asociado (AA, AAS, AS, etc.)
- 3 Certificado u otro diploma formal no en lista (arriba)
- 4 Estudiante especial no licenciado-matriculado pero no en un programa con diploma (título)

*Si marco una de las opciones ya mencionadas en BACHILLERATO, SALTE A LA PREGUNTA 22.*

**POSGRADUADO:**

- 5 Certificado Pos Bachillerato
- 6 Maestría (MA, MS, MBA etc.)  
*--Favor especifique: \_\_\_\_\_*
- 7 Título avanzado--doctorado (PhD, MD, JD, EdD, etc.) *--Favor especifique: \_\_\_\_\_*
- 8 Estudiante graduado especial-matriculado pero no en un programa con diploma (título).

21. ¿En qué fecha se matriculó por primera vez en una escuela posgraduada? ..... / \_\_\_\_\_  
mes año

22. ¿Cuál fue su especialidad o su programa de estudio durante el primer plazo (semestre, trimestre) desde que empezo en la Escuela NPSAS en el año escolar 1994-95?

Especialización: \_\_\_\_\_



23. Durante el primer plazo (semestre, trimestre) en cuál usted estaba matriculado en la Escuela NPSAS durante el año escolar 1994-95, ¿cual representa su nivel en el programa?

*Favor de escoger solamente una opción.*

**BACHILLERATO (LICENCIATURA):**

- 1 Primer año estudiante del bachillerato
- 2 Segundo año
- 3 Tercer año
- 4 Cuarto año (senior)
- 5 Quinto año ( higher senior)
- 6 Estudiante especial - ningún nivel

**POSGRADUADO:**

- 7 Primer año estudiante posgraduado
- 8 Segundo año
- 9 Tercer año
- 10 Cuarto año
- 11 Quinto año or más
- 12 Estudiante especial--ningún nivel

**D. FINANCIAR SU EDUCACIÓN**

24. ¿Qué tanto dinero gasto usted en los pagos de matrícula, derechos (o cuotas) de matrícula u otros gastos en todas las escuelas que asistió durante el año escolar 1994-95?

GASTOS EN 1994-95	CANTIDAD
Matrícula y derechos de matrícula en todas las escuelas que asistió en este año, antes de descuentos o suspensión de gastos ("waivers")	\$
Renta y comida o gastos de huésped si la vivienda es propiedad universitaria (escuela)	\$
Libros	\$
Equipo (e j., computadora, microscopios, herramientas o instrumentos)	\$
Gastos de ir y venir a las clases, incluyendo feria de carro público o autobus y gasolina	\$
Otros gastos educacionales (ej., transporte a su domicilio, cuidado de niños mientras va a clase	\$

25. Durante el año escolar 1994-95, ¿recibió alguna asistencia económica, tal como un subsidio, préstamos, becas, suspensión de matrícula, ayudantía ("assistantships"), reembolso de su empleador para los gastos de matrícula, y así por lo tanto?

- 1 Sí
- 2 No → SALTE A LA PREGUNTA 27

26. Favor de anotar los tipos, las fuentes y las cantidades de asistencia económica que haya recibido al asistir a todas las escuelas durante el año escolar 1994-95.

TIPO/FUENTE	CANTIDAD
EJEMPLOS: Pell Grant/Subsidio Federal	\$2000
Stafford Loan/Prestamo Federal	\$2500
Auxiliar de inverstigaciones ("Assistantships")/Institucional	\$2500
	\$
	\$
	\$
	\$
	\$
	\$
	\$
	\$
	\$

27. ¿Recibió algún préstamo de sus padres, algún pariente, banco, cooperativa de crédito ("credit union") o de cualquier fuente que no fuera el gobierno federal o estatal, su empleador, o su escuela para el año escolar 1994-95?

- 1 Sí
- 2 No → SALTE A LA PREGUNTA 29

28. ¿Qué cantidad recibió?

FUENTE	CANTIDAD
Padres/Tutores	\$
Otros parientes o amigos	\$
Banco, ahorros o préstamos, o cooperativa de crédito ("credit union")	\$
Otra fuente de préstamos:: (Favor especifique)	\$

29. Sin tomar en cuenta algún préstamo, ¿cuánto dinero recibía mensualmente de sus padres/tutores, parientes, o amigos para los gastos del año escolar 1994-95?

FUENTE	CANTIDAD
Pardres/Tutores	\$
Otros parientes y amigos	\$

**FAVOR CONTINUE →**

30. ¿Cuánto es la cantidad total que ha tomado prestado para su educación desde que salió de la escuela secundaria, incluyendo préstamos para estudiantes (federales) y préstamos de cualquiera fuente. ¿Cuánto debe todavía? *Anote 0 si usted no ha tomado prestado dinero para su educación pos-secundaria o si no debe ningún dinero.*

PRÉSTAMOS PARA SU EDUCACIÓN	CANTIDAD
Cantidad total tomó prestado ALGUNA VEZ	\$
Cantidad en préstamos para estudiantes del gobierno federal	\$
Cantidad total actualmente debe	\$
Cantidad debido a préstamos para estudiantes del gobierno federal	\$

**E. EMPLEO Y INGRESOS**

31. ¿Trabajó, con paga/sueldo, durante algún período entre las fechas del primero de julio, 1994 y el 30 de junio, 1995?

- 1 Sí
- 2 No → SALTE A LA PREGUNTA 35

32. ¿Qué era su empleo, con paga/sueldo, principal en ese entonces? *Su empleo principal puede considerarse como el trabajo donde trabajó las más horas por semana, el que le pagaba el sueldo más alto, o el que más utilizaba su especialización.*

Título del empleo: \_\_\_\_\_

Reponsabilidades: \_\_\_\_\_  
\_\_\_\_\_

33. ¿Trabajaba (con paga/sueldo) usted al mismo tiempo que estaba matriculado en la escuela?

- 1 Sí Si contesto sí, ¿cuántas horas por semana trabajaba como pormedio? \_\_\_\_\_  
¿Cuánto se ganaba usted por hora? \_\_\_\_\_  
..... \$ \_\_\_\_\_
- 2 No

34. ¿Cuánto fue su ingreso total de todos los empleos que tuvo entre el primero de julio, 1994 y el 30 de junio, 1995?

..... \$

35. Durante el año escolar 1994-95, ¿participó en algunos de los siguientes programas? (*Marque todos los que sean aplicables.*)

- 1 Un programa de estudio y trabajo federal
- 2 Un internado o práctica
- 3 Un programa de aprendizaje
- 4 Un cooperativo educacional

5 Un maestro auxiliar ("teaching assistantship")

6 Un auxiliar de investigaciones ("research assistantship")

36. Por favor llene la planilla de ingresos para los años 1993 and 1994 (incluya desde el primero de enero al 31 de diciembre).

INGRESO FUENTE	CANTIDAD	
	1993	1994
Sus empleos, incluyendo estudio y trabajo Federal, y "assistanships"	\$	\$
Los empleos de su esposo, incluyendo estudio y trabajo Federal, y "assistanships"	\$	\$
Interés, dividendos, y ganancias sobre el capital	\$	\$
Otras fuentes tales como el mantenimiento de un hijo, el Seguro Social, o Asistencia Pública	\$	\$

**F. INFORMACION SOBRE LOS PADRES/TUTORES**

37. ¿Cuál era el estado civil de sus padres/tutores legales el primero de julio, 1994?

- 1 Casados uno con el otro
- 2 Divorciados
- 3 Separados
- 4 Nunca se han casado
- 5 Uno o ambos habian fallecido
- 6 Nunca conoció sus padres; no tenía tutores legales → SALTE A LA PREGUNTA 38
- 7 Nunca conoció sus padres; se crió con tutor(es) legal(es)

38. ¿Cuál es el nivel más alto o el año escolar más alto que terminaron sus padres/tutores?

*Haga un círculo al número en la primera columna para su madre/tutora y en la segunda columna para su padre/tutor.*

Madre/Tutora	Padre/Tutor
1 . . . . . No terminó escuela secundaria . . . . .	1
2 . . . . . Terminó equivalente a la secundaria . . . . .	2
3 . . . . . Menos de 1 año en un programa técnico, ocupacional, o secretarial/comercio . . . . .	3
4 . . . . . De 1 a menos de 2 años en un programa técnico, ocupacional, o secretarial/comercio . . . . .	4
5 . . . . . 2 años o más en un programa técnico, ocupacional, o secretarial/comercio . . . . .	5
6 . . . . . Menos de 2 años de universidad . . . . .	6
7 . . . . . 2 o más años de universidad, incluyendo un diploma de 2-años . . . . .	7
8 . . . . . Bachillerato de 4 o 5 años . . . . .	8
9 . . . . . Maestría o equivalente . . . . .	9
10 . . . . . MD/DDSD/JD/otro título profesional . . . . .	10

## Reinterview

---



## SAPRIAID

Did you get any grants, loans, scholarships, assistantships, work-study, or any other financial aid in 1994-95?

- 1=YES
- 2=NO
- 1=DK
- 2=RE

## SACMPLR

As of [date of main interview], had you completed your program of study and received your [certificate/degree]?

- 1 = YES, ALREADY COMPLETED PROGRAM AND RECEIVED DEGREE
- 2 = NO, COMPLETED PROGRAM BUT NOT YET RECEIVED DEGREE
- 3 = NO, NOT COMPLETED PROGRAM YET.

## SACMPCOR

As of [date of main interview], had you completed your course work and all other requirements for your degree?

- 0= NOT COMPLETED COURSEWORK.
- 1= COMPLETED COURSEWORK, BUT NOT ALL REQUIREMENTS
- 2= COMPLETED ALL REQUIREMENTS.

## SBSCHRES

While enrolled during 95-96, where did you live?

- 1 = on-campus in school-owned housing,
- 2 = off-campus in school-owned housing,
- 3 = in an apartment or house other than with your parents or guardians (including houses owned by fraternities and sororities),
- 4 = with your parents or guardians,
- 5 = with other relatives, or
- 6 = some place else?

## SCPARTUI

During 1995-96, did your [fill parent(s)/guardian(s)] pay for any of your...

...Tuition or fees (1=YES 2=NO)?

## SCPARRM

...Room and board (1=YES 2=NO)?

## SCPARBK

...Books or equipment (1=YES 2=NO)?

<p>SCPARALW</p> <p>Did your [parent(s)/guardian(s)] give you an allowance that you don't have to repay?</p> <p>1=YES 2=NO -1=DK -2=RE</p> <p>SCNUMJBS</p> <p>Between July 1, 1995 and June 30, 1996, how many jobs did you have (0-15)?</p> <p>COUNT WORK STUDY AND ASSISTANTSHIPS IN ADDITION TO ANY OTHER JOBS HELD.</p> <p>SCREIMB</p> <p>Did you receive tuition reimbursement from your employer (1=YES 2=NO)?</p> <p>NEW ITEM FOR REINTERVIEW ONLY</p> <p>Were you awarded any financial aid for the 1995-96 school year?</p> <p>INCLUDE ANY FINANCIAL AID AWARDED FROM FEDERAL, STATE, OR INSTITUTIONAL SOURCES BUT EXCLUDE FINANCIAL ASSISTANCE FROM FAMILY OR FRIENDS, REGARDLESS OF WHETHER OR NOT ANY AID WAS AWARDED.</p> <p>1 = YES 2 = NO -1=DK -2=RE</p> <p>SDACCEPT</p> <p>Did you accept all of the aid you were awarded for the year?</p> <p>1 = YES 2 = NO</p>	<p>SDBOREVR</p> <p>INTERVIEWER: ENTER 1 TO INDICATE "ALL OF IT"</p> <p>Including the \$[amount borrowed 95-96 from main interview] from [your [parent(s)/guardian(s)] and all other sources, all sources, H/how much have you borrowed for your education since you left high school (0-200,000)?...</p> <p>SEHOURS</p> <p>About how many hours did you work per week while you were enrolled July 1, 1995 through June 30, 1996?</p> <p>0-99</p> <p>SEENRAMT</p> <p>About how much did you earn from all jobs while you were enrolled?</p> <p>AMOUNT: (0-100,000) \</p> <p>SEENRFRQ</p> <p>FREQUENCY: 1= PER HOUR 2= PER WEEK 3= PER MONTH 4= PER TERM 5= FOR THE YEAR 95-96</p> <p>SEENRWKS</p> <p>Did you work for all or most of the weeks while you were enrolled?</p> <p>1= YES, EVERY WEEK WHILE ENROLLED 2= YES, MOST OF THE WEEKS WHILE ENROLLED 3= NO, ONLY ABOUT HALF OF THE WEEKS WHILE ENROLLED 4= NO, LESS THAN HALF OF THE WEEKS WHILE ENROLLED -1= DK -2= RE</p>
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<p>SFTOT95</p> <p>What was your [and your spouse's] total income from all sources, prior to taxes and deductions, excluding any (student) financial aid you may have received... (EXCLUDE WORK STUDY &amp; ASSISTANTSHIPS)</p>	<p>...for 1995?</p> <p>SFTOT94</p> <p>...for 1994?</p>
--	--

<p>SHDADED</p> <p>What was the highest grade or level of education your father ever completed?</p> <p>1= DID NOT COMPLETE HIGH SCHOOL                  2= COMPLETED HIGH SCHOOL OR EQUIVALENT                  3= LESS THAN 1 YR OF OCCUPATIONAL, TRADE, TECHNICAL OR BUSINESS SCHOOL                  4= ONE BUT LESS THAN 2 YEARS OF OCCUPATIONAL, TRADE, TECHNICAL, BUSINESS SCHOOL                  5= 2 YEARS OR MORE OF OCCUPATIONAL, TRADE, BUSINESS SCHOOL                  6= LESS THAN 2 YEARS OF COLLEGE                  7= 2 OR MORE YEARS OF COLLEGE, INCLUDING 2-YR DEGREE                  8= BACHELOR'S DEGREE -4 OR 5 YEAR DEGREE                  9= MASTER'S DEGREE OR EQUIVALENT                  10= MD/DDS/LLB/OTHER ADVANCED PROFESSIONAL DEGREE                  11= DOCTORATE DEGREE -PHD, EDD, DBA</p>	<p>5= 2 YEARS OR MORE OF OCCUPATIONAL, TRADE, BUSINESS SCHOOL                  6= LESS THAN 2 YEARS OF COLLEGE                  7= 2 OR MORE YEARS OF COLLEGE, INCLUDING 2-YR DEGREE                  8= BACHELOR'S DEGREE -4 OR 5 YEAR DEGREE                  9= MASTER'S DEGREE OR EQUIVALENT                  10= MD/DDS/LLB/OTHER ADVANCED PROFESSIONAL DEGREE                  11= DOCTORATE DEGREE -PHD, EDD, DBA</p> <p>SHOTPSE</p> <p>How many of your other family members ever attended a postsecondary school? 0-20= MEMBERS</p> <p>RELIAB_END</p>
<p>SHMOMED</p> <p>What was the highest grade or level of education your mother ever completed?</p> <p>1= DID NOT COMPLETE HIGH SCHOOL                  2= COMPLETED HIGH SCHOOL OR EQUIVALENT                  3= LESS THAN 1 YR OF OCCUPATIONAL, TRADE, TECHNICAL OR BUSINESS SCHOOL                  4= ONE BUT LESS THAN 2 YEARS OF OCCUPATIONAL, TRADE, TECHNICAL, BUSINESS SCHOOL</p>	

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# Appendix E

## Training Material

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# Appendix E

## Training Material

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## NPSAS:96 TELEPHONE INTERVIEWER TRAINING AGENDA

Session 1 (240 minutes)

Topic 1 (Lead Trainer)	Welcome and Introduction to NPSAS:96 - Background and purpose of NPSAS:96 - What data are used for - NPSAS project overview - What is financial aid?	35 minutes
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Topic 2 (Lead Trainer)	Overview of the Training Session - Training agenda and rules	15 minutes
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Topic 3 (Lead Trainer & Assistant)	Demonstration Interviews - Student - Parent	70 minutes
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BREAK		10 minutes
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Topic 4 (Lead Trainer)	Confidentiality and Informed Consent - Review Signed forms	15 minutes
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Topic 5 (Lead Trainer & Assistant)	NPSAS Student Questionnaire - Concept of Active Listening	85 minutes
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Section A

- Review of Q x Q's
- Review "user exits" screens
- Small Group Mock #1 of Section

<i>Production Sheet Discussion and Entry</i>		10 minutes
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Session 2 (240 Minutes)

Topic 6 (Lead Trainer & Assistant)	NPSAS Student Questionnaire (Continued) Sections B-E - Review QxQ's - Review User Exits - Small Group Mock #1 of Sections	70 minutes 45 minutes 40 minutes
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NPSAS:96 Telephone Interviewer Training Agenda (Continued)

BREAK 10 minutes

Topic 7 Practice User Exits in Student Questionnaire 65 minutes  
(Lead Trainer)

*Production Sheet Entry* 10 minutes

Session 3 (240 Minutes)

Topic 8 NPSAS Student Questionnaire (Continued)  
(Lead Trainer Sections F-End of Questionnaire  
& Assistant) - Review of QxQ's 70 minutes  
- Small Group Mock #1 of Sections 50 minutes

BREAK 10 minutes

Topic 9 Explaining the Study and Obtaining Participation 45 minutes  
(Lead Trainer)  
- Lead Letters  
- Question and Answer sheet

Topic 10 NPSAS Front End Module 55 minutes  
(Lead Trainer) Overview of Contacting/locating procedures  
- preloaded information  
- basic algorithms for calling each case  
- brief explanation of Fastdata role  
Intro to roster line concept (on data view)  
QxQ Review  
- introductory screens  
- utility screens  
Examples on Dataview  
Events and Status Codes

*Production Sheet Entry* 10 minutes

Session 4 (240 minutes)

Topic 10 NPSAS Front End Module (Continued) 45 minutes  
Overview of Contacting/locating procedures  
- preloaded information

## NPSAS:96 Telephone Interviewer Training Agenda (Continued)

	<ul style="list-style-type: none"> <li>- basic algorithms for calling each case</li> <li>- brief explanation of Fastdata role</li> </ul>	
	Intro to roster line concept (on data view)	
	QxQ Review	
	<ul style="list-style-type: none"> <li>- introductory screens</li> <li>- utility screens</li> </ul>	
	Examples on Dataview	
	Events and Status Codes	
Topic 11 (Lead Trainer)	Quality Control Measures <ul style="list-style-type: none"> <li>- Monitoring</li> <li>- Reporting problems</li> <li>- How to use the Electronic Problem Sheet</li> <li>- Who to report what types of problems</li> </ul>	15 minutes
Topic 12 (Lead Trainer and Assistant)	Small Group Mock #2 of Student Interview	70 minutes
BREAK		10 minutes
Topic 13 (Lead Trainer)	Parent Interview Review QxQ's	60 minutes
Topic 14 (Lead Trainer & Assistant)	Small Group Mock #3 of Parental Interview	30 minutes
<i>Production Sheet Entry</i>		10 minutes
<u>Session 5 (240 Minutes)</u>		
Topic 15 (Lead Trainer & Assistant)	More User Exit Practice and Coding	50 minutes
Topic 16 (Lead Trainer & Assistant)	Practice Contacting/Locating/Student Int. <ul style="list-style-type: none"> <li>- Small Group Mock #4 of entire NPSAS package</li> </ul>	90 minutes

NPSAS:96 Telephone Interviewer Training Agenda (Continued)

BREAK		10 minutes
Topic 17 (Lead Trainer & Assistant)	Practice Contacting/Locating/Student Int - Small Group Mock #5	60 minutes
Topic 18 (Lead Trainer)	Question and Answer Session	20 minutes
<i>Production Sheet Entry</i>		10 minutes

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## Field Staff Data Collector Training Agenda

DAY 0
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- 9:00 am Welcome and Introduction
  - Meet Project Team Members
  - Review Field Supervisor (FS Territories)
- 9:30 am Review Field Data Collector (FDC) Training
  - Discuss FS Roles
- 10:00 am Postsecondary Institution Environment
- 10:30 am Contacting Coordinators (Checklist)
- 11:30 am Lunch
- 1:00 pm Mock #5: Eric Npsastestv
  - Round-Robin
  - Highlight Q x Q Specifications
- 2:00 pm Mock #9: José Npsastestix
  - Individual
- 2:00 pm Field Management System (MS) - Reports
- 3:00 pm Break
- 3:15 pm FMS - Production, Time and Expense (PT&E)
- 3:45 pm FMS - Assignments
- 4:15 pm Questions and Answers
- 4:30 pm Adjourn

Field Staff Data Collector Training Agenda - (Continued)

DAY 1

- 8:30 am Overview of Training Objective
- Review Training Materials
  - Data Collection Time Line
- 9:00 am NPSAS:96 Institutional Contacting
- 9:30 am Basic Concepts of Postsecondary Financial Aid Process
- 10:15 am Break
- 10:30 am CADE - "Basics"
- Software Development
  - Sections & Sub-sections
  - CADE Tutorial
- 11:30 am General FDC Responsibilities
- Confidentiality Agreements
  - Contact with Institutional Coordinator
- 12:00 pm Lunch
- 1:00 pm Introduction to CADE
- Case #1 - Rachel Npsastesti
- FDC do not use PC
  - FDC locate "files"
- 2:45 pm Break
- 3:00 pm Case #1 - Rachel (continued)
- 4:00 pm Review / Questions Case #1
- 4:15 pm Using CADE
- Identify System Menu
  - Select Institution
  - Complete Data Entry
- 5:00 pm Review Home Study

## Field Staff Data Collector Training Agenda - (Continued)

5:30 pm Adjourn

**DAY 2**

8:30 am Review Case #1

8:45 am CADE: Section by Section  
– Case #10 - Monique

Registration /Admissions Section: Locating

9:15 am Registration /Admissions Section: Characteristics

9:45 am Registration / Admissions Section: Admission Tests

10:15 am Break

10:30 am Enrollment / Tuition Section

11:15 am Financial Aid Section: Financial Aid Awards

12:00 pm Financial Aid Section: Needs Analysis

12:30 pm Lunch

1:30 Financial Aid Section: Student Aid Report (SAR)

2:00 pm Round-Robin  
– Case #8 - Max T.

3:15 Break

3:30 pm Round-Robin  
– Case #8 (continued)

4:30 pm “Packing” Complete Case

5:00 pm Adjourn

Field Staff Data Collector Training Agenda - (Continued)

DAY 3

- 8:30 am      Review
  - Case #10
  - Case #8
  
- 9:00 am      Key Elements in Student Financial Aid Data
  
- 9:30 am      Postsecondary Institution Environment
  
- 10:15 am     Break
  
- 10:30 am     Contacting Coordinators
  - Checklist
  
- 11:15am     Item Verification: System Q/C
  
- 12:15 pm     Lunch
  
- 1:15 pm      Introduction to Field Management System
  
- 1:45 pm      Individual Practice
  - Case #3 - David J.
  
- 2:30 pm      Break
  
- 2:45 pm      Case #3 - (continued)
  
- 3:45 pm      Review Case #3
  
- 4:15 pm      Assignment: “After Hours Practice”
  - Transmission of Cases 1, 10, 8, 3
  - Receipt of Cases 7, 2, 4, 6
  
- 5:00 pm      Adjourn

## Field Staff Data Collector Training Agenda - (Continued)

## DAY 4

- 8:30 am Review Transmission
- 9:00 am Introduction to E-Mail
- 10:15 am Break
- 10:30 am Round-Robin  
– Case #7 - Paul T.
- 11:45 am Review  
– Case #7
- 12:15 pm Lunch
- 1:15 pm Individual Practice  
– Case #2  
– Role-play IC Call
- 2:30 pm Break
- 2:45 pm Review  
– Case #2
- 3:15 pm The Test  
– Case #4 - Liz
- 4:15 pm Assignment  
– Transmission of Cases #7, 2, 4
- 4:30 pm Adjourn





# Appendix F

## Design Effect Tables

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## Statistical Analysis Considerations

The NPSAS:96 sampling design was a stratified two-stage design. A stratified sample of postsecondary institutions was selected with probabilities proportional to a composite measure of size at the first stage, and a stratified systematic sample of students was selected from sample institutions at the second stage. Moreover, a stratified subsample of students was selected for computer-assisted telephone interviewing (CATI). At the first stage, about ten percent of the eligible institutions were selected, but the institution sampling rates varied considerably by institutional level and control.<sup>1</sup> At the second stage, potential first-time, beginning (FTB) students were oversampled. Moreover, FTBs were retained for CATI with certainty, while about half of all other students were retained, and higher sampling rates were used for students whose CADE data indicated that they were financial aid applicants. Because of this complex sampling design, it is important that statistical analyses be conducted using software that properly accounts for the complex survey sampling design.

Most commonly-used statistical computing packages (e.g., SAS and SPSS) assume that the data were obtained from a simple random sample; that is, they assume that the observations are independent and identically distributed. When data have been collected using a complex sampling design, the simple random sampling assumption can lead to an underestimate of the sampling variance, which can therefore lead to artificially small confidence intervals and anticonservative hypothesis tests results (i.e., rejecting the null hypothesis when it is in fact true more often than indicated by the nominal Type I error level) (Carlson et al, 1993).

Statistical strategies that have been developed to address this issue include: first-order Taylor series expansion of the variance equation; balanced repeated replication; and the Jackknife approach (see, e.g., Wolter, 1985). Special-purpose software packages that have been developed for analysis of complex sample survey data include SUDAAN and WesVarPC. Recently, the statistical software package Stata has added features for analysis of complex survey data. Evaluations of the relative performances of these packages are reported by Cohen (1997). SUDAAN is a commercial product developed by Research Triangle Institute; information regarding the features of this package and its lease terms is available from the Web site <http://www.rti.org/patents/sudaan/sudaan.html>. WesVarPC is a product of Westat, Inc. and can be downloaded from the Web site <http://www.westat.com/wesvarpc/index.html>. NCES also has developed a software tool called the Data Analysis System (DAS) for analysis of complex survey data. Information about using the DAS is available from the Web site <http://www.pedar-das.org>. This site includes links to many NCES DAS files, including the NPSAS DAS files.

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<sup>1</sup> From about 3 percent for private, for-profit, less-than-2-year institutions to about 51 percent for public, 4-year, doctoral/first-professional-granting institutions.

If one must perform a quick analysis of NPSAS:96 data without using one of the software packages for analysis of complex survey data, the design effect tables in this appendix can be used to make approximate adjustments to the standard errors of survey statistics computed using the standard software packages that assume simple random sampling designs. For example, Table F.9 shows design effects based on the study weights for undergraduate students at public, 4-year, doctoral/first-professional institutions. If one had computed a statistic (e.g., mean Pell grant) for this domain of students using the study weights, then the summary statistics from Table F.9 suggest that the standard error computed from the standard statistical software package should be multiplied by a survey design effect of about 3.64 (the median for this domain). However, the range of design effects shown in Table F.9 for this domain is from 2.28 to 7.87. Therefore, one cannot be confident regarding the actual design-based standard error without performing the analysis using one of the software packages specifically designed for analysis of data from complex sample surveys.

## References

Carlson, B.L., Johnson, A.E., and Cohen, S.B. (1993). "An Evaluation of the Use of Personal Computers for Variance Estimation with Complex Survey Data." *Journal of Official Statistics*, Vol. 9, No. 4, pp. 795-814.

Cohen, S.B. (1997). "An Evaluation of Alternative PC-Based Software Packages Developed for the Analysis of Complex Survey Data." *The American Statistician*, Vol. 51, No. 3, pp. 285-292.

Wolter, K. (1985). *Introduction to Variance Estimation*, Springer-Verlag: New York, NY.

# DESIGN EFFECT TABLES

## Section A

Design effect tables for undergraduate students based on the study weights



Table F.1—Design effects based on the study weights for all undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	49.67	0.73	0.25	41,482	2.98	8.86
Received any federal aid	36.58	0.70	0.24	41,482	2.97	8.80
Received any non-federal aid	32.00	0.65	0.23	41,482	2.84	8.09
Received any state grant aid	12.71	0.49	0.16	41,482	3.02	9.14
Received any institution grant aid	11.68	0.47	0.16	41,482	2.99	8.95
Received any aid from other sources	12.36	0.39	0.16	41,482	2.40	5.74
Received any grant aid	38.94	0.69	0.24	41,482	2.86	8.21
Received any loan aid	25.60	0.57	0.21	41,482	2.64	6.96
Received any work-study aid	5.03	0.27	0.11	41,482	2.49	6.22
Received any other type of aid	7.58	0.33	0.13	41,482	2.55	6.50
Received a Pell grant	21.61	0.60	0.20	41,482	2.97	8.84
Received a Stafford loan	24.66	0.55	0.21	41,482	2.61	6.83
Received a subsidized loan	21.66	0.50	0.20	41,482	2.48	6.14
Received an unsubsidized loan	10.01	0.32	0.15	41,482	2.15	4.63
Received grant aid only	18.84	0.57	0.19	41,482	2.97	8.80
Married	20.95	0.57	0.20	41,482	2.88	8.27
U.S. citizen	95.12	0.33	0.11	41,482	3.12	9.74
U.S. Armed Forces veteran	4.97	0.27	0.11	39,536	2.43	5.88
Enrolled exclusively full-time	44.95	0.83	0.25	40,838	3.38	11.46
Lived on campus	20.61	0.56	0.20	41,482	2.83	8.03
SUMMARY STATISTICS						
Minimum					2.15	4.63
25 <sup>th</sup> percentile					2.52	6.36
Median					2.84	8.06
75 <sup>th</sup> percentile					2.98	8.85
Maximum					3.38	11.46





Table F.2—Design Effects based on the study weights for male undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	46.72	0.95	0.37	17,714	2.54	6.48
Received any federal aid	33.11	0.83	0.35	17,714	2.35	5.51
Received any non-federal aid	31.37	0.83	0.35	17,714	2.39	5.72
Received any state grant aid	11.16	0.52	0.24	17,714	2.21	4.86
Received any institution grant aid	11.45	0.56	0.24	17,714	2.33	5.45
Received any aid from other sources	13.55	0.58	0.26	17,714	2.24	5.03
Received any grant aid	35.70	0.84	0.36	17,714	2.34	5.49
Received any loan aid	24.40	0.73	0.32	17,714	2.25	5.05
Received any work-study aid	4.32	0.29	0.15	17,714	1.91	3.63
Received any other type of aid	8.94	0.45	0.21	17,714	2.10	4.43
Received a Pell grant	17.88	0.63	0.29	17,714	2.18	4.74
Received a Stafford loan	23.46	0.70	0.32	17,714	2.19	4.81
Received a subsidized loan	20.36	0.64	0.30	17,714	2.11	4.46
Received an unsubsidized loan	9.68	0.41	0.22	17,714	1.85	3.43
Received grant aid only	16.73	0.67	0.28	17,714	2.40	5.77
Married	18.29	0.73	0.29	17,714	2.52	6.37
U.S. citizen	94.84	0.38	0.17	17,714	2.27	5.14
U.S. Armed Forces veteran	9.82	0.51	0.23	16,743	2.22	4.92
Enrolled exclusively full-time	47.33	1.02	0.38	17,486	2.69	7.23
Lived on campus	21.60	0.69	0.31	17,714	2.22	4.94
SUMMARY STATISTICS						
Minimum					1.85	3.43
25 <sup>th</sup> percentile					2.19	4.78
Median					2.25	5.04
75 <sup>th</sup> percentile					2.37	5.61
Maximum					2.69	7.23

Table F.3—Design effects based on the study weights for female undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	51.91	0.86	0.32	23,768	2.67	7.10
Received any federal aid	39.22	0.84	0.32	23,768	2.66	7.08
Received any non-federal aid	32.47	0.74	0.30	23,768	2.45	6.01
Received any state grant aid	13.89	0.59	0.22	23,768	2.63	6.92
Received any institution grant aid	11.86	0.53	0.21	23,768	2.52	6.34
Received any aid from other sources	11.45	0.43	0.21	23,768	2.07	4.28
Received any grant aid	41.40	0.82	0.32	23,768	2.57	6.60
Received any loan aid	26.51	0.66	0.29	23,768	2.32	5.37
Received any work-study aid	5.56	0.31	0.15	23,768	2.09	4.39
Received any other type of aid	6.54	0.35	0.16	23,768	2.16	4.68
Received a Pell grant	24.45	0.75	0.28	23,768	2.67	7.14
Received a Stafford loan	25.58	0.65	0.28	23,768	2.31	5.35
Received a subsidized loan	22.64	0.61	0.27	23,768	2.23	4.97
Received an unsubsidized loan	10.26	0.37	0.20	23,768	1.90	3.60
Received grant aid only	20.44	0.72	0.26	23,768	2.74	7.52
Married	22.98	0.68	0.27	23,768	2.50	6.23
U.S. citizen	95.33	0.42	0.14	23,768	3.07	9.42
U.S. Armed Forces veteran	1.34	0.17	0.08	22,793	2.25	5.06
Enrolled exclusively full-time	43.13	0.91	0.32	23,352	2.82	7.94
Lived on campus	19.86	0.68	0.26	23,768	2.61	6.81
SUMMARY STATISTICS						
Minimum					1.90	3.60
25 <sup>th</sup> percentile					2.24	5.01
Median					2.48	6.17
75 <sup>th</sup> percentile					2.66	7.09
Maximum					3.07	9.42

Table F.4— Design effects based on the study weights for students at less-than-2-year institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	63.21	4.13	0.78	3,831	5.31	28.15
Received any federal aid	52.18	4.17	0.81	3,831	5.16	26.64
Received any non-federal aid	25.66	3.23	0.71	3,831	4.58	20.99
Received any state grant aid	6.69	2.35	0.40	3,831	5.81	33.80
Received any institution grant aid	5.23	1.58	0.36	3,831	4.39	19.29
Received any aid from other sources	9.23	1.38	0.47	3,831	2.95	8.70
Received any grant aid	46.67	3.73	0.81	3,831	4.63	21.42
Received any loan aid	37.16	4.27	0.78	3,831	5.47	29.89
Received any work-study aid	0.12	0.06	0.06	3,831	1.06	1.13
Received any other type of aid	11.56	1.60	0.52	3,831	3.11	9.64
Received a Pell grant	39.07	3.61	0.79	3,831	4.58	20.97
Received a Stafford loan	34.65	4.15	0.77	3,831	5.40	29.16
Received a subsidized loan	33.32	4.02	0.76	3,831	5.28	27.89
Received an unsubsidized loan	21.07	3.25	0.66	3,831	4.94	24.40
Received grant aid only	19.24	3.01	0.64	3,831	4.73	22.34
Married	28.97	1.30	0.73	3,831	1.78	3.15
U.S. citizen	93.38	1.12	0.40	3,831	2.78	7.75
U.S. Armed Forces veteran	7.52	1.20	0.44	3,517	2.69	7.26
Enrolled exclusively full-time	79.80	2.73	0.66	3,711	4.14	17.10
Lived on campus	2.13	0.41	0.23	3,831	1.74	3.04
<b>SUMMARY STATISTICS</b>						
Minimum					1.06	1.13
25 <sup>th</sup> percentile					2.87	8.23
Median					4.58	20.98
75 <sup>th</sup> percentile					5.22	27.27
Maximum					5.81	33.80

Table F.5— Design effects based on the study weights for undergraduate students at public, 2-year institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	35.20	1.28	0.61	6,167	2.11	4.45
Received any federal aid	22.10	1.12	0.53	6,167	2.12	4.50
Received any non-federal aid	22.86	1.13	0.53	6,167	2.11	4.44
Received any state grant aid	8.52	0.82	0.36	6,167	2.31	5.33
Received any institution grant aid	3.91	0.62	0.25	6,167	2.50	6.27
Received any aid from other sources	10.91	0.73	0.40	6,167	1.83	3.35
Received any grant aid	28.86	1.21	0.58	6,167	2.09	4.37
Received any loan aid	8.56	0.66	0.36	6,167	1.85	3.41
Received any work-study aid	1.54	0.29	0.16	6,167	1.86	3.47
Received any other type of aid	5.03	0.57	0.28	6,167	2.05	4.20
Received a Pell grant	16.56	1.04	0.47	6,167	2.20	4.85
Received a Stafford loan	8.06	0.62	0.35	6,167	1.80	3.23
Received a subsidized loan	6.86	0.56	0.32	6,167	1.74	3.04
Received an unsubsidized loan	3.39	0.32	0.23	6,167	1.41	1.97
Received grant aid only	21.35	1.07	0.52	6,167	2.05	4.20
Married	25.97	1.08	0.56	6,167	1.93	3.71
U.S. citizen	95.19	0.64	0.27	6,167	2.37	5.60
U.S. Armed Forces veteran	5.92	0.51	0.31	5,788	1.66	2.75
Enrolled exclusively full-time	25.62	1.26	0.56	6,045	2.25	5.05
Lived on campus	12.25	0.69	0.42	6,167	1.65	2.71
SUMMARY STATISTICS						
Minimum					1.41	1.97
25 <sup>th</sup> percentile					1.81	3.29
Median					2.05	4.20
75 <sup>th</sup> percentile					2.16	4.67
Maximum					2.50	6.27

Table F.6— Design effects based on the study weights for under graduate students at 4-year, non-doctoral/first-professional institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	63.67	1.06	0.43	12,559	2.48	6.15
Received any federal aid	49.61	1.22	0.45	12,559	2.73	7.46
Received any non-federal aid	45.27	1.23	0.44	12,559	2.76	7.64
Received any state grant aid	20.78	1.06	0.36	12,559	2.94	8.62
Received any institution grant aid	21.91	1.32	0.37	12,559	3.58	12.80
Received any aid from other sources	15.12	0.66	0.32	12,559	2.06	4.23
Received any grant aid	51.24	1.13	0.45	12,559	2.53	6.42
Received any loan aid	40.09	1.23	0.44	12,559	2.82	7.95
Received any work-study aid	10.86	0.84	0.28	12,559	3.02	9.11
Received any other type of aid	9.19	0.61	0.26	12,559	2.38	5.67
Received a Pell grant	25.86	1.05	0.39	12,559	2.70	7.28
Received a Stafford loan	38.83	1.22	0.43	12,559	2.80	7.82
Received a subsidized loan	34.36	1.08	0.42	12,559	2.54	6.44
Received an unsubsidized loan	13.38	0.65	0.30	12,559	2.14	4.57
Received grant aid only	17.98	0.90	0.34	12,559	2.63	6.93
Married	18.52	1.00	0.35	12,559	2.87	8.24
U.S. citizen	96.01	0.40	0.17	12,559	2.30	5.30
U.S. Armed Forces veteran	4.15	0.39	0.18	12,175	2.13	4.54
Enrolled exclusively full-time	57.35	1.48	0.44	12,416	3.34	11.13
Lived on campus	29.39	1.51	0.41	12,559	3.72	13.82
SUMMARY STATISTICS						
Minimum					2.06	4.23
25 <sup>th</sup> percentile					2.43	5.91
Median					2.66	7.10
75 <sup>th</sup> percentile					2.88	8.28
Maximum					3.72	13.82

Table F.7— Design effects based on the study weights for under graduate students at 4-year, doctoral/first-professional institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	57.95	0.83	0.41	14,284	2.01	4.03
Received any federal aid	44.60	0.80	0.42	14,284	1.91	3.67
Received any non-federal aid	38.51	0.89	0.41	14,284	2.17	4.73
Received any state grant aid	14.41	0.74	0.29	14,284	2.53	6.39
Received any institution grant aid	18.77	0.74	0.33	14,284	2.27	5.17
Received any aid from other sources	13.35	0.47	0.28	14,284	1.65	2.73
Received any grant aid	43.18	0.79	0.41	14,284	1.90	3.61
Received any loan aid	38.35	0.83	0.41	14,284	2.04	4.15
Received any work-study aid	7.82	0.50	0.22	14,284	2.24	5.03
Received any other type of aid	9.46	0.49	0.24	14,284	2.00	4.01
Received a Pell grant	21.00	0.72	0.34	14,284	2.10	4.42
Received a Stafford loan	37.15	0.83	0.40	14,284	2.05	4.19
Received a subsidized loan	32.12	0.77	0.39	14,284	1.98	3.90
Received an unsubsidized loan	14.18	0.52	0.29	14,284	1.80	3.23
Received grant aid only	15.00	0.59	0.30	14,284	1.98	3.94
Married	11.58	0.65	0.27	14,284	2.43	5.91
U.S. citizen	94.81	0.39	0.19	14,284	2.09	4.37
U.S. Armed Forces veteran	3.00	0.26	0.15	13,609	1.81	3.26
Enrolled exclusively full-time	60.72	1.23	0.41	14,157	3.01	9.04
Lived on campus	34.09	1.05	0.40	14,284	2.65	7.04
SUMMARY STATISTICS						
Minimum					1.65	2.73
25 <sup>th</sup> percentile					1.95	3.79
Median					2.04	4.17
75 <sup>th</sup> percentile					2.26	5.10
Maximum					3.01	9.04

Table F.8— Design effects based on the study weights for under graduate students at public, 4-year, non-doctoral/first-professional institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	55.76	1.28	0.58	7,451	2.22	4.95
Received any federal aid	45.38	1.30	0.58	7,451	2.25	5.04
Received any non-federal aid	33.94	1.21	0.55	7,451	2.21	4.90
Received any state grant aid	18.04	1.17	0.45	7,451	2.62	6.89
Received any institution grant aid	7.06	0.69	0.30	7,451	2.33	5.44
Received any aid from other sources	11.64	0.61	0.37	7,451	1.65	2.74
Received any grant aid	41.33	1.16	0.57	7,451	2.04	4.15
Received any loan aid	34.81	1.37	0.55	7,451	2.48	6.16
Received any work-study aid	5.74	0.59	0.27	7,451	2.21	4.87
Received any other type of aid	7.01	0.51	0.30	7,451	1.71	2.93
Received a Pell grant	26.08	1.16	0.51	7,451	2.28	5.19
Received a Stafford loan	33.61	1.34	0.55	7,451	2.46	6.04
Received a subsidized loan	29.34	1.15	0.53	7,451	2.19	4.79
Received an unsubsidized loan	12.06	0.69	0.38	7,451	1.84	3.39
Received grant aid only	16.33	1.02	0.43	7,451	2.38	5.66
Married	18.88	1.11	0.45	7,451	2.44	5.95
U.S. citizen	95.21	0.61	0.25	7,451	2.47	6.08
U.S. Armed Forces veteran	4.17	0.37	0.24	7,235	1.56	2.43
Enrolled exclusively full-time	53.52	1.70	0.58	7,368	2.93	8.58
Lived on campus	24.81	1.33	0.50	7,451	2.65	7.04
<b>SUMMARY STATISTICS</b>						
Minimum					1.56	2.43
25 <sup>th</sup> percentile					2.05	4.22
Median					2.23	5.00
75 <sup>th</sup> percentile					2.46	6.06
Maximum					2.93	8.58



Table F.9—Design effects based on the study weights for undergraduate students at public, 4-year, doctoral/first-professional institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	55.94	1.00	0.54	8,596	1.88	3.52
Received any federal aid	43.82	0.94	0.54	8,596	1.76	3.11
Received any non-federal aid	34.21	1.05	0.51	8,596	2.05	4.19
Received any state grant aid	13.79	0.87	0.37	8,596	2.33	5.41
Received any institution grant aid	13.19	0.78	0.37	8,596	2.15	4.62
Received any aid from other sources	12.25	0.53	0.35	8,596	1.51	2.28
Received any grant aid	39.91	0.94	0.53	8,596	1.77	3.14
Received any loan aid	37.30	0.99	0.52	8,596	1.89	3.58
Received any work-study aid	5.39	0.54	0.24	8,596	2.22	4.94
Received any other type of aid	8.85	0.60	0.31	8,596	1.96	3.83
Received a Pell grant	22.04	0.86	0.45	8,596	1.92	3.68
Received a Stafford loan	36.29	0.98	0.52	8,596	1.90	3.60
Received a subsidized loan	30.93	0.92	0.50	8,596	1.84	3.37
Received an unsubsidized loan	14.82	0.64	0.38	8,596	1.66	2.77
Received grant aid only	14.28	0.70	0.38	8,596	1.85	3.42
Married	11.49	0.78	0.34	8,596	2.26	5.12
U.S. citizen	95.34	0.45	0.23	8,596	1.98	3.91
U.S. Armed Forces veteran	3.31	0.33	0.20	8,199	1.67	2.78
Enrolled exclusively full-time	59.19	1.49	0.53	8,532	2.80	7.87
Lived on campus	33.65	1.23	0.51	8,596	2.42	5.85
SUMMARY STATISTICS						
Minimum					1.51	2.28
25 <sup>th</sup> percentile					1.80	3.26
Median					1.91	3.64
75 <sup>th</sup> percentile					2.14	4.60
Maximum					2.80	7.87

Table F.10—Design effects based on the study weights for undergraduate students at private, not-for-profit, 4-year, non-doctoral/first-professional institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	74.32	1.64	0.61	5,108	2.68	7.16
Received any federal aid	55.31	2.26	0.70	5,108	3.24	10.52
Received any non-federal aid	60.51	2.20	0.68	5,108	3.22	10.34
Received any state grant aid	24.47	1.95	0.60	5,108	3.23	10.46
Received any institution grant aid	41.88	2.69	0.69	5,108	3.89	15.16
Received any aid from other sources	19.81	1.26	0.56	5,108	2.27	5.13
Received any grant aid	64.59	1.97	0.67	5,108	2.94	8.66
Received any loan aid	47.19	2.22	0.70	5,108	3.17	10.07
Received any work-study aid	17.76	1.75	0.53	5,108	3.27	10.72
Received any other type of aid	12.11	1.24	0.46	5,108	2.72	7.41
Received a Pell grant	25.57	1.91	0.61	5,108	3.13	9.82
Received a Stafford loan	45.86	2.19	0.70	5,108	3.15	9.91
Received a subsidized loan	41.10	1.99	0.69	5,108	2.90	8.38
Received an unsubsidized loan	15.16	1.21	0.50	5,108	2.40	5.77
Received grant aid only	20.21	1.59	0.56	5,108	2.82	7.97
Married	18.04	1.81	0.54	5,108	3.36	11.26
U.S. citizen	97.08	0.48	0.24	5,108	2.02	4.10
U.S. Armed Forces veteran	4.12	0.77	0.28	4,940	2.70	7.31
Enrolled exclusively full-time	62.53	2.57	0.68	5,048	3.77	14.22
Lived on campus	35.56	2.98	0.67	5,108	4.45	19.84
SUMMARY STATISTICS						
Minimum					2.02	4.10
25 <sup>th</sup> percentile					2.71	7.36
Median					3.11	9.65
75 <sup>th</sup> percentile					3.24	10.49
Maximum					4.45	19.84

Table F.11—Design effects based on the study weights for undergraduate students at private, not-for-profit, 4-year, doctoral/first-professional institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	65.01	1.31	0.63	5,688	2.07	4.27
Received any federal aid	47.31	1.43	0.66	5,688	2.16	4.66
Received any non-federal aid	53.59	1.58	0.66	5,688	2.39	5.69
Received any state grant aid	16.57	1.43	0.49	5,688	2.90	8.42
Received any institution grant aid	38.33	1.73	0.64	5,688	2.69	7.21
Received any aid from other sources	17.21	0.98	0.50	5,688	1.95	3.80
Received any grant aid	54.63	1.39	0.66	5,688	2.10	4.42
Received any loan aid	42.02	1.44	0.65	5,688	2.20	4.84
Received any work-study aid	16.33	1.21	0.49	5,688	2.47	6.08
Received any other type of aid	11.63	0.70	0.43	5,688	1.64	2.69
Received a Pell grant	17.36	1.11	0.50	5,688	2.22	4.93
Received a Stafford loan	40.16	1.44	0.65	5,688	2.22	4.92
Received a subsidized loan	36.33	1.36	0.64	5,688	2.13	4.52
Received an unsubsidized loan	11.93	0.76	0.43	5,688	1.78	3.16
Received grant aid only	17.53	1.06	0.50	5,688	2.11	4.44
Married	11.93	1.07	0.43	5,688	2.49	6.20
U.S. citizen	92.93	0.74	0.34	5,688	2.19	4.77
U.S. Armed Forces veteran	1.92	0.27	0.19	5,410	1.46	2.13
Enrolled exclusively full-time	66.09	1.98	0.63	5,625	3.13	9.80
Lived on campus	35.67	1.97	0.64	5,688	3.10	9.60
SUMMARY STATISTICS						
Minimum					1.46	2.13
25 <sup>th</sup> percentile					2.08	4.35
Median					2.19	4.81
75 <sup>th</sup> percentile					2.43	5.91
Maximum					3.13	9.80

Table F.12—Design effects based on the study weights for undergraduate students at private, for-profit institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	77.73	2.37	0.57	5,380	4.19	17.52
Received any federal aid	70.65	2.68	0.62	5,380	4.31	18.57
Received any non-federal aid	26.96	2.53	0.60	5,380	4.18	17.47
Received any state grant aid	9.07	1.95	0.39	5,380	4.99	24.88
Received any institution grant aid	5.20	1.29	0.30	5,380	4.26	18.11
Received any aid from other sources	9.82	1.08	0.41	5,380	2.67	7.12
Received any grant aid	55.90	2.60	0.68	5,380	3.84	14.76
Received any loan aid	55.86	3.24	0.68	5,380	4.79	22.92
Received any work-study aid	0.43	0.12	0.09	5,380	1.34	1.79
Received any other type of aid	12.70	1.24	0.45	5,380	2.73	7.48
Received a Pell grant	48.50	2.68	0.68	5,380	3.93	15.42
Received a Stafford loan	53.54	3.21	0.68	5,380	4.71	22.22
Received a subsidized loan	49.87	3.11	0.68	5,380	4.56	20.77
Received an unsubsidized loan	32.35	2.70	0.64	5,380	4.23	17.90
Received grant aid only	16.92	2.41	0.51	5,380	4.72	22.30
Married	25.33	1.19	0.59	5,380	2.01	4.04
U.S. citizen	92.73	1.21	0.35	5,380	3.41	11.62
U.S. Armed Forces veteran	6.78	0.69	0.35	5,187	1.97	3.89
Enrolled exclusively full-time	75.96	2.43	0.59	5,229	4.11	16.87
Lived on campus	2.61	0.71	0.22	5,380	3.26	10.64
SUMMARY STATISTICS						
Minimum					1.34	1.79
25 <sup>th</sup> percentile					3.00	9.06
Median					4.14	17.17
75 <sup>th</sup> percentile					4.43	19.67
Maximum					4.99	24.88

Table F.13—Design effects based on the study weights for dependent undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	50.85	0.84	0.32	24,217	2.62	6.86
Received any federal aid	39.14	0.76	0.31	24,217	2.41	5.80
Received any non-federal aid	33.36	0.79	0.30	24,217	2.60	6.76
Received any state grant aid	14.15	0.55	0.22	24,217	2.45	6.00
Received any institution grant aid	17.82	0.71	0.25	24,217	2.87	8.23
Received any aid from other sources	9.27	0.35	0.19	24,217	1.87	3.51
Received any grant aid	38.74	0.80	0.31	24,217	2.57	6.59
Received any loan aid	30.49	0.68	0.30	24,217	2.31	5.33
Received any work-study aid	7.85	0.43	0.17	24,217	2.47	6.09
Received any other type of aid	7.91	0.34	0.17	24,217	1.95	3.82
Received a Pell grant	18.45	0.61	0.25	24,217	2.43	5.90
Received a Stafford loan	29.41	0.67	0.29	24,217	2.29	5.25
Received a subsidized loan	24.60	0.59	0.28	24,217	2.13	4.56
Received an unsubsidized loan	9.29	0.33	0.19	24,217	1.78	3.18
Received grant aid only	16.13	0.58	0.24	24,217	2.45	5.99
Married	0.00	0.00	0.00	24,217	- <sup>a</sup>	- <sup>a</sup>
U.S. citizen	95.31	0.31	0.14	24,217	2.27	5.13
U.S. Armed Forces veteran	0.00	0.00	0.00	23,366	- <sup>a</sup>	- <sup>a</sup>
Enrolled exclusively full-time	61.37	0.90	0.31	23,946	2.85	8.11
Lived on campus	39.55	0.87	0.31	24,217	2.76	7.62
SUMMARY STATISTICS						
Minimum					1.78	3.18
25 <sup>th</sup> percentile					2.27	5.13
Median					2.44	5.94
75 <sup>th</sup> percentile					2.60	6.76
Maximum					2.87	8.23

<sup>a</sup> The design effect is undefined because the estimate is 0.00.

Table F.14—Design effects based on the study weights for independent undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	48.52	1.00	0.38	17,265	2.62	6.88
Received any federal aid	34.10	0.92	0.36	17,265	2.56	6.55
Received any non-federal aid	30.68	0.86	0.35	17,265	2.46	6.06
Received any state grant aid	11.33	0.65	0.24	17,265	2.69	7.23
Received any institution grant aid	5.75	0.42	0.18	17,265	2.39	5.73
Received any aid from other sources	15.34	0.64	0.27	17,265	2.32	5.36
Received any grant aid	39.14	0.91	0.37	17,265	2.44	5.96
Received any loan aid	20.87	0.67	0.31	17,265	2.16	4.65
Received any work-study aid	2.30	0.21	0.11	17,265	1.80	3.23
Received any other type of aid	7.26	0.47	0.20	17,265	2.40	5.75
Received a Pell grant	24.67	0.81	0.33	17,265	2.47	6.12
Received a Stafford loan	20.07	0.65	0.30	17,265	2.14	4.60
Received a subsidized loan	18.81	0.63	0.30	17,265	2.11	4.46
Received an unsubsidized loan	10.71	0.49	0.24	17,265	2.06	4.26
Received grant aid only	21.46	0.79	0.31	17,265	2.54	6.46
Married	41.22	0.91	0.37	17,265	2.44	5.94
U.S. citizen	94.94	0.45	0.17	17,265	2.69	7.22
U.S. Armed Forces veteran	9.95	0.50	0.24	16,170	2.14	4.59
Enrolled exclusively full-time	28.99	0.91	0.35	16,892	2.61	6.82
Lived on campus	2.29	0.18	0.11	17,265	1.57	2.46
<b>SUMMARY STATISTICS</b>						
Minimum					1.57	2.46
25 <sup>th</sup> percentile					2.14	4.60
Median					2.42	5.86
75 <sup>th</sup> percentile					2.55	6.50
Maximum					2.69	7.23

Table F.15—Design effects based on the study weights for white, non-hispanic undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	47.05	0.81	0.30	28,449	2.75	7.55
Received any federal aid	33.13	0.72	0.28	28,449	2.60	6.74
Received any non-federal aid	31.13	0.73	0.27	28,449	2.67	7.12
Received any state grant aid	11.13	0.46	0.19	28,449	2.44	5.96
Received any institution grant aid	12.18	0.57	0.19	28,449	2.95	8.69
Received any aid from other sources	13.04	0.40	0.20	28,449	2.02	4.10
Received any grant aid	35.37	0.74	0.28	28,449	2.60	6.75
Received any loan aid	25.53	0.64	0.26	28,449	2.46	6.04
Received any work-study aid	4.62	0.29	0.12	28,449	2.35	5.53
Received any other type of aid	7.61	0.35	0.16	28,449	2.24	5.04
Received a Pell grant	16.28	0.52	0.22	28,449	2.36	5.59
Received a Stafford loan	24.81	0.62	0.26	28,449	2.43	5.91
Received a subsidized loan	21.34	0.56	0.24	28,449	2.31	5.31
Received an unsubsidized loan	10.59	0.35	0.18	28,449	1.92	3.70
Received grant aid only	16.80	0.57	0.22	28,449	2.56	6.54
Married	22.64	0.65	0.25	28,449	2.62	6.85
U.S. citizen	98.67	0.13	0.07	28,449	1.94	3.76
U.S. Armed Forces veteran	4.81	0.29	0.13	27,162	2.25	5.06
Enrolled exclusively full-time	44.73	0.93	0.30	28,153	3.14	9.88
Lived on campus	22.29	0.64	0.25	28,449	2.59	6.73
SUMMARY STATISTICS						
Minimum					1.92	3.70
25 <sup>th</sup> percentile					2.28	5.19
Median					2.45	6.00
75 <sup>th</sup> percentile					2.60	6.74
Maximum					3.14	9.88

Table F.16—Design effects based on the study weights for black, non-Hispanic undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	62.95	1.87	0.67	5,264	2.81	7.88
Received any federal aid	49.99	1.75	0.69	5,264	2.55	6.48
Received any non-federal aid	38.28	1.60	0.67	5,264	2.39	5.73
Received any state grant aid	16.34	1.23	0.51	5,264	2.41	5.81
Received any institution grant aid	11.93	1.08	0.45	5,264	2.43	5.89
Received any aid from other sources	14.03	1.03	0.48	5,264	2.15	4.62
Received any grant aid	52.73	1.66	0.69	5,264	2.42	5.85
Received any loan aid	30.94	1.73	0.64	5,264	2.71	7.33
Received any work-study aid	6.05	0.62	0.33	5,264	1.89	3.59
Received any other type of aid	9.99	0.87	0.41	5,264	2.09	4.38
Received a Pell grant	37.90	1.52	0.67	5,264	2.28	5.19
Received a Stafford loan	29.77	1.69	0.63	5,264	2.68	7.16
Received a subsidized loan	27.64	1.59	0.62	5,264	2.58	6.65
Received an unsubsidized loan	11.33	0.87	0.44	5,264	2.00	3.99
Received grant aid only	24.46	1.46	0.59	5,264	2.47	6.10
Married	16.16	1.13	0.51	5,264	2.22	4.92
U.S. citizen	94.91	0.70	0.30	5,264	2.32	5.37
U.S. Armed Forces veteran	7.77	0.73	0.38	5,031	1.94	3.77
Enrolled exclusively full-time	43.72	1.84	0.69	5,138	2.67	7.11
Lived on campus	17.67	1.24	0.53	5,264	2.35	5.52
<b>SUMMARY STATISTICS</b>						
Minimum					1.89	3.59
25 <sup>th</sup> percentile					2.19	4.80
Median					2.40	5.77
75 <sup>th</sup> percentile					2.56	6.57
Maximum					2.81	7.88



Table F.17—Design effects based on the study weights for Asian/Pacific Islander undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	42.88	1.94	0.97	2,612	2.00	4.00
Received any federal aid	33.08	1.69	0.92	2,612	1.84	3.38
Received any non-federal aid	30.77	1.79	0.90	2,612	1.99	3.95
Received any state grant aid	15.04	1.43	0.70	2,612	2.04	4.17
Received any institution grant aid	12.68	1.18	0.65	2,612	1.82	3.30
Received any aid from other sources	7.71	0.92	0.52	2,612	1.77	3.14
Received any grant aid	35.68	1.78	0.94	2,612	1.90	3.61
Received any loan aid	21.20	1.42	0.80	2,612	1.77	3.15
Received any work-study aid	6.57	0.72	0.48	2,612	1.50	2.24
Received any other type of aid	5.73	0.73	0.45	2,612	1.60	2.55
Received a Pell grant	22.63	1.37	0.82	2,612	1.68	2.81
Received a Stafford loan	19.69	1.32	0.78	2,612	1.69	2.86
Received a subsidized loan	18.07	1.25	0.75	2,612	1.65	2.74
Received an unsubsidized loan	5.28	0.57	0.44	2,612	1.29	1.67
Received grant aid only	16.49	1.54	0.73	2,612	2.12	4.49
Married	15.79	1.78	0.71	2,612	2.49	6.19
U.S. citizen	66.04	1.87	0.93	2,612	2.01	4.05
U.S. Armed Forces veteran	2.80	0.67	0.33	2,427	2.00	4.00
Enrolled exclusively full-time	49.09	2.12	0.99	2,571	2.15	4.63
Lived on campus	21.05	1.62	0.80	2,612	2.03	4.12
<b>SUMMARY STATISTICS</b>						
Minimum					1.29	1.67
25 <sup>th</sup> percentile					1.68	2.84
Median					1.87	3.49
75 <sup>th</sup> percentile					2.02	4.09
Maximum					2.65	7.04

Table F.18—Design effects based on the study weights for Hispanic undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	54.16	2.06	0.75	4,424	2.75	7.59
Received any federal aid	44.61	2.14	0.75	4,424	2.86	8.16
Received any non-federal aid	30.60	1.68	0.69	4,424	2.42	5.88
Received any state grant aid	17.59	1.50	0.57	4,424	2.61	6.83
Received any institution grant aid	7.83	0.75	0.40	4,424	1.86	3.44
Received any aid from other sources	8.29	0.87	0.41	4,424	2.10	4.41
Received any grant aid	47.30	2.04	0.75	4,424	2.72	7.41
Received any loan aid	22.32	1.55	0.63	4,424	2.48	6.15
Received any work-study aid	5.78	0.85	0.35	4,424	2.42	5.87
Received any other type of aid	5.22	0.58	0.33	4,424	1.74	3.02
Received a Pell grant	35.91	2.11	0.72	4,424	2.92	8.53
Received a Stafford loan	20.56	1.41	0.61	4,424	2.33	5.42
Received a subsidized loan	18.75	1.31	0.59	4,424	2.24	5.00
Received an unsubsidized loan	7.52	0.75	0.40	4,424	1.89	3.56
Received grant aid only	26.39	1.78	0.66	4,424	2.68	7.18
Married	18.53	1.53	0.58	4,424	2.62	6.88
U.S. citizen	88.58	1.52	0.48	4,424	3.18	10.09
U.S. Armed Forces veteran	4.43	0.94	0.32	4,207	2.96	8.77
Enrolled exclusively full-time	44.52	2.36	0.76	4,268	3.10	9.62
Lived on campus	12.48	1.05	0.50	4,424	2.11	4.44
SUMMARY STATISTICS						
Minimum					1.74	3.02
25 <sup>th</sup> percentile					2.17	4.72
Median					2.55	6.49
75 <sup>th</sup> percentile					2.81	7.87
Maximum					3.18	10.09

Table F.19—Design effects based on the study weights for low-income undergraduate students (less than 150 percent of poverty)

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	71.24	0.99	0.39	13,306	2.52	6.36
Received any federal aid	63.37	1.12	0.42	13,306	2.68	7.20
Received any non-federal aid	40.62	1.13	0.43	13,306	2.66	7.07
Received any state grant aid	24.09	1.12	0.37	13,306	3.01	9.06
Received any institution grant aid	11.65	0.62	0.28	13,306	2.25	5.05
Received any aid from other sources	11.00	0.58	0.27	13,306	2.13	4.55
Received any grant aid	64.78	1.04	0.41	13,306	2.51	6.30
Received any loan aid	35.73	1.03	0.42	13,306	2.47	6.09
Received any work-study aid	7.51	0.46	0.23	13,306	2.02	4.09
Received any other type of aid	8.24	0.49	0.24	13,306	2.06	4.23
Received a Pell grant	55.94	1.10	0.43	13,306	2.56	6.58
Received a Stafford loan	34.04	1.01	0.41	13,306	2.46	6.04
Received a subsidized loan	33.04	0.98	0.41	13,306	2.41	5.82
Received an unsubsidized loan	12.37	0.63	0.29	13,306	2.21	4.89
Received grant aid only	28.21	1.10	0.39	13,306	2.83	8.00
Married	16.97	0.72	0.33	13,306	2.22	4.91
U.S. citizen	91.30	0.65	0.24	13,306	2.65	7.02
U.S. Armed Forces veteran	6.25	0.39	0.21	12,984	1.82	3.29
Enrolled exclusively full-time	49.48	1.16	0.44	12,914	2.64	6.94
Lived on campus	10.21	0.53	0.26	13,306	2.01	4.03
SUMMARY STATISTICS						
Minimum					1.82	3.29
25 <sup>th</sup> percentile					2.12	4.49
Median					2.46	6.06
75 <sup>th</sup> percentile					2.64	6.98
Maximum					3.01	9.06



## Section B

Design effect tables for undergraduate students based on the CATI weights



Table F.20—Design effects based on the CATI weights for all undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	8.86	0.51	0.17	27,414	2.95	8.68
Worked while in school	78.82	0.62	0.25	26,359	2.46	6.05
Worked 20 or more hours per week while in school	63.29	0.84	0.30	26,359	2.82	7.96
Worked multiple jobs in 1995-96	31.97	0.75	0.29	25,038	2.54	6.43
Principal job in 1995-96 related to major	32.15	0.94	0.33	20,217	2.87	8.25
Born outside the U.S.	12.05	0.71	0.21	24,462	3.39	11.50
Registered to vote	76.97	0.67	0.28	22,818	2.40	5.76
Voted in the 1996 elections (or planned to)	82.57	0.63	0.25	22,211	2.46	6.03
Has a disability	5.52	0.26	0.14	26,664	1.88	3.55
Applied for financial aid	60.92	1.05	0.30	25,839	3.45	11.90
Attended more than one institution in 1995-96	5.55	0.29	0.14	27,113	2.06	4.26
Has dependents other than spouse	24.23	0.79	0.26	27,414	3.05	9.28
Has children under 5 years old	8.42	0.41	0.17	25,647	2.37	5.60
Has children aged 5 to 13 years old	7.92	0.46	0.17	25,647	2.75	7.55
Accepted all aid offered	86.72	0.60	0.28	15,162	2.16	4.68
First-time beginner in 1995-96	21.93	0.52	0.25	27,414	2.06	4.25
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	27.20	0.68	0.29	23,112	2.33	5.43
Ever attended a community college	52.35	0.99	0.30	27,414	3.29	10.83
Have a degree or license	16.52	0.59	0.22	27,414	2.61	6.84
Did community service during 1995-96	39.28	0.78	0.31	24,639	2.50	6.26
SUMMARY STATISTICS						
Minimum					1.88	3.55
25 <sup>th</sup> percentile					2.35	5.52
Median					2.52	6.34
75 <sup>th</sup> percentile					2.85	8.10
Maximum					3.45	11.90

Table F.21—Design effects based on the CATI weights for male undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	8.72	0.74	0.26	11,512	2.82	7.93
Worked while in school	80.43	0.87	0.38	11,068	2.30	5.31
Worked 20 or more hours per week while in school	66.92	1.20	0.45	11,068	2.68	7.16
Worked multiple jobs in 1995-96	35.02	1.07	0.47	10,471	2.29	5.26
Principal job in 1995-96 related to major	29.78	1.39	0.49	8,805	2.86	8.18
Born outside the U.S.	13.74	1.13	0.34	10,261	3.31	10.96
Registered to vote	74.88	1.03	0.44	9,502	2.31	5.34
Voted in the 1996 elections (or planned to)	81.13	1.05	0.41	9,256	2.59	6.73
Has a disability	6.26	0.43	0.23	11,202	1.90	3.61
Applied for financial aid	57.29	1.49	0.48	10,770	3.12	9.75
Attended more than one institution in 1995-96	4.68	0.33	0.20	11,393	1.69	2.86
Has dependents other than spouse	18.62	0.98	0.36	11,512	2.70	7.30
Has children under 5 years old	6.97	0.61	0.24	11,091	2.51	6.29
Has children aged 5 to 13 years old	5.85	0.61	0.22	11,091	2.76	7.60
Accepted all aid offered	86.87	0.82	0.44	6,027	1.89	3.56
First-time beginner in 1995-96	22.80	0.74	0.39	11,512	1.89	3.59
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	24.55	0.95	0.44	9,718	2.17	4.72
Ever attended a community college	51.26	1.32	0.47	11,512	2.84	8.07
Have a degree or license	15.74	0.95	0.34	11,512	2.79	7.81
Did community service during 1995-96	36.70	1.12	0.47	10,316	2.35	5.53
SUMMARY STATISTICS						
Minimum					1.69	2.86
25 <sup>th</sup> percentile					2.23	4.99
Median					2.55	6.51
75 <sup>th</sup> percentile					2.80	7.87
Maximum					3.31	10.96



Table F.22—Design effects based on the CATI weights for female undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	8.97	0.69	0.23	15,902	3.05	9.29
Worked while in school	77.55	0.76	0.34	15,291	2.26	5.11
Worked 20 or more hours per week while in school	60.44	0.99	0.40	15,291	2.49	6.22
Worked multiple jobs in 1995-96	29.57	0.86	0.38	14,567	2.27	5.17
Principal job in 1995-96 related to major	34.13	1.18	0.44	11,412	2.67	7.11
Born outside the U.S.	10.72	0.78	0.26	14,201	2.99	8.97
Registered to vote	78.59	0.79	0.36	13,316	2.22	4.95
Voted in the 1996 elections (or planned to)	83.68	0.79	0.32	12,955	2.43	5.90
Has a disability	4.93	0.32	0.17	15,462	1.82	3.32
Applied for financial aid	63.75	1.22	0.39	15,069	3.11	9.65
Attended more than one institution in 1995-96	6.23	0.40	0.19	15,720	2.08	4.32
Has dependents other than spouse	28.64	1.04	0.36	15,902	2.89	8.38
Has children under 5 years old	9.62	0.60	0.24	14,556	2.46	6.03
Has children aged 5 to 13 years old	9.62	0.67	0.24	14,556	2.76	7.60
Accepted all aid offered	86.63	0.78	0.36	9,135	2.20	4.84
First-time beginner in 1995-96	21.24	0.64	0.32	15,902	1.98	3.91
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	29.26	0.87	0.39	13,394	2.20	4.85
Ever attended a community college	53.20	1.19	0.40	15,902	3.01	9.05
Have a degree or license	17.13	0.72	0.30	15,902	2.41	5.83
Did community service during 1995-96	41.33	0.97	0.41	14,323	2.35	5.53
SUMMARY STATISTICS						
Minimum					1.82	3.32
25 <sup>th</sup> percentile					2.21	4.90
Median					2.42	5.86
75 <sup>th</sup> percentile					2.78	7.71
Maximum					3.11	9.65

Table F.23—Design effects based on the CATI weights for students at less-than-2-year institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	3.24	0.71	0.36	2,421	1.98	3.92
Worked while in school	58.09	2.64	1.03	2,291	2.56	6.55
Worked 20 or more hours per week while in school	50.39	2.77	1.04	2,291	2.65	7.03
Worked multiple jobs in 1995-96	23.67	1.54	0.91	2,183	1.69	2.86
Principal job in 1995-96 related to major	26.42	2.30	1.16	1,444	1.98	3.92
Born outside the U.S.	14.55	1.88	0.77	2,110	2.44	5.97
Registered to vote	66.78	1.53	1.08	1,903	1.41	2.00
Voted in the 1996 elections (or planned to)	69.29	1.71	1.08	1,815	1.58	2.49
Has a disability	8.94	1.21	0.59	2,316	2.04	4.16
Applied for financial aid	78.39	3.59	0.86	2,265	4.15	17.23
Attended more than one institution in 1995-96	4.16	1.08	0.41	2,345	2.62	6.88
Has dependents other than spouse	41.88	2.01	1.01	2,408	2.00	4.01
Has children under 5 years old	18.61	1.58	0.87	1,981	1.81	3.27
Has children aged 5 to 13 years old	14.89	1.21	0.80	1,981	1.51	2.29
Accepted all aid offered	94.34	1.03	0.61	1,418	1.68	2.84
First-time beginner in 1995-96	48.59	2.76	1.02	2,421	2.72	7.38
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	67.17	1.63	1.03	2,073	1.58	2.49
Ever attended a community college	7.69	0.88	0.54	2,421	1.62	2.63
Have a degree or license	24.82	1.97	0.88	2,421	2.24	5.03
Did community service during 1995-96	27.49	2.70	0.97	2,131	2.79	7.81
SUMMARY STATISTICS						
Minimum					1.41	2.00
25 <sup>th</sup> percentile					1.65	2.73
Median					1.99	3.97
75 <sup>th</sup> percentile					2.59	6.71
Maximum					4.15	17.23

Table F.24—Design effects based on the CATI weights for undergraduate students at public, 2-year institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	10.43	0.96	0.49	3,954	1.97	3.87
Worked while in school	83.61	1.07	0.60	3,804	1.79	3.19
Worked 20 or more hours per week while in school	74.53	1.29	0.71	3,804	1.83	3.34
Worked multiple jobs in 1995-96	27.92	1.41	0.75	3,623	1.90	3.59
Principal job in 1995-96 related to major	35.47	1.79	0.87	3,012	2.06	4.22
Born outside the U.S.	12.87	1.39	0.56	3,577	2.48	6.16
Registered to vote	75.91	1.32	0.74	3,339	1.78	3.18
Voted in the 1996 elections (or planned to)	81.05	1.22	0.69	3,222	1.76	3.11
Has a disability	5.98	0.48	0.38	3,825	1.25	1.57
Applied for financial aid	45.86	1.96	0.83	3,599	2.36	5.55
Attended more than one institution in 1995-96	6.46	0.58	0.39	3,937	1.47	2.17
Has dependents other than spouse	30.22	1.48	0.73	3,954	2.02	4.10
Has children under 5 years old	11.07	0.80	0.52	3,669	1.55	2.39
Has children aged 5 to 13 years old	10.24	0.90	0.50	3,669	1.79	3.20
Accepted all aid offered	88.47	1.57	0.89	1,302	1.77	3.14
First-time beginner in 1995-96	21.90	0.97	0.66	3,954	1.48	2.19
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	20.40	1.18	0.73	3,039	1.61	2.61
Ever attended a community college	100.00	0.00	0.00	3,954	- <sup>a</sup>	- <sup>a</sup>
Have a degree or license	17.07	1.05	0.60	3,954	1.75	3.07
Did community service during 1995-96	32.79	1.39	0.79	3,566	1.77	3.12
SUMMARY STATISTICS						
Minimum					1.25	1.57
25 <sup>th</sup> percentile					1.61	2.61
Median					1.78	3.18
75 <sup>th</sup> percentile					1.90	3.59
Maximum					2.48	6.16

<sup>a</sup> The design effect is undefined because the estimate is 100.00.

Table F.25—Design effects based on the CATI weights for undergraduate students at 4-year, non-doctoral/first-professional institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	10.63	0.95	0.33	8,650	2.85	8.15
Worked while in school	78.66	0.85	0.45	8,332	1.90	3.63
Worked 20 or more hours per week while in school	57.45	1.51	0.54	8,332	2.80	7.81
Worked multiple jobs in 1995-96	34.06	1.10	0.53	7,953	2.07	4.30
Principal job in 1995-96 related to major	31.31	1.40	0.57	6,572	2.45	5.99
Born outside the U.S.	9.17	0.83	0.33	7,681	2.53	6.38
Registered to vote	79.61	0.78	0.47	7,271	1.65	2.71
Voted in the 1996 elections (or planned to)	85.93	0.70	0.41	7,116	1.69	2.87
Has a disability	5.66	0.48	0.25	8,446	1.92	3.69
Applied for financial aid	73.29	1.36	0.49	8,197	2.78	7.73
Attended more than one institution in 1995-96	4.76	0.32	0.23	8,584	1.39	1.92
Has dependents other than spouse	18.84	1.21	0.42	8,650	2.88	8.32
Has children under 5 years old	5.18	0.43	0.24	8,251	1.76	3.10
Has children aged 5 to 13 years old	6.56	0.76	0.27	8,251	2.80	7.87
Accepted all aid offered	86.68	0.83	0.48	5,029	1.74	3.01
First-time beginner in 1995-96	19.29	0.79	0.42	8,650	1.85	3.43
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	27.41	1.13	0.52	7,328	2.16	4.68
Ever attended a community college	11.92	0.82	0.35	8,650	2.36	5.59
Have a degree or license	17.89	1.16	0.41	8,650	2.81	7.92
Did community service during 1995-96	47.61	1.13	0.56	7,837	2.01	4.03
SUMMARY STATISTICS						
Minimum					1.39	1.92
25 <sup>th</sup> percentile					1.81	3.27
Median					2.12	4.49
75 <sup>th</sup> percentile					2.77	7.68
Maximum					2.85	8.15

Table F.26—Design effects based on the CATI weights for undergraduate students at 4-year, doctoral/  
first-professional institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	5.74	0.49	0.24	9,420	2.05	4.21
Worked while in school	74.46	0.99	0.46	9,072	2.16	4.65
Worked 20 or more hours per week while in school	49.57	1.38	0.52	9,072	2.63	6.94
Worked multiple jobs in 1995-96	39.49	1.08	0.53	8,545	2.04	4.16
Principal job in 1995-96 related to major	27.63	1.10	0.53	7,096	2.08	4.32
Born outside the U.S.	12.45	0.90	0.36	8,450	2.50	6.26
Registered to vote	79.47	0.87	0.46	7,866	1.91	3.64
Voted in the 1996 elections (or planned to)	85.98	0.86	0.40	7,712	2.17	4.72
Has a disability	3.89	0.35	0.20	9,187	1.71	2.94
Applied for financial aid	69.95	1.14	0.49	8,909	2.34	5.47
Attended more than one institution in 1995-96	4.83	0.31	0.22	9,334	1.39	1.94
Has dependents other than spouse	11.30	0.80	0.33	9,420	2.46	6.08
Has children under 5 years old	3.84	0.41	0.20	9,171	2.04	4.16
Has children aged 5 to 13 years old	3.24	0.38	0.19	9,171	2.05	4.21
Accepted all aid offered	82.27	0.95	0.52	5,387	1.82	3.31
First-time beginner in 1995-96	18.59	0.50	0.40	9,420	1.26	1.59
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	25.48	1.06	0.48	8,116	2.20	4.84
Ever attended a community college	14.48	0.82	0.36	9,420	2.25	5.06
Have a degree or license	12.33	0.77	0.34	9,420	2.26	5.11
Did community service during 1995-96	47.67	1.22	0.54	8,414	2.23	4.99
SUMMARY STATISTICS						
Minimum					1.26	1.59
25 <sup>th</sup> percentile					1.97	3.90
Median					2.12	4.49
75 <sup>th</sup> percentile					2.24	5.03
Maximum					2.63	6.94

Table F.27—Design effects based on the CATI weights for undergraduate students at public, 4-year, non-doctoral/first-professional institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	6.70	0.69	0.35	5,166	1.99	3.96
Worked while in school	77.88	1.03	0.59	4,969	1.75	3.05
Worked 20 or more hours per week while in school	60.28	1.60	0.69	4,969	2.30	5.29
Worked multiple jobs in 1995-96	32.29	1.24	0.68	4,749	1.83	3.36
Principal job in 1995-96 related to major	28.96	1.38	0.72	3,948	1.91	3.64
Born outside the U.S.	9.89	1.15	0.44	4,687	2.65	7.01
Registered to vote	79.82	1.03	0.60	4,405	1.71	2.91
Voted in the 1996 elections (or planned to)	85.97	0.88	0.53	4,316	1.66	2.76
Has a disability	5.51	0.66	0.32	5,038	2.06	4.23
Applied for financial aid	66.91	1.74	0.68	4,854	2.58	6.66
Attended more than one institution in 1995-96	4.57	0.41	0.29	5,129	1.42	2.02
Has dependents other than spouse	17.84	1.10	0.53	5,166	2.07	4.28
Has children under 5 years old	5.63	0.52	0.33	4,944	1.59	2.53
Has children aged 5 to 13 years old	5.38	0.56	0.32	4,944	1.76	3.09
Accepted all aid offered	87.27	1.16	0.63	2,826	1.85	3.43
First-time beginner in 1995-96	17.46	0.96	0.53	5,166	1.81	3.27
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	21.26	1.11	0.62	4,424	1.81	3.28
Ever attended a community college	13.93	1.15	0.48	5,166	2.38	5.68
Have a degree or license	17.75	1.32	0.53	5,166	2.48	6.17
Did community service during 1995-96	44.15	1.20	0.73	4,684	1.65	2.73
SUMMARY STATISTICS						
Minimum					1.42	2.02
25 <sup>th</sup> percentile					1.73	2.98
Median					1.84	3.39
75 <sup>th</sup> percentile					2.21	4.88
Maximum					2.65	7.01

Table F.28—Design effects based on the CATI weights for undergraduate students at public, 4-year, doctoral/first-professional institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	4.49	0.54	0.27	5,714	1.96	3.84
Worked while in school	74.54	1.21	0.59	5,527	2.06	4.25
Worked 20 or more hours per week while in school	51.29	1.69	0.67	5,527	2.52	6.33
Worked multiple jobs in 1995-96	39.17	1.29	0.68	5,206	1.91	3.65
Principal job in 1995-96 related to major	26.37	1.32	0.67	4,323	1.97	3.89
Born outside the U.S.	11.79	1.09	0.45	5,187	2.43	5.91
Registered to vote	79.76	1.03	0.58	4,868	1.78	3.18
Voted in the 1996 elections (or planned to)	85.57	1.04	0.51	4,766	2.05	4.20
Has a disability	3.70	0.42	0.25	5,587	1.65	2.72
Applied for financial aid	69.07	1.34	0.63	5,385	2.12	4.51
Attended more than one institution in 1995-96	5.15	0.38	0.29	5,654	1.29	1.66
Has dependents other than spouse	11.55	0.98	0.42	5,714	2.33	4.28
Has children under 5 years old	4.04	0.51	0.26	5,562	1.92	3.70
Has children aged 5 to 13 years old	3.29	0.47	0.24	5,562	1.95	3.80
Accepted all aid offered	81.21	1.17	0.69	3,172	1.69	2.85
First-time beginner in 1995-96	17.83	0.60	0.51	5,714	1.19	1.41
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	22.66	1.29	0.59	4,972	2.18	4.76
Ever attended a community college	15.93	1.01	0.48	5,714	2.09	4.38
Have a degree or license	12.08	0.91	0.43	5,714	2.12	4.48
Did community service during 1995-96	45.44	1.46	0.70	5,127	2.10	4.42
SUMMARY STATISTICS						
Minimum					1.19	1.41
25 <sup>th</sup> percentile					1.85	3.41
Median					2.01	4.04
75 <sup>th</sup> percentile					2.11	4.47
Maximum					2.52	6.33

Table F.29—Design effects based on the CATI weights for undergraduate students at private, not-for-profit, 4-year, non-doctoral/first-professional institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	16.02	1.95	0.62	3,484	3.14	9.86
Worked while in school	79.74	1.45	0.69	3,363	2.09	4.38
Worked 20 or more hours per week while in school	53.60	2.83	0.86	3,363	3.29	10.81
Worked multiple jobs in 1995-96	36.46	1.94	0.85	3,204	2.29	5.23
Principal job in 1995-96 related to major	34.53	2.74	0.93	2,624	2.95	8.69
Born outside the U.S.	8.15	1.18	0.50	2,994	2.35	5.52
Registered to vote	79.31	1.18	0.76	2,866	1.56	2.44
Voted in the 1996 elections (or planned to)	85.87	1.13	0.66	2,800	1.72	2.97
Has a disability	5.87	0.70	0.40	3,408	1.74	3.03
Applied for financial aid	81.72	2.02	0.67	3,343	3.02	9.10
Attended more than one institution in 1995-96	5.03	0.52	0.37	3,455	1.40	1.95
Has dependents other than spouse	20.20	2.45	0.68	3,484	3.60	12.96
Has children under 5 years old	4.56	0.73	0.36	3,307	2.00	4.00
Has children aged 5 to 13 years old	8.18	1.62	0.48	3,307	3.41	11.60
Accepted all aid offered	86.01	1.18	0.74	2,203	1.60	2.56
First-time beginner in 1995-96	21.79	1.33	0.70	3,484	1.91	3.64
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	35.97	2.17	0.89	2,904	2.44	5.94
Ever attended a community college	9.16	1.12	0.49	3,484	2.28	5.22
Have a degree or license	18.06	2.07	0.65	3,484	3.17	10.06
Did community service during 1995-96	52.34	2.07	0.89	3,153	2.33	5.41
SUMMARY STATISTICS						
Minimum					1.40	1.95
25 <sup>th</sup> percentile					1.82	3.34
Median					2.31	5.32
75 <sup>th</sup> percentile					3.08	9.48
Maximum					3.41	11.60



Table F.30—Design effects based on the CATI weights for undergraduate students at private, not-for-profit, 4-year, doctoral/first-professional institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	10.03	1.08	0.49	3,706	2.19	4.79
Worked while in school	74.18	1.39	0.74	3,545	1.89	3.56
Worked 20 or more hours per week while in school	43.57	2.04	0.83	3,545	2.45	6.02
Worked multiple jobs in 1995-96	40.58	1.74	0.85	3,339	2.05	4.19
Principal job in 1995-96 related to major	32.14	1.71	0.89	2,773	1.93	3.71
Born outside the U.S.	14.83	1.32	0.62	3,263	2.12	4.50
Registered to vote	78.39	1.49	0.75	2,998	1.99	3.95
Voted in the 1996 elections (or planned to)	87.48	1.18	0.61	2,946	1.93	3.73
Has a disability	4.51	0.55	0.35	3,600	1.60	2.55
Applied for financial aid	73.03	2.08	0.75	3,524	2.78	7.72
Attended more than one institution in 1995-96	3.76	0.45	0.31	3,680	1.42	2.02
Has dependents other than spouse	10.42	1.12	0.50	3,706	2.24	5.00
Has children under 5 years old	3.19	0.52	0.29	3,609	1.77	3.12
Has children aged 5 to 13 years old	3.09	0.53	0.29	3,609	1.84	3.38
Accepted all aid offered	85.86	1.18	0.74	2,215	1.59	2.54
First-time beginner in 1995-96	21.22	0.88	0.67	3,706	1.31	1.71
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	35.50	1.48	0.85	3,144	1.73	2.99
Ever attended a community college	9.48	0.98	0.48	3,706	2.04	4.18
Have a degree or license	13.18	1.29	0.56	3,706	2.33	5.42
Did community service during 1995-96	55.55	1.84	0.87	3,287	2.13	4.52
SUMMARY STATISTICS						
Minimum					1.31	1.71
25 <sup>th</sup> percentile					1.75	3.06
Median					1.96	3.84
75 <sup>th</sup> percentile					2.12	4.51
Maximum					2.78	7.72

Table F.31—Design effects based on the CATI weights for undergraduate students at private, for-profit institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	4.35	0.72	0.35	3,445	2.07	4.27
Worked while in school	63.45	2.19	0.84	3,280	2.61	6.81
Worked 20 or more hours per week while in school	56.45	2.29	0.87	3,280	2.65	7.00
Worked multiple jobs in 1995-96	27.52	1.36	0.80	3,124	1.71	2.92
Principal job in 1995-96 related to major	24.03	1.82	0.90	2,243	2.01	4.05
Born outside the U.S.	13.57	1.29	0.62	3,014	2.07	4.30
Registered to vote	67.38	1.21	0.89	2,751	1.35	1.82
Voted in the 1996 elections (or planned to)	69.96	1.25	0.90	2,619	1.39	1.94
Has a disability	7.40	0.91	0.45	3,325	2.00	4.02
Applied for financial aid	88.58	1.91	0.55	3,316	3.45	11.91
Attended more than one institution in 1995-96	4.82	0.86	0.37	3,397	2.34	5.49
Has dependents other than spouse	45.62	1.87	0.85	3,445	2.21	4.87
Has children under 5 years old	18.27	1.39	0.72	2,857	1.92	3.70
Has children aged 5 to 13 years old	12.37	0.89	0.62	2,857	1.45	2.10
Accepted all aid offered	94.74	0.65	0.46	2,402	1.43	2.03
First-time beginner in 1995-96	44.73	1.92	0.85	3,445	2.27	5.15
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	73.07	1.68	0.81	2,970	2.06	4.24
Ever attended a community college	5.03	0.61	0.37	3,445	1.65	2.72
Have a degree or license	19.07	1.44	0.67	3,445	2.15	4.63
Did community service during 1995-96	23.73	1.30	0.77	3,072	1.69	2.86
SUMMARY STATISTICS						
Minimum					1.35	1.82
25 <sup>th</sup> percentile					1.67	2.79
Median					2.04	4.14
75 <sup>th</sup> percentile					2.28	5.22
Maximum					3.45	11.91

Table F.32—Design effects based on the CATI weights for dependent undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	2.82	0.32	0.13	16,872	2.53	6.39
Worked while in school	77.73	0.78	0.33	16,189	2.40	5.75
Worked 20 or more hours per week while in school	54.96	1.10	0.39	16,189	2.80	7.85
Worked multiple jobs in 1995-96	42.47	0.94	0.40	15,362	2.35	5.51
Principal job in 1995-96 related to major	21.03	0.97	0.36	12,828	2.69	7.23
Born outside the U.S.	10.67	0.70	0.25	14,994	2.77	7.68
Registered to vote	72.68	0.90	0.38	14,004	2.39	5.71
Voted in the 1996 elections (or planned to)	80.83	0.96	0.34	13,655	2.86	8.16
Has a disability	4.57	0.30	0.16	16,394	1.84	3.38
Applied for financial aid	67.37	1.09	0.37	16,022	2.95	8.72
Attended more than one institution in 1995-96	6.23	0.35	0.19	16,731	1.88	3.53
Has dependents other than spouse	0.00	0.00	0.00	16,872	-. <sup>a</sup>	-. <sup>a</sup>
Has children under 5 years old	0.00	0.00	0.00	16,872	-. <sup>a</sup>	-. <sup>a</sup>
Has children aged 5 to 13 years old	0.00	0.00	0.00	16,872	-. <sup>a</sup>	-. <sup>a</sup>
Accepted all aid offered	87.94	0.57	0.33	9,669	1.73	3.00
First-time beginner in 1995-96	31.87	0.74	0.36	16,872	2.07	4.30
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	28.56	0.88	0.38	14,345	2.33	5.43
Ever attended a community college	42.99	1.29	0.38	16,872	3.38	11.40
Have a degree or license	5.43	0.44	0.17	16,872	2.51	6.29
Did community service during 1995-96	40.09	0.94	0.40	15,095	2.37	5.60
SUMMARY STATISTICS						
Minimum					1.73	3.00
25 <sup>th</sup> percentile					2.33	5.43
Median					2.40	5.75
75 <sup>th</sup> percentile					2.77	7.68
Maximum					3.38	11.40

<sup>a</sup> The design effect is undefined because the estimate is 100.00.

Table F.33—Design effects based on the CATI weights for independent undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	14.74	0.90	0.35	10,542	2.60	6.76
Worked while in school	79.87	0.86	0.40	10,170	2.16	4.67
Worked 20 or more hours per week while in school	71.28	1.01	0.45	10,170	2.24	5.02
Worked multiple jobs in 1995-96	21.76	0.98	0.42	9,676	2.33	5.42
Principal job in 1995-96 related to major	43.57	1.45	0.58	7,389	2.51	6.28
Born outside the U.S.	13.37	1.01	0.35	9,468	2.90	8.41
Registered to vote	81.08	0.93	0.42	8,814	2.23	4.96
Voted in the 1996 elections (or planned to)	84.23	0.86	0.39	8,556	2.18	4.74
Has a disability	6.43	0.43	0.24	10,270	1.79	3.22
Applied for financial aid	54.44	1.49	0.50	9,817	2.97	8.84
Attended more than one institution in 1995-96	4.87	0.37	0.21	10,382	1.77	3.13
Has dependents other than spouse	47.79	1.23	0.49	10,542	2.52	6.35
Has children under 5 years old	17.58	0.85	0.41	8,775	2.09	4.35
Has children aged 5 to 13 years old	16.53	0.89	0.40	8,775	2.25	5.07
Accepted all aid offered	85.28	1.08	0.48	5,493	2.26	5.10
First-time beginner in 1995-96	12.26	0.54	0.32	10,542	1.70	2.88
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	25.80	1.02	0.47	8,767	2.17	4.73
Ever attended a community college	61.45	1.27	0.47	10,542	2.67	7.13
Have a degree or license	27.30	0.98	0.43	10,542	2.27	5.15
Did community service during 1995-96	38.49	1.14	0.50	9,544	2.29	5.23
SUMMARY STATISTICS						
Minimum					1.70	2.88
25 <sup>th</sup> percentile					2.17	4.70
Median					2.26	5.09
75 <sup>th</sup> percentile					2.42	5.85
Maximum					2.97	8.84

Table F.34—Design effects based on the CATI weights for white, Non-Hispanic undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	9.78	0.60	0.21	19,224	2.79	7.80
Worked while in school	79.56	0.69	0.30	18,543	2.33	5.42
Worked 20 or more hours per week while in school	64.02	0.94	0.35	18,543	2.68	7.18
Worked multiple jobs in 1995-96	34.04	0.85	0.36	17,446	2.38	5.67
Principal job in 1995-96 related to major	31.80	1.00	0.38	14,892	2.63	6.90
Born outside the U.S.	4.34	0.33	0.15	17,497	2.14	4.58
Registered to vote	78.81	0.71	0.31	16,848	2.24	5.04
Voted in the 1996 elections (or planned to)	84.46	0.64	0.28	16,445	2.28	5.20
Has a disability	6.24	0.35	0.18	18,738	1.96	3.83
Applied for financial aid	57.30	1.16	0.37	18,042	3.16	9.99
Attended more than one institution in 1995-96	5.24	0.31	0.16	19,061	1.92	3.69
Has dependents other than spouse	21.34	0.79	0.30	19,224	2.67	7.14
Has children under 5 years old	7.41	0.47	0.19	18,301	2.45	5.99
Has children aged 5 to 13 years old	7.18	0.46	0.19	18,301	2.39	5.70
Accepted all aid offered	86.47	0.69	0.34	10,304	2.03	4.13
First-time beginner in 1995-96	21.34	0.58	0.30	19,224	1.96	3.83
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	23.91	0.75	0.33	16,468	2.25	5.05
Ever attended a community college	51.19	1.19	0.36	19,224	3.31	10.94
Have a degree or license	16.57	0.66	0.27	19,224	2.47	6.09
Did community service during 1995-96	41.36	0.90	0.38	17,187	2.39	5.72
SUMMARY STATISTICS						
Minimum					1.92	3.69
25 <sup>th</sup> percentile					2.19	4.81
Median					2.38	5.66
75 <sup>th</sup> percentile					2.55	6.49
Maximum					3.31	10.94

Table F.35—Design effects based on the CATI weights for black, Non-Hispanic undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	9.76	1.76	0.51	3,394	3.46	11.99
Worked while in school	80.11	1.32	0.70	3,222	1.87	3.51
Worked 20 or more hours per week while in school	67.22	1.69	0.83	3,222	2.04	4.17
Worked multiple jobs in 1995-96	29.78	2.00	0.82	3,130	2.44	5.98
Principal job in 1995-96 related to major	32.35	2.55	0.95	2,447	2.70	7.28
Born outside the U.S.	11.70	1.73	0.57	3,145	3.01	9.08
Registered to vote	78.20	1.62	0.76	2,924	2.13	4.52
Voted in the 1996 elections (or planned to)	81.76	1.46	0.73	2,837	2.02	4.07
Has a disability	3.38	0.54	0.32	3,276	1.70	2.90
Applied for financial aid	76.35	2.53	0.74	3,273	3.41	11.61
Attended more than one institution in 1995-96	6.02	0.80	0.41	3,348	1.95	3.79
Has dependents other than spouse	41.05	2.34	0.84	3,394	2.77	7.66
Has children under 5 years old	15.27	1.76	0.66	2,995	2.68	7.17
Has children aged 5 to 13 years old	13.90	1.79	0.63	2,995	2.83	8.00
Accepted all aid offered	89.85	1.14	0.63	2,324	1.82	3.30
First-time beginner in 1995-96	23.25	1.44	0.73	3,394	1.98	3.92
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	33.67	1.98	0.86	3,025	2.31	5.33
Ever attended a community college	55.39	2.81	0.85	3,394	3.29	10.85
Have a degree or license	19.35	1.88	0.68	3,394	2.77	7.70
Did community service during 1995-96	35.74	1.96	0.86	3,086	2.27	5.16
SUMMARY STATISTICS						
Minimum					1.70	2.90
25 <sup>th</sup> percentile					2.00	4.00
Median					2.38	5.65
75 <sup>th</sup> percentile					2.80	7.85
Maximum					3.46	11.99

Table F.36—Design effects based on the CATI weights for Asian/Pacific Islander undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	4.12	1.07	0.50	1,602	2.16	4.65
Worked while in school	65.32	2.92	1.22	1,513	2.38	5.68
Worked 20 or more hours per week while in school	40.11	3.15	1.26	1,513	2.50	6.25
Worked multiple jobs in 1995-96	25.07	2.43	1.13	1,474	2.15	4.62
Principal job in 1995-96 related to major	25.36	3.10	1.35	1,039	2.30	5.28
Born outside the U.S.	77.60	2.36	1.09	1,475	2.18	4.74
Registered to vote	56.13	3.58	1.58	992	2.27	5.16
Voted in the 1996 elections (or planned to)	71.41	3.04	1.47	939	2.06	4.25
Has a disability	1.89	0.65	0.35	1,540	1.88	3.55
Applied for financial aid	57.83	3.31	1.27	1,510	2.60	6.77
Attended more than one institution in 1995-96	7.88	1.43	0.68	1,581	2.11	4.45
Has dependents other than spouse	13.21	2.20	0.85	1,602	2.60	6.74
Has children under 5 years old	2.20	0.68	0.38	1,522	1.82	3.32
Has children aged 5 to 13 years old	4.27	1.95	0.52	1,522	3.76	14.11
Accepted all aid offered	79.84	2.92	1.35	882	2.16	4.67
First-time beginner in 1995-96	21.30	1.76	1.02	1,602	1.72	2.96
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	43.20	3.20	1.33	1,390	2.41	5.80
Ever attended a community college	46.74	3.27	1.25	1,602	2.62	6.89
Have a degree or license	13.10	2.19	0.84	1,602	2.60	6.75
Did community service during 1995-96	34.15	3.11	1.25	1,440	2.49	6.19
SUMMARY STATISTICS						
Minimum					1.72	2.96
25 <sup>th</sup> percentile					2.13	4.54
Median					2.29	5.22
75 <sup>th</sup> percentile					2.55	6.50
Maximum					3.76	14.11

Table F.37—Design effects based on the CATI weights for Hispanic undergraduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	4.81	0.89	0.41	2,792	2.19	4.79
Worked while in school	80.60	2.24	0.76	2,696	2.95	8.69
Worked 20 or more hours per week while in school	67.32	2.81	0.90	2,696	3.11	9.69
Worked multiple jobs in 1995-96	25.35	2.00	0.85	2,624	2.36	5.55
Principal job in 1995-96 related to major	36.91	4.53	1.21	1,591	3.75	14.03
Born outside the U.S.	30.79	3.81	1.03	1,994	3.69	13.59
Registered to vote	70.02	3.40	1.10	1,746	3.10	9.61
Voted in the 1996 elections (or planned to)	72.69	3.52	1.08	1,692	3.25	10.54
Has a disability	4.11	0.69	0.38	2,725	1.81	3.27
Applied for financial aid	67.42	3.13	0.91	2,634	3.43	11.73
Attended more than one institution in 1995-96	6.04	0.95	0.46	2,726	2.08	4.33
Has dependents other than spouse	29.89	2.43	0.87	2,792	2.80	7.85
Has children under 5 years old	10.95	1.68	0.63	2,466	2.67	7.13
Has children aged 5 to 13 years old	8.29	1.48	0.56	2,466	2.67	7.12
Accepted all aid offered	86.00	2.82	0.92	1,407	3.05	9.33
First-time beginner in 1995-96	24.52	1.73	0.81	2,792	2.13	4.52
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	34.69	3.25	1.09	1,893	2.97	8.81
Ever attended a community college	59.64	3.74	0.93	2,792	4.03	16.25
Have a degree or license	14.79	2.05	0.67	2,792	3.04	9.27
Did community service during 1995-96	32.69	2.96	0.92	2,572	3.20	10.26
SUMMARY STATISTICS						
Minimum					1.81	3.27
25 <sup>th</sup> percentile					2.51	6.34
Median					3.01	9.04
75 <sup>th</sup> percentile					3.22	10.40
Maximum					4.03	16.25



Table F.38—Design effects based on the CATI weights for low-income undergraduate students (less than 150 percent of poverty)

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	4.24	0.62	0.22	8,581	2.86	8.18
Worked while in school	73.17	1.07	0.49	8,238	2.20	4.82
Worked 20 or more hours per week while in school	57.39	1.26	0.54	8,238	2.31	5.32
Worked multiple jobs in 1995-96	29.58	1.17	0.51	7,963	2.29	5.26
Principal job in 1995-96 related to major	27.02	1.27	0.59	5,705	2.15	4.64
Born outside the U.S.	15.68	1.04	0.42	7,478	2.49	6.18
Registered to vote	73.95	1.14	0.53	6,753	2.13	4.56
Voted in the 1996 elections (or planned to)	78.59	1.11	0.51	6,516	2.18	4.75
Has a disability	6.48	0.47	0.27	8,343	1.73	3.00
Applied for financial aid	82.32	1.15	0.42	8,340	2.76	7.63
Attended more than one institution in 1995-96	7.05	0.62	0.28	8,451	2.23	4.98
Has dependents other than spouse	37.71	1.32	0.52	8,581	2.52	6.36
Has children under 5 years old	16.78	1.04	0.43	7,451	2.41	5.83
Has children aged 5 to 13 years old	11.34	0.85	0.37	7,451	2.32	5.39
Accepted all aid offered	87.04	0.89	0.44	5,939	2.04	4.17
First-time beginner in 1995-96	24.19	0.87	0.46	8,581	1.87	3.51
Considered crime rate, graduation rate, or job placement rate when deciding which school to attend	30.42	1.08	0.54	7,142	1.99	3.94
Ever attended a community college	50.26	1.47	0.54	8,581	2.72	7.38
Have a degree or license	17.37	0.98	0.41	8,581	2.39	5.70
Did community service during 1995-96	35.67	1.15	0.54	7,846	2.12	4.50
SUMMARY STATISTICS						
Minimum					1.73	3.00
25 <sup>th</sup> percentile					2.13	4.53
Median					2.26	5.12
75 <sup>th</sup> percentile					2.45	6.00
Maximum					2.86	8.18



## Section C

Design effect tables for graduate students (excluding first-professional students) based on the study weights



Table F.39—Design effects based on the study weights for all graduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	48.25	1.19	0.73	4,721	1.63	2.66
Received any federal aid	19.53	0.76	0.58	4,721	1.32	1.74
Received any non-federal aid	38.12	1.19	0.71	4,721	1.69	2.84
Received any state grant aid	1.51	0.23	0.18	4,721	1.28	1.63
Received any institution grant aid	8.52	0.94	0.41	4,721	2.31	5.35
Received any aid from other sources	15.78	0.72	0.53	4,721	1.36	1.85
Received any grant aid	23.40	0.98	0.62	4,721	1.59	2.54
Received any loan aid	18.89	0.76	0.57	4,721	1.34	1.79
Received any work-study aid	1.58	0.24	0.18	4,721	1.35	1.81
Received any other type of aid	18.66	1.08	0.57	4,721	1.90	3.61
Received an assistantship	12.02	0.89	0.47	4,721	1.89	3.57
Received a Stafford loan	18.63	0.75	0.57	4,721	1.33	1.77
Received a subsidized loan	17.27	0.73	0.55	4,721	1.33	1.77
Received an unsubsidized loan	10.86	0.56	0.45	4,721	1.23	1.50
Received grant aid only	15.12	0.88	0.52	4,721	1.68	2.82
Married	41.67	1.35	0.96	2,606	1.40	1.97
U.S. citizen	92.80	0.51	0.38	4,721	1.36	1.84
U.S. Armed Forces veteran	4.04	0.33	0.30	4,191	1.10	1.21
Enrolled exclusively full-time	30.27	1.34	0.67	4,702	1.99	3.98
Lived on campus	4.36	0.44	0.30	4,721	1.49	2.23
SUMMARY STATISTICS						
Minimum					1.10	1.21
25 <sup>th</sup> percentile					1.33	1.77
Median					1.42	2.02
75 <sup>th</sup> percentile					1.68	2.83
Maximum					2.31	5.35

Table F.40—Design effects based on the study weights for graduate students at public, 4-year institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	47.49	1.54	0.98	2,606	1.58	2.49
Received any federal aid	17.33	0.79	0.74	2,606	1.06	1.13
Received any non-federal aid	39.27	1.54	0.96	2,606	1.61	2.59
Received any state grant aid	2.04	0.35	0.28	2,606	1.27	1.61
Received any institution grant aid	6.30	0.74	0.48	2,606	1.56	2.43
Received any aid from other sources	14.23	0.82	0.68	2,606	1.20	1.44
Received any grant aid	20.88	1.06	0.80	2,606	1.33	1.76
Received any loan aid	16.74	0.78	0.73	2,606	1.06	1.13
Received any work-study aid	2.02	0.38	0.28	2,606	1.38	1.91
Received any other type of aid	23.08	1.54	0.83	2,606	1.87	3.48
Received an assistantship	16.47	1.38	0.73	2,606	1.90	3.63
Received a Stafford loan	16.48	0.77	0.73	2,606	1.06	1.12
Received a subsidized loan	15.42	0.75	0.71	2,606	1.05	1.11
Received an unsubsidized loan	8.34	0.50	0.54	2,606	0.91	0.84
Received grant aid only	13.15	0.82	0.66	2,606	1.24	1.53
Married	40.64	1.35	0.96	2,606	1.40	1.97
U.S. citizen	92.55	0.65	0.51	2,606	1.26	1.59
U.S. Armed Forces veteran	4.13	0.45	0.41	2,323	1.09	1.18
Enrolled exclusively full-time	29.69	1.57	0.90	2,602	1.75	3.06
Lived on campus	4.57	0.56	0.41	2,606	1.36	1.86
SUMMARY STATISTICS						
Minimum					0.91	0.84
25 <sup>th</sup> percentile					1.07	1.16
Median					1.30	1.68
75 <sup>th</sup> percentile					1.57	2.46
Maximum					1.90	3.63

Table F.41—Design effects based on the study weights for graduate students at private, not-for-profit, 4-year institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	49.12	1.93	1.12	1,988	1.72	2.95
Received any federal aid	22.40	1.48	0.94	1,988	1.58	2.50
Received any non-federal aid	36.72	1.96	1.08	1,988	1.81	3.29
Received any state grant aid	0.76	0.22	0.20	1,988	1.14	1.30
Received any institution grant aid	12.40	2.05	0.74	1,988	2.78	7.73
Received any aid from other sources	17.47	1.24	0.85	1,988	1.46	2.13
Received any grant aid	27.07	1.81	1.00	1,988	1.81	3.29
Received any loan aid	21.63	1.48	0.92	1,988	1.60	2.58
Received any work-study aid	0.98	0.23	0.22	1,988	1.03	1.05
Received any other type of aid	12.60	1.41	0.74	1,988	1.89	3.58
Received an assistantship	5.70	0.87	0.52	1,988	1.67	2.78
Received a Stafford loan	21.37	1.47	0.92	1,988	1.60	2.57
Received a subsidized loan	19.82	1.44	0.89	1,988	1.61	2.59
Received an unsubsidized loan	14.11	1.11	0.78	1,988	1.42	2.02
Received grant aid only	17.83	1.78	0.86	1,988	2.07	4.28
Married	42.58	1.74	1.11	1,988	1.57	2.46
U.S. citizen	92.93	0.86	0.58	1,988	1.49	2.22
U.S. Armed Forces veteran	3.18	0.45	0.42	1,763	1.08	1.16
Enrolled exclusively full-time	30.26	2.30	1.03	1,974	2.23	4.96
Lived on campus	4.24	0.76	0.45	1,988	1.69	2.86
<b>SUMMARY STATISTICS</b>						
Minimum					1.03	1.05
25 <sup>th</sup> percentile					1.47	2.17
Median					1.61	2.61
75 <sup>th</sup> percentile					1.81	3.29
Maximum					2.78	7.73





## Section D

Design effect tables for graduate students (excluding first-professional students) based on the CATI weights



Table F.42—Design effects based on the CATI weights for all graduate students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	22.61	1.40	0.80	2,761	1.76	3.10
Worked while in school	82.60	1.17	0.73	2,694	1.61	2.59
Worked 20 or more hours per week while in school	73.36	1.34	0.85	2,694	1.57	2.46
Worked multiple jobs in 1995-96	22.31	1.27	0.82	2,589	1.55	2.39
Principal job in 1995-96 related to major	74.55	1.62	0.92	2,255	1.77	3.12
Employed as a teacher	20.43	1.56	0.79	2,584	1.97	3.87
Born outside the U.S.	15.80	1.21	0.72	2,587	1.69	2.85
Registered to vote	89.80	1.01	0.62	2,373	1.63	2.67
Voted in the 1992 elections (or planned to)	91.77	0.93	0.59	2,178	1.59	2.52
Voted in the 1996 elections (or planned to)	93.48	0.80	0.51	2,352	1.57	2.48
Has a disability	3.39	0.48	0.35	2,721	1.38	1.91
Applied for financial aid	52.03	2.06	1.00	2,479	2.06	4.23
Attended more than one institution in 1995-96	2.87	0.42	0.32	2,732	1.32	1.74
Has dependents other than spouse	30.87	1.42	0.88	2,761	2.61	2.58
Has children under 5 years old	9.02	0.71	0.56	2,631	1.27	1.60
Has children aged 5 to 13 years old	12.73	1.05	0.65	2,631	1.61	2.60
Accepted all aid offered	78.63	1.78	1.27	1,045	1.41	1.98
Ever attended a community college	18.07	1.26	0.73	2,761	1.72	2.94
Has any associate degree	7.11	0.75	0.49	2,761	1.53	2.33
Did community service during 1995-96	53.13	1.59	0.99	2,559	1.61	2.60
SUMMARY STATISTICS						
Minimum					0.98	0.96
25 <sup>th</sup> percentile					1.41	1.98
Median					1.61	2.59
75 <sup>th</sup> percentile					1.72	2.94
Maximum					2.06	4.23

<sup>a</sup> The design effect is undefined because the estimate is 100.00.

Table F.43—Design effects based on the CATI weights for graduate students at public, 4-year institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	20.69	1.79	1.03	1,538	1.73	3.01
Worked while in school	82.57	1.43	0.98	1,503	1.46	2.12
Worked 20 or more hours per week while in school	72.98	1.67	1.15	1,503	1.46	2.13
Worked multiple jobs in 1995-96	23.83	1.74	1.12	1,459	1.56	2.44
Principal job in 1995-96 related to major	74.14	2.20	1.23	1,277	1.79	3.21
Employed as a teacher	20.30	1.92	1.05	1,455	1.82	3.30
Born outside the U.S.	16.25	1.56	0.97	1,460	1.62	2.61
Registered to vote	90.31	1.33	0.81	1,324	1.63	2.67
Voted in the 1992 elections (or planned to)	91.92	1.16	0.78	1,215	1.48	2.20
Voted in the 1996 elections (or planned to)	94.08	1.09	0.65	1,310	1.67	2.78
Has a disability	3.40	0.54	0.47	1,514	1.16	1.33
Applied for financial aid	50.80	2.59	1.34	1,384	1.93	3.72
Attended more than one institution in 1995-96	2.76	0.51	0.42	1,526	1.22	1.49
Has dependents other than spouse	29.84	1.78	1.17	1,538	1.53	2.33
Has children under 5 years old	8.35	0.84	0.72	1,481	1.16	1.35
Has children aged 5 to 13 years old	12.45	1.41	0.86	1,481	1.65	2.72
Accepted all aid offered	76.91	2.53	1.83	528	1.38	1.90
Ever attended a community college	19.13	1.67	1.00	1,538	1.66	2.76
Has any associate degree	8.07	1.11	0.69	1,538	1.60	2.57
Did community service during 1995-96	52.51	2.06	1.31	1,443	1.57	2.47
SUMMARY STATISTICS						
Minimum					0.95	0.91
25 <sup>th</sup> percentile					1.38	1.90
Median					1.57	2.47
75 <sup>th</sup> percentile					1.67	2.78
Maximum					1.93	3.72

<sup>a</sup> The design effect is undefined because the estimate is 100.00.

Table F.44—Design effects based on the CATI weights for graduate students at private, not-for-profit, 4-year institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	24.55	2.13	1.27	1,140	1.67	2.79
Worked while in school	82.26	2.06	1.15	1,110	1.80	3.23
Worked 20 or more hours per week while in school	73.50	2.21	1.32	1,110	1.67	2.79
Worked multiple jobs in 1995-96	20.53	1.79	1.24	1,056	1.44	2.08
Principal job in 1995-96 related to major	76.29	2.12	1.41	911	1.51	2.27
Employed as a teacher	21.26	2.73	1.26	1,055	2.16	4.68
Born outside the U.S.	15.33	2.01	1.11	1,053	1.81	3.29
Registered to vote	89.23	1.65	0.99	977	1.66	2.77
Voted in the 1992 elections (or planned to)	91.4	1.65	0.93	896	1.77	3.12
Voted in the 1996 elections (or planned to)	92.45	1.23	0.85	971	1.45	2.11
Has a disability	3.39	0.94	0.54	1,125	1.73	3.01
Applied for financial aid	54.78	3.42	1.56	1,016	2.19	4.80
Attended more than one institution in 1995-96	3.04	0.75	0.51	1,124	1.46	2.14
Has dependents other than spouse	30.80	2.2107	1.37	1,140	1.62	2.62
Has children under 5 years old	9.29	1.17	0.88	1,076	1.32	1.75
Has children aged 5 to 13 years old	12.77	1.60	1.02	1,076	1.57	2.46
Accepted all aid offered	80.09	2.60	1.83	478	1.42	2.03
Ever attended a community college	16.41	1.98	1.10	1,140	1.80	3.25
Has any associate degree	5.38	0.82	0.67	1,140	1.22	1.50
Did community service during 1995-96	54.11	2.60	1.54	1,042	1.68	2.83
SUMMARY STATISTICS						
Minimum					0.98	0.96
25 <sup>th</sup> percentile					1.45	2.11
Median					1.66	2.77
75 <sup>th</sup> percentile					1.80	3.23
Maximum					2.19	4.80

<sup>a</sup> The design effect is undefined because the estimate is 100.00.



## Section E

Design effect tables for first-professional students based on the study weights





Table F.45—Design effects based on the study weights for all first-professional students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	80.23	1.68	0.83	2,309	2.02	4.10
Received any federal aid	69.03	3.07	0.96	2,309	3.19	10.15
Received any non-federal aid	50.37	2.62	1.04	2,309	2.52	6.34
Received any state grant aid	8.60	2.10	0.58	2,309	3.60	12.96
Received any institution grant aid	23.58	3.43	0.88	2,309	3.88	15.08
Received any aid from other sources	20.97	1.76	0.85	2,309	2.08	4.33
Received any grant aid	35.87	3.09	1.00	2,309	3.10	9.61
Received any loan aid	69.44	2.88	0.96	2,309	3.00	9.01
Received any work-study aid	5.23	0.80	0.46	2,309	1.72	2.96
Received any other type of aid	11.03	1.56	0.65	2,309	2.39	5.72
Received an assistantship	4.05	0.67	0.41	2,309	1.64	2.70
Received a Stafford loan	67.88	3.15	0.97	2,309	3.24	10.48
Received a subsidized loan	66.40	3.06	0.98	2,309	3.11	9.68
Received an unsubsidized loan	52.14	2.94	1.04	2,309	2.82	7.98
Received grant aid only	6.34	2.46	0.51	2,309	4.86	23.60
Married	24.974	2.42	0.90	2,309	2.69	7.24
U.S. citizen	95.25	0.79	0.44	2,309	1.79	3.19
U.S. Armed Forces veteran	4.50	0.60	0.44	2,210	1.35	1.83
Enrolled exclusively full-time	80.15	2.77	0.83	2,302	3.33	11.07
Lived on campus	6.91	1.30	0.53	2,309	2.46	6.07
SUMMARY STATISTICS						
Minimum					1.35	1.83
25 <sup>th</sup> percentile					2.05	4.21
Median					2.82	7.97
75 <sup>th</sup> percentile					3.21	10.31
Maximum					4.86	23.60

Table F.46—Design effects based on the study weights for first-professional students at public, 4-year institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	84.27	1.93	1.16	978	1.65	2.74
Received any federal aid	77.55	2.27	1.33	978	1.70	2.90
Received any non-federal aid	50.14	3.41	1.60	978	2.13	4.56
Received any state grant aid	10.15	3.76	0.97	978	3.89	15.16
Received any institution grant aid	25.77	4.53	1.40	978	3.24	10.49
Received any aid from other sources	16.10	1.68	1.18	978	1.43	2.04
Received any grant aid	40.48	3.56	1.57	978	2.27	5.15
Received any loan aid	76.88	2.35	1.35	978	1.75	3.05
Received any work-study aid	5.12	1.04	0.70	978	1.47	2.16
Received any other type of aid	12.34	1.61	1.05	978	1.53	2.35
Received an assistantship	5.24	1.16	0.71	978	1.62	2.64
Received a Stafford loan	76.42	2.39	1.36	978	1.76	3.09
Received a subsidized loan	74.94	2.23	1.39	978	1.61	2.58
Received an unsubsidized loan	53.17	3.92	1.60	978	2.45	6.02
Received grant aid only	4.30	1.00	0.65	978	1.55	2.40
Married	24.51	3.29	1.38	978	2.39	5.73
U.S. citizen	96.94	0.91	0.55	978	1.65	2.73
U.S. Armed Forces veteran	3.92	1.02	0.63	945	1.61	2.59
Enrolled exclusively full-time	84.88	3.16	1.15	977	2.75	7.58
Lived on campus	4.37	0.88	0.65	978	1.34	1.80
SUMMARY STATISTICS						
Minimum					1.34	1.80
25 <sup>th</sup> percentile					1.58	2.49
Median					1.68	2.82
75 <sup>th</sup> percentile					2.36	5.58
Maximum					3.89	15.16

Table F.47—Design effects based on the study weights for first-professional students at private, not-for-profit, 4-year institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any aid	77.36	2.45	1.15	1,331	2.14	4.56
Received any federal aid	62.97	4.59	1.32	1,331	3.47	12.04
Received any non-federal aid	50.53	3.77	1.37	1,331	2.75	7.56
Received any state grant aid	7.49	2.31	0.72	1,331	3.20	10.22
Received any institution grant aid	22.02	4.94	1.14	1,331	4.35	18.94
Received any aid from other sources	24.44	2.64	1.18	1,331	2.24	5.01
Received any grant aid	32.59	4.58	1.28	1,331	3.56	12.71
Received any loan aid	64.15	4.32	1.31	1,331	3.29	10.80
Received any work-study aid	5.32	1.15	0.62	1,331	1.87	3.50
Received any other type of aid	10.10	2.44	0.83	1,331	2.96	8.74
Received an assistantship	3.20	0.82	0.48	1,331	1.69	2.86
Received a Stafford loan	61.81	4.71	1.33	1,331	3.54	12.50
Received a subsidized loan	60.32	4.59	1.34	1,331	3.43	11.74
Received an unsubsidized loan	51.42	4.13	1.37	1,331	3.02	9.11
Received grant aid only	7.80	4.10	0.74	1,331	5.58	31.18
Married	25.29	3.43	1.19	1,331	2.88	8.30
U.S. citizen	94.06	1.14	0.65	1,331	1.76	3.08
U.S. Armed Forces veteran	4.92	0.74	0.61	1,265	1.22	1.48
Enrolled exclusively full-time	76.75	3.94	1.16	1,325	3.39	11.53
Lived on campus	8.71	2.05	0.77	1,331	2.65	7.02
SUMMARY STATISTICS						
Minimum					1.22	1.48
25 <sup>th</sup> percentile					2.19	4.78
Median					3.01	9.05
75 <sup>th</sup> percentile					3.45	11.89
Maximum					5.58	31.18



## Section F

Design effect tables for first-professional students based on the CATI weights



Table F.48—Design effects based on the CATI weights for all first-professional students

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	4.54	1.18	0.59	1,256	2.02	4.07
Worked while in school	50.37	3.07	1.43	1,223	2.14	4.60
Worked 20 or more hours per week while in school	28.39	2.79	1.29	1,223	2.17	4.69
Worked multiple jobs in 1995-96	22.38	2.60	1.22	1,159	2.12	4.50
Principal job in 1995-96 related to major	66.11	2.60	1.80	689	1.44	2.08
Employed as a teacher	1.03	0.64	0.30	1,159	2.15	4.62
Born outside the U.S.	15.75	1.98	1.08	1,141	1.84	3.38
Registered to vote	88.96	1.70	0.95	1,083	1.79	3.20
Voted in the 1992 elections (or planned to)	89.50	1.21	0.99	953	1.22	1.49
Voted in the 1996 elections (or planned to)	91.11	1.43	0.87	1,076	1.65	2.72
Has a disability	2.28	0.50	0.42	1,241	1.17	1.37
Applied for financial aid	85.38	1.94	1.02	1,209	1.91	3.66
Attended more than one institution in 1995-96	1.98	0.41	0.40	1,236	1.03	1.06
Has dependents other than spouse	13.18	1.57	0.95	1,256	1.64	2.70
Has children under 5 years old	4.05	1.09	0.57	1,186	1.90	3.63
Has children aged 5 to 13 years old	3.63	0.93	0.54	1,186	1.71	2.91
Accepted all aid offered	81.19	1.85	1.30	899	1.42	2.01
Ever attended a community college	17.09	1.76	1.06	1,256	1.65	2.74
Has any associate degree	5.30	0.93	0.63	1,256	1.47	2.15
Did community service during 1995-96	57.54	2.86	1.46	1,146	1.96	3.84
SUMMARY STATISTICS						
Minimum					1.03	1.06
25 <sup>th</sup> percentile					1.44	2.08
Median					1.79	3.20
75 <sup>th</sup> percentile					2.02	4.07
Maximum					2.17	4.69

<sup>a</sup> The design effect is undefined because the estimate is 100.00.

Table F.49—Design effects based on the CATI weights for first-professional students at public, 4-year institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	2.05	0.78	0.61	539	1.28	1.64
Worked while in school	40.55	3.14	2.13	529	1.47	2.17
Worked 20 or more hours per week while in school	18.94	2.59	1.70	529	1.52	2.32
Worked multiple jobs in 1995-96	15.49	2.49	1.61	507	1.55	2.41
Principal job in 1995-96 related to major	70.12	3.68	2.79	270	1.32	1.74
Employed as a teacher	1.78	1.44	0.59	507	2.45	6.02
Born outside the U.S.	13.09	2.48	1.50	506	1.66	2.74
Registered to vote	88.95	2.30	1.41	491	1.63	2.65
Voted in 1992 elections (or planned to)	90.47	1.60	1.42	426	1.12	1.26
Voted in the 1996 elections (or planned to)	91.48	2.31	1.26	492	1.83	3.36
Has a disability	1.43	0.41	0.51	536	0.80	0.64
Applied for financial aid	86.38	2.67	1.50	520	1.77	3.14
Attended more than one institution in 1995-96	1.67	0.58	0.56	528	1.04	1.08
Has dependents other than spouse	10.73	1.75	1.33	539	1.31	1.72
Has children under 5 years old	2.94	0.80	0.74	515	1.08	1.16
Has children aged 5 to 13 years old	3.13	0.85	0.77	515	1.11	1.24
Accepted all aid offered	80.38	2.28	1.94	418	1.18	1.38
Ever attended a community college	18.49	2.31	1.67	539	1.38	1.91
Has any associate degree	3.97	0.95	0.84	539	1.13	1.27
Did community service during 1995-96	54.23	3.92	2.23	500	1.76	3.09
SUMMARY STATISTICS						
Minimum					0.80	0.64
25 <sup>th</sup> percentile					1.18	1.38
Median					1.38	1.91
75 <sup>th</sup> percentile					1.66	2.74
Maximum					2.45	6.02

<sup>a</sup> The design effect is undefined because the estimate is 100.00.



Table F.50—Design effects based on the CATI weights for first-professional students at private, not-for-profit, 4-year institutions

	Percent Estimate	Design Std. Err.	SRS Std. Err.	Sample Size	DEFT	DEFF
Received any employer aid	6.10	1.84	0.89	717	2.06	4.24
Worked while in school	56.70	4.20	1.88	694	2.23	4.98
Worked 20 or more hours per week while in school	34.47	3.93	1.80	694	2.18	4.76
Worked multiple jobs in 1995-96	26.87	3.65	1.74	652	2.10	4.43
Principal job in 1995-96 related to major	63.94	3.51	2.35	419	1.50	2.24
Employed as a teacher	0.54	0.45	0.29	652	1.55	2.42
Born outside the U.S.	17.50	2.78	1.51	635	1.84	3.39
Registered to vote	88.98	2.41	1.29	592	1.87	3.51
Voted in the 1992 elections (or planned to)	88.84	1.72	1.37	527	1.26	1.58
Voted in the 1996 elections (or planned to)	90.85	1.83	1.19	584	1.54	2.36
Has a disability	2.82	0.76	0.62	705	1.22	1.48
Applied for financial aid	84.73	2.69	1.37	689	1.96	3.86
Attended more than one institution in 1995-96	2.17	0.55	0.55	708	1.01	1.01
Has dependents other than spouse	14.70	2.30	1.32	717	1.74	3.03
Has children under 5 years old	4.75	1.68	0.82	671	2.05	4.19
Has children aged 5 to 13 years old	3.95	1.40	0.75	671	1.86	3.47
Accepted all aid offered	81.85	2.77	1.76	481	1.58	2.49
Ever attended a community college	16.21	2.48	1.38	717	1.80	3.25
Has any associate degree	6.13	1.38	0.90	717	1.54	2.38
Did community service during 1995-96	59.68	4.06	1.93	646	2.11	4.43
SUMMARY STATISTICS						
Minimum					1.01	1.01
25 <sup>th</sup> percentile					1.54	2.36
Median					1.84	3.39
75 <sup>th</sup> percentile					2.06	4.24
Maximum					2.23	4.98

<sup>a</sup> The design effect is undefined because the estimate is 100.00.





# Appendix G

## Supplemental Tables

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Table G.1—Number of students enrolled in postsecondary institutions by family income and student level for all institutions

		Total	Freshman	Sophomore	Junior	Senior	Unclassified undergraduate	Graduate/first-professional
TOTAL	Unweighted size	48,389	24,326	5,769	4,698	5,134	1,540	6,922
	Weighted size	19,375,435	8,390,721	3,623,405	1,816,640	2,093,699	738,992	2,711,978
	SE weighted	307,958	190,091	126,923	47,960	55,473	87,945	82,544
Dependent: less than \$10,000	Unweighted size	2,346	1,501	366	222	206	51	*
	Weighted size	743,197	412,584	163,436	80,439	75,557	11,181	*
	SE weighted	35,256	23,779	14,968	6,726	8,100	2,526	*
Dependent: \$10,000-\$19,999	Unweighted size	2,560	1,684	333	263	239	41	*
	Weighted size	803,725	449,238	154,590	92,607	85,705	21,585	*
	SE weighted	32,213	24,432	14,436	7,502	6,209	6,128	*
Dependent: \$20,000-\$29,999	Unweighted size	2,821	1,779	409	318	264	51	*
	Weighted size	968,776	509,355	211,026	125,147	99,729	23,519	*
	SE weighted	41,123	27,872	16,996	9,151	7,867	8,600	*
Dependent: \$30,000-\$39,999	Unweighted size	2,610	1,615	411	290	261	33	*
	Weighted size	907,019	455,046	228,929	105,975	100,552	16,517	*
	SE weighted	34,572	23,910	18,894	7,675	7,430	5,843	*
Dependent: \$40,000-\$49,999	Unweighted size	2,772	1,777	354	334	258	49	*
	Weighted size	944,908	504,976	185,278	127,474	99,572	27,608	*
	SE weighted	37,563	27,481	15,235	8,555	7,736	8,439	*
Dependent: \$50,000-\$59,999	Unweighted size	2,480	1,535	331	305	287	*	*
	Weighted size	917,614	496,748	164,959	124,279	120,525	*	*
	SE weighted	38,869	30,334	14,081	8,453	8,038	*	*
Dependent: \$60,000-\$69,999	Unweighted size	2,197	1,343	298	275	262	*	*
	Weighted size	767,506	381,634	153,840	109,757	111,099	*	*
	SE weighted	33,426	24,559	14,060	7,738	8,354	*	*
Dependent: \$70,000-\$79,999	Unweighted size	1,706	1,059	228	215	177	*	*
	Weighted size	588,248	285,152	120,467	90,438	76,073	*	*
	SE weighted	26,265	18,133	12,439	7,472	6,994	*	*

Table G.1—Number of students enrolled in postsecondary institutions by family income and student level for all institutions (continued)

		Total	Freshman	Sophomore	Junior	Senior	Unclassified undergraduate	Graduate/first-professional
Dependent: \$80,000-\$99,999	Unweighted size	2,061	1,280	289	256	216	*	*
	Weighted size	687,985	316,294	159,888	103,946	94,918	*	*
	SE weighted	30,172	19,590	15,932	7,652	7,224	*	*
Dependent: \$100,000 or more	Unweighted size	2,663	1,619	331	339	348	*	*
	Weighted size	887,638	406,548	160,408	147,935	159,637	*	*
	SE weighted	41,408	28,494	12,779	10,795	12,144	*	*
Independent: less than \$5,000	Unweighted size	5,190	2,067	470	358	557	155	1,583
	Weighted size	1,632,652	605,751	262,403	118,449	198,898	58,597	388,554
	SE weighted	47,673	29,197	21,005	8,410	11,058	9,835	19,568
Independent: \$5,000-\$9,999	Unweighted size	3,804	1,539	413	312	441	173	926
	Weighted size	1,542,179	571,037	314,138	112,999	168,950	73,495	301,560
	SE weighted	48,220	32,402	25,620	8,861	9,815	13,247	14,066
Independent: \$10,000-\$19,999	Unweighted size	5,156	2,183	541	378	556	277	1,221
	Weighted size	2,382,658	1,012,851	404,032	139,461	223,882	127,195	475,237
	SE weighted	71,974	50,327	31,058	9,732	12,365	19,530	22,302
Independent: \$20,000-\$29,999	Unweighted size	3,363	1,275	354	264	353	221	896
	Weighted size	1,772,544	699,366	332,670	102,979	143,596	100,464	393,469
	SE weighted	66,106	44,401	28,505	9,010	9,130	15,917	20,036
Independent: \$30,000-\$49,999	Unweighted size	3,582	1,168	388	339	373	204	1,110
	Weighted size	2,013,442	688,375	359,587	134,499	169,349	126,818	534,814
	SE weighted	68,578	39,398	33,132	11,019	12,732	16,331	25,380
Independent: \$50,000 or more	Unweighted size	3,078	902	253	230	336	173	1,184
	Weighted size	1,815,344	595,766	247,754	100,256	165,657	88,941	616,970
	SE weighted	69,323	41,300	25,383	9,866	11,852	12,711	29,943

\*Insufficient number of cases for reliable estimation. Graduate students are independent students.

Table G.2—Number of students enrolled in postsecondary institutions by family income and student level for public, less-than-4-year institutions

		Total	Freshman	Sophomore	Junior	Senior	Unclassified undergraduate	Graduate/first- professional
TOTAL	Unweighted size	7,187	5,421	1,213	53	*	490	*
	Weighted size	7,839,449	5,183,471	2,087,088	79,338	*	477,990	*
	SE weighted	256,017	173,722	119,982	18,006	*	81,531	*
Dependent: less than \$10,000	Unweighted size	339	283	45	*	*	*	*
	Weighted size	281,604	215,820	57,430	*	*	*	*
	SE weighted	27,186	21,153	12,404	*	*	*	*
Dependent: \$10,000-\$19,999	Unweighted size	374	312	41	*	*	*	*
	Weighted size	304,021	230,232	55,820	*	*	*	*
	SE weighted	25,293	21,845	12,804	*	*	*	*
Dependent: \$20,000-\$29,999	Unweighted size	408	331	57	*	*	*	*
	Weighted size	401,566	280,952	96,705	*	*	*	*
	SE weighted	35,363	25,734	15,187	*	*	*	*
Dependent: \$30,000-\$39,999	Unweighted size	349	272	61	*	*	*	*
	Weighted size	369,669	247,846	109,047	*	*	*	*
	SE weighted	29,143	21,998	17,374	*	*	*	*
Dependent: \$40,000-\$49,999	Unweighted size	385	311	50	*	*	*	*
	Weighted size	380,332	275,313	81,757	*	*	*	*
	SE weighted	31,363	25,444	13,394	*	*	*	*
Dependent: \$50,000-\$59,999	Unweighted size	308	261	36	*	*	*	*
	Weighted size	350,877	285,066	55,615	*	*	*	*
	SE weighted	33,248	28,888	11,557	*	*	*	*
Dependent: \$60,000-\$69,999	Unweighted size	207	177	*	*	*	*	*
	Weighted size	264,211	206,093	*	*	*	*	*
	SE weighted	27,898	23,259	*	*	*	*	*
Dependent: \$70,000-\$79,999	Unweighted size	184	146	*	*	*	*	*
	Weighted size	200,879	139,384	*	*	*	*	*
	SE weighted	20,385	16,421	*	*	*	*	*



Table G.2—Number of students enrolled in postsecondary institutions by family income and student level for public, less-than-4-year institutions (continued)

		Total	Freshman	Sophomore	Junior	Senior	Unclassified undergraduate	Graduate/first-professional
Dependent: \$80,000-\$99,999	Unweighted size	189	145	33	*	*	*	*
	Weighted size	220,862	147,060	62,440	*	*	*	*
	SE weighted	23,456	17,775	14,009	*	*	*	*
Dependent: \$100,000 or more	Unweighted size	175	149	*	*	*	*	*
	Weighted size	217,200	175,088	*	*	*	*	*
	SE weighted	29,143	26,040	*	*	*	*	*
Independent: less than \$5,000	Unweighted size	690	517	117	*	*	51	*
	Weighted size	564,498	352,335	166,563	*	*	36,748	*
	SE weighted	36,778	25,293	19,846	*	*	8,775	*
Independent: \$5,000-\$9,999	Unweighted size	667	463	146	*	*	50	*
	Weighted size	675,647	381,249	242,445	*	*	40,639	*
	SE weighted	41,886	30,279	24,977	*	*	11,719	*
Independent: \$10,000-\$19,999	Unweighted size	1,031	754	181	*	*	89	*
	Weighted size	1,127,319	733,262	298,625	*	*	87,399	*
	SE weighted	63,303	47,901	30,203	*	*	18,413	*
Independent: \$20,000-\$29,999	Unweighted size	668	459	135	*	*	67	*
	Weighted size	866,391	530,072	266,186	*	*	61,097	*
	SE weighted	59,110	43,151	27,937	*	*	14,606	*
Independent: \$30,000-\$49,999	Unweighted size	704	477	145	*	*	75	*
	Weighted size	907,120	531,634	273,742	*	*	88,848	*
	SE weighted	57,410	37,824	32,268	*	*	15,373	*
Independent: \$50,000 or more	Unweighted size	509	364	99	*	*	40	*
	Weighted size	707,253	452,065	195,434	*	*	46,821	*
	SE weighted	55,444	39,707	24,761	*	*	11,135	*

\*Insufficient number of cases for reliable estimation. Graduate students are independent students.

Table G.3—Number of students enrolled in postsecondary institutions by family income and student level for public, 4-year institutions

		Total	Freshman	Sophomore	Junior	Senior	Unclassified undergraduate	Graduate/first-professional
TOTAL	Unweighted size	19,537	7,931	2,103	2,711	3,042	243	3,507
	Weighted size	6,779,202	1,507,310	934,060	1,212,881	1,467,255	99,103	1,558,593
	SE weighted	133,682	48,731	32,590	39,005	47,988	17,416	49,299
Dependent: less than \$10,000	Unweighted size	885	514	133	127	104	*	*
	Weighted size	264,216	97,427	60,809	54,572	49,555	*	*
	SE weighted	15,999	7,290	6,502	5,085	5,638	*	*
Dependent: \$10,000-\$19,999	Unweighted size	1,121	687	163	141	125	*	*
	Weighted size	308,212	123,742	66,354	60,586	56,335	*	*
	SE weighted	16,300	8,884	5,575	6,188	5,185	*	*
Dependent: \$20,000-\$29,999	Unweighted size	1,308	793	176	190	138	*	*
	Weighted size	361,641	132,930	74,979	83,616	66,656	*	*
	SE weighted	17,723	8,481	6,515	6,972	6,593	*	*
Dependent: \$30,000-\$39,999	Unweighted size	1,220	711	181	178	141	*	*
	Weighted size	341,733	116,817	78,154	78,620	65,509	*	*
	SE weighted	15,621	7,598	6,432	7,070	6,156	*	*
Dependent: \$40,000-\$49,999	Unweighted size	1,317	800	165	200	145	*	*
	Weighted size	363,456	133,670	70,322	88,956	67,411	*	*
	SE weighted	17,461	8,198	6,370	7,327	6,625	*	*
Dependent: \$50,000-\$59,999	Unweighted size	1,245	723	156	197	164	*	*
	Weighted size	380,853	130,048	73,574	92,448	83,177	*	*
	SE weighted	16,958	7,398	6,818	7,611	7,131	*	*
Dependent: \$60,000-\$69,999	Unweighted size	1,069	630	152	138	145	*	*
	Weighted size	322,026	104,594	72,862	66,505	76,389	*	*
	SE weighted	15,197	6,308	6,314	6,025	7,273	*	*
Dependent: \$70,000-\$79,999	Unweighted size	858	527	102	118	106	*	*
	Weighted size	252,486	87,678	49,178	57,840	55,626	*	*
	SE weighted	13,794	6,164	5,824	5,803	6,076	*	*

Table G.3—Number of students enrolled in postsecondary institutions by family income and student level for public, 4-year institutions (continued)

		Total	Freshman	Sophomore	Junior	Senior	Unclassified undergraduate	Graduate/first-professional
Dependent: \$80,000-\$99,999	Unweighted size	988	607	125	143	113	*	*
	Weighted size	291,097	95,898	61,314	71,481	62,404	*	*
	SE weighted	15,807	6,661	6,288	6,803	5,896	*	*
Dependent: \$100,000 or more	Unweighted size	1,224	728	145	169	180	*	*
	Weighted size	407,531	129,997	77,255	94,948	104,596	*	*
	SE weighted	23,014	9,034	6,754	8,780	10,478	*	*
Independent: less than \$5,000	Unweighted size	1,787	246	133	214	373	*	803
	Weighted size	561,128	56,624	52,288	79,017	152,458	*	213,094
	SE weighted	20,015	5,305	5,163	5,943	9,950	*	13,980
Independent: \$5,000-\$9,999	Unweighted size	1,342	180	106	207	309	*	514
	Weighted size	505,512	48,008	39,650	82,228	133,667	*	189,890
	SE weighted	17,455	5,086	4,505	6,352	8,877	*	10,521
Independent: \$10,000-\$19,999	Unweighted size	1,707	289	147	232	352	33	654
	Weighted size	697,686	84,278	57,989	97,085	165,426	12,824	280,084
	SE weighted	24,095	7,806	5,326	8,275	10,667	3,190	15,263
Independent: \$20,000-\$29,999	Unweighted size	1,130	180	81	162	224	40	443
	Weighted size	507,948	52,759	35,124	68,323	106,260	14,743	230,739
	SE weighted	22,549	5,554	4,385	7,077	8,073	3,506	15,226
Independent: \$30,000-\$49,999	Unweighted size	1,222	177	89	181	221	*	527
	Weighted size	601,912	56,199	40,691	82,000	109,249	*	300,187
	SE weighted	27,187	6,573	4,828	8,732	9,884	*	18,143
Independent: \$50,000 or more	Unweighted size	1,114	139	49	114	202	46	564
	Weighted size	611,765	56,641	23,517	54,656	112,537	21,189	343,225
	SE weighted	29,118	6,494	3,668	6,420	9,839	4,257	19,540

\*Insufficient number of cases for reliable estimation. Graduate students are independent students.

Table G.4—Number of students enrolled in postsecondary institutions by family income and student level for private, not-for-profit, less-than-4-year institutions

		Total	Freshman	Sophomore	Junior	Senior	Unclassified undergraduate	Graduate/first-professional
TOTAL	Unweighted size	2,072	1,553	311	46	*	149	*
	Weighted size	223,522	161,988	35,655	5,160	*	18,224	*
	SE weighted	31,706	24,075	6,478	2,277	*	11,541	*
Dependent: less than \$10,000	Unweighted size	94	75	*	*	*	*	*
	Weighted size	10,261	7,823	*	*	*	*	*
	SE weighted	2,087	1,554	*	*	*	*	*
Dependent: \$10,000-\$19,999	Unweighted size	103	91	*	*	*	*	*
	Weighted size	9,186	7,915	*	*	*	*	*
	SE weighted	1,717	1,571	*	*	*	*	*
Dependent: \$20,000-\$29,999	Unweighted size	92	72	*	*	*	*	*
	Weighted size	9,465	7,344	*	*	*	*	*
	SE weighted	2,050	1,916	*	*	*	*	*
Dependent: \$30,000-\$39,999	Unweighted size	83	68	*	*	*	*	*
	Weighted size	7,669	5,930	*	*	*	*	*
	SE weighted	1,542	1,445	*	*	*	*	*
Dependent: \$40,000-\$49,999	Unweighted size	103	70	*	*	*	*	*
	Weighted size	9,278	5,594	*	*	*	*	*
	SE weighted	2,050	1,217	*	*	*	*	*
Dependent: \$50,000-\$59,999	Unweighted size	79	50	*	*	*	*	*
	Weighted size	7,119	4,030	*	*	*	*	*
	SE weighted	1,613	909	*	*	*	*	*
Dependent: \$60,000-\$69,999	Unweighted size	62	53	*	*	*	*	*
	Weighted size	5,185	4,338	*	*	*	*	*
	SE weighted	969	893	*	*	*	*	*
Dependent: \$70,000-\$79,999	Unweighted size	66	55	*	*	*	*	*
	Weighted size	6,926	5,638	*	*	*	*	*
	SE weighted	1,399	1,301	*	*	*	*	*

Table G.4—Number of students enrolled in postsecondary institutions by family income and student level for private, not-for-profit, less-than-4-year institutions (continued)

		Total	Freshman	Sophomore	Junior	Senior	Unclassified undergraduate	Graduate/first-professional
Dependent: \$80,000-\$99,999	Unweighted size	40	30	*	*	*	*	*
	Weighted size	3,858	2,872	*	*	*	*	*
	SE weighted	913	893	*	*	*	*	*
Dependent: \$100,000 or more	Unweighted size	49	38	*	*	*	*	*
	Weighted size	4,845	3,249	*	*	*	*	*
	SE weighted	1,043	827	*	*	*	*	*
Independent: less than \$5,000	Unweighted size	286	225	46	*	*	*	*
	Weighted size	28,358	21,408	5,078	*	*	*	*
	SE weighted	6,706	4,726	1,845	*	*	*	*
Independent: \$5,000-\$9,999	Unweighted size	210	159	31	*	*	*	*
	Weighted size	22,387	16,739	3,353	*	*	*	*
	SE weighted	4,291	3,338	1,153	*	*	*	*
Independent: \$10,000-\$19,999	Unweighted size	317	224	49	*	*	37	*
	Weighted size	36,599	26,257	5,007	*	*	4,246	*
	SE weighted	7,361	6,058	1,162	*	*	2,141	*
Independent: \$20,000-\$29,999	Unweighted size	172	128	*	*	*	*	*
	Weighted size	21,288	15,304	*	*	*	*	*
	SE weighted	4,995	3,637	*	*	*	*	*
Independent: \$30,000-\$49,999	Unweighted size	182	120	30	*	*	*	*
	Weighted size	22,866	14,920	4,086	*	*	*	*
	SE weighted	4,269	2,990	1,190	*	*	*	*
Independent: \$50,000 or more	Unweighted size	134	95	*	*	*	*	*
	Weighted size	18,232	12,627	*	*	*	*	*
	SE weighted	4,483	3,308	*	*	*	*	*

\*Insufficient number of cases for reliable estimation. Graduate students are independent students.

Table G.5—Number of students enrolled in postsecondary institutions by family income and student level for private, not-for-profit, 4-year institutions

		Total	Freshman	Sophomore	Junior	Senior	Unclassified undergraduate	Graduate/first- professional
TOTAL	Unweighted size	14,086	5,246	1,650	1,752	2,004	146	3,288
	Weighted size	3,561,088	841,086	465,515	499,134	601,524	47,165	1,106,664
	SE weighted	92,252	33,802	20,526	21,239	27,478	7,446	63,083
Dependent: less than \$10,000	Unweighted size	694	360	144	87	99	*	*
	Weighted size	134,790	51,646	36,060	20,494	25,485	*	*
	SE weighted	14,070	5,831	4,603	2,738	5,805	*	*
Dependent: \$10,000-\$19,999	Unweighted size	703	373	105	113	111	*	*
	Weighted size	139,827	52,365	28,130	30,014	28,909	*	*
	SE weighted	10,373	4,749	3,482	4,151	3,406	*	*
Dependent: \$20,000-\$29,999	Unweighted size	807	416	141	122	123	*	*
	Weighted size	159,062	58,854	33,067	33,172	32,606	*	*
	SE weighted	10,022	4,983	3,404	3,560	4,276	*	*
Dependent: \$30,000-\$39,999	Unweighted size	784	422	134	107	118	*	*
	Weighted size	158,239	60,394	35,933	26,549	34,702	*	*
	SE weighted	9,433	4,525	3,472	2,961	4,153	*	*
Dependent: \$40,000-\$49,999	Unweighted size	815	475	102	127	110	*	*
	Weighted size	164,162	68,812	27,303	36,015	31,721	*	*
	SE weighted	10,221	5,358	3,182	4,098	3,987	*	*
Dependent: \$50,000-\$59,999	Unweighted size	731	409	99	103	120	*	*
	Weighted size	158,510	62,293	29,259	30,093	36,865	*	*
	SE weighted	10,378	4,941	3,968	3,457	3,699	*	*
Dependent: \$60,000-\$69,999	Unweighted size	759	404	105	131	115	*	*
	Weighted size	160,662	55,269	29,870	40,007	34,331	*	*
	SE weighted	10,135	4,314	3,387	4,567	4,101	*	*
Dependent: \$70,000-\$79,999	Unweighted size	540	288	87	94	70	*	*
	Weighted size	113,951	42,045	23,113	28,332	20,291	*	*
	SE weighted	8,662	3,677	2,784	3,681	3,460	*	*

Table G.5—Number of students enrolled in postsecondary institutions by family income and student level for private, not-for-profit, 4-year institutions (continued)

		Total	Freshman	Sophomore	Junior	Senior	Unclassified undergraduate	Graduate/first-professional
Dependent: \$80,000-\$99,999	Unweighted size	761	436	110	110	102	*	*
	Weighted size	154,864	57,927	32,138	31,410	32,381	*	*
	SE weighted	10,054	4,114	4,041	3,369	4,173	*	*
Dependent: \$100,000 or more	Unweighted size	1,137	646	151	166	165	*	*
	Weighted size	242,745	87,939	48,510	49,584	54,365	*	*
	SE weighted	18,103	6,870	5,352	5,618	6,118	*	*
Independent: less than \$5,000	Unweighted size	1,454	264	109	125	175	*	776
	Weighted size	318,288	43,280	26,282	30,217	43,293	*	174,064
	SE weighted	17,442	5,492	3,493	3,837	4,514	*	13,628
Independent: \$5,000-\$9,999	Unweighted size	799	112	69	82	122	*	405
	Weighted size	202,059	22,987	16,309	18,255	32,372	*	108,495
	SE weighted	11,810	3,941	2,616	2,586	3,953	*	9,148
Independent: \$10,000-\$19,999	Unweighted size	1,157	203	88	112	192	*	548
	Weighted size	357,107	51,362	26,631	32,106	55,164	*	187,827
	SE weighted	20,501	6,400	3,681	3,817	6,041	*	15,917
Independent: \$20,000-\$29,999	Unweighted size	880	147	76	80	117	*	432
	Weighted size	287,651	40,677	21,392	23,446	35,396	*	156,890
	SE weighted	16,964	5,237	3,205	3,299	4,285	*	12,757
Independent: \$30,000-\$49,999	Unweighted size	1,052	139	79	114	144	*	550
	Weighted size	395,899	38,533	31,383	39,930	53,981	*	222,680
	SE weighted	23,812	5,455	5,238	4,987	6,176	*	16,517
Independent: \$50,000 or more	Unweighted size	1,013	152	51	79	121	33	577
	Weighted size	413,272	46,703	20,135	29,510	49,662	10,554	256,708
	SE weighted	27,738	7,347	3,571	4,402	6,536	2,539	21,232

\*Insufficient number of cases for reliable estimation. Graduate students are independent students.

Table G.6—Number of students enrolled in postsecondary institutions by family income and student level for private, for-profit, institutions

		Total	Freshman	Sophomore	Junior	Senior	Unclassified undergraduate	Graduate/first-professional
TOTAL	Unweighted size	5,507	4,175	492	136	65	512	127
	Weighted size	972,174	696,866	101,087	20,127	10,863	96,510	46,721
	SE weighted	54,359	45,393	14,417	3,937	2,656	24,420	21,230
Dependent: less than \$10,000	Unweighted size	334	269	38	*	*	*	*
	Weighted size	52,326	39,868	8,141	*	*	*	*
	SE weighted	6,864	5,369	2,563	*	*	*	*
Dependent: \$10,000-\$19,999	Unweighted size	259	221	*	*	*	*	*
	Weighted size	42,479	34,984	*	*	*	*	*
	SE weighted	4,715	4,011	*	*	*	*	*
Dependent: \$20,000-\$29,999	Unweighted size	206	167	*	*	*	*	*
	Weighted size	37,042	29,275	*	*	*	*	*
	SE weighted	4,695	3,784	*	*	*	*	*
Dependent: \$30,000-\$39,999	Unweighted size	174	142	*	*	*	*	*
	Weighted size	29,709	24,059	*	*	*	*	*
	SE weighted	3,351	2,818	*	*	*	*	*
Dependent: \$40,000-\$49,999	Unweighted size	152	121	*	*	*	*	*
	Weighted size	27,680	21,587	*	*	*	*	*
	SE weighted	3,765	3,259	*	*	*	*	*
Dependent: \$50,000-\$59,999	Unweighted size	117	92	*	*	*	*	*
	Weighted size	20,255	15,311	*	*	*	*	*
	SE weighted	2,864	2,383	*	*	*	*	*
Dependent: \$60,000-\$69,999	Unweighted size	100	79	*	*	*	*	*
	Weighted size	15,422	11,340	*	*	*	*	*
	SE weighted	2,222	1,720	*	*	*	*	*
Dependent: \$70,000-\$79,999	Unweighted size	58	43	*	*	*	*	*
	Weighted size	14,006	10,407	*	*	*	*	*
	SE weighted	2,671	2,443	*	*	*	*	*



Table G.6—Number of students enrolled in postsecondary institutions by family income and student level for private, for-profit, institutions (continued)

		Total	Freshman	Sophomore	Junior	Senior	Unclassified undergraduate	Graduate/first-professional
Dependent: \$80,000-\$99,999	Unweighted size	83	62	*	*	*	*	*
	Weighted size	17,304	12,537	*	*	*	*	*
	SE weighted	2,892	2,395	*	*	*	*	*
Dependent: \$100,000 or more	Unweighted size	78	58	*	*	*	*	*
	Weighted size	15,317	10,275	*	*	*	*	*
	SE weighted	2,624	2,080	*	*	*	*	*
Independent: less than \$5,000	Unweighted size	973	815	65	*	*	72	*
	Weighted size	160,380	132,104	12,192	*	*	11,805	*
	SE weighted	13,383	11,660	2,262	*	*	3,495	*
Independent: \$5,000-\$9,999	Unweighted size	786	625	61	*	*	74	*
	Weighted size	136,574	102,054	12,381	*	*	15,890	*
	SE weighted	10,715	9,141	2,061	*	*	5,174	*
Independent: \$10,000-\$19,999	Unweighted size	944	713	76	*	*	104	*
	Weighted size	163,947	117,692	15,780	*	*	18,709	*
	SE weighted	11,834	10,387	3,076	*	*	5,001	*
Independent: \$20,000-\$29,999	Unweighted size	513	361	41	*	*	72	*
	Weighted size	89,266	60,554	6,913	*	*	13,411	*
	SE weighted	8,075	6,302	1,384	*	*	4,518	*
Independent: \$30,000-\$49,999	Unweighted size	422	255	45	*	*	55	33
	Weighted size	85,645	47,089	9,685	*	*	12,009	11,947
	SE weighted	10,411	6,412	2,210	*	*	3,313	6,680
Independent: \$50,000 or more	Unweighted size	308	152	36	31	*	36	43
	Weighted size	64,822	27,730	6,620	4,618	*	7,066	17,037
	SE weighted	11,096	4,742	2,129	1,590	*	2,439	8,584

\*Insufficient number of cases for reliable estimation. Graduate students are independent students.

Table G.7—Number of students enrolled in postsecondary institutions by family income and student level for  
Public, 2-year institutions

		Total	Freshman	Sophomore	Junior	Senior	Unclassified undergraduate	Graduate/first- professional
TOTAL	Unweighted size	6,167	4,631	1,186	53	*	287	*
	Weighted size	7,631,866	5,057,866	2,083,708	79,338	*	399,392	*
	SE weighted	253,955	172,278	119,974	18,006	*	76,060	*
Dependent: less than \$10,000	Unweighted size	312	262	42	*	*	*	*
	Weighted size	277,759	213,484	57,229	*	*	*	*
	SE weighted	27,166	21,141	12,403	*	*	*	*
Dependent: \$10,000-\$19,999	Unweighted size	313	264	39	*	*	*	*
	Weighted size	289,789	221,490	55,564	*	*	*	*
	SE weighted	25,006	21,703	12,802	*	*	*	*
Dependent: \$20,000-\$29,999	Unweighted size	370	297	57	*	*	*	*
	Weighted size	395,548	276,504	96,705	*	*	*	*
	SE weighted	35,333	25,705	15,187	*	*	*	*
Dependent: \$30,000-\$39,999	Unweighted size	301	236	58	*	*	*	*
	Weighted size	362,805	242,333	108,834	*	*	*	*
	SE weighted	29,089	21,939	17,373	*	*	*	*
Dependent: \$40,000-\$49,999	Unweighted size	337	277	49	*	*	*	*
	Weighted size	369,334	268,755	81,642	*	*	*	*
	SE weighted	31,200	25,328	13,393	*	*	*	*
Dependent: \$50,000-\$59,999	Unweighted size	290	246	35	*	*	*	*
	Weighted size	347,955	282,842	55,549	*	*	*	*
	SE weighted	33,239	28,880	11,557	*	*	*	*
Dependent: \$60,000-\$69,999	Unweighted size	197	167	*	*	*	*	*
	Weighted size	263,297	205,179	*	*	*	*	*
	SE weighted	27,892	23,253	*	*	*	*	*
Dependent: \$70,000-\$79,999	Unweighted size	168	134	*	*	*	*	*
	Weighted size	198,431	137,508	*	*	*	*	*
	SE weighted	20,362	16,407	*	*	*	*	*

Table G.7—Number of students enrolled in postsecondary institutions by family income and student level for public, 2-year institutions (continued)

		Total	Freshman	Sophomore	Junior	Senior	Unclassified undergraduate	Graduate/first-professional
Dependent: \$80,000-\$99,999	Unweighted size	175	135	32	*	*	*	*
	Weighted size	219,130	146,092	62,157	*	*	*	*
	SE weighted	23,449	17,770	14,006	*	*	*	*
Dependent: \$100,000 or more	Unweighted size	171	147	*	*	*	*	*
	Weighted size	216,394	174,882	*	*	*	*	*
	SE weighted	29,137	26,040	*	*	*	*	*
Independent: less than \$5,000	Unweighted size	553	407	115	*	*	*	*
	Weighted size	540,451	338,335	166,389	*	*	*	*
	SE weighted	36,464	25,144	19,846	*	*	*	*
Independent: \$5,000-\$9,999	Unweighted size	545	363	144	*	*	30	*
	Weighted size	652,946	366,979	242,261	*	*	32,392	*
	SE weighted	41,650	30,034	24,977	*	*	11,197	*
Independent: \$10,000-\$19,999	Unweighted size	844	616	177.00	*	*	44	*
	Weighted size	1,087,970	712,963	298,060.00	*	*	68,914	*
	SE weighted	62,502	47,694	30,200.34	*	*	15,484	*
Independent: \$20,000-\$29,999	Unweighted size	567	380	134.00	*	*	46	*
	Weighted size	842,114	514,215	266,150.00	*	*	52,713	*
	SE weighted	58,933	42,996	27,937.15	*	*	14,216	*
Independent: \$30,000-\$49,999	Unweighted size	582	387	143.00	*	*	45	*
	Weighted size	878,948	515,851	273,634.00	*	*	76,567	*
	SE weighted	57,118	37,673	32,267.37	*	*	14,480	*
Independent: \$50,000 or more	Unweighted size	442	313	95.00	*	*	*	*
	Weighted size	688,995	440,454	194,284.00	*	*	*	*
	SE weighted	55,315	39,593	24,741.84	*	*	*	*

\*Insufficient number of cases for reliable estimation. Graduate students are independent students.

Table G.8—Number of students enrolled in postsecondary institutions by family income and tuition for all institutions

		Total	\$0-\$999	\$1,000-\$1,999	\$2,000-\$2,999	\$3,000-\$3,999	\$4,000-\$4,999	\$5,000-\$5,999	\$6,000-\$6,999	\$7,000-\$7,999
TOTAL	Unweighted size	48,389	10,328	7,771	6,223	4,376	3,026	2,058	1,851	1,541
	Weighted size	19,375,435	8,178,051	3,259,839	2,082,292	1,255,703	864,256	485,717	404,459	342,181
	SE weighted	307,958	246,309	120,066	90,392	65,091	70,784	36,198	34,730	29,362
Dependent: less than \$10,000	Unweighted size	2,346	410	446	357	204	141	86	106	84
	Weighted size	743,197	255,644	149,666	88,596	54,523	40,342	19,823	18,635	15,792
	SE weighted	35,256	21,845	14,727	9,557	7,111	6,902	4,013	3,143	3,091
Dependent: \$10,000-\$19,999	Unweighted size	2,560	430	467	386	243	184	99	110	74
	Weighted size	803,725	269,933	161,391	101,186	56,589	47,027	22,564	19,737	14,685
	SE weighted	32,213	22,092	14,305	9,007	6,271	8,170	3,957	3,378	2,934
Dependent: \$20,000-\$29,999	Unweighted size	2,821	442	509	399	317	164	102	105	88
	Weighted size	968,776	333,140	198,439	111,345	76,762	46,384	21,174	19,905	20,082
	SE weighted	41,123	31,963	16,823	9,862	7,817	6,822	3,336	3,326	3,318
Dependent: \$30,000-\$39,999	Unweighted size	2,610	380	438	362	274	153	106	103	68
	Weighted size	907,019	281,229	176,023	117,432	70,159	44,486	21,925	23,028	13,350
	SE weighted	34,572	22,582	15,011	11,745	7,464	6,676	3,613	4,419	2,443
Dependent: \$40,000-\$49,999	Unweighted size	2,772	442	472	393	307	156	96	97	57
	Weighted size	944,908	312,729	176,350	115,321	83,925	45,321	20,987	22,393	14,045
	SE weighted	37,563	26,740	15,223	10,382	8,667	7,613	3,507	4,164	2,669
Dependent: \$50,000-\$59,999	Unweighted size	2,480	336	425	396	269	155	96	77	49
	Weighted size	917,614	277,870	194,064	132,981	67,870	47,404	21,759	15,886	10,483
	SE weighted	38,869	26,366	17,699	12,657	8,197	6,628	3,264	2,523	2,138
Dependent: \$60,000-\$69,999	Unweighted size	2,197	265	305	323	277	117	93	69	54
	Weighted size	767,506	230,568	120,383	106,316	80,453	36,186	23,882	13,473	11,033
	SE weighted	33,426	23,916	12,301	11,531	8,125	6,111	4,107	2,198	2,289
Dependent: \$70,000-\$79,999	Unweighted size	1,706	219	227	282	187	94	72	60	41
	Weighted size	588,248	173,828	89,814	89,994	50,910	27,956	18,513	12,588	11,771
	SE weighted	26,265	18,437	9,491	8,937	6,035	4,110	3,461	2,681	2,282
Dependent: \$80,000-\$99,999	Unweighted size	2,061	217	259	260	234	137	84	71	53
	Weighted size	687,985	178,835	116,960	86,675	57,501	45,958	19,568	16,086	11,476
	SE weighted	30,172	18,278	15,213	9,019	6,211	7,622	3,585	2,587	2,741
Dependent: \$100,000 or more	Unweighted size	2,663	209	270	312	236	165	102	76	74
	Weighted size	887,638	179,310	107,564	119,023	76,283	67,050	24,393	17,146	21,743
	SE weighted	41,408	24,440	13,460	13,530	8,452	11,121	4,274	3,015	3,862
Independent: less than \$5,000	Unweighted size	5,190	863	752	621	426	364	264	286	269
	Weighted size	1,632,652	561,018	273,578	183,831	115,938	85,907	54,174	56,344	49,006
	SE weighted	47,673	33,977	17,311	12,549	9,220	8,636	6,016	7,944	7,906
Independent: \$5,000-\$9,999	Unweighted size	3,804	860	573	498	315	258	191	171	211
	Weighted size	1,542,179	666,551	253,335	168,656	93,717	63,912	42,701	36,124	41,609
	SE weighted	48,220	39,572	16,076	12,291	8,094	5,825	4,936	5,367	5,329
Independent: \$10,000-\$19,999	Unweighted size	5,156	1,512	853	614	359	340	259	219	184
	Weighted size	2,382,658	1,232,929	385,435	219,683	101,072	85,605	57,963	54,357	39,646
	SE weighted	71,974	61,831	22,563	15,607	7,834	7,634	7,179	7,835	5,254
Independent: \$20,000-\$29,999	Unweighted size	3,363	1,124	588	348	229	223	144	124	102
	Weighted size	1,772,544	1,009,055	272,820	132,380	69,707	59,630	31,296	31,980	26,594
	SE weighted	66,106	56,678	18,686	10,200	6,329	5,967	4,550	4,293	3,915
Independent: \$30,000-\$49,999	Unweighted size	3,582	1,337	631	358	271	212	155	101	75
	Weighted size	2,013,442	1,145,057	308,815	156,209	101,073	67,441	49,121	25,484	21,767
	SE weighted	68,578	58,021	19,002	12,495	9,743	6,404	5,691	4,205	3,518
Independent: \$50,000 or more	Unweighted size	3,078	1,282	556	314	228	163	109	76	58
	Weighted size	1,815,344	1,070,355	275,202	152,664	99,221	53,647	35,874	21,293	19,099
	SE weighted	69,323	58,038	17,956	12,128	9,659	5,968	4,595	3,427	3,438

Table G.8—Number of students enrolled in postsecondary institutions by family income and tuition for all institutions (continued)

		\$8,000- \$8,999	\$9,000- \$9,999	\$10,000- \$10,999	\$11,000- \$11,999	\$12,000- \$12,999	\$13,000- \$13,999	\$14,000- \$14,999	\$15,000 or More	Missing
TOTAL	Unweighted size	1,567	1,115	847	673	830	1,043	952	3,676	512
	Weighted size	360,591	259,068	226,576	167,996	180,886	201,513	189,770	700,168	216,369
	SE weighted	37,615	28,707	28,080	26,771	24,080	28,469	31,903	66,092	34,395
Dependent: less than \$10,000	Unweighted size	61	44	37	32	52	37	49	166	34
	Weighted size	13,422	6,855	8,176	6,341	8,478	6,584	8,108	33,638	8,574
	SE weighted	3,083	1,497	1,928	1,454	2,045	1,706	1,840	9,229	2,457
Dependent: \$10,000-\$19,999	Unweighted size	70	67	53	36	42	49	47	174	*
	Weighted size	14,258	14,109	12,440	8,224	7,353	7,475	8,553	30,456	*
	SE weighted	2,960	2,905	3,065	2,553	1,781	1,773	2,258	4,637	*
Dependent: \$20,000-\$29,999	Unweighted size	73	71	65	46	57	81	76	210	*
	Weighted size	19,324	13,013	15,768	9,974	9,472	14,605	15,506	37,241	*
	SE weighted	3,783	2,620	3,553	2,551	2,170	3,399	3,587	6,166	*
Dependent: \$30,000-\$39,999	Unweighted size	80	65	62	49	68	65	81	233	*
	Weighted size	20,262	14,606	12,741	11,588	12,296	13,471	14,448	39,449	*
	SE weighted	3,405	2,951	2,831	3,007	2,893	2,906	3,657	5,404	*
Dependent: \$40,000-\$49,999	Unweighted size	81	72	51	49	56	100	72	251	*
	Weighted size	20,590	15,934	12,428	10,206	9,765	18,615	13,777	44,315	*
	SE weighted	4,295	2,859	2,798	2,525	2,323	4,102	4,029	7,421	*
Dependent: \$50,000-\$59,999	Unweighted size	57	76	38	51	63	84	83	216	*
	Weighted size	18,374	18,916	8,300	11,922	14,664	18,650	16,146	39,120	*
	SE weighted	3,828	4,157	1,948	3,938	3,093	4,195	4,397	5,900	*
Dependent: \$60,000-\$69,999	Unweighted size	59	69	55	37	65	67	65	268	*
	Weighted size	14,426	14,042	13,756	9,697	14,447	13,562	13,058	48,966	*
	SE weighted	3,165	2,811	3,095	2,627	4,044	3,765	3,890	6,367	*
Dependent: \$70,000-\$79,999	Unweighted size	59	*	41	30	43	72	50	197	*
	Weighted size	16,186	*	11,309	9,780	7,580	14,837	9,355	36,293	*
	SE weighted	3,232	*	3,600	2,599	2,087	3,823	2,142	5,165	*
Dependent: \$80,000-\$99,999	Unweighted size	68	52	53	37	57	78	91	295	*
	Weighted size	17,160	10,136	13,151	9,848	12,220	16,785	19,231	51,639	*
	SE weighted	3,127	2,439	4,134	2,568	2,582	3,603	5,294	6,885	*
Dependent: \$100,000 or more	Unweighted size	97	113	69	60	79	87	130	572	*
	Weighted size	27,747	29,620	18,040	15,540	19,881	18,624	21,833	115,163	*
	SE weighted	5,703	8,247	4,278	3,398	3,974	3,517	4,948	15,616	*
Independent: less than \$5,000	Unweighted size	275	138	75	56	72	131	64	432	102
	Weighted size	46,183	26,323	19,492	12,416	14,015	20,716	12,514	73,381	27,816
	SE weighted	7,600	3,412	3,187	2,498	2,656	5,703	2,090	6,650	5,610
Independent: \$5,000-\$9,999	Unweighted size	137	89	49	62	44	49	40	202	55
	Weighted size	28,086	23,976	15,628	14,362	10,511	7,914	7,256	39,291	28,550
	SE weighted	4,506	3,620	3,532	5,618	2,238	2,066	1,485	4,466	10,433
Independent: \$10,000-\$19,999	Unweighted size	206	81	58	47	51	57	48	182	86
	Weighted size	46,451	16,671	17,486	13,443	14,436	10,826	14,962	39,837	31,856
	SE weighted	7,476	2,853	2,876	3,558	2,908	2,304	3,261	5,325	7,527
Independent: \$20,000-\$29,999	Unweighted size	116	60	58	31	*	*	*	95	42
	Weighted size	25,505	18,922	21,205	9,503	*	*	*	22,821	18,831
	SE weighted	3,949	3,188	3,816	2,645	*	*	*	3,641	5,207
Independent: \$30,000-\$49,999	Unweighted size	82	60	53	*	30	33	*	103	38
	Weighted size	19,881	20,152	17,918	*	9,369	6,688	*	26,027	27,629
	SE weighted	3,596	3,432	3,476	*	2,249	1,475	*	3,855	10,057
Independent: \$50,000 or more	Unweighted size	46	33	30	*	*	*	*	80	*
	Weighted size	12,736	9,974	8,738	*	*	*	*	22,531	*
	SE weighted	2,732	2,330	2,108	*	*	*	*	3,389	*

\* Insufficient number of cases for reliable estimation. Graduate students are independent students.

Table G.9—Number of students enrolled in postsecondary institutions by family income and tuition for undergraduate students

		Total	\$0-\$999	\$1,000-\$1,999	\$2,000-\$2,999	\$3,000-\$3,999	\$4,000-\$4,999	\$5,000-\$5,999	\$6,000-\$6,999	\$7,000-\$7,999
TOTAL	Unweighted size	41,467	9,191	6,863	5,600	3,864	2,545	1,729	1,577	1,260
	Weighted size	16,663,457	7,495,161	2,778,715	1,792,623	1,031,958	694,359	367,622	306,716	257,255
	SE weighted	299,076	242,523	113,819	86,065	60,662	65,434	34,889	31,864	27,415
Dependent: less than \$10,000	Unweighted size	2,346	410	446	357	204	141	86	106	84
	Weighted size	743,197	255,644	149,666	88,596	54,523	40,342	19,823	18,635	15,792
	SE weighted	35,256	21,845	14,727	9,557	7,111	6,902	4,013	3,143	3,091
Dependent: \$10,000-\$19,999	Unweighted size	2,560	430	467	386	243	184	99	110	74
	Weighted size	803,725	269,933	161,391	101,186	56,589	47,027	22,564	19,737	14,685
	SE weighted	32,213	22,092	14,305	9,007	6,271	8,170	3,957	3,378	2,934
Dependent: \$20,000-\$29,999	Unweighted size	2,821	442	509	399	317	164	102	105	88
	Weighted size	968,776	333,140	198,439	111,345	76,762	46,384	21,174	19,905	20,082
	SE weighted	41,123	31,963	16,823	9,862	7,817	6,822	3,336	3,326	3,318
Dependent: \$30,000-\$39,999	Unweighted size	2,610	380	438	362	274	153	106	103	68
	Weighted size	907,019	281,229	176,023	117,432	70,159	44,486	21,925	23,028	13,350
	SE weighted	34,572	22,582	15,011	11,745	7,464	6,676	3,613	4,419	2,443
Dependent: \$40,000-\$49,999	Unweighted size	2,772	442	472	393	307	156	96	97	57
	Weighted size	944,908	312,729	176,350	115,321	83,925	45,321	20,987	22,393	14,045
	SE weighted	37,563	26,740	15,223	10,382	8,667	7,613	3,507	4,164	2,669
Dependent: \$50,000-\$59,999	Unweighted size	2,480	336	425	396	269	155	96	77	49
	Weighted size	917,614	277,870	194,064	132,981	67,870	47,404	21,759	15,886	10,483
	SE weighted	38,869	26,366	17,699	12,657	8,197	6,628	3,264	2,523	2,138
Dependent: \$60,000-\$69,999	Unweighted size	2,196	265	305	322	277	117	93	69	54
	Weighted size	766,788	230,568	120,383	105,598	80,453	36,186	23,882	13,473	11,033
	SE weighted	33,417	23,916	12,301	11,485	8,125	6,111	4,107	2,198	2,289
Dependent: \$70,000-\$79,999	Unweighted size	1,705	219	226	282	187	94	72	60	41
	Weighted size	587,592	173,828	89,158	89,994	50,910	27,956	18,513	12,588	11,771
	SE weighted	26,249	18,437	9,474	8,937	6,035	4,110	3,461	2,681	2,282
Dependent: \$80,000-\$99,999	Unweighted size	2,061	217	259	260	234	137	84	71	53
	Weighted size	687,985	178,835	116,960	86,675	57,501	45,958	19,568	16,086	11,476
	SE weighted	30,172	18,278	15,213	9,019	6,211	7,622	3,585	2,587	2,741
Dependent: \$100,000 or more	Unweighted size	2,663	209	270	312	236	165	102	76	74
	Weighted size	887,638	179,310	107,564	119,023	76,283	67,050	24,393	17,146	21,743
	SE weighted	41,408	24,440	13,460	13,530	8,452	11,121	4,274	3,015	3,862
Independent: less than \$5,000	Unweighted size	3,607	791	649	506	331	265	179	210	177
	Weighted size	1,244,098	526,144	232,583	144,553	86,142	59,125	32,244	35,613	28,127
	SE weighted	44,331	33,569	16,452	11,253	8,254	7,534	4,732	6,775	6,686
Independent: \$5,000-\$9,999	Unweighted size	2,878	789	481	405	247	195	138	127	154
	Weighted size	1,240,619	628,132	210,972	130,298	67,804	45,181	23,892	23,319	26,555
	SE weighted	46,282	39,225	14,998	10,801	6,717	4,931	3,607	4,727	4,573
Independent: \$10,000-\$19,999	Unweighted size	3,935	1,352	680	507	280	230	194	160	143
	Weighted size	1,907,421	1,140,604	295,719	171,404	68,446	49,711	32,696	27,806	26,186
	SE weighted	68,621	61,276	20,642	14,371	5,670	5,719	5,901	4,545	4,546
Independent: \$20,000-\$29,999	Unweighted size	2,467	940	447	267	157	165	114	91	69
	Weighted size	1,379,075	897,685	198,181	93,673	37,709	38,096	21,841	17,908	13,401
	SE weighted	62,794	55,626	16,582	8,750	4,228	4,816	4,015	2,992	2,656
Independent: \$30,000-\$49,999	Unweighted size	2,472	1,064	439	255	182	137	101	67	48
	Weighted size	1,478,628	976,142	197,738	100,120	56,999	34,366	24,741	12,572	12,288
	SE weighted	63,010	55,859	15,450	10,141	7,825	4,349	4,127	2,142	2,178
Independent: \$50,000 or more	Unweighted size	1,894	905	350	191	119	87	67	48	*
	Weighted size	1,198,374	833,368	153,524	84,424	39,883	19,766	17,620	10,621	*
	SE weighted	60,670	55,044	13,068	9,280	5,492	3,111	2,936	1,919	*

Table G9—Number of students enrolled in postsecondary institutions by family income and tuition for undergraduate students (continued)

		\$8,000- \$8,999	\$9,000- \$9,999	\$10,000- \$10,999	\$11,000- \$11,999	\$12,000- \$12,999	\$13,000- \$13,999	\$14,000- \$14,999	\$15,000 or More	Missing
TOTAL	Unweighted size	1,179	928	676	573	693	818	827	2,733	411
	Weighted size	277,754	203,378	163,733	136,119	137,677	164,806	157,381	505,533	192,667
	SE weighted	34,317	27,191	25,826	25,624	22,814	26,860	31,266	60,412	33,884
Dependent: less than \$10,000	Unweighted size	61	44	37	32	52	37	49	166	34
	Weighted size	13,422	6,855	8,176	6,341	8,478	6,584	8,108	33,638	8,574
	SE weighted	3,083	1,497	1,928	1,454	2,045	1,706	1,840	9,229	2,457
Dependent: \$10,000-\$19,999	Unweighted size	70	67	53	36	42	49	47	174	*
	Weighted size	14,258	14,109	12,440	8,224	7,353	7,475	8,553	30,456	*
	SE weighted	2,960	2,905	3,065	2,553	1,781	1,773	2,258	4,637	0
Dependent: \$20,000-\$29,999	Unweighted size	73	71	65	46	57	81	76	210	*
	Weighted size	19,324	13,013	15,768	9,974	9,472	14,605	15,506	37,241	*
	SE weighted	3,783	2,620	3,553	2,551	2,170	3,399	3,587	6,166	0
Dependent: \$30,000-\$39,999	Unweighted size	80	65	62	49	68	65	81	233	*
	Weighted size	20,262	14,606	12,741	11,588	12,296	13,471	14,448	39,449	*
	SE weighted	3,405	2,951	2,831	3,007	2,893	2,906	3,657	5,404	0
Dependent: \$40,000-\$49,999	Unweighted size	81	72	51	49	56	100	72	251	*
	Weighted size	20,590	15,934	12,428	10,206	9,765	18,615	13,777	44,315	*
	SE weighted	4,295	2,859	2,798	2,525	2,323	4,102	4,029	7,421	0
Dependent: \$50,000-\$59,999	Unweighted size	57	76	38	51	63	84	83	216	*
	Weighted size	18,374	18,916	8,300	11,922	14,664	18,650	16,146	39,120	*
	SE weighted	3,828	4,157	1,948	3,938	3,093	4,195	4,397	5,900	0
Dependent: \$60,000-\$69,999	Unweighted size	59	69	55	37	65	67	65	268	*
	Weighted size	14,426	14,042	13,756	9,697	14,447	13,562	13,058	48,966	*
	SE weighted	3,165	2,811	3,095	2,627	4,044	3,765	3,890	6,367	0
Dependent: \$70,000-\$79,999	Unweighted size	59	*	41	30	43	72	50	197	*
	Weighted size	16,186	*	11,309	9,780	7,580	14,837	9,355	36,293	*
	SE weighted	3,232	*	3,600	2,599	2,087	3,823	2,142	5,165	0
Dependent: \$80,000-\$99,999	Unweighted size	68	52	53	37	57	78	91	295	*
	Weighted size	17,160	10,136	13,151	9,848	12,220	16,785	19,231	51,639	*
	SE weighted	3,127	2,439	4,134	2,568	2,582	3,603	5,294	6,885	0
Dependent: \$100,000 or more	Unweighted size	97	113	69	60	79	87	130	572	*
	Weighted size	27,747	29,620	18,040	15,540	19,881	18,624	21,833	115,163	*
	SE weighted	5,703	8,247	4,278	3,398	3,974	3,517	4,948	15,616	0
Independent: less than \$5,000	Unweighted size	124	80	44	34	37	42	*	50	63
	Weighted size	22,291	15,352	10,031	6,693	6,455	7,790	*	7,780	19,003
	SE weighted	4,337	2,533	2,085	1,766	1,850	2,869	*	1,455	4,918
Independent: \$5,000-\$9,999	Unweighted size	81	57	*	45	*	*	*	39	39
	Weighted size	14,511	12,299	*	9,159	*	*	*	6,348	25,603
	SE weighted	3,617	2,389	*	5,356	*	*	*	1,233	10,383
Independent: \$10,000-\$19,999	Unweighted size	130	58	*	*	*	*	*	*	67
	Weighted size	27,117	11,324	*	*	*	*	*	*	28,490
	SE weighted	6,028	2,376	*	*	*	*	*	*	7,387
Independent: \$20,000-\$29,999	Unweighted size	74	33	*	*	*	*	*	*	*
	Weighted size	16,044	8,779	*	*	*	*	*	*	*
	SE weighted	3,080	1,947	*	*	*	*	*	*	0
Independent: \$30,000-\$49,999	Unweighted size	43	30	*	*	*	*	*	*	30
	Weighted size	9,834	8,247	*	*	*	*	*	*	24,908
	SE weighted	2,341	1,921	*	*	*	*	*	*	9,987
Independent: \$50,000 or more	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	0

\*Insufficient number of cases for reliable estimation. Graduate students are independent students.

Table G.10—Number of students enrolled in postsecondary institutions by family income and tuition for graduate/first-professional students

		Total	\$0-\$999	\$1,000-\$1,999	\$2,000-\$2,999	\$3,000-\$3,999	\$4,000-\$4,999	\$5,000-\$5,999	\$6,000-\$6,999	\$7,000-\$7,999
TOTAL	Unweighted size	6,922	1,137	908	623	512	481	329	274	281
	Weighted size	2,711,978	682,890	481,124	289,669	223,745	169,897	118,095	97,743	84,926
	SE weighted	82,544	36,048	25,216	16,726	16,950	13,882	9,773	13,749	9,026
Dependent: less than \$10,000	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$10,000-\$19,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$20,000-\$29,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$30,000-\$39,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$40,000-\$49,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$50,000-\$59,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$60,000-\$69,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$70,000-\$79,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$80,000-\$99,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$100,000 or more	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: less than \$5,000	Unweighted size	1,583	72	103	115	95	99	85	76	92
	Weighted size	388,554	34,874	40,995	39,278	29,796	26,782	21,930	20,731	20,879
	SE weighted	19,568	4,920	5,087	5,129	4,141	3,795	3,720	4,212	4,127
Independent: \$5,000-\$9,999	Unweighted size	926	71	92	93	68	63	53	44	57
	Weighted size	301,560	38,419	42,363	38,358	25,913	18,731	18,809	12,805	15,054
	SE weighted	14,066	4,920	5,106	5,114	3,826	2,955	3,294	2,556	2,822
Independent: \$10,000-\$19,999	Unweighted size	1,221	160	173	107	79	110	65	59	41
	Weighted size	475,237	92,325	89,716	48,279	32,626	35,894	25,267	26,551	13,460
	SE weighted	22,302	7,953	8,294	5,694	5,362	4,716	4,242	6,441	2,548
Independent: \$20,000-\$29,999	Unweighted size	896	184	141	81	72	58	30	33	33
	Weighted size	393,469	111,370	74,639	38,707	31,998	21,534	9,455	14,072	13,193
	SE weighted	20,036	10,324	7,803	4,967	4,602	3,278	2,145	3,035	2,930
Independent: \$30,000-\$49,999	Unweighted size	1,110	273	192	103	89	75	54	34	*
	Weighted size	534,814	168,915	111,077	56,089	44,074	33,075	24,380	12,912	*
	SE weighted	25,380	14,257	10,090	6,553	5,747	4,820	3,908	3,537	*
Independent: \$50,000 or more	Unweighted size	1,184	377	206	123	109	76	42	*	31
	Weighted size	616,970	236,987	121,678	68,240	59,338	33,881	18,254	*	12,861
	SE weighted	29,943	16,806	11,174	7,279	7,741	5,163	3,543	*	2,869



Table G.10—Number of students enrolled in postsecondary institutions by family income and tuition for graduate/first-professional students (continued)

		\$8,000- \$8,999	\$9,000- \$9,999	\$10,000- \$10,999	\$11,000- \$11,999	\$12,000- \$12,999	\$13,000- \$13,999	\$14,000- \$14,999	\$15,000 or More	Missing
TOTAL	Unweighted size	388	187	171	100	137	225	125	943	101
	Weighted size	82,837	55,690	62,843	31,877	43,209	36,707	32,389	194,635	23,702
	SE weighted	15,547	6,888	9,111	5,994	6,791	9,983	5,664	17,478	4,609
Dependent: less than \$10,000	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$10,000-\$19,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$20,000-\$29,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$30,000-\$39,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$40,000-\$49,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$50,000-\$59,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$60,000-\$69,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$70,000-\$79,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$80,000-\$99,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$100,000 or more	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: less than \$5,000	Unweighted size	151	58	31	*	35	89	39	382	39
	Weighted size	23,892	10,971	9,461	*	7,560	12,926	8,342	65,601	8,813
	SE weighted	6,268	2,167	2,450	*	1,888	4,960	1,768	6,431	2,529
Independent: \$5,000-\$9,999	Unweighted size	56	32	*	*	*	32	*	163	*
	Weighted size	13,575	11,677	*	*	*	4,982	*	32,943	*
	SE weighted	2,682	2,779	*	*	*	1,904	*	4,336	*
Independent: \$10,000-\$19,999	Unweighted size	76	*	34	*	30	41	33	153	*
	Weighted size	19,334	*	12,172	*	10,484	7,493	11,314	33,850	*
	SE weighted	4,445	*	2,558	*	2,674	2,138	2,871	4,968	*
Independent: \$20,000-\$29,999	Unweighted size	42	*	36	*	*	*	*	82	*
	Weighted size	9,461	*	15,049	*	*	*	*	19,289	*
	SE weighted	2,423	*	3,401	*	*	*	*	3,584	*
Independent: \$30,000-\$49,999	Unweighted size	39	30	*	*	*	*	*	95	*
	Weighted size	10,047	11,905	*	*	*	*	*	23,986	*
	SE weighted	2,746	2,897	*	*	*	*	*	3,775	*
Independent: \$50,000 or more	Unweighted size	*	*	*	*	*	*	*	68	*
	Weighted size	*	*	*	*	*	*	*	18,966	*
	SE weighted	*	*	*	*	*	*	*	3,296	*

\*Insufficient number of cases for reliable estimation. Graduate students are independent students.

Table G.11—Number of students enrolled in postsecondary institutions by family income and tuition for freshman/first-year students

		Total	\$0-\$999	\$1,000-\$1,999	\$2,000-\$2,999	\$3,000-\$3,999	\$4,000-\$4,999	\$5,000-\$5,999	\$6,000-\$6,999	\$7,000-\$7,999
TOTAL	Unweighted size	24,326	5,829	3,815	2,993	2,211	1,512	1,157	1,076	858
	Weighted size	8,390,721	4,527,794	1,322,674	665,148	353,724	278,776	174,976	157,642	130,613
	SE weighted	190,091	156,482	72,882	44,292	26,057	28,147	23,216	23,094	18,407
Dependent: less than \$10,000	Unweighted size	1,501	306	294	212	114	81	63	80	60
	Weighted size	412,584	185,387	81,738	40,392	20,055	14,713	10,512	10,758	7,712
	SE weighted	23,779	16,492	10,568	5,585	3,599	2,597	2,276	2,079	1,733
Dependent: \$10,000-\$19,999	Unweighted size	1,684	322	312	237	163	121	67	88	63
	Weighted size	449,238	184,539	99,291	44,089	27,215	21,265	10,265	12,250	9,757
	SE weighted	24,432	17,205	11,829	4,833	4,001	4,113	1,878	2,436	2,314
Dependent: \$20,000-\$29,999	Unweighted size	1,779	316	350	234	209	97	77	79	53
	Weighted size	509,355	208,968	123,578	42,340	31,541	19,027	10,612	11,049	9,677
	SE weighted	27,872	21,431	12,751	4,828	3,645	3,078	1,889	1,921	2,221
Dependent: \$30,000-\$39,999	Unweighted size	1,615	260	284	218	182	88	74	59	45
	Weighted size	455,046	179,945	90,872	45,978	28,216	16,527	11,361	8,969	6,405
	SE weighted	23,910	17,007	9,826	5,723	3,739	2,915	1,904	2,263	1,433
Dependent: \$40,000-\$49,999	Unweighted size	1,777	324	305	242	193	95	67	62	36
	Weighted size	504,976	216,079	99,109	43,747	34,370	17,104	9,644	10,006	6,680
	SE weighted	27,481	21,318	10,490	5,162	4,841	3,990	1,874	2,379	1,486
Dependent: \$50,000-\$59,999	Unweighted size	1,535	232	283	228	177	89	61	54	*
	Weighted size	496,748	197,790	123,530	52,579	27,518	18,517	9,566	7,366	*
	SE weighted	30,334	22,178	15,523	8,429	3,569	2,903	1,893	1,448	*
Dependent: \$60,000-\$69,999	Unweighted size	1,343	190	196	197	163	69	58	46	38
	Weighted size	381,634	166,204	61,791	44,786	24,690	12,209	9,914	5,392	6,083
	SE weighted	24,559	19,839	9,248	7,038	3,035	2,134	2,218	1,040	1,454
Dependent: \$70,000-\$79,999	Unweighted size	1,059	162	134	186	124	58	43	43	*
	Weighted size	285,152	114,663	42,249	40,071	16,574	12,683	6,654	6,274	*
	SE weighted	18,133	14,736	6,664	5,124	2,382	2,426	1,475	1,506	*
Dependent: \$80,000-\$99,999	Unweighted size	1,280	146	164	154	154	76	60	50	34
	Weighted size	316,294	113,866	53,618	34,561	20,904	14,537	9,635	7,011	4,463
	SE weighted	19,590	14,504	7,892	6,580	3,092	2,628	1,761	1,459	1,096
Dependent: \$100,000 or more	Unweighted size	1,619	157	177	174	136	88	73	53	46
	Weighted size	406,548	137,119	55,985	39,704	22,564	21,686	10,226	8,300	8,939
	SE weighted	28,494	23,056	9,827	5,850	2,973	4,649	1,893	1,858	1,921
Independent: less than \$5,000	Unweighted size	2,067	491	323	253	163	174	128	159	128
	Weighted size	605,751	296,468	103,313	49,605	25,896	29,399	17,253	22,256	17,263
	SE weighted	29,197	22,594	12,043	7,059	3,593	5,209	3,585	4,964	5,203
Independent: \$5,000-\$9,999	Unweighted size	1,539	479	194	161	103	122	99	86	123
	Weighted size	571,037	348,057	62,513	39,949	14,823	19,360	13,471	13,480	15,844
	SE weighted	32,402	27,675	7,776	7,473	2,440	2,990	2,888	4,087	3,702
Independent: \$10,000-\$19,999	Unweighted size	2,183	831	312	216	131	133	137	110	96
	Weighted size	1,012,851	682,252	128,976	57,810	21,741	21,824	18,969	17,044	13,739
	SE weighted	50,327	45,842	14,139	8,593	2,905	4,354	5,384	3,918	2,911
Independent: \$20,000-\$29,999	Unweighted size	1,275	530	184	119	82	94	71	50	47
	Weighted size	699,366	500,816	83,650	33,323	12,445	16,498	11,667	8,225	7,362
	SE weighted	44,401	39,406	12,074	5,630	2,104	3,019	3,455	2,046	1,968
Independent: \$30,000-\$49,999	Unweighted size	1,168	588	158	98	72	72	47	35	*
	Weighted size	688,375	523,777	58,743	31,459	15,406	12,429	9,209	5,346	*
	SE weighted	39,398	37,575	8,169	5,880	3,709	2,469	3,262	1,443	*
Independent: \$50,000 or more	Unweighted size	902	495	145	64	45	55	32	*	*
	Weighted size	595,766	471,864	53,718	24,755	9,766	10,998	6,018	*	*
	SE weighted	41,300	39,937	7,125	6,099	2,125	2,127	1,767	*	*

Table G.11—Number of students enrolled in postsecondary institutions by family income and tuition for freshman/first-year students (continued)

		\$8,000- \$8,999	\$9,000- \$9,999	\$10,000- \$10,999	\$11,000- \$11,999	\$12,000- \$12,999	\$13,000- \$13,999	\$14,000- \$14,999	\$15,000 or More	Missing
TOTAL	Unweighted size	697	526	338	316	361	436	447	1,446	308
	Weighted size	128,988	78,315	54,408	53,770	47,074	52,192	59,885	156,982	147,760
	SE weighted	20,753	11,109	12,301	14,279	9,343	9,388	12,383	19,478	31,068
Dependent: less than \$10,000	Unweighted size	47	*	*	*	30	*	*	69	*
	Weighted size	7,830	*	*	*	3,290	*	*	7,775	*
	SE weighted	1,965	*	*	*	918	*	*	2,276	*
Dependent: \$10,000-\$19,999	Unweighted size	39	38	*	*	30	*	*	88	*
	Weighted size	4,466	5,625	*	*	3,814	*	*	7,989	*
	SE weighted	930	1,469	*	*	1,043	*	*	1,329	*
Dependent: \$20,000-\$29,999	Unweighted size	36	46	32	*	31	44	*	106	*
	Weighted size	8,043	6,268	4,941	*	3,647	4,733	*	11,361	*
	SE weighted	1,831	1,371	1,740	*	999	1,231	*	1,914	*
Dependent: \$30,000-\$39,999	Unweighted size	47	*	35	*	42	34	48	128	*
	Weighted size	8,925	*	4,599	*	5,308	3,658	5,545	13,790	*
	SE weighted	1,846	*	1,133	*	1,240	966	1,297	2,068	*
Dependent: \$40,000-\$49,999	Unweighted size	47	58	*	*	*	65	46	138	*
	Weighted size	9,760	10,837	*	*	*	7,316	6,045	13,938	*
	SE weighted	2,205	2,186	*	*	*	2,399	1,529	2,588	*
Dependent: \$50,000-\$59,999	Unweighted size	33	40	*	*	34	47	50	119	*
	Weighted size	7,443	6,021	*	*	5,900	6,255	6,649	13,141	*
	SE weighted	2,032	1,656	*	*	1,885	1,513	2,076	2,301	*
Dependent: \$60,000-\$69,999	Unweighted size	35	46	*	*	33	31	35	152	*
	Weighted size	6,121	6,638	*	*	3,965	3,813	4,764	16,429	*
	SE weighted	1,783	1,350	*	*	1,210	1,190	1,632	2,584	*
Dependent: \$70,000-\$79,999	Unweighted size	34	*	*	*	*	41	*	104	*
	Weighted size	6,491	*	*	*	*	5,465	*	11,757	*
	SE weighted	1,972	*	*	*	*	1,438	*	1,898	*
Dependent: \$80,000-\$99,999	Unweighted size	36	40	*	*	*	42	53	187	*
	Weighted size	5,973	5,699	*	*	*	4,570	7,117	20,676	*
	SE weighted	1,310	1,359	*	*	*	981	1,906	3,052	*
Dependent: \$100,000 or more	Unweighted size	56	71	46	32	39	56	83	324	*
	Weighted size	11,410	10,519	8,507	5,245	4,862	6,642	11,344	36,813	*
	SE weighted	2,891	3,491	3,048	1,337	1,195	1,459	2,732	5,308	*
Independent: less than \$5,000	Unweighted size	76	37	*	*	*	*	*	*	47
	Weighted size	12,096	5,188	*	*	*	*	*	*	14,816
	SE weighted	3,407	1,123	*	*	*	*	*	*	4,546
Independent: \$5,000-\$9,999	Unweighted size	57	*	*	30	*	*	*	*	31
	Weighted size	9,136	*	*	5,780	*	*	*	*	21,858
	SE weighted	2,332	*	*	5,230	*	*	*	*	10,162
Independent: \$10,000-\$19,999	Unweighted size	86	*	*	*	*	*	*	*	48
	Weighted size	17,190	*	*	*	*	*	*	*	19,842
	SE weighted	5,158	*	*	*	*	*	*	*	6,024
Independent: \$20,000-\$29,999	Unweighted size	37	*	*	*	*	*	*	*	*
	Weighted size	7,418	*	*	*	*	*	*	*	*
	SE weighted	2,302	*	*	*	*	*	*	*	*
Independent: \$30,000-\$49,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$50,000 or more	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*

\*Insufficient number of cases for reliable estimation. Graduate students are independent students.

Table G.12—Number of students enrolled in postsecondary institutions by family income and tuition for  
sophomore/second-year students

		Total	\$0-\$999	\$1,000- \$1,999	\$2,000- \$2,999	\$3,000- \$3,999	\$4,000- \$4,999	\$5,000- \$5,999	\$6,000- \$6,999	\$7,000- \$7,999
TOTAL	Unweighted size	5,769	1,395	1,028	736	522	327	190	176	152
	Weighted size	3,623,405	1,803,633	627,447	345,496	212,070	122,304	58,660	50,031	44,008
	SE weighted	126,923	107,057	41,352	25,737	17,874	15,460	8,646	6,622	6,954
Dependent: less than \$10,000	Unweighted size	366	58	66	60	39	*	*	*	*
	Weighted size	163,436	48,394	36,261	19,022	14,160	*	*	*	*
	SE weighted	14,968	10,949	6,790	3,265	3,340	*	*	*	*
Dependent: \$10,000-\$19,999	Unweighted size	333	51	73	51	32	*	*	*	*
	Weighted size	154,590	52,037	31,193	20,121	12,048	*	*	*	*
	SE weighted	14,436	11,783	5,001	3,583	2,287	*	*	*	*
Dependent: \$20,000-\$29,999	Unweighted size	409	63	76	46	42	*	*	*	*
	Weighted size	211,026	84,899	40,698	18,459	17,023	*	*	*	*
	SE weighted	16,996	14,463	6,384	3,267	3,442	*	*	*	*
Dependent: \$30,000-\$39,999	Unweighted size	411	69	68	53	33	*	*	*	*
	Weighted size	228,929	80,648	45,438	29,213	16,858	*	*	*	*
	SE weighted	18,894	14,537	8,176	6,584	4,469	*	*	*	*
Dependent: \$40,000-\$49,999	Unweighted size	354	54	61	52	32	*	*	*	*
	Weighted size	185,278	60,563	34,319	27,833	13,114	*	*	*	*
	SE weighted	15,235	11,693	7,288	5,248	2,494	*	*	*	*
Dependent: \$50,000-\$59,999	Unweighted size	331	52	55	41	36	*	*	*	*
	Weighted size	164,959	53,050	28,920	20,828	15,256	*	*	*	*
	SE weighted	14,081	10,479	5,671	4,007	3,146	*	*	*	*
Dependent: \$60,000-\$69,999	Unweighted size	298	33	36	52	39	*	*	*	*
	Weighted size	153,840	39,245	23,046	26,854	20,011	*	*	*	*
	SE weighted	14,060	11,285	5,390	4,608	3,456	*	*	*	*
Dependent: \$70,000-\$79,999	Unweighted size	228	*	33	31	30	*	*	*	*
	Weighted size	120,467	*	18,197	15,829	18,030	*	*	*	*
	SE weighted	12,439	*	4,240	3,622	4,418	*	*	*	*
Dependent: \$80,000-\$99,999	Unweighted size	289	34	42	39	*	*	*	*	*
	Weighted size	159,888	41,584	38,431	18,202	*	*	*	*	*
	SE weighted	15,932	9,210	11,351	3,265	*	*	*	*	*
Dependent: \$100,000 or more	Unweighted size	331	*	37	39	30	*	*	*	*
	Weighted size	160,408	*	23,260	26,973	14,607	*	*	*	*
	SE weighted	12,779	*	4,620	6,114	3,380	*	*	*	*
Independent: less than \$5,000	Unweighted size	470	135	98	56	37	*	*	*	*
	Weighted size	262,403	141,600	50,079	22,075	12,189	*	*	*	*
	SE weighted	21,005	18,220	7,579	3,981	4,000	*	*	*	*
Independent: \$5,000-\$9,999	Unweighted size	413	135	81	54	38	*	*	*	*
	Weighted size	314,138	185,203	67,037	23,964	10,833	*	*	*	*
	SE weighted	25,620	21,335	10,696	4,682	2,479	*	*	*	*
Independent: \$10,000-\$19,999	Unweighted size	541	205	107	76	37	31	*	*	*
	Weighted size	404,032	267,656	65,948	30,428	9,919	8,155	*	*	*
	SE weighted	31,058	29,207	10,980	5,134	1,975	1,770	*	*	*
Independent: \$20,000-\$29,999	Unweighted size	354	151	68	35	*	*	*	*	*
	Weighted size	332,670	251,072	39,447	15,174	*	*	*	*	*
	SE weighted	28,505	26,832	6,980	3,668	*	*	*	*	*
Independent: \$30,000-\$49,999	Unweighted size	388	182	76	33	35	*	*	*	*
	Weighted size	359,587	253,025	53,726	19,718	13,844	*	*	*	*
	SE weighted	33,132	29,176	9,499	5,611	4,552	*	*	*	*
Independent: \$50,000 or more	Unweighted size	253	126	51	*	*	*	*	*	*
	Weighted size	247,754	188,418	31,447	*	*	*	*	*	*
	SE weighted	25,383	22,034	7,780	*	*	*	*	*	*

Table G.12—Number of students enrolled in postsecondary institutions by family income and tuition for sophomore/second-year students (continued)

		\$8,000- \$8,999	\$9,000- \$9,999	\$10,000- \$10,999	\$11,000- \$11,999	\$12,000- \$12,999	\$13,000- \$13,999	\$14,000- \$14,999	\$15,000 or More	Missing
TOTAL	Unweighted size	148	142	90	96	126	107	114	384	36
	Weighted size	42,458	40,652	30,323	30,075	32,301	29,990	27,997	103,651	22,309
	SE weighted	6,451	6,925	6,241	7,606	6,302	6,381	6,818	14,047	7,370
Dependent: less than \$10,000	Unweighted size	*	*	*	*	*	*	*	37	*
	Weighted size	*	*	*	*	*	*	*	10,207	*
	SE weighted	*	*	*	*	*	*	*	2,594	*
Dependent: \$10,000-\$19,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$20,000-\$29,999	Unweighted size	*	*	*	*	*	*	*	36	*
	Weighted size	*	*	*	*	*	*	*	9,412	*
	SE weighted	*	*	*	*	*	*	*	2,364	*
Dependent: \$30,000-\$39,999	Unweighted size	*	*	*	*	*	*	*	43	*
	Weighted size	*	*	*	*	*	*	*	10,046	*
	SE weighted	*	*	*	*	*	*	*	1,869	*
Dependent: \$40,000-\$49,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$50,000-\$59,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$60,000-\$69,999	Unweighted size	*	*	*	*	*	*	*	34	*
	Weighted size	*	*	*	*	*	*	*	9,607	*
	SE weighted	*	*	*	*	*	*	*	1,956	*
Dependent: \$70,000-\$79,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$80,000-\$99,999	Unweighted size	*	*	*	*	*	*	*	32	*
	Weighted size	*	*	*	*	*	*	*	8,280	*
	SE weighted	*	*	*	*	*	*	*	1,804	*
Dependent: \$100,000 or more	Unweighted size	*	*	*	*	*	*	*	77	*
	Weighted size	*	*	*	*	*	*	*	24,125	*
	SE weighted	*	*	*	*	*	*	*	3,958	*
Independent: less than \$5,000	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$5,000-\$9,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$10,000-\$19,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$20,000-\$29,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$30,000-\$49,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$50,000 or more	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*

\*Insufficient number of cases for reliable estimation. Graduate students are independent students.

Table G.13—Number of students enrolled in postsecondary institutions by family income and tuition for junior/third-year students

		Total	\$0-\$999	\$1,000-\$1,999	\$2,000-\$2,999	\$3,000-\$3,999	\$4,000-\$4,999	\$5,000-\$5,999	\$6,000-\$6,999	\$7,000-\$7,999
TOTAL	Unweighted size	4,698	551	866	764	521	315	176	137	81
	Weighted size	1,816,640	284,617	343,388	321,287	214,817	133,677	61,965	44,417	28,419
	SE weighted	47,960	24,109	20,366	17,665	17,135	16,742	7,982	6,030	4,052
Dependent: less than \$10,000	Unweighted size	222	*	45	37	*	*	*	*	*
	Weighted size	80,439	*	17,097	13,244	*	*	*	*	*
	SE weighted	6,726	*	2,944	2,378	*	*	*	*	*
Dependent: \$10,000-\$19,999	Unweighted size	263	*	45	46	*	*	*	*	*
	Weighted size	92,607	*	17,925	18,177	*	*	*	*	*
	SE weighted	7,502	*	3,229	3,039	*	*	*	*	*
Dependent: \$20,000-\$29,999	Unweighted size	318	*	45	60	44	*	*	*	*
	Weighted size	125,147	*	17,727	26,899	19,093	*	*	*	*
	SE weighted	9,151	*	3,270	4,139	3,397	*	*	*	*
Dependent: \$30,000-\$39,999	Unweighted size	290	*	36	42	39	*	*	*	*
	Weighted size	105,975	*	15,273	18,270	15,969	*	*	*	*
	SE weighted	7,675	*	2,826	2,781	3,061	*	*	*	*
Dependent: \$40,000-\$49,999	Unweighted size	334	*	62	54	42	*	*	*	*
	Weighted size	127,474	*	23,735	24,795	19,582	*	*	*	*
	SE weighted	8,555	*	3,785	3,436	3,513	*	*	*	*
Dependent: \$50,000-\$59,999	Unweighted size	305	*	50	69	*	*	*	*	*
	Weighted size	124,279	*	22,500	31,914	*	*	*	*	*
	SE weighted	8,453	*	3,684	4,358	*	*	*	*	*
Dependent: \$60,000-\$69,999	Unweighted size	275	*	35	36	40	*	*	*	*
	Weighted size	109,757	*	15,696	16,652	18,098	*	*	*	*
	SE weighted	7,738	*	3,081	2,836	3,131	*	*	*	*
Dependent: \$70,000-\$79,999	Unweighted size	215	*	35	*	*	*	*	*	*
	Weighted size	90,438	*	15,961	*	*	*	*	*	*
	SE weighted	7,472	*	3,131	*	*	*	*	*	*
Dependent: \$80,000-\$99,999	Unweighted size	256	*	*	*	33	*	*	*	*
	Weighted size	103,946	*	*	*	14,901	*	*	*	*
	SE weighted	7,652	*	*	*	2,899	*	*	*	*
Dependent: \$100,000 or more	Unweighted size	339	*	*	48	34	*	*	*	*
	Weighted size	147,935	*	*	24,657	18,665	*	*	*	*
	SE weighted	10,795	*	*	4,153	3,946	*	*	*	*
Independent: less than \$5,000	Unweighted size	358	36	86	75	40	*	*	*	*
	Weighted size	118,449	18,594	26,808	27,636	14,217	*	*	*	*
	SE weighted	8,410	5,067	3,249	3,569	2,592	*	*	*	*
Independent: \$5,000-\$9,999	Unweighted size	312	46	64	64	43	*	*	*	*
	Weighted size	112,999	22,999	23,776	21,816	17,990	*	*	*	*
	SE weighted	8,861	5,951	3,171	3,185	3,256	*	*	*	*
Independent: \$10,000-\$19,999	Unweighted size	378	82	98	63	42	*	*	*	*
	Weighted size	139,461	38,250	37,461	23,820	14,766	*	*	*	*
	SE weighted	9,732	6,151	4,607	3,538	2,454	*	*	*	*
Independent: \$20,000-\$29,999	Unweighted size	264	64	80	*	*	*	*	*	*
	Weighted size	102,979	34,012	30,733	*	*	*	*	*	*
	SE weighted	9,010	5,937	4,196	*	*	*	*	*	*
Independent: \$30,000-\$49,999	Unweighted size	339	91	85	50	32	*	*	*	*
	Weighted size	134,499	45,921	32,926	19,833	11,168	*	*	*	*
	SE weighted	11,019	6,675	4,750	3,311	2,376	*	*	*	*
Independent: \$50,000 or more	Unweighted size	230	60	52	38	*	*	*	*	*
	Weighted size	100,256	38,414	22,140	14,665	*	*	*	*	*
	SE weighted	9,866	7,291	3,580	2,593	*	*	*	*	*

Table G.13—Number of students enrolled in postsecondary institutions by family income and tuition for junior/third-year students (continued)

		\$8,000- \$8,999	\$9,000- \$9,999	\$10,000- \$10,999	\$11,000- \$11,999	\$12,000- \$12,999	\$13,000- \$13,999	\$14,000- \$14,999	\$15,000 or More	Missing
TOTAL	Unweighted size	138	110	121	71	107	138	147	428	*
	Weighted size	47,407	36,038	40,677	23,408	29,065	42,515	39,119	113,342	*
	SE weighted	8,930	6,924	6,621	4,993	5,957	8,302	8,795	14,458	*
Dependent: less than \$10,000	Unweighted size	*	*	*	*	*	*	*	33	*
	Weighted size	*	*	*	*	*	*	*	7,469	*
	SE weighted	*	*	*	*	*	*	*	1,590	*
Dependent: \$10,000-\$19,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$20,000-\$29,999	Unweighted size	*	*	*	*	*	*	*	31	*
	Weighted size	*	*	*	*	*	*	*	7,078	*
	SE weighted	*	*	*	*	*	*	*	1,626	*
Dependent: \$30,000-\$39,999	Unweighted size	*	*	*	*	*	*	*	31	*
	Weighted size	*	*	*	*	*	*	*	8,513	*
	SE weighted	*	*	*	*	*	*	*	2,385	*
Dependent: \$40,000-\$49,999	Unweighted size	*	*	*	*	*	*	*	42	*
	Weighted size	*	*	*	*	*	*	*	10,896	*
	SE weighted	*	*	*	*	*	*	*	2,303	*
Dependent: \$50,000-\$59,999	Unweighted size	*	*	*	*	*	*	*	30	*
	Weighted size	*	*	*	*	*	*	*	8,582	*
	SE weighted	*	*	*	*	*	*	*	2,129	*
Dependent: \$60,000-\$69,999	Unweighted size	*	*	*	*	*	*	*	40	*
	Weighted size	*	*	*	*	*	*	*	10,739	*
	SE weighted	*	*	*	*	*	*	*	2,315	*
Dependent: \$70,000-\$79,999	Unweighted size	*	*	*	*	*	*	*	36	*
	Weighted size	*	*	*	*	*	*	*	8,949	*
	SE weighted	*	*	*	*	*	*	*	1,695	*
Dependent: \$80,000-\$99,999	Unweighted size	*	*	*	*	*	*	*	36	*
	Weighted size	*	*	*	*	*	*	*	10,081	*
	SE weighted	*	*	*	*	*	*	*	2,055	*
Dependent: \$100,000 or more	Unweighted size	*	*	*	*	*	*	*	84	*
	Weighted size	*	*	*	*	*	*	*	26,963	*
	SE weighted	*	*	*	*	*	*	*	4,626	*
Independent: less than \$5,000	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$5,000-\$9,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$10,000-\$19,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$20,000-\$29,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$30,000-\$49,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$50,000 or more	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*

\* Insufficient number of cases for reliable estimation. Graduate students are independent students.

Table G.14—Number of students enrolled in postsecondary institutions by family income and tuition for senior/fourth- or fifth-year students

		Total	\$0-\$999	\$1,000-\$1,999	\$2,000-\$2,999	\$3,000-\$3,999	\$4,000-\$4,999	\$5,000-\$5,999	\$6,000-\$6,999	\$7,000-\$7,999
TOTAL	Unweighted size	5,134	730	952	942	525	323	159	145	103
	Weighted size	2,093,699	348,086	422,155	415,049	234,154	145,729	61,663	48,446	37,686
	SE weighted	55,473	21,239	25,465	25,963	17,510	16,655	7,357	6,495	4,927
Dependent: less than \$10,000	Unweighted size	206	*	33	41	*	*	*	*	*
	Weighted size	75,557	*	12,785	14,358	*	*	*	*	*
	SE weighted	8,100	*	2,674	2,707	*	*	*	*	*
Dependent: \$10,000-\$19,999	Unweighted size	239	*	33	47	*	*	*	*	*
	Weighted size	85,705	*	11,998	17,608	*	*	*	*	*
	SE weighted	6,209	*	2,227	3,119	*	*	*	*	*
Dependent: \$20,000-\$29,999	Unweighted size	264	*	35	49	*	*	*	*	*
	Weighted size	99,729	*	15,480	21,565	*	*	*	*	*
	SE weighted	7,867	*	2,935	3,881	*	*	*	*	*
Dependent: \$30,000-\$39,999	Unweighted size	261	*	47	43	*	*	*	*	*
	Weighted size	100,552	*	21,413	19,677	*	*	*	*	*
	SE weighted	7,430	*	3,721	3,455	*	*	*	*	*
Dependent: \$40,000-\$49,999	Unweighted size	258	*	42	39	38	*	*	*	*
	Weighted size	99,572	*	18,824	17,245	16,695	*	*	*	*
	SE weighted	7,736	*	3,626	3,100	2,868	*	*	*	*
Dependent: \$50,000-\$59,999	Unweighted size	287	*	35	56	*	*	*	*	*
	Weighted size	120,525	*	18,192	25,833	*	*	*	*	*
	SE weighted	8,038	*	3,390	3,725	*	*	*	*	*
Dependent: \$60,000-\$69,999	Unweighted size	262	*	38	34	34	*	*	*	*
	Weighted size	111,099	*	19,850	16,659	17,413	*	*	*	*
	SE weighted	8,354	*	3,424	2,899	3,311	*	*	*	*
Dependent: \$70,000-\$79,999	Unweighted size	177	*	*	31	*	*	*	*	*
	Weighted size	76,073	*	*	17,229	*	*	*	*	*
	SE weighted	6,994	*	*	3,701	*	*	*	*	*
Dependent: \$80,000-\$99,999	Unweighted size	216	*	*	40	*	*	*	*	*
	Weighted size	94,918	*	*	21,443	*	*	*	*	*
	SE weighted	7,224	*	*	3,295	*	*	*	*	*
Dependent: \$100,000 or more	Unweighted size	348	*	36	49	35	*	*	*	*
	Weighted size	159,637	*	17,207	27,293	20,206	*	*	*	*
	SE weighted	12,144	*	3,308	5,062	4,412	*	*	*	*
Independent: less than \$5,000	Unweighted size	557	75	123	109	83	32	*	*	*
	Weighted size	198,898	31,071	46,893	42,050	32,447	11,600	*	*	*
	SE weighted	11,058	4,195	5,031	4,890	4,661	2,611	*	*	*
Independent: \$5,000-\$9,999	Unweighted size	441	64	116	104	47	*	*	*	*
	Weighted size	168,950	26,997	47,963	40,868	19,681	*	*	*	*
	SE weighted	9,815	3,848	5,269	4,630	3,485	*	*	*	*
Independent: \$10,000-\$19,999	Unweighted size	556	123	120	130	51	30	*	*	*
	Weighted size	223,882	60,326	50,789	54,528	19,674	10,334	*	*	*
	SE weighted	12,365	6,144	5,735	6,379	2,907	2,221	*	*	*
Independent: \$20,000-\$29,999	Unweighted size	353	97	81	56	31	*	*	*	*
	Weighted size	143,596	41,773	35,805	23,606	13,994	*	*	*	*
	SE weighted	9,130	4,968	4,754	3,358	2,635	*	*	*	*
Independent: \$30,000-\$49,999	Unweighted size	373	94	88	59	35	*	*	*	*
	Weighted size	169,349	52,727	41,725	25,588	14,638	*	*	*	*
	SE weighted	12,732	8,219	5,288	4,201	2,675	*	*	*	*
Independent: \$50,000 or more	Unweighted size	336	121	78	55	*	*	*	*	*
	Weighted size	165,657	64,158	39,683	29,499	*	*	*	*	*
	SE weighted	11,852	7,472	5,639	4,526	*	*	*	*	*



Table G.14—Number of students enrolled in postsecondary institutions by family income and tuition for senior/fourth- or fifth-year students (continued)

		\$8,000- \$8,999	\$9,000- \$9,999	\$10,000- \$10,999	\$11,000- \$11,999	\$12,000- \$12,999	\$13,000- \$13,999	\$14,000- \$14,999	\$15,000 or More	Missing
TOTAL	Unweighted size	115	125	112	85	90	132	119	457	*
	Weighted size	41,987	43,783	35,725	28,123	27,529	39,095	30,380	127,478	*
	SE weighted	6,031	7,208	5,962	5,242	4,858	7,812	6,517	16,399	*
Dependent: less than \$10,000	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$10,000-\$19,999	Unweighted size	*	*	*	*	*	*	*	32	*
	Weighted size	*	*	*	*	*	*	*	7,987	*
	SE weighted	*	*	*	*	*	*	*	1,823	*
Dependent: \$20,000-\$29,999	Unweighted size	*	*	*	*	*	*	*	36	*
	Weighted size	*	*	*	*	*	*	*	9,196	*
	SE weighted	*	*	*	*	*	*	*	2,259	*
Dependent: \$30,000-\$39,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$40,000-\$49,999	Unweighted size	*	*	*	*	*	*	*	42	*
	Weighted size	*	*	*	*	*	*	*	11,415	*
	SE weighted	*	*	*	*	*	*	*	2,719	*
Dependent: \$50,000-\$59,999	Unweighted size	*	*	*	*	*	*	*	41	*
	Weighted size	*	*	*	*	*	*	*	10,876	*
	SE weighted	*	*	*	*	*	*	*	2,189	*
Dependent: \$60,000-\$69,999	Unweighted size	*	*	*	*	*	*	*	40	*
	Weighted size	*	*	*	*	*	*	*	11,690	*
	SE weighted	*	*	*	*	*	*	*	2,075	*
Dependent: \$70,000-\$79,999	Unweighted size	*	*	*	*	*	*	*	33	*
	Weighted size	*	*	*	*	*	*	*	9,007	*
	SE weighted	*	*	*	*	*	*	*	2,066	*
Dependent: \$80,000-\$99,999	Unweighted size	*	*	*	*	*	*	*	40	*
	Weighted size	*	*	*	*	*	*	*	12,602	*
	SE weighted	*	*	*	*	*	*	*	2,410	*
Dependent: \$100,000 or more	Unweighted size	*	*	*	*	*	*	*	81	*
	Weighted size	*	*	*	*	*	*	*	25,941	*
	SE weighted	*	*	*	*	*	*	*	4,851	*
Independent: less than \$5,000	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$5,000-\$9,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$10,000-\$19,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$20,000-\$29,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$30,000-\$49,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$50,000 or more	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*

\*Insufficient number of cases for reliable estimation. Graduate students are independent students.

Table G.15—Number of students enrolled in postsecondary institutions by family income and tuition for unclassified undergraduate students

		Total	\$0-\$999	\$1,000-\$1,999	\$2,000-\$2,999	\$3,000-\$3,999	\$4,000-\$4,999	\$5,000-\$5,999	\$6,000-\$6,999	\$7,000-\$7,999
TOTAL	Unweighted size	1,540	686	202	165	85	68	47	43	66
	Weighted size	738,992	531,031	63,051	45,643	17,193	13,873	10,358	6,180	16,529
	SE weighted	87,945	79,050	10,899	9,182	4,975	4,650	2,993	2,331	6,552
Dependent: less than \$10,000	Unweighted size	51	*	*	*	*	*	*	*	*
	Weighted size	11,181	*	*	*	*	*	*	*	*
	SE weighted	2,526	*	*	*	*	*	*	*	*
Dependent: \$10,000-\$19,999	Unweighted size	41	*	*	*	*	*	*	*	*
	Weighted size	21,585	*	*	*	*	*	*	*	*
	SE weighted	6,128	*	*	*	*	*	*	*	*
Dependent: \$20,000-\$29,999	Unweighted size	51	*	*	*	*	*	*	*	*
	Weighted size	23,519	*	*	*	*	*	*	*	*
	SE weighted	8,600	*	*	*	*	*	*	*	*
Dependent: \$30,000-\$39,999	Unweighted size	33	*	*	*	*	*	*	*	*
	Weighted size	16,517	*	*	*	*	*	*	*	*
	SE weighted	5,843	*	*	*	*	*	*	*	*
Dependent: \$40,000-\$49,999	Unweighted size	49	*	*	*	*	*	*	*	*
	Weighted size	27,608	*	*	*	*	*	*	*	*
	SE weighted	8,439	*	*	*	*	*	*	*	*
Dependent: \$50,000-\$59,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$60,000-\$69,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$70,000-\$79,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$80,000-\$99,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$100,000 or more	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: less than \$5,000	Unweighted size	155	54	*	*	*	*	*	*	*
	Weighted size	58,597	38,411	*	*	*	*	*	*	*
	SE weighted	9,835	8,833	*	*	*	*	*	*	*
Independent: \$5,000-\$9,999	Unweighted size	173	65	*	*	*	*	*	*	*
	Weighted size	73,495	44,876	*	*	*	*	*	*	*
	SE weighted	13,247	11,661	*	*	*	*	*	*	*
Independent: \$10,000-\$19,999	Unweighted size	277	111	43	*	*	*	*	*	*
	Weighted size	127,195	92,120	12,545	*	*	*	*	*	*
	SE weighted	19,530	17,945	3,462	*	*	*	*	*	*
Independent: \$20,000-\$29,999	Unweighted size	221	98	34	*	*	*	*	*	*
	Weighted size	100,464	70,012	8,546	*	*	*	*	*	*
	SE weighted	15,917	14,151	2,294	*	*	*	*	*	*
Independent: \$30,000-\$49,999	Unweighted size	204	109	32	*	*	*	*	*	*
	Weighted size	126,818	100,692	10,618	*	*	*	*	*	*
	SE weighted	16,331	15,310	2,678	*	*	*	*	*	*
Independent: \$50,000 or more	Unweighted size	173	103	*	*	*	*	*	*	*
	Weighted size	88,941	70,514	*	*	*	*	*	*	*
	SE weighted	12,711	11,953	*	*	*	*	*	*	*

Table G.15—Number of students enrolled in postsecondary institutions by family income and tuition for unclassified undergraduate students (continued)

		\$8,000- \$8,999	\$9,000- \$9,999	\$10,000- \$10,999	\$11,000- \$11,999	\$12,000- \$12,999	\$13,000- \$13,999	\$14,000- \$14,999	\$15,000 or More	Missing
TOTAL	Unweighted size	81	*	*	*	*	*	*	*	*
	Weighted size	16,914	*	*	*	*	*	*	*	*
	SE weighted	8,412	*	*	*	*	*	*	*	*
Dependent: less than \$10,000	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$10,000-\$19,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$20,000-\$29,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$30,000-\$39,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$40,000-\$49,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$50,000-\$59,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$60,000-\$69,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$70,000-\$79,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$80,000-\$99,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Dependent: \$100,000 or more	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: less than \$5,000	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$5,000-\$9,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$10,000-\$19,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$20,000-\$29,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$30,000-\$49,999	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*
Independent: \$50,000 or more	Unweighted size	*	*	*	*	*	*	*	*	*
	Weighted size	*	*	*	*	*	*	*	*	*
	SE weighted	*	*	*	*	*	*	*	*	*

\*Insufficient number of cases for reliable estimation. Graduate students are independent students.

## Appendix H

### NPSAS:96 Analysis Variables

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Note: This list of NPSAS:96 analysis variables is current as this report is being published. However, it is anticipated that additional variables will be created and added in the future. Links to the most recent NPSAS Data Analysis Systems, which contain the NPSAS analysis variables can be found at the following web sites.

<http://nces.ed.gov/>

<http://www.pedar-das.org>



Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	EMPLYAMT	Aid	Total employer aid 95-96
DERIVED	MERIT Aid	Aid	Total merit-only grants and scholarships 95-96
DERIVED	NEEDAID	Aid	Total need-based grant aid 95-96
DERIVED	TNFEDAID	Aid	Total non-federal aid 95-96
DERIVED	TNFEDGRT	Aid	Total non-federal grants 95-96
DERIVED	TNFEDLN	Aid	Total non-federal loans 95-96
DERIVED	TNFEDOTH	Aid	Total other type of non-federal 95-96
DERIVED	TOTAID	Aid	Total aid 95-96
DERIVED	TOTAID2	Aid	Total federal (Title IV), state, & institutional aid 95-96
DERIVED	TOTGRT	Aid	Total grant 95-96
DERIVED	TOTLOAN	Aid	Total loan (except PLUS) 95-96
DERIVED	TOTLOAN2	Aid	Total loan (including PLUS) 95-96
DERIVED	TOTOTHR	Aid	Total other type of aid (includes assistantships & PLUS) 95-96
DERIVED	TOTWKST	Aid	Total work-study 95-96
DERIVED	WAIVAMT	Aid	Total tuition waiver 95-96
DERIVED	AIDPACK	Aid package	Package by type of aid (grants/loans/work) 95-96
DERIVED	FEDPACK	Aid package	Package with federal aid (Pell and Stafford) 95-96
DERIVED	INSTPACK	Aid package	Type of institutional aid package 95-96
DERIVED	PELLPACK	Aid package	Package with Pell grants 95-96
DERIVED	SCRPACK1	Aid package	Package with Title IV aid by source 95-96
DERIVED	SCRPACK2	Aid package	Package by source of aid (fed./st./inst.) 95-96
DERIVED	STAFFPACK	Aid package	Package with Stafford loans 95-96
DERIVED	CAMPAMT	AidFed	Campus-based federal aid (Perkins, SEOG, FWSP) 95-96
DERIVED	FDLNAMT2	AidFed	Federal loan (Stafford & Perkins) amt at non-NPSAS inst 95-96
DERIVED	PELL2AMT	AidFed	Pell grant amount at non-NPSAS inst. 95-96
DERIVED	PELLAMT	AidFed	Pell grant 95-96
DERIVED	SCHL2AID	AidFed	Federal aid amt. received at non-NPSAS institution 95-96
DERIVED	SCHOOL2	AidFed	Loans at second (non-NPSAS) institution 95-96
DERIVED	STAF2AMT	AidFed	Stafford loan amount (FFEL+Direct) rcvd at oth school 95-96
DERIVED	STAFFAMT	AidFed	Stafford loan total amount (FFEL+Direct) 95-96
DERIVED	STAFFCT1	AidFed	Stafford subsidized amount categories 95-96
DERIVED	STAFFCT2	AidFed	Stafford total amount categories 95-96
DERIVED	STAFSUB	AidFed	Stafford subsidized amount (FFEL+Direct) 95-96
DERIVED	STAFUNSB	AidFed	Stafford unsubsidized amount (FFEL+Direct) 95-96
DERIVED	T4LNAMT1	AidFed	Title IV loans (except PLUS) 95-96
DERIVED	T4LNAMT2	AidFed	Title IV loans (including PLUS) 95-96
DERIVED	TFEDAID	AidFed	Total federal aid amount (except VA/DOD) 95-96
DERIVED	TFEDAID2	AidFed	Total federal aid amount (including VA/DOD) 95-96
DERIVED	TFEDGRT	AidFed	Total federal grant amount 95-96
DERIVED	TFEDLN	AidFed	Total federal loan amount (except PLUS) 95-96
DERIVED	TFEDLN2	AidFed	Total federal loan amount (including PLUS) 95-96
DERIVED	TITIVAMT	AidFed	Title IV aid total amount 95-96
DERIVED	ZPERKINS	AidFed	Source for Perkins loan amount 95-96
DERIVED	ZPLUS	AidFed	Source for PLUS loans 95-96
DERIVED	ZSTAFF	AidFed	Source for Stafford loans 95-96
DERIVED	SEOGAMT	AidFedgrant	SEOG amount 95-96
DERIVED	OTHFDRGT	AidFedgrant	Other federal grants and scholarships 95-96
DERIVED	DIRECTLN	AidFedloan	Direct loan amount-total 95-96
DERIVED	DIRECTSB	AidFedloan	Direct loan subsidized amount 95-96
DERIVED	DIRECTUN	AidFedloan	Direct loan unsubsidized amount 95-96

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	FFELAMT	AidFedloan	FFEL loan total 95-96
DERIVED	FFELSUB	AidFedloan	FFEL subsidized 95-96
DERIVED	FFELUNSB	AidFedloan	FFEL unsubsidized 95-96
DERIVED	NUMFEDL2	AidFedloan	Number of federal loans received (incl. PLUS) 95-96
DERIVED	NUMFEDLN	AidFedloan	Number of federal loans received (excl. PLUS) 95-96
DERIVED	PERK2AMT	AidFedloan	Perkins amount at second (non-NPSAS) institution 95-95
DERIVED	PERKAMT	AidFedloan	Perkins loan amount 95-96
DERIVED	PHSLOAN	AidFedloan	Federal public health service loans 95-96
DERIVED	PLUSAMT1	AidFedother	PLUS loan (direct) 95-96
DERIVED	PLUSAMT2	AidFedother	PLUS loan (FFEL) 95-96
DERIVED	PLUSAMT3	AidFedother	PLUS loan total 95-96
DERIVED	PLUSAMT4	AidFedother	PLUS loan amount at non-NPSAS inst. 95-96
DERIVED	TFEDOTHR	AidFedother	Other federal amount-including PLUS 95-96
DERIVED	FWSP	AidFedwork	Total federal work-study 1995-96
DERIVED	TFEDWRK	AidFedwork	Total federal work-study 95-96
DERIVED	ASTAMT	AidInst	Total assistantships 95-96
DERIVED	FELLAMT	AidInst	Total graduate fellowships 95-96
DERIVED	INATHAMT	AidInst	Athletic scholarship 95-96
DERIVED	INGRTAMT	AidInst	Institutional grant total 95-96
DERIVED	INLNAMT	AidInst	Institutional loan total 95-96
DERIVED	INOTHAMT	AidInst	Institutional other aid-includes assistantships 95-96
DERIVED	INSTAMT	AidInst	Institutional total aid 95-96
DERIVED	INSTNEED	AidInst	Institution need-based grants and scholarships 95-96
DERIVED	INSTNOND	AidInst	Institutional non-need-based grants 95-96
DERIVED	INSTWRK	AidInst	Institution work-study amount 95-96
DERIVED	RESAMT	AidInst	Research assistant total 95-96
DERIVED	TEACHAMT	AidInst	Teaching assistantship total 95-96
DERIVED	UNKNAST	AidInst	Amount received for grad. assistantships (unspecified) 95-96
DERIVED	ZAST	AidInst	Source for assistantships
DERIVED	DODTOT	AidOther	Federal military tuition aid (Includes ROTC) 95-95
DERIVED	JTPA	AidOther	Job Training Partnership Act (JTPA) amount 95-96
DERIVED	OTHERSCR	AidOther	Other source-total amt (including VA/DOD) 95-96
DERIVED	OTHGTAMT	AidOther	Other grant total (not fed./state/institutional) 95-96
DERIVED	OTHLNAMT	AidOther	Other loan total (not fed./state/institutional) 95-96
DERIVED	OTHNEED	AidOther	Other need-based grants/scholarships 95-96
DERIVED	OTHNOND	AidOther	Other non-need-based grants/scholarships 95-96
DERIVED	OTHROTHR	AidOther	Other source-other type of aid (inc. VA/DOD) 95-96
DERIVED	OTHWKAMT	AidOther	Other work-study total (not fed./state/institutional) 95-96
DERIVED	PRIVAIID	AidOther	Grants from private outside sources 95-96
DERIVED	SDFGNAID	AidOther	Received aid from home country
DERIVED	TOTMIL	AidOther	Total military tuition aid 95-96
DERIVED	TOTVET	AidOther	Total veterans aid (including non-federal)
DERIVED	VADODAMT	AidOther	VA/DOD benefits amount 95-96
DERIVED	VETBFED	AidOther	Total federal veterans aid and benefits
DERIVED	VOCHHELP	AidOther	Vocational rehabilitation and JTPA amount 95-96
DERIVED	VOCREHAB	AidOther	Vocational rehabilitation grants 95-96
DERIVED	ZOTHAIID	AidOther	Source for other aid
DERIVED	ZVADOD	AidOther	Source for military aid
DERIVED	STATEAMT	AidState	Total state aid amount 95-96
DERIVED	STATNEED	AidState	State need-based grant/scholarship amount 95-96

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	STATNOND	AidState	State non-need-based grant/scholarship amount 95-96
DERIVED	STGTAMT	AidState	State grant total 95-96
DERIVED	STLNAMT	AidState	State loan total 95-96
DERIVED	STOTHAMT	AidState	State - other type of aid 95-96
DERIVED	STWKAMT	AidState	State work-study total 95-96
DERIVED	APART	AP test	Took AP tests - Art history, or studio
DERIVED	APBIO	AP test	Took AP tests - Biology
DERIVED	APCALC	AP test	Took AP tests - Calculus
DERIVED	APCHEM	AP test	Took AP tests - Chemistry
DERIVED	APCOMPTR	AP test	Took AP tests - Computer science
DERIVED	APECON	AP test	Took AP tests - Economics (macro / micro)
DERIVED	APENGLSH	AP test	Took AP tests - English (comp. / lit.)
DERIVED	APFLANG	AP test	Took AP tests - Foreign languages
DERIVED	APGOVNT	AP test	Took AP tests - Government
DERIVED	APHISTORY	AP test	Took AP tests - History
DERIVED	APPHYSIC	AP test	Took AP tests - Physics
DERIVED	APPSYCH	AP test	Took AP tests - Psychology
DERIVED	APTEST	AP test	Number of Advanced Placement (AP) tests taken
DERIVED	PARBUS	AssetsParents	Parents own a business 95-96
DERIVED	PARBUSDB	AssetsParents	Parents business debt 95-96
DERIVED	PARBUSNT	AssetsParents	Parent^s business net value 95-96
DERIVED	PARBUSVL	AssetsParents	Parents business value 95-96
DERIVED	PARFRM	AssetsParents	Parents own a farm 95-96
DERIVED	PARFRMDB	AssetsParents	Parents farm debt 95-96
DERIVED	PARFRMNT	AssetsParents	Parents farm net value 95-96
DERIVED	PARFRMVL	AssetsParents	Parents farm value 95-96
DERIVED	PARINV	AssetsParents	Parents have other investments 95-96
DERIVED	PARINV50	AssetsParents	Parents have investments over \$50,000
DERIVED	PARINVDB	AssetsParents	Parents other investment debt 95-96
DERIVED	PARINVNT	AssetsParents	Parents other investment net value 95-96
DERIVED	PARINVVL	AssetsParents	Parents other investment value 95-96
DERIVED	PFRBUS50	AssetsParents	Parents own business or farm over \$50,000
DERIVED	PHOME	AssetsParents	Parents own a home 95-96
DERIVED	PHOMEQ	AssetsParents	Parent^s home equity 95-96
DERIVED	PMONEY	AssetsParents	Parent^s cash and savings 95-96
DERIVED	PMONEY10	AssetsParents	Parents have cash and savings over \$10,000
DERIVED	PNETWOR	AssetsParents	Parents net worth 95-96
DERIVED	SHOMEQ	AssetsStudent	Student^s home equity 95-96
DERIVED	SMONEY	AssetsStudent	Student^s cash and savings 95-96
DERIVED	SNETWOR	AssetsStudent	Student net worth 95-96
DERIVED	STBUSDB	AssetsStudent	Student business debt 95-96
DERIVED	STBUSNT	AssetsStudent	Student business net value 95-96
DERIVED	STBUSVL	AssetsStudent	Student business value 95-96
DERIVED	STFRMDB	AssetsStudent	Student farm debt 95-96
DERIVED	STFRMNT	AssetsStudent	Student farm net value 95-96
DERIVED	STFRMVL	AssetsStudent	Student farm value 95-96
DERIVED	STINVDB	AssetsStudent	Student other investment debt 95-96
DERIVED	STINVNT	AssetsStudent	Student other investment net value 95-96
DERIVED	STINVVL	AssetsStudent	Student other investment value 95-96
DERIVED	ATTEND	Attendance	Attendance intensity fall 1995-96



Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	ATTEND2	Attendance	Attendance intensity first term enrolled 1995
DERIVED	ATTNPT1	Attendance	Attendance intensity at NPSAS inst 95-96
DERIVED	ATTNPTRN	Attendance	Attendance intensity 95-96
DERIVED	ATTNST1	Attendance	Attendance pattern at NPSAS inst 1995-96
DERIVED	ATTNST3	Attendance	Attendance pattern (full year=9 months) 95-96
DERIVED	ATTNSTAT	Attendance	Attendance pattern 95-96
DERIVED	CREDHRS	Attendance	Number of credit hours taken during 95-96
DERIVED	CREDHRS1	Attendance	Number of credit hours taken at NPSAS inst. 95-96
DERIVED	ENLEN	Attendance	Number of months enrolled - 1995-96
DERIVED	ENLEN1	Attendance	Number of months enrolled at the NPSAS inst. 95-96
DERIVED	ENR9505	Attendance	Enrollment 95/05
DERIVED	ENR9506	Attendance	Enrollment 95/06
DERIVED	ENR9507	Attendance	Enrollment 95/07
DERIVED	ENR9508	Attendance	Enrollment 95/08
DERIVED	ENR9509	Attendance	Enrollment 95/09
DERIVED	ENR9510	Attendance	Enrollment 95/10
DERIVED	ENR9511	Attendance	Enrollment 95/11
DERIVED	ENR9512	Attendance	Enrollment 95/12
DERIVED	ENR9601	Attendance	Enrollment 96/01
DERIVED	ENR9602	Attendance	Enrollment 96/02
DERIVED	ENR9603	Attendance	Enrollment 96/03
DERIVED	ENR9604	Attendance	Enrollment 96/04
DERIVED	ENR9605	Attendance	Enrollment 96/05
DERIVED	ENR9606	Attendance	Enrollment 96/06
DERIVED	ENRFIR1	Attendance	Date first enrolled at NPSAS inst in 1995-96 (yyyymm)
DERIVED	ENRFIRST	Attendance	Date first enrolled in 1995-96 (yyyymm)
DERIVED	ENRL9495	Attendance	Enrolled in PSE during 1994-95
DERIVED	ENRLAS1	Attendance	Date last enrolled at NPSAS inst in 1995-96 (yyyymm)
DERIVED	ENRLAST	Attendance	Date last enrolled in 1995-96 (yyyymmdd)
DERIVED	FTPCT	Attendance	Percent months enrolled full-time - 1995-96
DERIVED	FTPCT1	Attendance	Percent months enrolled full-time at NPSAS inst.1995-96
DERIVED	HRSRPERWK	Attendance	Clock hours required per week at NPSAS inst 1995-96
DERIVED	HTPCT	Attendance	Percent months enrolled half-time 95-96
DERIVED	HTPCT1	Attendance	Percent months enrolled half-time at NPSAS inst1995-96
DERIVED	IND9505	Attendance	Institution used for enrollment in 95/05
DERIVED	IND9506	Attendance	Institution used for enrollment in 95/06
DERIVED	IND9507	Attendance	Institution used for enrollment in 95/07
DERIVED	IND9508	Attendance	Institution used for enrollment in 95/08
DERIVED	IND9509	Attendance	Institution used for enrollment in 95/09
DERIVED	IND9510	Attendance	Institution used for enrollment in 95/10
DERIVED	IND9511	Attendance	Institution used for enrollment in 95/11
DERIVED	IND9512	Attendance	Institution used for enrollment in 95/12
DERIVED	IND9601	Attendance	Institution used for enrollment in 96/01
DERIVED	IND9602	Attendance	Institution used for enrollment in 96/02
DERIVED	IND9603	Attendance	Institution used for enrollment in 96/03
DERIVED	IND9604	Attendance	Institution used for enrollment in 96/04
DERIVED	IND9605	Attendance	Institution used for enrollment in 96/05
DERIVED	IND9606	Attendance	Institution used for enrollment in 96/06
DERIVED	LENGTHCL	Attendance	Length of program (clock-hour students NPSAS inst) 1995-96
DERIVED	MFT	Attendance	Number of months attended full-time 1995-96

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	MFT1	Attendance	Number of months attended full-time NPSAS inst 1995-96
DERIVED	MHT	Attendance	Number of months attended half-time or more 1995-96
DERIVED	MHT1	Attendance	Number of months attended ht or more at NPSAS inst 95-96
DERIVED	MISSPCT	Attendance	Percent months enrollment missing 1995-96
DERIVED	MISSPCT1	Attendance	Percent months enrollment missing NPSAS inst. 1995-96
DERIVED	MMISS	Attendance	Number of months enrollment status missing -1995-96
DERIVED	MMISS1	Attendance	Number of months enr status missing (NPSAS inst) 95-96
DERIVED	MPT	Attendance	Number of months attended less than half-time -1995-96
DERIVED	MPT1	Attendance	Number of months attended lt ht at NPSAS inst 95-96
DERIVED	PSECTYR	Attendance	Year first enrolled in postsecondary education
DERIVED	PTPCT	Attendance	Percent months enrolled less than half-time 19-95-96
DERIVED	PTPCT1	Attendance	Percent months enrolled lt ht, NPSAS inst 95-96
CATI	SATRNSFR	Attendance	Transferred in during (student report) 95-96
DERIVED	STUDMULT	Attendance	Number of institutions attended 1995-96
DERIVED	TERMS	Attendance	Number terms/periods enrolled - 1995-96
DERIVED	TERMS1	Attendance	Number terms/periods enrolled - NPSAS inst 1995-96
DERIVED	ZATTEND	Attendance	Source for student attendance
DERIVED	ZSMULT	Attendance	Source for multiple schools 95-96
DERIVED	BORAMT1	Borrowed	Cumulative borrowed for undergraduate education through 1996
DERIVED	BORAMT2	Borrowed	Cumulative borrowed for graduate education through 1996
DERIVED	BORAMT3	Borrowed	Cumulative borrowed for ed. (ug & grad) through 1996
DERIVED	BORFED	Borrowed	Cumulative federal amount borrowed for education through 96
DERIVED	BORTYPE	Borrowed	Type of loans borrowed (federal/family) through 1996
DERIVED	FAMLOAN	Borrowed	Total amount ever borrowed from family
DERIVED	FAMOWE	Borrowed	Amount still owed for loans from family
DERIVED	OWEAMT	Borrowed	Amount still owed on loans- total in 1996
DERIVED	OWEFED	Borrowed	Cumulative amount owed on fed. loans for education thru 96
CATI	PLPARPAY	Borrowed	Amount of parent help with student debt
CATI	PLSTUPAY	Borrowed	Amount of student help with parent debt
CATI	PMBORROW	Borrowed	Amount borrowed ever for dependent PSE (parent)
DERIVED	PPARLOAN	Borrowed	Amount of parent loan to student 95-96
DERIVED	RELLOAN	Borrowed	Amount relatives/friends loaned for 95-96
CATI	SCHOMEQ	Borrowed	Used home eq loan/2nd mtg/refinancing (student)
DERIVED	WKBORR95	Borrowed	Working and borrowing status 95-96
DERIVED	ZBOR	Borrowed	Source for cumulative loans
DERIVED	COMMLOAN	Borrowed, loan type	Commercial loan 95-96
DERIVED	CREDLOAN	Borrowed, loan type	Line of credit 95-96
DERIVED	HOMELOAN	Borrowed, loan type	Home equity loan 95-96
DERIVED	LIFELOAN	Borrowed, loan type	Loan against a life insurance policy 95-9
DERIVED	OTHRLOAN	Borrowed, loan type	Other type of loan not mentioned 95-96
DERIVED	PLUSLOAN	Borrowed, loan type	PLUS loan 95-96
DERIVED	RETRLOAN	Borrowed, loan type	Loan against a retirement fund 95-96
DERIVED	SCHLLOAN	Borrowed, loan type	School-sponsored parent loan 95-96
DERIVED	SIGNLOAN	Borrowed, loan type	Signature loan
DERIVED	SMAELOAN	Borrowed, loan type	Family Ed. Loan from Sallie Mae 95-96
DERIVED	STATLOAN	Borrowed, loan type	State-sponsored parent loan 95-96
DERIVED	UNDRLOAN	Borrowed, loan type	Loan from a non-profit underwriter 95-96
CATI	SIARTS	BPSClimate	Participated in fine arts activities 95-96
CATI	SICLUBS	BPSClimate	Participate in school clubs 95-96
CATI	SIFRIEND	BPSClimate	Go places with friends 95-96

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
CATI	SIINTRAM	BPSClimate	Participated in intramural sports 95-96
CATI	SILECTUR	BPSClimate	Attend lectures/conventions/field trips 95-96
CATI	SIMEET	BPSClimate	Meet with advisor about plans 95-96
CATI	SISOCIAL	BPSClimate	Have social contact with faculty 95-96
CATI	SISTUDGP	BPSClimate	Attend study groups outside class 95-96
CATI	SITALK	BPSClimate	Talk with faculty outside class 95-96
CATI	SIVARSTY	BPSClimate	Participated in varsity sports 95-96
CATI	SIAUTH	BPSGoal	Become an authority in field
CATI	SIAWAY	BPSGoal	Get away from home
CATI	SIBTROPP	BPSGoal	Offer better opportunities to children
CATI	SIBUSIN	BPSGoal	Succeed in own business
CATI	SIFAMILY	BPSGoal	Raise a family
CATI	SIFINC	BPSGoal	Be well off financially
CATI	SIINFL	BPSGoal	Influence political structure
CATI	SILEAD	BPSGoal	Be leader in community
CATI	SILEISR	BPSGoal	Have leisure time
CATI	SILIVCLS	BPSGoal	Live close to family
CATI	SISUCCAR	BPSGoal	Succeed in career
DERIVED	COUNSEL	BPSSatisfaction	Satisfied with counseling 95-96
DERIVED	CULTUR	BPSSatisfaction	Satisfied with cultural activities 95-96
DERIVED	JOBPLC	BPSSatisfaction	Satisfied with job placement 95-96
CATI	SICLIMT	BPSSatisfaction	Satisfied-Campus climate 95-96
CATI	SICLSIZE	BPSSatisfaction	Satisfied-Class size 95-96
CATI	SICOST	BPSSatisfaction	Satisfied-cost of attending 95-96
CATI	SICOURS	BPSSatisfaction	Satisfied-course availability 95-96
CATI	SIINTELL	BPSSatisfaction	Satisfied- intellectual growth 95-96
CATI	SIPRSTG	BPSSatisfaction	Satisfied-Prestige of school 95-96
CATI	SISOCLIF	BPSSatisfaction	Satisfied-social life 95-96
CATI	SITEACH	BPSSatisfaction	Satisfied-instructors ability to teach 95-96
DERIVED	SPORTS	BPSSatisfaction	Satisfied with sports and recreational 95-96
DERIVED	COACH	Community service	Work with kids as a coach /scouting 95-96
DERIVED	COMMHOOR	Community service	Student^s hours/week doing community service 95-96
DERIVED	COMMNUM	Community Service	Number of community service or volunteer activities
DERIVED	COMMREQ	Community service	Was any service required for graduation 95-96
DERIVED	COMMSERV	Community service	Performed community service in 1995-96
DERIVED	HOSPITAL	Community service	Hospital, nursing home, group home 95-96
DERIVED	LITERACY	Community service	Adult literacy project 95-96
DERIVED	MENTOR	Community service	Work with kids as tutor/mentor 95-96
DERIVED	MONEYNP	Community service	Raise money for non-political purpose 95-96
DERIVED	MONEYP	Community service	Raise money or vol. for political campaign 95-96
DERIVED	NEIGHBOR	Community service	Neighborhood improvement/cleanup projects 95-96
DERIVED	OTHCOMM	Community service	Other type of community service 95-96
DERIVED	SHELTER	Community service	Worked at a shelter/soup kitchen 95-96
DERIVED	TELCRIS	Community service	Telephone crisis center 95-96
CATI	SBBOOKS	Cost, Budget	Books and Supplies
CATI	SBEQUIP	Cost, budget	Equipment and Instruments
DERIVED	INJURIS	Cost, tuition	Tuition jurisdiction (in/out of area)-NPSAS inst 95-96
DERIVED	TUITION	Cost, tuition	Tuition and fees for terms attended-NPSAS inst 95-96
DERIVED	BUDGETAJ	CostBudget	Total student budget (attendance adjusted) 95-96
DERIVED	BUDGETFT	CostBudget	Total student budget (full-time, full-year) 95-96

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	SBNONTAJ	CostBudget	Total budget non-tuition costs (attendance adjusted) 95-96
DERIVED	SBNONTUN	CostBudget	Total non-tuition costs (full-time, full-year) 95-96
DERIVED	ZBUDGET	CostBudget	Source for student budget
DERIVED	CPS00096	CPS96	96CPS000: CPS student record (ISIR) available 95-96
CPS96	CPS100	CPS96	96CPS100: Parent^s type of 1994 tax form (ISIR)
CPS96	CPS101	CPS96	96CPS101: Parents exemptions claimed in 1994 (ISIR)
CPS96	CPS102	CPS96	96CPS102: Parents adjusted gross income in 1994 (ISIR)
CPS96	CPS103	CPS96	96CPS103: Parents income taxes paid in 1994 (ISIR)
CPS96	CPS104	CPS96	96CPS104: Fathers income earned from work in 1994 (ISIR)
CPS96	CPS105	CPS96	96CPS105: Mothers income earned from work in 1994 (ISIR)
CPS96	CPS106	CPS96	96CPS106: Parents annual Soc. Sec. benefits in 1994 (ISIR)
CPS96	CPS107	CPS96	96CPS107: Parents annual AFDC/ADC benefits in 1994 (ISIR)
CPS96	CPS108	CPS96	96CPS108: Parents annual child support recvd in 1994 (ISIR)
CPS96	CPS109	CPS96	96CPS109: Parents other nontaxed income in 1994 (ISIR)
CPS96	CPS110	CPS96	96CPS110: Age of older parent (ISIR)
CPS96	CPS111	CPS96	96CPS111: Parents cash, savings, checking (ISIR)
CPS96	CPS112	CPS96	96CPS112: Parents other investment value (ISIR)
CPS96	CPS113	CPS96	96CPS113: Parents other investment debt (ISIR)
CPS96	CPS114	CPS96	96CPS114: Parents business value (ISIR)
CPS96	CPS115	CPS96	96CPS115: Parents business debt (ISIR)
CPS96	CPS116	CPS96	96CPS116: Parents farm value (ISIR)
CPS96	CPS117	CPS96	96CPS117: Parents farm debt (ISIR)
CPS96	CPS15	CPS96	96CPS015: Student state of legal residence (ISIR)
CPS96	CPS157	CPS96	96CPS157: Paid EFC type (ISIR)
CPS96	CPS159	CPS96	96CPS159: Automatic zero EFC (ISIR)
CPS96	CPS16	CPS96	96CPS016: Student legal residence date (yyyymmdd) (ISIR)
CPS96	CPS160	CPS96	96CPS160: Dependency and EFC formula type in 1994 (ISIR)
CPS96	CPS161	CPS96	96CPS161: Adjusted EFC calculation requested (ISIR)
CPS96	CPS162	CPS96	96CPS162: Primary EFC (ISIR)
CPS96	CPS163	CPS96	96CPS163: Secondary EFC (ISIR)
CPS96	CPS188	CPS96	96CPS188: TI: Total income (ISIR)
CPS96	CPS189	CPS96	96CPS189: ATI: Allowances against total income (ISIR)
CPS96	CPS19	CPS96	96CPS019: Student citizenship status (ISIR)
CPS96	CPS190	CPS96	96CPS190: STX: State tax allowance (ISIR)
CPS96	CPS191	CPS96	96CPS191: EA: Employment allowance (ISIR)
CPS96	CPS192	CPS96	96CPS192: IPA: Income protection allowance (ISIR)
CPS96	CPS193	CPS96	96CPS193: AI: Available income (ISIR)
CPS96	CPS194	CPS96	96CPS194: DNW: Discretionary net worth (ISIR)
CPS96	CPS195	CPS96	96CPS195: APA: Asset protection allowance (ISIR)
CPS96	CPS196	CPS96	96CPS196: PCA: Contribution from assets (ISIR)
CPS96	CPS197	CPS96	96CPS197: AAI: Adjusted available income (ISIR)
CPS96	CPS198	CPS96	96CPS198: TPC: Total parent contribution (ISIR)
CPS96	CPS199	CPS96	96CPS199: TSC: Total student contribution (indep)
CPS96	CPS200	CPS96	96CPS200: APC: Adjusted parents contribution (ISIR)
CPS96	CPS201	CPS96	96CPS201: SIC: Dependent Students Inc contribution (ISIR)
CPS96	CPS202	CPS96	96CPS202: SCA: Students Contribution from assets (ISIR)
CPS96	CPS205	CPS96	96CPS205: Request for information transfer (ISIR)
CPS96	CPS206	CPS96	96CPS206: Dependency status (ISIR)
CPS96	CPS21	CPS96	96CPS021: First Bachelor degree by 7-1-95? (ISIR)
CPS96	CPS22	CPS96	96CPS022: Student marital status (ISIR)

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
CPS96	CPS23	CPS96	96CPS023: Student marital status date (yyyyymm) (ISIR)
CPS96	CPS26	CPS96	96CPS026: Born before 1-1-72? (ISIR)
CPS96	CPS267	CPS96	96CPS267: STI: Dependent students total income (ISIR)
CPS96	CPS27	CPS96	96CPS027: Veteran status (ISIR)
CPS96	CPS28	CPS96	96CPS028: Graduate/Prof student in 1995-96? (ISIR)
CPS96	CPS29	CPS96	96CPS029: Is student married? (ISIR)
CPS96	CPS30	CPS96	96CPS030: Orphan or ward of court? (ISIR)
CPS96	CPS31	CPS96	96CPS031: Have dependents other than spouse (ISIR)
CPS96	CPS32	CPS96	96CPS032: Students number in family (ISIR)
CPS96	CPS33	CPS96	96CPS033: Student family members in college 1995-96 (ISIR)
CPS96	CPS34	CPS96	96CPS034: Student type of 1994 tax form (ISIR)
CPS96	CPS35	CPS96	96CPS035: Students exemptions claimed in 1994 (ISIR)
CPS96	CPS36	CPS96	96CPS036: Student adj. gross income in 1994 (ISIR)
CPS96	CPS37	CPS96	96CPS037: Student income taxes paid in 1994 (ISIR)
CPS96	CPS38	CPS96	96CPS038: Student earned income from work in 1994 (ISIR)
CPS96	CPS39	CPS96	96CPS039: Spouses income earned from work in 1994 (ISIR)
CPS96	CPS40	CPS96	96CPS040: Student annual Soc. Sec. benefits in 1994 (ISIR)
CPS96	CPS41	CPS96	96CPS041: Student annual AFDC/ADC benefits in 1994 (ISIR)
CPS96	CPS42	CPS96	96CPS042: Student annual child support recvd in 1994 (ISIR)
CPS96	CPS43	CPS96	96CPS043: Student other nontaxed income in 1994 (ISIR)
CPS96	CPS44	CPS96	96CPS044: Monthly Veterans education benefits (ISIR)
CPS96	CPS45	CPS96	96CPS045: # Monthly Veterans education benefits (ISIR)
CPS96	CPS46	CPS96	96CPS046: Student cash, savings, checking (ISIR)
CPS96	CPS47	CPS96	96CPS047: Student other investment value (ISIR)
CPS96	CPS48	CPS96	96CPS048: Student other investment debt (ISIR)
CPS96	CPS49	CPS96	96CPS049: Student business value (ISIR)
CPS96	CPS50	CPS96	96CPS050: Student business debt (ISIR)
CPS96	CPS51	CPS96	96CPS051: Student farm value (ISIR)
CPS96	CPS52	CPS96	96CPS052: Student farm debt (ISIR)
CPS96	CPS54	CPS96	96CPS054: Interested in student employment (ISIR)
CPS96	CPS55	CPS96	96CPS055: Interested in student loans (ISIR)
CPS96	CPS56	CPS96	96CPS056: Interested in parent loans for students (ISIR)
CPS96	CPS61	CPS96	96CPS061: College choice #1 (ISIR)
CPS96	CPS62	CPS96	96CPS062: College choice #2 (ISIR) 95-96
CPS96	CPS63	CPS96	96CPS063: College choice #3 (ISIR) 95-96
CPS96	CPS64	CPS96	96CPS064: College choice #4 (ISIR) 95-96
CPS96	CPS65	CPS96	96CPS065: College choice #5 (ISIR) 95-96
CPS96	CPS66	CPS96	96CPS066: College choice #6 (ISIR) 95-96
CPS96	CPS67	CPS96	96CPS067: Release data to state (ISIR)
CPS96	CPS68	CPS96	96CPS068: FAFSA application signed by (ISIR)
CPS96	CPS69	CPS96	96CPS069: Date application completed (yyyymmdd) (ISIR)
CPS96	CPS72	CPS96	96CPS072: Preparers signature (ISIR)
CPS96	CPS73	CPS96	96CPS073: Fathers education level (ISIR)
CPS96	CPS74	CPS96	96CPS074: Mothers education level (ISIR)
CPS96	CPS75	CPS96	96CPS075: Date GED earned (yyyymmdd) (ISIR)
CPS96	CPS76	CPS96	96CPS076: Selective service match (ISIR)
CPS96	CPS77	CPS96	96CPS077: Selective service registration flag (ISIR)
CPS96	CPS78	CPS96	96CPS078: High school graduation date (yyyyymm) (ISIR)
CPS96	CPS79	CPS96	96CPS079: INS match (ISIR)
CPS96	CPS82	CPS96	96CPS082: Enrollment plan for Summer 95 (ISIR)

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
CPS96	CPS83	CPS96	96CPS083: Enrollment plan for Fall 1995 (ISIR)
CPS96	CPS84	CPS96	96CPS084: Enrollment plan for Winter 1996 (ISIR)
CPS96	CPS85	CPS96	96CPS085: Enrollment plan for Spring 1996 (ISIR)
CPS96	CPS86	CPS96	96CPS086: Enrollment plan for Summer 1996 (ISIR)
CPS96	CPS87	CPS96	96CPS087: Self-reported degree/certificate expected (ISIR)
CPS96	CPS89	CPS96	96CPS089: Self-reported major or course of study (ISIR)
CPS96	CPS91	CPS96	96CPS091: Date expected to complete program (yyyymmdd) (ISIR)
CPS96	CPS92	CPS96	96CPS092: Self-reported class level (ISIR)
CPS96	CPS93	CPS96	96CPS093: Child care paid for how many kids? (ISIR)
CPS96	CPS94	CPS96	96CPS094: Date application received (yyyymmdd) (ISIR)
CPS96	CPS95	CPS96	96CPS095: Parents marital status (ISIR)
CPS96	CPS96	CPS96	96CPS096: Parents state of legal residence (ISIR)
CPS96	CPS97	CPS96	96CPS097: Parents legal residence date (yyyymmdd) (ISIR)
CPS96	CPS98	CPS96	96CPS098: Parents number of family members (ISIR)
CPS96	CPS99	CPS96	96CPS099: Parent family members in college 1995-96 (ISIR)
CPS97	C97_013	CPS97	97CPS013: Student title
CPS97	C97_014	CPS97	97CPS014: Student State of Legal Residence (ISIR)
CPS97	C97_015	CPS97	97CPS015: Student Legal Residence Date (yyyymmdd) (ISIR)
CPS97	C97_017	CPS97	97CPS017: Student date of birth (yyyymmdd)
CPS97	C97_018	CPS97	97CPS018: Student Citizenship Status (ISIR)
CPS97	C97_020	CPS97	97CPS020: First Bachelor Degree by 7-1-96? (ISIR)
CPS97	C97_021	CPS97	97CPS021: Student Marital Status (ISIR)
CPS97	C97_022	CPS97	97CPS022: Student Marital Status Date (yyyymm) (ISIR)
CPS97	C97_023	CPS97	97CPS023: Born Before 1-1-73? (ISIR)
CPS97	C97_024	CPS97	97CPS024: Veteran of US Armed Forces (ISIR)
CPS97	C97_025	CPS97	97CPS025: Graduate/Prof Student in 96-97 (ISIR)
CPS97	C97_026	CPS97	97CPS026: Is Student Married? (ISIR)
CPS97	C97_027	CPS97	97CPS027: Orphan or Ward of Court (ISIR)
CPS97	C97_028	CPS97	97CPS028: Have Dependents Other Than Spouse (ISIR)
CPS97	C97_029	CPS97	97CPS029: Students Number of Family (ISIR)
CPS97	C97_030	CPS97	97CPS030: Students Number in College in 1996-97 (ISIR)
CPS97	C97_031	CPS97	97CPS031: Students Type of 1995: Tax Form (ISIR)
CPS97	C97_032	CPS97	97CPS032: Students Exemptions Claimed in 1995 (ISIR)
CPS97	C97_033	CPS97	97CPS033: Students Adjusted Gross Income in 1995 (ISIR)
CPS97	C97_034	CPS97	97CPS034: Students US Income Tax Paid in 1995 (ISIR)
CPS97	C97_035	CPS97	97CPS035: Student Income Earned from Work in 1995 (ISIR)
CPS97	C97_036	CPS97	97CPS036: Spouses Income Earned from Work in 1995 (ISIR)
CPS97	C97_037	CPS97	97CPS037: Students Annual Social Security Benefits in 1995 (SAR)
CPS97	C97_038	CPS97	97CPS038: Students Annual AFDC/ADC in 1995 (ISIR)
CPS97	C97_039	CPS97	97CPS039: Students Annual Child Support Received in 1995 (ISIR)
CPS97	C97_040	CPS97	97CPS040: Students Other Untaxed Income in 1995 (ISIR)
CPS97	C97_041	CPS97	97CPS041: Monthly Veterans Education Benefits (ISIR)
CPS97	C97_042	CPS97	97CPS042: # Monthly Veterans Education Benefits (ISIR)
CPS97	C97_068	CPS97	97CPS068: Fathers Highest Grade Level Completed (ISIR)
CPS97	C97_069	CPS97	97CPS069: Mothers Highest Grade Level Completed (ISIR)
CPS97	C97_070	CPS97	97CPS070: Date GED Earned (yyyymm) (ISIR)
CPS97	C97_073	CPS97	97CPS073: High School Graduation Date (yyyymm) (ISIR)
CPS97	C97_082	CPS97	97CPS082: Degree/Certificate expected (self-reported) (ISIR)

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
CPS97	C97_083	CPS97	97CPS083: Course of Study (ISIR)
CPS97	C97_084	CPS97	97CPS084: Date Expected to Complete Pgm (yyyymmdd) (ISIR)
CPS97	C97_085	CPS97	97CPS085: Year in College in 1996-97 (self reported) (ISIR)
CPS97	C97_088	CPS97	97CPS088: Parents Marital Status (ISIR)
CPS97	C97_089	CPS97	97CPS089: Parents State of Legal Residence (ISIR)
CPS97	C97_090	CPS97	97CPS090: Parents Legal Residence Date (yyyymmdd) (ISIR)
CPS97	C97_091	CPS97	97CPS091: Parents Number of Family Members (ISIR)
CPS97	C97_092	CPS97	97CPS092: Parents Number in College in 1996-97 (ISIR)
CPS97	C97_093	CPS97	97CPS093: Parents Type of 1996: Tax Form Used (ISIR)
CPS97	C97_094	CPS97	97CPS094: Parents Exemptions Claimed in 1995 (ISIR)
CPS97	C97_095	CPS97	97CPS095: Parents Adjusted Gross Income (IRS Form) in 1995 (SAR
CPS97	C97_096	CPS97	97CPS096: Parents US Income Tax Paid in 1995 (ISIR)
CPS97	C97_097	CPS97	97CPS097: Fathers Income Earned from Work in 1995 (ISIR)
CPS97	C97_098	CPS97	97CPS098: Mothers Income Earned from Work in 1995 (ISIR)
CPS97	C97_099	CPS97	97CPS099: Parents Annual Social Security Benefits in 1995 (ISIR)
CPS97	C97_100	CPS97	97CPS100: Parents Annual AFDC/ADC in 1995 (ISIR)
CPS97	C97_101	CPS97	97CPS101: Parents Annual Child Support Received in 1995 (ISIR)
CPS97	C97_102	CPS97	97CPS102: Parents Other Untaxed Income in 1995 (ISIR)
CPS97	C97_103	CPS97	97CPS103: Age of Older Parent (ISIR)
CPS97	C97_148	CPS97	97CPS148: Paid EFC Type (ISIR)
CPS97	C97_150	CPS97	97CPS150: Automatic Zero EFC (ISIR)
CPS97	C97_151	CPS97	97CPS151: Dependency and EFC Formula Type (ISIR)
CPS97	C97_152	CPS97	97CPS152: Adjusted EFC Calculation Requested (ISIR)
CPS97	C97_153	CPS97	97CPS153: Primary EFC (ISIR)
CPS97	C97_154	CPS97	97CPS154: Secondary EFC (ISIR)
CPS97	C97_163	CPS97	97CPS163: Students 1995: Total from Worksheet #3
CPS97	C97_175	CPS97	97CPS175: Parents 1995: Total from Worksheet #3
CPS97	C97_179	CPS97	97CPS179: TI: Total Income (ISIR)
CPS97	C97_180	CPS97	97CPS180: ATI: Allowances Against Total Income (ISIR)
CPS97	C97_181	CPS97	97CPS181: STX: State Tax Allowance (ISIR)
CPS97	C97_182	CPS97	97CPS182: EA: Employment Allowance (ISIR)
CPS97	C97_183	CPS97	97CPS183: IPA: Income Protection Allowance (ISIR)
CPS97	C97_184	CPS97	97CPS184: AI: Available Income (ISIR)
CPS97	C97_185	CPS97	97CPS185: DNW: Discretionary Net Worth (ISIR)
CPS97	C97_186	CPS97	97CPS186: APA: Asset Protection Allowance (ISIR)
CPS97	C97_187	CPS97	97CPS187: PCA: Contribution from Assets (ISIR)
CPS97	C97_188	CPS97	97CPS188: AAI: Adjusted Available Income (ISIR)
CPS97	C97_189	CPS97	97CPS189: TPC: Total Parent Contribution (ISIR)
CPS97	C97_190	CPS97	97CPS190: TSC: Total Student Contribution (indep)
CPS97	C97_191	CPS97	97CPS191: PC: Adjusted Parents Contribution (ISIR)
CPS97	C97_192	CPS97	97CPS192: SIC: Dependent Students Inc Contribution (ISIR)
CPS97	C97_193	CPS97	97CPS193: SCA: Students Contribution from Assets (ISIR)
CPS97	C97_196	CPS97	97CPS196: Dependency Status (ISIR)
CPS97	C97_251	CPS97	97CPS251: STI: Dependent Students Total Income (ISIR)
CPS97	C97_255	CPS97	97CPS255: CAI: Contribution from Available Income (ISIR)
CPS97	C97_256	CPS97	97CPS256: Graduate Flag (ISIR)
DERIVED	CPS00097	CPS97	97CPS000: CPS student record (ISIR) available 96-97?
DERIVED	DEAFNESS	Disability	Hearing impaired or deaf

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	DISABIL	Disability	Student have any disabilities
DERIVED	HEALTOTH	Disability	Other health related disabilities
DERIVED	LEARNDIS	Disability	Learning disability
DERIVED	ORTHO	Disability	Orthopedic limitation
CATI	SGHEAR	Disability	Extent of hearing impairment
CATI	SGORTHO1	Disability	Walk 1/4 mile without assistance
CATI	SGORTHO2	Disability	Able to walk up stairs without resting
CATI	SGORTHO3	Disability	Able to lift/carry up to 10 pounds
CATI	SGORTHO4	Disability	How difficult to enter/exit buildings
CATI	SGSPEECH	Disability	Extent of speech impairment/disability
CATI	SGVISION	Disability	Extent of visual impairment
DERIVED	SPEECH	Disability	Speech limitation
DERIVED	VISUAL	Disability	Partially sighted or blind
DERIVED	EFC1	EFC	FM expected family contribution as recorded 95-96
DERIVED	EFC3	EFC	FM expected family contribution - regression estimate 95-96
DERIVED	EFC4	EFC	FM expected family contribution - composite 95-96
DERIVED	FMPC	EFC	FM parental contribution for dependent students 95-96
DERIVED	FMSC	EFC	FM dependent student contribution 95-96
DERIVED	ZEFC	EFC	Source for EFC
CATI	SECAREER	Employee/Student	Helps prepare for career 95-96
CATI	SECHOICE	Employee/Student	Reduces class choices 95-96
CATI	SECONTNT	Employee/Student	Assists with class content 95-96
CATI	SEDEGREE	Employee/Student	Enrolled to earn degree/certificate 95-96
CATI	SEEXPENS	Employee/Student	Pays tuition and living expenses 95-96
CATI	SEJOBADV	Employee/Student	Enrolled to advance job 95-96
CATI	SEJOBEXP	Employee/Student	Gives experience for future employment 95-96
CATI	SEJOBREQ	Employee/Student	Enrollment required by job 95-96
CATI	SELIBRY	Employee/Student	Limits access to library 95-96
CATI	SEMONEY	Employee/Student	Provides spending money 95-96
CATI	SENEWSKL	Employee/Student	Enrolled to learn new job skills 95-96
CATI	SEPERS	Employee/Student	Enrolled for personal interest 95-96
CATI	SERECR	Employee/Student	Enrolled for recreation 95-96
CATI	SEROLE	Employee/Student	Primary role while enrolled & working 95-96
CATI	SESCHED	Employee/Student	Limits class schedule 95-96
CATI	SETIME	Employee/Student	Limits study time 95-96
DERIVED	EM2ENRL	Employment	Ratio employed during month enrolled 95-96
DERIVED	HRSWORK	Employment	Average hours worked per week while enrolled 95-96
CATI	SCNUMJBS	Employment	Number of jobs held 95-96
CATI	SECMSRV	Employment	Work study part of comm service project 95-96
CATI	SECWSOFF	Employment	CWS on/off-campus 95-96
CATI	SECWSTYP	Employment	CWS type of employer 95-96
CATI	SEENRWKS	Employment	Weeks employed while enrolled 95-96
CATI	SEONOFF	Employment	Principal job-on campus 95-96
CATI	SEORGTYP	Employment	Organization type-principal job 95-96
CATI	SEPRNCWS	Employment	Principal job - CWS/assistantship 95-96
CATI	SERELMAJ	Employment	Principal job related to major 95-96
CATI	SESCHEMP	Employment	Employed by school 95-96
CATI	SESMRHR	Employment	Hours worked summer 1995
CATI	SESMRWRK	Employment	Worked summer 1995
CATI	SESTLEMP	Employment	Still employed in principal job 95-96



Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
CATI	SHEFFECT	Employment	Effect of job on academic performance 95-96
CATI	SHHRSEXP	Employment	# of work hours expected by parents 95-96
CATI	SHWRKEXP	Employment	Parent expected student to work 95-96 sy
CATI	SEENRFRQ	Employment	Frequency of earnings 95-96
DERIVED	INCOME2	Family Income	Family income and dependency level (cat.) 1994
DERIVED	PFAMNUM	FamilyParent	Parent^s family size 95-96
DERIVED	PPOSTED	FamilyParent	Number in college parent^s family 95-96
DERIVED	ZPFAMSZ	FamilyParent	Source for parents family size
DERIVED	CHILDCAR	FamilyStudent	Number of dependents paying childcare for 95-96
DERIVED	DEPAGE1	FamilyStudent	Number of dependents under age 5 95-96
DERIVED	DEPAGE2	FamilyStudent	Number of dependents age five to thirteen 95-96
DERIVED	DEPAGE3	FamilyStudent	Number of dependents, over 13 years of age 95-96
DERIVED	NDEPEND	FamilyStudent	Number of dependents (student) 95-96
DERIVED	SFAMNUM	FamilyStudent	Student^s family size 95-96
CATI	SFSPSAID	FamilyStudent	Spouse received financial aid 95-96
CATI	SFSPSENR	FamilyStudent	Spouse enrolled for 6+ credits 95-96
DERIVED	SPOSTED	FamilyStudent	Number in college student^s family 95-96
DERIVED	ZSFAMSZ	FamilyStudent	Source for student family size
DERIVED	AIDAPP	Financial aid	Applied for financial aid in 1995-96
DERIVED	AIDDEP	Financial aid	Financial aid receipt and dependency status 95-96
DERIVED	ANYEFC	Financial Aid	Received federal aid subject to EFC limitations 95-96
DERIVED	ANYFED	Financial Aid	Received federal financial aid in 1995-96
DERIVED	ANYFIN	Financial aid	Received any financial aid in 1995-96
DERIVED	APPDATE	Financial Aid	Date FAFSA application received
DERIVED	PRIORAID	Financial aid	Received any financial aid in 1994-95
DERIVED	PREPAID	Fund Source, student	Prepaid tuition amount use 95-96
CATI	SCUSBOND	Fund source, student	Used U.S. savings bonds 95-96
DERIVED	STRAT1	Fund source, student	Number of strategies used to finance 95-96 costs
DERIVED	STSAVPLN	Fund source, student	Student/parents use a college prepay plan 95-96
DERIVED	AFDC	IncomeFamily	Student/parents received AFDC in 1994 or 1995
DERIVED	CAGI	IncomeFamily	AGI combined (continuous)-1994
DERIVED	CAGICAT	IncomeFamily	AGI combined (categorical) -1994
DERIVED	CHILDSUP	IncomeFamily	Student/parents received child support in 1994 or 1995
DERIVED	CINCOME	IncomeFamily	Total income (cont.) parents and indep. students-1994
DERIVED	CINCOME2	IncomeFamily	Total income (cont.) parents and indep. students-94-imp
DERIVED	DEPINC	IncomeFamily	Dependent students parents income -1994
DERIVED	DEPINC2	IncomeFamily	Dependent students parents income -1994 (imp)
DERIVED	INCOME	IncomeFamily	Income and dependency level (categorical) 1994
DERIVED	INCSUP	IncomeFamily	Student/parents received income support during 1995-96
DERIVED	INDEPIN2	IncomeFamily	Total income independent students 1994 (imp)
DERIVED	INDEPIN1	IncomeFamily	Total income independent students 1994
DERIVED	PCTALL	IncomeFamily	Total income parents and indep. students percentile 1994
DERIVED	PCTDEP	IncomeFamily	Parents total income, percentile (dep. students) 1994
DERIVED	PCTINDEP	IncomeFamily	Independent student total income, percentile rank 1994
DERIVED	PCTPOV94	IncomeFamily	Percent of poverty level 1994
DERIVED	PCTPOV95	IncomeFamily	Percent of poverty level 1995
DERIVED	SSI	IncomeFamily	Student/parents received social security in 1994 or 1995
DERIVED	DADWORK	IncomeParent	Father^s income from work-1994
DERIVED	MOMWORK	IncomeParent	Mother^s income from work-1994
DERIVED	PAGICAT	IncomeParent	Parents AGI (categorical) 1994

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	PARAFDC	IncomeParent	Parents AFDC/ADC benefits 1994
DERIVED	PARCHILD	IncomeParent	Parent annual child support recvd-amount-1994
DERIVED	PAREXEM	IncomeParent	Parents exemptions claimed in 1994
DERIVED	PARFORM	IncomeParent	Parents tax form 1994
DERIVED	PARINC94	IncomeParent	Parent^s income (including parents of independents)-1994
DERIVED	PARINC95	IncomeParent	Parent^s income (including parents of independents)-1995
DERIVED	PAROTHR	IncomeParent	Parents other nontaxed income-amount-1994
DERIVED	PARSOC	IncomeParent	Parents social security benefits 1994
DERIVED	PARTAX	IncomeParent	Parents income taxes paid in 1994
DERIVED	PUNTAX	IncomeParent	Parents untaxed income-1994
DERIVED	ZPARINC	IncomeParent	Source for parents income
DERIVED	SAGICAT	IncomeStudent	Independent student AGI (categorical) 1994
CATI	SFCOMP95	IncomeStudent	Received Worker^s Compensation in 1995
CATI	SFDIS95	IncomeStudent	Received Disability in 1995
CATI	SFFOOD	IncomeStudent	Received food stamps in 1995
CATI	SFWELF95	IncomeStudent	Received welfare in 1995
DERIVED	SPSEMP	IncomeStudent	Spouse employed 95-96
DERIVED	SPSINC	IncomeStudent	Spouses earned income from work 1995-96
DERIVED	STUAFDC	IncomeStudent	Student AFDC/ADC benefits 1994
DERIVED	STUCHILD	IncomeStudent	Student child support received in 1994
DERIVED	STUEXEM	IncomeStudent	Student exemptions claimed in 1994
DERIVED	STUFORM	IncomeStudent	Student tax form 1994
DERIVED	STUINC94	IncomeStudent	Student^s income (including dependents) -1994
DERIVED	STUINC95	IncomeStudent	Student^s income (including dependents) -1995
DERIVED	STUOTHER	IncomeStudent	Student other nontaxed income 1994
DERIVED	STUSOC	IncomeStudent	Student social security benefits 1994
DERIVED	STUTTAX	IncomeStudent	Student income taxes paid in 1994
DERIVED	STUWORK	IncomeStudent	Student income earned from work-1994
DERIVED	SUNTAX	IncomeStudent	Student untaxed income-1994
DERIVED	WKINC	IncomeStudent	Student earnings while enrolled 1995-96
DERIVED	ZSTUINC	IncomeStudent	Source for student income
IPEDS	AFFIL	Institution	NPSAS institution affiliation (IPEDS) 95-96
DERIVED	AIDCTRL	Institution	Control of institution where aid received 95-96
DERIVED	AIDLEVL	Institution	Level of institution where aid received 95-96
DERIVED	AIDSEC2	Institution	Type of other inst. (not NPSAS) where aid received 95-96
DERIVED	AIDSECT	Institution	Institution type where aid received in 95-96
IPEDS	BEAUTYFL	Institution	NPSAS institution is a cosmetology school 95-96
IPEDS	CARNEGIE	Institution	NPSAS institution Carnegie code 95-96
CADE	CLOCK	Institution	Institution awards clock vs. credit hours 95-96
IPEDS	CONTROL	Institution	Institution control 95-96
DERIVED	ENDCAT	Institution	Endowment/FTE categories (NPSAS inst) 95-96
DERIVED	ENRLCATB	Institution	Control and size (total enrollment) (NPSAS inst) 95-96
IPEDS	ENRLSIZE	Institution	Enrollment at the NPSAS institution 95-96
IPEDS	FICE	Institution	FICE code NPSAS Institution 95-96
IPEDS	FPOFFER	Institution	First professional offerings at the NPSAS inst 95-96
DERIVED	FRSTSCHL	Institution	Is the NPSAS inst. the first institution attended?
IPEDS	HBCU	Institution	Historically black college/university (NPSAS inst
IPEDS	HLOFFER	Institution	Highest level offering 95-96
DERIVED	HLOFFER2	Institution	Highest level offering -revised 95-96
DERIVED	INSSTATE	Institution	State where NPSAS institution is located 95-96

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	INSTCPS	Institution	Number of schls student planned to apply to, 95-96 (CPS)
IPEDS	IPEDSID	Institution	IPEDS identification code - NPSAS inst
IPEDS	LEVEL	Institution	Institution level 95-96
IPEDS	LOCALE	Institution	Location of institution (Urban/rural)
CADE	MCALSYS	Institution	Institution calendar system 95-96
IPEDS	OBEREG	Institution	NPSAS inst region of country
DERIVED	OPEID	Institution	OPEID identification code-NPSAS institution
DERIVED	OPEID2	Institution	OPEID code alternate for the NPSAS instittuion
IPEDS	PCTMIN1	Institution	NPSAS inst percent black non-Hispanic, Fall 1995
IPEDS	PCTMIN2	Institution	NPSAS inst percent American Indian, Fall 1995
IPEDS	PCTMIN3	Institution	NPSAS inst percent Asian, Fall 1995
IPEDS	PCTMIN4	Institution	NPSAS inst percent Hispanic, Fall 1995
DERIVED	PCTMIN5	Institution	NPSAS inst percent White non-Hispanic, Fall 1995
DERIVED	PCTMIN6	Institution	NPSAS inst percent minority, Fall 1995
DERIVED	PCTMIN7	Institution	NPSAS inst percent minority (excl Asians), Fall 1995
IPEDS	PEO1ISTR	Institution	NPSAS institution has occupational courses 95-96
IPEDS	PEO2ISTR	Institution	NPSAS institution has academic courses 95-96
IPEDS	PEO3ISTR	Institution	NPSAS institution has continuing ed/prof courses 95-96
IPEDS	PEO4ISTR	Institution	NPSAS institution has recrtnl/avocational courses 95-96
IPEDS	PEO5ISTR	Institution	NPSAS institution has adult remed/HS equiv. courses 95-96
IPEDS	PEO6ISTR	Institution	NPSAS institution offers secondary courses 95-96
DERIVED	PGMSEC	Institution	Graduate program and institution type 95-96
DERIVED	SCHLSEQ	Institution	Sequence of enrollment (multiple enrollments) 95-96
DERIVED	SECTOR	Institution	Institution type (level & control) 95-96
DERIVED	SECTOR9	Institution	Institution type and highest degree 95-96
DERIVED	TERMSNA	Institution	Indicator for no standard terms at the school 95-96
CADE	COSTLIVE	Institution Choice	Other living costs were less 95-96
DERIVED	COSTREL	Institution Choice	Num. cost related rsns for attending school 95-96
DERIVED	FACILITY	Institution Choice	Facilities/equipment 95-96
DERIVED	FRIENDAT	Institution Choice	Friends/spouse attended the school 95-96
DERIVED	INFLREL	Institution Choice	Number influence rel. rsns for attdng schl 95-96
DERIVED	INFLUNCE	Institution Choice	Other influence factors 95-96
DERIVED	LIVEHOME	Institution Choice	Could live at home 95-96
DERIVED	LOCATION	Institution Choice	Other location reason 95-96
DERIVED	LOCREL	Institution Choice	Number location rel. rsns for attending schl 95-96
DERIVED	MOREAID	Institution Choice	Got more financial aid 95-96
DERIVED	OTHCOST	Institution Choice	Other cost related reason 95-96
DERIVED	OTHRSN	Institution Choice	Other reputation reason 95-96
DERIVED	PARENT	Institution Choice	Parent(s) wanted student to attend 95-96
DERIVED	PARNATT	Institution Choice	Parent(s) attended the school 95-96
DERIVED	PLACEMNT	Institution Choice	Job placement 95-96
DERIVED	PROFESOR	Institution Choice	Faculty reputation 95-96
DERIVED	RATED	Institution Choice	Number of rating criteria considered 95-96
DERIVED	REPREL	Institution Choice	Number reputation rel. rsns for attdng schl 95-96
DERIVED	REPUTATN	Institution Choice	School has good reputation 95-96
CATI	SBCRIMRT	Institution Choice	Considered crime rate
CATI	SBGRADRT	Institution Choice	Considered graduation rate
CATI	SBPLACRT	Institution Choice	Considered job placement rate
CATI	SBRSNMST	Institution choice	Most important reason to attend
DERIVED	SCHCLOSE	Institution Choice	Close to home 95-96

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	SCHLNWRK	Institution Choice	Close to job 95-96
DERIVED	SHORTER	Institution Choice	Shorter time to finish 95-96
CATI	SIMILES	Institution Choice	Distance from school to permanent home 95-96
CATI	SINUMACC	Institution Choice	Number of schools where accepted 95-96
CATI	SINUMAPP	Institution Choice	Number of schools applied to 95-96
DERIVED	SURROUND	Institution Choice	Liked the campus 95-96
DERIVED	TEACHER	Institution Choice	Teacher/guidance counselor recommended 95-96
DERIVED	TUITLESS	Institution Choice	Tuition was low 95-96
IPEDS	ADMREQ1	InstitutionAdmission	NPSAS inst require HS diploma/equiv.(IPEDS)
IPEDS	ADMREQ10	InstitutionAdmission	NPSAS inst require TOEFL or equivalent (IPEDS)
IPEDS	ADMREQ11	InstitutionAdmission	NPSAS inst has open admissions
IPEDS	ADMREQ12	InstitutionAdmission	NPSAS inst other admissions requirement
IPEDS	ADMREQ2	InstitutionAdmission	NPSAS inst require HS class standing (IPEDS)
IPEDS	ADMREQ3	InstitutionAdmission	NPSAS inst require test scores (IPEDS)
IPEDS	ADMREQ4	InstitutionAdmission	NPSAS inst require SAT (IPEDS)
IPEDS	ADMREQ5	InstitutionAdmission	NPSAS inst require ACT (IPEDS)
IPEDS	ADMREQ6	InstitutionAdmission	NPSAS inst require other test (IPEDS)
IPEDS	ADMREQ7	InstitutionAdmission	NPSAS inst require residence (IPEDS)
IPEDS	ADMREQ8	InstitutionAdmission	NPSAS inst require ability to benefit (IPEDS)
IPEDS	ADMREQ9	InstitutionAdmission	NPSAS inst require age (IPEDS)
DERIVED	INSTREQ	InstitutionAdmission	NPSAS inst. require either the ACT or SAT? 95-96
DERIVED	PACPDATE	Interview	Parent Interview completion date (YYYYMMDD)
DERIVED	BPSELNEW	Interview	FTB Indicator
DERIVED	FTBTYPE	Interview	First-time beginner
DERIVED	PACPTIME	Interview	Parent Interview completion time
DERIVED	STCPDATE	Interview	Student Interview completion date
DERIVED	STCPTIME	Interview	Student Interview completion time
DERIVED	SUMDATE	Interview	Summary status - Date (yyyymmdd)
DERIVED	SUMSTAT	Interview	Summary status
DERIVED	SUMTIME	Interview	Summary status - Time
DERIVED	EFC AID1	Need	Amount of total aid subject to EFC limitations 95-96
DERIVED	EFC AID2	Need	Amount of federal aid subject to EFC limitations 95-96
DERIVED	EFC PCT1	Need	Ratio, EFC to total student budget (full-time, full-year) 95-96
DERIVED	EFC PCT2	Need	Ratio, EFC to total student budget (adjusted) 95-96
DERIVED	FTNEED1	Need	Student budget (full-time, full-year) minus EFC 95-96
DERIVED	FTNEED2	Need	Student budget (full-time, full-year) minus EFC minus aid 95-96
DERIVED	SNEED1	Need	Student budget (adjusted) minus EFC 95-96
DERIVED	SNEED2	Need	Student budget (adjusted) minus EFC minus aid 95-96
DERIVED	SNEED3	Need	Student budget (adjusted) minus EFC minus federal grants 95-96
DERIVED	NETCST1	Net cost	Student budget (adjusted) minus all aid 95-96
DERIVED	NETCST10	Net cost	Tuition and fees minus federal grants 95-96
DERIVED	NETCST11	Net cost	Student budget (adj.) minus EFC minus fed. grants
DERIVED	NETCST2	Net cost	Student budget (adjusted) minus federal grants 95-96
DERIVED	NETCST3	Net cost	Student budget (adjusted) minus grants 95-96
DERIVED	NETCST4	Net cost	Student budget (adjusted) minus grants and 0.5*loans 95-96
DERIVED	NETCST5	Net cost	Student budget (full-time) minus all aid 95-96
DERIVED	NETCST6	Net cost	Student budget (full-time) minus federal grants 95-96
DERIVED	NETCST7	Net cost	Student budget (full-time) minus grants 95-96

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	NETCST8	Net cost	Student budget (full-time) minus grants and 0.5*loans 95-96
DERIVED	NETCST9	Net cost	Tuition and fees minus all grants 95-96
DERIVED	CNSLD89	NSLDS	Consolidated loans-1989-90 and earlier
DERIVED	CNSLD90	NSLDS	Consolidated loans-1990-91
DERIVED	CNSLD91	NSLDS	Consolidated loans-1991-92
DERIVED	CNSLD92	NSLDS	Consolidated loans-1992-93
DERIVED	CNSLD93	NSLDS	Consolidated loans-1993-94
DERIVED	CNSLD94	NSLDS	Consolidated loans-1994-95
DERIVED	CNSLD95	NSLDS	Consolidated loans-1995-96
DERIVED	CNSLDCUM	NSLDS	Consolidated loans - cumulative through 1996
DERIVED	CUMGRAD1	NSLDS	Cumulative borrowed graduate (Stafford & Perkins) through 1996
DERIVED	CUMGRAD2	NSLDS	Cumulative borrowed graduate (Staff.,Perk.,Plus) through 1996
DERIVED	CUMOWE1	NSLDS	Amount owed (Stafford & Perkins) in 1996
DERIVED	CUMOWE2	NSLDS	Amount owed (Stafford,Perkin, & Plus) in 1996
DERIVED	CUMUG1	NSLDS	Cumulative borrowed undergrad. (Staff.,Perk.,SLS) through 1996
DERIVED	CUMUG2	NSLDS	Cumulative borrowed undrgrd. (Staff.,Perk.,Plus,SLS) thru 1996
DERIVED	NSLDS096	NSLDS	NSLDS federal student loan records available 1995-96
DERIVED	PERK89	NSLDS	Perkins loans-AY89-90 and prior
DERIVED	PERK90	NSLDS	Perkins loans-AY90-91
DERIVED	PERK91	NSLDS	Perkins loans-AY91-92
DERIVED	PERK92	NSLDS	Perkins loans-AY92-93
DERIVED	PERK93	NSLDS	Perkins loans-AY93-94
DERIVED	PERK94	NSLDS	Perkins loans-AY94-95
DERIVED	PERK95	NSLDS	Perkins loans-AY95-96
DERIVED	PERKCUM	NSLDS	Perkins loans - cumulative through 1996
DERIVED	PLUS89	NSLDS	PLUS loans-1989-90 and earlier
DERIVED	PLUS90	NSLDS	PLUS loans-1990-91
DERIVED	PLUS91	NSLDS	PLUS loans-1991-92
DERIVED	PLUS92	NSLDS	PLUS loans-1992-93
DERIVED	PLUS93	NSLDS	PLUS loans-1993-94
DERIVED	PLUS94	NSLDS	PLUS loans-1994-95
DERIVED	PLUS95	NSLDS	PLUS loans-1995-96
DERIVED	PLUSCUM	NSLDS	PLUS loans - cumulative through 1996
DERIVED	STF01	NSLDS	Stafford and SLS loans-undergraduate year 1
DERIVED	STF02	NSLDS	Stafford and SLS loans-undergraduate year 2
DERIVED	STF03	NSLDS	Stafford and SLS loans-undergraduate year 3
DERIVED	STF04	NSLDS	Stafford and SLS loans-undergraduate year 4
DERIVED	STF05	NSLDS	Stafford and SLS loans-undergraduate year 5
DERIVED	STF06	NSLDS	Stafford and SLS loans-graduate year 1
DERIVED	STF07	NSLDS	Stafford and SLS loans-graduate year 2
DERIVED	STF08	NSLDS	Stafford and SLS loans-graduate year 3
DERIVED	STF09	NSLDS	Stafford SLS loans-graduate year 4 plus
DERIVED	STF10	NSLDS	Stafford and SLS loans-graduate year unknown
DERIVED	STF11	NSLDS	Stafford and SLS loans-year unknown (special)
DERIVED	STFCUM	NSLDS	Stafford and SLS loans total - cumulative through 1996
DERIVED	STFIRSTL	NSLDS	Stafford and SLS loans- first class level borrowed
DERIVED	STFIRSTY	NSLDS	Stafford and SLS loans- first year borrowed
DERIVED	STFLVL89	NSLDS	Stafford and SLS loan class level-AY89-90
DERIVED	STFLVL90	NSLDS	Stafford and SLS loan class level-AY90-91
DERIVED	STFLVL91	NSLDS	Stafford and SLS loan class level-AY91-92

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	STFLVL92	NSLDS	Stafford and SLS loan class level-AY92-93
DERIVED	STFLVL93	NSLDS	Stafford and SLS loan class level-AY93-94
DERIVED	STFLVL94	NSLDS	Stafford and SLS loan class level-AY94-95
DERIVED	STFLVL95	NSLDS	Stafford and SLS loan class level-AY95-96
DERIVED	STFSBCUM	NSLDS	Stafford loans subsidized- cumulative through 1996
DERIVED	STFY89	NSLDS	Stafford and SLS loans-AY89-90 and prior
DERIVED	STFY90	NSLDS	Stafford and SLS loans-AY90-91
DERIVED	STFY91	NSLDS	Stafford and SLS loans-AY91-92
DERIVED	STFY92	NSLDS	Stafford and SLS loans-AY92-93
DERIVED	STFY93	NSLDS	Stafford and SLS loans-AY93-94
DERIVED	STFY94	NSLDS	Stafford and SLS loans-AY94-95
DERIVED	STFY95	NSLDS	Stafford and SLS loans-AY95-96
DERIVED	STFYEAR5	NSLDS	Number of years borrowed Stafford and SLS loans
DERIVED	STLASTL	NSLDS	Stafford loan- last class level borrowed
DERIVED	STLASTY	NSLDS	Stafford loan- last year borrowed
DERIVED	STSUB89	NSLDS	Stafford subsidized amount in 1989
DERIVED	STSUB90	NSLDS	Stafford subsidized amount in 1990
DERIVED	STSUB91	NSLDS	Stafford subsidized amount in 1991
DERIVED	STSUB92	NSLDS	Stafford subsidized amount in 1992
DERIVED	STSUB93	NSLDS	Stafford subsidized amount in 1993
DERIVED	STSUB94	NSLDS	Stafford subsidized amount in 1994
DERIVED	STSUB95	NSLDS	Stafford subsidized amount in 1995
DERIVED	T4SUB89	NSLDS	Title IV Subsidized loans (incl. Perkins)-1989-90 and earlier
DERIVED	T4SUB90	NSLDS	Title IV Subsidized loans (incl. Perkins)-1990-91
DERIVED	T4SUB91	NSLDS	Title IV Subsidized loans (incl. Perkins)-1991-92
DERIVED	T4SUB92	NSLDS	Title IV Subsidized loans (incl. Perkins)-1992-93
DERIVED	T4SUB93	NSLDS	Title IV Subsidized loans (incl. Perkins)-1993-94
DERIVED	T4SUB94	NSLDS	Title IV Subsidized loans (incl. Perkins)-1994-95
DERIVED	T4SUB95	NSLDS	Title IV Subsidized loans (incl. Perkins)-1995-96
DERIVED	T4SUBCUM	NSLDS	Title IV Subsidized loans (incl. Perk.)-cumulative thru 1996
DERIVED	T4TOT89	NSLDS	Title IV loans including PLUS-1989-90 and earlier
DERIVED	T4TOT90	NSLDS	Title IV loans including PLUS-1990-91
DERIVED	T4TOT91	NSLDS	Title IV loans including PLUS-1991-92
DERIVED	T4TOT92	NSLDS	Title IV loans including PLUS-1992-93
DERIVED	T4TOT93	NSLDS	Title IV loans including PLUS-1993-94
DERIVED	T4TOT94	NSLDS	Title IV loans including PLUS-1994-95
DERIVED	T4TOT95	NSLDS	Title IV loans including PLUS-1995-96
DERIVED	T4TOTCUM	NSLDS	Title IV loans including PLUS - cumulative through 1996
DERIVED	T4TOX89	NSLDS	Title IV loans excluding PLUS-1989-90 and earlier
DERIVED	T4TOX90	NSLDS	Title IV loans excluding PLUS-1990-91
DERIVED	T4TOX91	NSLDS	Title IV loans excluding PLUS-1991-92
DERIVED	T4TOX92	NSLDS	Title IV loans excluding PLUS-1992-93
DERIVED	T4TOX93	NSLDS	Title IV loans excluding PLUS-1993-94
DERIVED	T4TOX94	NSLDS	Title IV loans excluding PLUS-1994-95
DERIVED	T4TOX95	NSLDS	Title IV loans excluding PLUS-1995-96
DERIVED	T4TOXCUM	NSLDS	Title IV loans excluding PLUS - cumulative through 1996
DERIVED	T4UNS89	NSLDS	Title IV Unsubsidized loans -1989-90 and earlier
DERIVED	T4UNS90	NSLDS	Title IV Unsubsidized loans -1990-91
DERIVED	T4UNS91	NSLDS	Title IV Unsubsidized loans -1991-92
DERIVED	T4UNS92	NSLDS	Title IV Unsubsidized loans -1992-93

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	T4UN93	NSLDS	Title IV Unsubsidized loans -1993-94
DERIVED	T4UN94	NSLDS	Title IV Unsubsidized loans -1994-95
DERIVED	T4UN95	NSLDS	Title IV Unsubsidized loans -1995-96
DERIVED	T4UNSCUM	NSLDS	Title IV Unsubsidized loans - cumulative through 1996
DERIVED	ALLOWNCE	Parental support	Monthly allowance from parents 95-96
DERIVED	PARHELP	Parental support	Parents helped with loan or direct contribution 95-9
DERIVED	PARPDIR	Parental support	Parents helped with direct contribution 95-96
CATI	PLGVAMT	Parental support	Amount given to student (parent) 95-96
CATI	PLLNAMT	Parental support	Amount loaned to student (parent) 95-96
CATI	PLPDSCH	Parental support	Amount paid to school (parent) 95-96
CATI	SBPDBRD	Parental support	Paid room and board to parents 95-96
CATI	SCOTSUP	Parental support	Provided other types of support 95-96
CATI	SCPARALW	Parental support	Parents paid - Allowance 95-96
CATI	SCPARBK	Parental support	Parents paid - books/equipment 95-96
CATI	SCPARLON	Parental support	Parent(s) loaned for 95-96
CATI	SCPARRM	Parental support	Parents paid - room/board 95-96
CATI	SCPARTUI	Parental support	Parents paid - tuition/fees 95-96
CATI	SCSUPCAR	Parental support	Car loan payments 95-96
CATI	SCSUPCHG	Parental support	Charge cards 95-96
CATI	SCSUPCLS	Parental support	Clothing 95-96
CATI	SCSUPHS	Parental support	Housing 95-96
CATI	SCSUPINS	Parental support	Any type of insurance 95-96
CATI	SCSUPMLS	Parental support	Meals 95-96
CATI	SCSUPOTH	Parental support	Other types of assistance 95-96
CATI	SCSUPREP	Parental support	Car repair bills 95-96
DERIVED	TOTALLOW	Parental support	Total amount of allowance from parents 1995-96
CATI	PLPREPAY	Parental support	Parents used a prepayment plan 95-96
CATI	PLEEBOND	ParentFundSource	EE Bonds 95-96
CATI	PLLIFINS	ParentFundSource	Life insurance policies 95-96
CATI	PLLOANS	ParentFundSource	Loans 95-96
CATI	PLMRTG	ParentFundSource	Second mortgage 95-96
CATI	PLOTHBND	ParentFundSource	Other stocks, bonds, mutual funds 95-96
CATI	PLOTHSRC	ParentFundSource	Other sources of funds 95-96
CATI	PLRELMNY	ParentFundSource	Money from relatives, friends, spouse 95-96
CATI	PLRETIRE	ParentFundSource	Retirement funds 95-96
CATI	PLSAVNGS	ParentFundSource	Savings, money market, CD 95-96
CATI	PLTRUST	ParentFundSource	Trust fund 95-96
DERIVED	DADAGE	Parents	Father's age 95-96
DERIVED	DADOC	Parents	Father's occupation 95-96
DERIVED	MOMAGE	Parents	Mother's age 95-96
DERIVED	MOMOC	Parents	Mother's occupation 95-96
DERIVED	PARAGE	Parents	Age of older parent 95-96
DERIVED	PARSTATE	Parents	Parents' state of legal residence 95-96
DERIVED	PMARITAL	Parents	Parents marital status 95-96
DERIVED	RPAR	Parents	Referent parent 95-96
DERIVED	ZPMARIT	Parents	Source for parents marital status
DERIVED	B2TO3	ParentsEducation	Both parents have 2-3 years of PSE 95-96
DERIVED	BASSOC	ParentsEducation	Both parents have an Associate's 95-96
DERIVED	BBA	ParentsEducation	Both parents have a Bachelor's 95-96
DERIVED	BBAPLUS	ParentsEducation	Both parents have a Bachelor's or higher 95-96

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	BHSG	ParentsEducation	Both parents have a high school diploma 95-96
DERIVED	BLTHS	ParentsEducation	Both parents have a less than HS education 95-96
DERIVED	BMAPLUS	ParentsEducation	Both parents have a Master^s degree or higher 95-96
DERIVED	BSPMPSE	ParentsEducation	Both parents have some PSE, lt 2 years 95-96
DERIVED	DADED	ParentsEducation	Father^s highest level of education 95-96
DERIVED	E2TO3	ParentsEducation	Either parents has 2-3 years of PSE 95-96
DERIVED	EASSOC	ParentsEducation	Either parent has an Associate^s 95-96
DERIVED	EBA	ParentsEducation	Either parent has a Bachelor^s 95-96
DERIVED	EBAl	ParentsEducation	Parent^s Bachelor^s degree status 95-96
DERIVED	EBAPLUS	ParentsEducation	Either parent has a Bachelor^s or higher 95-96
DERIVED	EHS	ParentsEducation	Either parent has a high school diploma 95-96
DERIVED	ELTHS	ParentsEducation	Either parent has a less than HS education 95-96
DERIVED	EMAPLUS	ParentsEducation	Either parent has a Master^s degree or higher 95-96
DERIVED	ESMPSE	ParentsEducation	Either parent has some PSE, lt 2 years 95-96
DERIVED	FATHEDUC	ParentsEducation	Highest level of education completed by father 95-96
DERIVED	MOMED	ParentsEducation	Mother^s highest level of education 95-96
DERIVED	MOMGTDAD	ParentsEducation	Mother has more education than father 95-96
DERIVED	MOTHEduc	ParentsEducation	Highest level of education completed by mother 95-96
DERIVED	PARED	ParentsEducation	Parents^ highest education level (3 values) 95-96
DERIVED	PAREduc	ParentsEducation	Highest education level compl. by either parent 95-9
DERIVED	ZPARED	ParentsEducation	Source for parents education
DERIVED	AIDCST1	Ratio	Ratio of total aid to student budget (adjusted) 95-96
DERIVED	AIDCST2	Ratio	Ratio of total aid to student budget (full-time) 95-96
DERIVED	FEDPCT	Ratio	Ratio of federal aid to total aid 95-96
DERIVED	GRTLOAN	Ratio	Ratio of grants to total loans 95-96
DERIVED	GRTPCT	Ratio	Ratio of grants to total aid 95-96
DERIVED	GRTRATIO	Ratio	Ratio of grants to grants and loans 95-96
DERIVED	INSTPCT	Ratio	Ratio of institution aid to total aid 95-96
DERIVED	LOANPCT	Ratio	Ratio of loans to total aid 95-96
DERIVED	STAPCT	Ratio	Ratio of state aid to total aid 95-96
DERIVED	WORKPCT	Ratio	Ratio of work-study to total aid 95-96
DERIVED	SFAMPAY	Reason no apply-student	Family/student could pay 95-96
DERIVED	SHARDAPP	Reason no apply-student	Too difficult to apply 95-96
DERIVED	SHINCOME	Reason no apply-student	Family income too high 95-96
DERIVED	SLOWGRAD	Reason no apply-student	Grades/scores too low 95-96
DERIVED	SMISDLIN	Reason no apply-student	Missed application deadline 95-96
DERIVED	SNOAIDMO	Reason no apply-student	No money was available 95-96
DERIVED	SNODEBT	Reason no apply-student	Didn^t want debt 95-96
DERIVED	SNODISCL	Reason no apply-student	Not want to disclose finances 95-96
DERIVED	SNOELIGB	Reason no apply-student	Ineligible since part-time 95-96
DERIVED	SOTHERR	Reason no apply-student	Other reason 95-96
DERIVED	REFUSAID	Reject reason	Student did not accept some of aid awarded in 1995-96
DERIVED	RFUSASST	Reject reason	Student did not accept grad. assistantship in 1995-96
DERIVED	RFUSGRNT	Reject reason	Student refused grant aid for 1995-96
DERIVED	RFUSLOAN	Reject reason	Student refused loan aid for 1995-96
DERIVED	RFUSOTHR	Reject reason	Student refused other aid for 1995-96
DERIVED	RFUSWKST	Reject reason	Student refused work study aid for 1995-96
DERIVED	ANYREM	Remedial	Any remedial courses taken? 95-96
DERIVED	REMED2	Remedial	Any remedial math, reading, writing or lang. courses? 95-96
CATI	SILANG	Remedial	Remedial course - Eng language 95-96



Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
CATI	SIMATH	Remedial	Remedial course - math 95-96
CATI	SIREAD	Remedial	Remedial course - reading 95-96
CATI	SISTUD	Remedial	Remedial course - study skills 95-96
CATI	SIWRIT	Remedial	Remedial course - writing 95-96
DERIVED	CATIRESP	Sample	CATI respondent status
DERIVED	CHKDGT1	Sample	Check digit 1
DERIVED	CHKDGT2	Sample	Check digit 2
DERIVED	CHKDGT3	Sample	Check digit 3
DERIVED	COMPT087	Sample	Comparable to 1987 NPSAS
DERIVED	ACTVDUTY	Student	Military-active duty
DERIVED	AGE	Student	Age as of 12/31/95
DERIVED	BDATE	Student	Birth date (YYYYMMDD)
DERIVED	CENRACE	Student	Race/ethnicity of student-census categories 95-96
DERIVED	CITIZEN2	Student	Citizenship 95-96
DERIVED	DELAYED	Student	Delayed enrollement status (excl GED & cert of compl.)
DERIVED	DELAYENR	Student	Delayed enrollment into PSE 95-96
DERIVED	DEPATT	Student	Dependency and attendance status first term 95-96
DERIVED	DEPEND	Student	Dependency status 95-96
DERIVED	DEPEND2	Student	Dependency status for financial aid 95-96
DERIVED	DEPEND3	Student	Dependency status for pell and federal loans 95-96
DERIVED	DEPEND4	Student	Dependency status for financial aid-incl marital status 95-96
DERIVED	GENDER	Student	Gender
DERIVED	HISPANIC	Student	Hispanic ethnicity
DERIVED	HISPTYPE	Student	Type of Hispanic origin
DERIVED	LOANDEP	Student	Dependency status for last loan (NSLDS) 95-96
DERIVED	LOCALRES	Student	Student housing status for need analysis 95-96
DERIVED	ORPHAN	Student	Orphan or ward of court 95-96
DERIVED	RACE	Student	Race/ethnicity of student
DERIVED	RACEDINC	Student	Race/ethnicity and dependency and income 95-96
DERIVED	RACESEX	Student	Race/ethnicity and gender
DERIVED	RISKINDX	Student	Sum of seven risk factor indices 95-96
DERIVED	RISKNDX2	Student	Sum of 7 risk factors, comparable to NPSAS:87/90
CATI	SBNPSED	Student	Highest level of ed exp @ sample school 95-96
CATI	SCCNTRY	Student	Country of origin
CATI	SEBRNCH	Student	Military service branch
CATI	SEMILTYP	Student	Military service type
CATI	SGASIAN	Student	Type of asian origin
CATI	SGLANG	Student	Primary language in home
CATI	SGTRIBE	Student	Enrolled in a recognized tribe
DERIVED	SINGLPAR	Student	Single parent 95-96
DERIVED	SMARITAL	Student	Marital status when applied for financial aid 95-96
DERIVED	STUOCC1	Student	Occupation 95-96
DERIVED	STUREGN	Student	Region of legal residence 95-96
DERIVED	STUSTATE	Student	Student's state of legal residence 95-96
DERIVED	TYPAGE	Student	Age, typical for student classification 95-96
DERIVED	TYPAGE2	Student	Age, typical/older classification 95-96
DERIVED	VETERAN	Student	Veteran status 95-96
DERIVED	ZAGE	Student	Source for student age
DERIVED	ZCITZN	Student	Source for student citizenship
DERIVED	ZDEPEND	Student	Source for student dependency

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	ZGENDER	Student	Source for student gender
DERIVED	ZHISP	Student	Source for student Hispanic status
DERIVED	ZHSGYY	Student	Source for year of H.S. graduation
DERIVED	ZLOCRES	Student	Source for local residence
DERIVED	ZRACE	Student	Source for student race/ethnicity
DERIVED	ZSMARIT	Student	Source for student marital status
DERIVED	COSMLIC	Student, degree	Holds a cosmetology license 95-96
DERIVED	DEGFIRST	Student, degree	Degree program during first term 95-96
DERIVED	DEGLAST	Student, degree	Degree program during last term 95-96
DERIVED	DOCTOR	Student, degree	Doctoral program 1995-96
DERIVED	GOTDEGRE	Student, degree	Degree completed in 1995-96
DERIVED	LICENSE	Student, degree	Number of licenses/certs. the student holds 95-96
DERIVED	MASTERS	Student, degree	Masters program 95-96
DERIVED	NOHHALIC	Student, degree	Holds a nurses aid/home health aid license 95-96
DERIVED	NURSELIC	Student, degree	Holds a nursing/lpn license 95-96
DERIVED	OTHRAA	Student, degree	Holds an associates degree 95-96
DERIVED	OTHRBA	Student, degree	Holds a bachelors degree 95-96
DERIVED	OTHRCERT	Student, degree	Holds a certificate or other formal award 95-96
DERIVED	OTHRDEGS	Student, degree	Number of other degrees, licenses or certs. 95-96
DERIVED	OTHRDFP	Student, degree	Holds a doctoral of first professional dgeree 95-96
DERIVED	OTHRLIC	Student, degree	Holds other type of license 95-96
DERIVED	OTHRMA	Student, degree	Holds a masters degree 95-96
DERIVED	OTHRPBA	Student, degree	Holds a post-baccalaureate certificate 95-96
DERIVED	TEACHLIC	Student, degree	Holds a teaching license 95-96
DERIVED	ZDEGFRST	Student, degree	Source for degree program first term
DERIVED	ZDEGLAST	Student, degree	Source for degree program last term
DERIVED	APPRENT	Student, education	Student participated in an apprenticeship 95-96
DERIVED	BATYPE	Student, education	Level and control of school of first BA
DERIVED	COOP	Student, education	Student participated in a cooperative ed pgm 95-96
DERIVED	CRTRANSF	Student, education	Any transfer credits from other school?
DERIVED	EVERCC	Student, education	Ever attended a public 2-year institution
DERIVED	EXPDATE	Student, education	Date expected to complete program (yyyymm) 95-96
DERIVED	FACPRLIC	Student, education	Holds a first aid/CPR license 95-96
DERIVED	FOODLIC	Student, education	Holds a food service license 95-96
DERIVED	FRSTYPER	Student, education	Level and control of first postsecondary inst.
DERIVED	FUTRPLAN	Student, education	What does student plan to be doing next year? 95-96
DERIVED	GEDYEAR	Student, education	Year GED earned (yyyy)
DERIVED	GPA	Student, education	Grade point average 95-96
DERIVED	GRADGAP	Student, education	Number of years between BA and graduate study
DERIVED	GRADPYR	Student, education	Year began graduate education
DERIVED	GRADYRS	Student, education	Number of years of graduate study
DERIVED	HSDEG	Student, education	High school degree or equivalent
DERIVED	HSGRADYY	Student, education	High school graduation year
DERIVED	INTERN	Student, education	Student participated in an internship 95-96
DERIVED	MAJORS	Student, education	Field of study 95-96 (99 categories)
DERIVED	MAJORS3	Student, education	Undergraduate field of study 95-96 (12 cat.)
DERIVED	MAJORS4	Student, education	Graduate field of study 95-96 (12 cat.)
DERIVED	PROGDATE	Student, education	Date completed program (yyyymm)
DERIVED	PROGSTAT	Student, education	Student completed degree program 95-96
CATI	SABA_YR	Student, education	Year of first bachelor's degree

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
CATI	SABSIPDS	Student, education	School of bachelor^s degree - IPEDS
CATI	SAHSTYPE	Student, education	Type of high school attended
DERIVED	SAMEREGN	Student, education	Attend inst. in region of legal residence 95-96?
DERIVED	SAMESTAT	Student, education	Attend inst. in state of legal residence 95-96?
CATI	SBENRPUR	Student, education	Primary reason for enrolling
CATI	SBHIGHED	Student, education	Highest level of education planned 95-96
CATI	SBOTHRRES	Student, education	Living arrangement when not in school
CATI	SEPROGRM	Student, education	Participated in coop ed/intersh/apprent
DERIVED	STYPEFST	Student, education	Student type during first term enrolled 95-96
DERIVED	STYPELST	Student, education	Student type during last term enrolled 95-96
DERIVED	ZHSDEG	Student, Education	Source for high school degree
DERIVED	ZMAJOR	Student, Education	Source for student major
DERIVED	FRSTPROF	Student, education	First professional degree program 1995-96
DERIVED	GRADDEG	Student, education	Graduate dgeree program 1995-96
DERIVED	CHNGUG	Student, level	Undergraduate became graduate in 1995-96
DERIVED	COLLGRAD	Student, level	Graduating senior in 1995-96
DERIVED	GRADLEV1	Student, level	Graduate level first term 95-96
DERIVED	GRADLEV2	Student, level	Graduate level last term 95-96
DERIVED	LEVFIRST	Student, level	Student level during first term 95-96
DERIVED	LEVLAST	Student, level	Student level during last term 95-96
DERIVED	LOANLVL	Student, level	Student level reported for last loan (NSLDS) 95-96
DERIVED	LVLCHNG	Student, level	Student level changed btw 1st and last term, 95-96
DERIVED	UGLEVEL1	Student, level	Undergraduate level first term 95-96
DERIVED	UGLEVEL2	Student, level	Undergraduate level last term 95-96
DERIVED	ZLEVFRST	Student, level	Source for student level first term
DERIVED	ZLEVLAST	Student, level	Source for student level last term
DERIVED	ACT	Test	ACT composite score
DERIVED	DAT	Test	Dental admissions exam (DAT)
DERIVED	GMAT	Test	General Management Acheivment Test (GMAT)
DERIVED	GRE	Test	Graduate Record Exam (GRE)
DERIVED	GREA	Test	GRE analytic score
DERIVED	GREM	Test	GRE math score
DERIVED	GREV	Test	GRE verbal score
DERIVED	LSAT	Test	Law School Admissions Test (LSAT)
DERIVED	MCAT	Test	Medical College Admissions Test (MCAT)
DERIVED	MILLER	Test	Miller^s analogies test
DERIVED	SATM	Test	SAT score-math score
DERIVED	SATR	Test	SAT score-reasoning score
DERIVED	SATTOTAL	Test	SAT score -combined verbal and math
DERIVED	SATV	Test	SAT score-verbal score
DERIVED	TOEFL	Test	Test of English Language Proficiency (TOEFL)
DERIVED	POLACT	Vote	Participation in political activities 95-96
CATI	SGPOLLTR	Vote	Wrote letter to public official 95-96
CATI	SGPOLMTG	Vote	Went to political meetings, rallies, dinners 95-96
CATI	SGVOTE	Vote	Registered to vote in US elections
CATI	SGVOTE92	Vote	Voted in 92 presidential election
CATI	SGVOTE96	Vote	Will (or did) vote in 96 pres. election
CATI	SGVOTEVR	Vote	Ever voted-natl, state, local elections
DERIVED	CATIWT1	Weight	CATI weight for UG in first or last term
DERIVED	CATIWT2	Weight	CATI weight for GR/FP in first or last term

Variable Type	Variable Name	DAS/ECB Prefix	Variable Label
DERIVED	DASWT1	Weight	Weight for UG in first or last term
DERIVED	DASWT2	Weight	Weight for GR/FP in first or last term

# Appendix I

## Imputations

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## A. Hot Deck Imputations

As described in Section 5.4, data for 21 analysis variables were statistically imputed using the weighted hot deck procedure. This appendix shows the imputation classes and sorting variables for all of these variables. As presented in Table 5.3, the variables are ordered by the percentage of missing data.

- (1) Variable Name: STUINC94  
Description: Student Income  
Data Used in Imputation: Study Respondents (48,389)  
Number Missing: 12,928 (26.7%)  
Imputation Classes: 57 CHAID segments defined by cross-classifications of  
    Dependency status  
    Amount of need-based aid received (categorical recode)  
    Marital status  
    Age (categorical recode)  
    Race/ethnicity  
    Tuition  
    OBE region  
    Institution level  
    Parent income (categorical recode of imputed variable)  
    Attendance status  
Sorting Variable(s):  
    Institution level  
    Race/ethnicity  
    Amount of need-based aid received
- (2) Variable Name: PARINC94  
Description: Parent Income  
Data Used in Imputation: Study Respondents, Dependents(24,218)  
Number Missing: 5,889 (24.2%)  
Imputation Classes, 1<sup>st</sup> Stage: Parent income category from student reports (if reported)  
Imputation Classes, 2<sup>nd</sup> Stage: 49 CHAID segments defined by cross-classifications of  
    Amount of need-based aid received (categorical recode)  
    Tuition  
    Race/ethnicity  
    OBE region  
    Institution level  
    Institution control  
Sorting Variable(s):  
    Amount of need-based aid received

NOTE: The imputation for parent income was performed in two stages. The first stage used parent income categories as the imputation classes among students who reported their parents' income category. The second stage imputed the remaining missing values where other variables were used to define the imputation classes. In both stages, the amount of need-based aid received was used as the sorting variable.

- (3) Variable Name: NDEPEND  
 Description: Number of Dependents  
 Data Used in Imputation: Study Respondents, Independents (24,171)  
 Number Missing: 4,749 (19.6%)  
 Imputation Classes: 17 CHAID segments defined by cross-classifications of  
     Student marital status  
     Age group  
     Gender  
     Student type  
     Indicator of CPS data  
     Institution level  
 Sorting Variable(s):  
     Gender  
     Age
- (4) Variable Name: PFAMNUM  
 Description: Parent Family Size  
 Data Used in Imputation: Study Respondents, Dependents (24,218)  
 Number Missing: 4,375 (18.0%)  
 Imputation Classes: Institution highest level of offering  
 Sorting Variable(s): Age
- (5) Variable Name: ANYDEP  
 Description: Dependents indicator  
 Data Used in Imputation: Study Respondents, Independents (24,171)  
 Number Missing: 4,306 (17.8%)  
 Imputation Classes: 13 CHAID segments defined by cross-classifications of  
     Age group  
     Student income  
     Gender  
     Student type  
     Indicator of CPS data  
     Indicator of CATI data  
     Institution level  
 Sorting Variable(s):  
     Gender  
     Age
- (6) Variable Name: PMARITAL  
 Description: Parent Marital Status  
 Data Used in Imputation: Study Respondents, Dependents (24,218)  
 Number Missing: 3,775 (15.5%)  
 Imputation Classes: Institution highest level of offering  
 Sorting Variable(s): Age



- (7) Variable Name: HSDEG  
 Description: Indicator and Type of High School Degree  
 Data Used in Imputation: Study Respondents (48,389)  
 Number Missing: 2,561 (5.3%)  
 Imputation Classes: Degree program in first term (imputed)  
 Sorting Variable(s): Age
- (8) Variable Name: HSGRADYY  
 Description: High School Graduation Year  
 Data Used in Imputation: Study Respondents, High School Degree or Certificate (47,508)  
 Number Missing: 2,511 (5.3%)  
 Imputation Classes: A cross-classification of  
     Type of high school degree  
     Age (categorical recode)  
 Sorting Variable(s): Age
- (9) Variable Name: Smarital  
 Description: Student Marital Status  
 Data Used in Imputation: Study Respondents (48,389)  
 Number Missing: 2,211 (4.6%)  
 Imputation Classes: 11 CHAID segments defined by cross-classifications of  
     Dependency status  
     Student income  
     Student type  
     Indicator of CPS data  
     Age group  
 Sorting Variable(s): Age
- (10) Variable Name: CITIZEN2  
 Description: Citizenship of Student  
 Data Used in Imputation: Study Respondents (48,389)  
 Number Missing: 2,084 (4.3%)  
 Imputation Classes: Federal aid status  
 Sorting Variable(s):  
     Institution control  
     Institution level  
     Student legal residence region

- (11) Variable Name: LEVLAST  
 Description: Student Level in Last Term  
 Data Used in Imputation: Study Respondents (48,389)  
 Number Missing: 2,073 (4.3%)  
 Imputation Classes: Degree program in last term  
 Sorting Variable(s):  
     Institution highest level of offering  
     Age
- (12) Variable Name: LEVFIRST  
 Description: Student Level in First Term  
 Data Used in Imputation: Study Respondents (48,389)  
 Number Missing: 2,063 (4.3%)  
 Imputation Procedure:  
     Copied imputed values of LEVLAST into missing values of LEVFIRST.
- (13) Variable Name: RACE  
 Description: Race/ethnicity  
 Data Used in Imputation: Study Respondents(48,389)  
 Number Missing: 1,794 (3.5%)  
 Imputation Classes: 69 CHAID segments defined by cross-classifications of  
     OBE region  
     Percent blacks at institution  
     Percent Hispanics at institution  
     Percent Asian/Pacific Islander at institution  
     Percent American Indian/American Native at institution  
     Institution level  
     Institution control  
 Sorting Variable(s):  
     Percent white at institution
- (14) Variable Name: LOCALRES  
 Description: Local Residence  
 Data Used in Imputation: Study Respondents (48,389)  
 Number Missing: 1,259 (2.6%)  
 Imputation Classes: A cross-classification of  
     Indicator of dorms on campus  
     Dependency status  
     Marital status  
 Sorting Variable(s):  
     Age

- (15) Variable Name: AGE  
 Description: Student Age  
 Data Used in Imputation: Study Respondents (48,389)  
 Number Missing: 456 (0.9%)  
 Imputation Classes: A cross-classification of  
     Dependency status  
     Student level in last term  
 Sorting Variable(s):  
     Marital status  
     Attendance status
- (16) Variable Name: ATTEND  
 Description: Attendance Intensity in Fall Term  
 Data Used in Imputation: Study Respondents, Enrolled in Fall Term (40,058)  
 Number Missing: 314 (0.6%)  
 Imputation Classes: A cross-classification of  
     Federal aid status  
     Marital status  
 Sorting Variable(s):  
     Age
- Note: The fall enrollment variable was imputed first to classify students as enrolled in the fall term or not.
- (17) Variable Name: DEPEND2  
 Description: Dependency Status  
 Data Used in Imputation: Study Respondents (48,389)  
 Number Missing: 283 (0.6%)  
 Imputation Procedure:  
     Imputed missing values by applying the dependency status definition for Federal aid applicants to the imputed variables for age, marital status, student level, and family size.
- (18) Variable Name: FALL  
 Description: Fall Enrollment Indicator  
 Data Used in Imputation: Study Respondents (48,389)  
 Number Missing: 164 (0.3%)  
 Imputation Classes: Marital status  
 Sorting Variable(s): Age
- (19) Variable Name: GENDER  
 Description: Student Gender  
 Data Used in Imputation: Study Respondents (48,389)  
 Number Missing: 96 (0.2%)  
 Imputation Classes: Race  
 Sorting Variable(s): Student major

- (20) Variable Name: DEGLAST  
Description: Degree Program in Last Term  
Data Used in Imputation: Study Respondents (48,389)  
Number Missing: 92 (0.2%)  
Imputation Classes: Student level in last term  
Sorting Variable(s):  
    Institution highest level of offering  
    Age
- (21) Variable Name: DEGFIRST  
Description: Degree Program in First Term  
Data Used in Imputation: Study Respondents (48,389)  
Number Missing: 74 (0.2%)  
Imputation Procedure:  
    Copied imputed values of DEGLAST into missing values of DEGFIRST.

## B. EFC Imputations

For expected family contribution (EFC), a regression approach was used for imputation. The goal was to obtain the most parsimonious and best fitting equations using information likely to be available for non-aided students (those most likely to have a missing EFC). The general approach was to develop logistic regression models to estimate zero EFC cases, and then use ordinary least squares (OLS) regression models to estimate the predicted EFC for non-zero EFC cases. This approach was designed to accommodate the truncated EFC distribution (i.e., the large number of zero EFC cases in the population) and followed a conventional econometric approach for such cases.

The EFC imputations were performed separately for three categories of students: Dependent Students, Independent Students without Dependents, and Independent Students with Dependents. The extent of the imputation is shown in Table I.1 for the total group and for three categories of student dependency.

Table I.1—Sources of EFC by student dependency status

Source	Total		Dependents		Independent no dependents		Independent with dependents	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	48,389	100.0	24,218	100.0	13,593	100.0	10,578	100.0
Institution SAR	1,250	2.6	660	2.7	349	2.6	241	2.3
CPS 95-6 ISIR	28,479	58.9	15,148	62.5	7,208	53.0	6,123	57.9
CPS 96-7 ISIR	1,048	2.2	545	2.3	327	2.4	176	1.7
Pell grant file	596	1.2	245	1.0	114	0.8	237	2.2
Imputed	17,016	35.2	7,620	31.4	5,595	41.2	3,801	35.9

The first step in imputing EFC for independent students used the parameter estimates from logistic regressions to predict whether or not the student fell into the zero EFC group. If the estimate probability was below 0.5, the cases was estimated to have a non-zero EFC; if above 0.5, the case was estimated to have a zero EFC. For the non-zero cases, an ordinary least squares based regression formula was then used to estimate the independent student EFC.

For independent students without dependents, the variables used in the imputation were:

- Student Total Income (STUINC94)
- Dummy variable based on Student Marital Status Married (SMARITAL=2)

For independent students with dependents, the variables used in the imputation were:

- Student Total Income (STUINC94)
- Dummy Variable based on STUINC94 GE \$60,000
- Dummy variable based on Student Marital Status Married (SMARITAL=2)
- Dummy variable based on Student Marital Status Separated (SMARITAL=3)
- Student Family Size (SFAMNUM)
- Number of Family Members in Postsecondary Education (SPOSTED)

For dependent students, two components of EFC were estimated and the sum of the estimated components was used as the estimate of the dependent students' EFC. The two components of dependent student EFC were: (a) the adjusted parent contribution and (b) the dependent student contribution. The estimation proceeded along lines similar to those used for the independent students, with a logistic regression first used to estimate zero EFC, followed by OLS regression. However, the logistic prediction for the adjusted parent contribution was not satisfactory, so OLS was used to estimate the entire component for all cases.

For dependent students, the variables used to predict the Adjusted Parent Contribution were:

- Parent Total Income (PARINC94)
- Dummy Variable based on PARINC94 GE \$60,000
- Family Size (PFAMNUM)
- Dummy Variable based on business or real estate assets GT \$50,000 or savings more than \$10,000
- Dummy Variable for Parent Marital Status Single (PMARITAL=1)
- Dummy Variable for Parent Marital Status Separated (PMARITAL=3)
- Dummy Variable for Parent Marital Status Divorced (PMARITAL=4)

The variables used to predict the Student Income Contribution component of dependent students' EFC were:

- Student Total Income (STUINC94)
- Dummy Variable based on STUINC94 LE \$1,750
- Parent Total Income (PARINC94)
- Dummy Variable based on PARINC94 GE \$60,000
- Dummy Variable for Parent Marital Status Single (PMARITAL=1)
- Dummy Variable for Parent Marital Status Separated (PMARITAL=3)
- Dummy Variable for Parent Marital Status Divorced (PMARITAL=4)

The correlation coefficients between estimated and actual EFC among those students with 1995-96 CPS records were:

- dependent .83;
- independent/no dependents .93;
- independent/with dependents .95.

For independent students, over 90 percent of the predicted values were within one thousand dollars of the actual value for the EFC. As shown in Table I.2, the results for dependent students were less satisfactory, with only about half of the values within one thousand dollars. When the equations were tested using the 1996-97 CPS records for those students who had financial aid application data available for both years, the results were similar.

Table I.2—Differences between actual and predicted EFC, by type of student dependency

Difference	Student dependency type			
	Total	Dependent	Independent, no dependents	Independent with dependents
Within \$1,000	75.8	53.4	90.7	93.9
\$100 or less	35.0	12.7	35.7	69.8
\$101-250	10.3	9.2	15.0	6.5
\$251- 500	15.9	11.8	27.6	8.6
\$501-1000	14.6	19.7	12.4	9.0
Over \$1,000	24.2	46.6	9.3	6.1

The composite EFC variable in the analysis file represents the actual recorded EFC (if available) or the EFC estimated by regression for the cases with no recorded information. The distribution of the recorded, imputed, and composite EFC values are shown in Table I.3. Since higher income students and families are less likely to apply for financial aid, approximately one-half of the imputed EFC's are in the ranges above 9,500.

Table I.3—Frequency distributions of recorded, imputed, and composite EFC

Value of EFC	Type of EFC value considered					
	Recorded		Imputed		Composite	
	Number	Percent	Number	Percent	Number	Percent
Total	31,373	100.0	17,016	100.0	48,389	100.0
zero	9,616	30.7	1,349	7.9	10,965	22.7
1-1500	5,557	17.7	979	5.8	6,536	13.5
1501-2500	2,657	8.5	814	4.8	3,471	7.2
2501-3500	2,088	6.7	875	5.1	2,963	6.1
3501-4500	1,795	5.7	979	5.8	2,774	5.7
4501-5500	1,469	4.7	918	5.4	2,387	4.9
5501-6500	1,131	3.6	1,051	6.2	2,182	4.5
6501-7500	942	3.0	644	3.8	1,586	3.3
7501-8500	783	2.5	710	4.2	1,493	3.1
8501-9500	718	2.3	623	3.7	1,341	2.8
9501-12500	1,582	5.0	2,165	12.7	3,747	7.7
12501-17500	1,396	4.4	2,597	15.3	3,993	8.3
17501-22500	719	2.3	1,158	6.8	1,877	3.9
22501+	920	2.9	2,154	12.7	3,074	6.4

Table I.4 compares the average income by EFC level and dependency status before and after imputation. Table I.5 compares the income distribution of dependent and independent students before and after the EFC imputations, as well as the average actual EFC and composite EFC for each income level before and after imputation.



Table I.4—Average total income by recorded and composite EFC and student dependency status

EFC range	Dependent parents		Independent no dependents		Independent with dependents	
	EFC recorded	EFC composite	EFC recorded	EFC composite	EFC recorded	EFC composite
Total	\$45,504	\$54,551	\$13,093	\$20,448	\$18,921	\$26,450
zero	16,087	15,038	3,368	3,074	9,220	9,211
1-1500	23,450	22,238	5,990	5,898	23,071	21,995
1501-2500	32,409	30,466	9,443	9,132	30,527	26,958
2501-3500	38,133	36,137	12,366	11,821	36,115	30,146
3501-4500	42,754	40,458	15,014	14,483	41,001	31,039
4501-5500	48,120	45,569	18,024	17,328	44,228	34,145
5501-6500	55,005	51,575	20,954	20,264	48,575	34,420
6501-7500	57,497	54,853	23,247	23,220	50,455	41,376
7501-8500	60,172	57,958	26,362	25,883	53,435	36,583
8501-9500	64,242	62,209	28,741	28,405	55,350	42,226
9501-12500	70,379	69,019	33,948	34,319	58,672	47,781
12501-17500	79,683	82,636	43,261	45,742	70,396	47,059
17501-22500	89,251	92,605	52,486	59,448	78,733	55,520
22501+	121,793	160,905	64,106	94,071	89,229	90,921

Table I.5—Distribution of recorded and composite EFC by dependency and income

Student dependency status and income	EFC recorded			EFC composite		
	Number	Percent	Average	Number	Percent	Average
<b>Dependents</b>						
Total	16,598	100.0	6,289	24,218	100.0	8,179
Under \$15,000	2,888	17.4	814	3,550	14.7	845
\$15-\$30,000	3,442	20.7	1,314	4,177	17.2	1,563
\$30-\$45,000	3,055	18.4	3,419	4,051	16.7	3,700
\$45-\$60,000	2,635	15.9	6,434	3,811	15.7	6,552
\$60-\$75,000	1,936	11.7	10,191	3,152	13.0	10,491
\$75-\$100,000	1,631	9.8	14,859	2,814	11.6	14,231
\$100-\$125,000	586	3.5	20,053	1,435	5.9	20,353
\$125-\$150,000	198	1.2	28,469	403	1.7	27,560
Over \$150,000	227	1.4	38,583	825	3.4	42,611
<b>Independent</b>						
<b>No dependents</b>						
Total	7,998	100.0	3,679	13,593	100.0	6,074
Under \$5,000	2,855	35.7	493	3,433	25.3	424
\$5-\$10,000	1,678	21.0	1,642	2,285	16.8	1,668
\$10-\$20,000	1,770	22.1	4,012	2,962	21.8	4,067
\$20-\$30,000	810	10.1	7,070	1,799	13.2	7,148
\$30-\$50,000	600	7.5	11,024	1,736	12.8	11,429
Over \$50,000	285	3.6	20,431	1,378	10.1	23,625
<b>Independent</b>						
<b>With dependents</b>						
Total	6,777	100.0	1,441	10,578	100.0	4,996
Under \$5,000	1,510	22.3	192	1,756	16.6	177
\$5-\$10,000	1,260	18.6	114	1,519	14.4	287
\$10-\$20,000	1,619	23.9	306	2,194	20.7	1,006
\$20-\$30,000	1,051	15.5	1,013	1,563	14.8	2,905
\$30-\$50,000	849	12.5	3,080	1,846	17.5	7,588
Over \$50,000	488	7.2	10,574	1,700	16.1	18,435

# Appendix J

## Comparison of NPSAS:96 CATI Respondents and Nonrespondents

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Table J-1—Comparison of NPSAS:96 CATI respondents and nonrespondents among study respondents

	CATI respondents		CATI nonrespondents	
	Sample size	Percent estimate	Sample size	Percent estimate
<b>Age</b>				
19 or younger	11,307	19.43	2,301	14.96*
20 to 23	7,949	31.03	1,684	31.12
24 to 29	5,206	20.82	1,377	24.67*
30 to 39	4,040	15.98	930	15.95
40 or older	2,826	12.75	670	13.31
<b>Race</b>				
White, non-Hispanic	22,301	72.64	4,598	67.56*
Black, non-Hispanic	3,692	10.94	942	12.30
Hispanic	3,002	9.28	716	9.04
Asian/Pacific Islander	1,882	5.81	522	8.73*
American Indian/Alaskan Native	257	0.80	103	1.23
Other	194	0.53	81	1.14
<b>Gender</b>				
Male	13,317	44.22	3,043	45.54
Female	18,011	55.78	3,919	54.46
<b>Income</b>				
Dependent: less than \$20,000	3,249	7.79	786	8.52
Dependent: \$20,000 to \$39,999	3,895	10.36	685	8.92
Dependent: \$40,000 to \$59,999	3,767	10.14	711	8.87
Dependent: \$60,000 to \$79,999	2,670	7.51	563	6.65*
Dependent: \$80,000 to \$99,999	1,393	3.46	330	4.15
Dependent: \$100,000 or more	1,897	4.97	353	4.01*
Independent: less than \$10,000	4,988	15.01	1,560	20.34
Independent: \$10,000 to \$19,999	3,049	11.74	776	13.45
Independent: \$20,000 to \$29,999	2,038	8.51	457	9.41
Independent: \$30,000 to \$49,999	2,282	10.43	432	8.47
Independent: \$50,000 or more	2,099	10.09	309	7.22*

Table J-1—Comparison of NPSAS:96 CATI respondents and nonrespondents among study respondents (continued)

	CATI respondents		CATI nonrespondents	
	Sample size	Percent estimate	Sample size	Percent estimate
Receipt of any aid				
Yes	22,460	58.22	3,966	39.63*
No	8,868	41.78	2,996	60.37*
Receipt of federal aid				
Yes	17,977	40.43	3,317	29.98*
No	13,351	59.57	3,645	70.02*
Receipt of state aid				
Yes	5,621	13.48	902	9.85*
No	25,707	86.52	6,060	90.15*
Receipt of institution aid				
Yes	7,658	17.71	1,259	13.28*
No	23,670	82.29	5,703	86.72*

Notes:

1. There were 38,995 eligible students selected for the CATI subsample which resulted in 31,328 respondents and 7,667 nonrespondents. This table excludes 705 of the 7,667 CATI nonrespondents because they were also study nonrespondents and therefore had missing data for the analysis variables of interest. These exclusions could cause some bias in the nonrespondent estimates, but we expect that it is negligible because of the relatively small number of students excluded.
2. Tests for significant differences between the distributions of the respondents and nonrespondents were performed for each of the eight primary variables at the  $(0.05 / 8)$  level to account for multiple comparison effects. Except for gender, all of the variables were found to be significant.
3. Within each variable, the category percentages of respondents and nonrespondents were tested for significant differences at the  $(0.05 / (c - 1))$  level, where  $c$  is the number of categories. Estimates that were found to be significantly different are flagged with an asterisk.
4. The effects of these significant differences on the CATI-based estimates are mitigated by the CATI nonresponse weight adjustments, which explicitly accounted for differences in age distribution and aid status.
5. Some of the statistically significant differences may not be of practical significance (e.g., 4 percent versus 5 percent for dependent students with incomes of \$100,000 or more).

\* Difference between respondents and nonrespondents is significant at the  $0.05/(c-1)$  level, where  $c$  is the number of categories within the primary variable.