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# NATIONAL CENTER FOR EDUCATION STATISTICS

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Working Paper Series

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## **National Postsecondary Student Aid Study: 1996 Field Test Methodology Report**

Working Paper No. 96-17

July 1996

Contact: Andrew G. Malizio  
Data Development and Longitudinal Studies Group  
(202) 219-1448  
[andrew\\_malizio@ed.gov](mailto:andrew_malizio@ed.gov)

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**Office of Educational Research and Improvement**

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**July 1996**

## Foreword

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Susan Ahmed  
Chief Mathematical Statistician  
Statistical Standards and  
Services Group

Samuel S. Peng  
Director  
Methodology, Training, and Customer  
Service Program

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**National Postsecondary Student Aid Study: 1996**  
**Field Test Methodology Report**

July 1996

Research Triangle Institute  
P.O. Box 12194  
Research Triangle Park, NC 27709-2194

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## I. Introduction, Background, and Purpose

This document provides the description, summary, and evaluation of methodological procedures and results for the *field test* of the 1995-96 National Postsecondary Student Aid Study (NPSAS:96). The field test and subsequent full-scale study are being conducted for the National Center for Education Statistics (NCES) of the U. S. Department of Education, Washington, DC, as authorized by Title IV, Section 401, of the National Education Statistics Act of 1994 [PL 103-382]. NPSAS:96 is being conducted under contract by Research Triangle Institute (RTI), assisted by MPR Associates, Inc. and the National Association of Student Financial Aid Administrators (NASFAA).

The remainder of this introductory chapter describes briefly the background, purposes, and scheduled products of the NPSAS study and the unique purposes of the field test. In Chapter II, field test design and method are described. Descriptions and overall outcomes of the several stages of data collection, as well as results of special studies, are presented in Chapter III. Chapter IV describes the results of a comparative evaluation of sampling design options. Chapter V presents evaluations of procedures used to collect information from institutions and students/parents. Chapter VI examines issues related to the quality of the data collected, and Chapter VII summarized the major recommendations for changes in design for the full scale study. Materials used during the field test survey are provided as appendixes to the report and cited, where appropriate, in the text.

### A. Background and Purpose 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 in postsecondary education institutions, including undergraduate, graduate, and first-professional students. Students attending all types and levels of institutions are represented in the sample, 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 NPSAS study was conducted in 1986-1987; subsequently, NPSAS has been conducted triannually as NPSAS:90, NPSAS:93, and the current NPSAS:96.

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 study focuses 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 second question addresses the actual implementation of student aid programs. Federal programs are largely controlled by factors other than the federal government because school financial aid offices and banks 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.

NPSAS also contributes to additional studies described in the General Education Provisions Act (GEPA). The topics include:

- # Current costs to students and their families of postsecondary education, graduate education, and post-baccalaureate professional education;
- # Effects of changing school-related expenses on postsecondary education costs for students at various socioeconomic levels, with differing demographic characteristics (Title XIII, Part A, section 1303 HEA, 1986);
- # Research on postsecondary opportunities for minorities and women (Title XIV, section 1401 HEA, 1986);
- # Study of financial aid formulae, especially more equitable formulae for students from farm families (Title XIII, Part A, section 1303 HEA, 1986).

## **B. Scheduled Additional Activities and Products of NPSAS:96**

NPSAS:96 full-scale data collection is scheduled for February through September 1996. Full-scale data will be used to examine a wide range of education policy questions including helping to determine federal policy regarding student financial aid. The extent and depth of the data allow sophisticated simulation and statistical modeling. Electronically documented, restricted access research files (with associated electronic codebooks) as well as NCES' Data Analysis Systems (DASs) for public release will be constructed from the full-scale data and distributed to a variety of organizations and researchers. NPSAS:96 will produce the following types of reports: (1) a full-scale methodology report; (2) a sample design report, providing details of sample design and selection procedures, universal coverage, weighting methodologies, estimation procedures and design effects, and the results of nonresponse analyses; and (3) descriptive summaries of significant findings including *Undergraduate Financing of Postsecondary Education*, *Student Financing of Graduate and Professional Education*, and *Profile of Undergraduates at U.S. Postsecondary Institutions*.

**C. Purpose of the Field Test**

The major purpose of the NPSAS:96 field test was to use, test, and evaluate all operational and methodological procedures, instruments, and systems planned for use in the full-scale study. Many such methodological features, representing enhancements or refinements to previously used NPSAS approaches, had not been fully tested in the past. Using and testing methodologies in the field test that parallel the data collection procedures proposed for the main NPSAS data collection allow such procedures to be adjusted as necessary, before the much larger (and more expensive) full-scale data collection activities begin.

This procedure of comprehensive field-testing has been used quite successfully throughout the NPSAS series to enhance and advance, after controlled evaluation, the methodologies used in these important surveys. Just as the results of past NPSAS surveys and their associated field tests have consistently served to improve subsequent design and method, the results of the NPSAS:96 field test have served to improve the NPSAS:96 full-scale study, which, based on the evaluations reported herein, has been modified and improved to maximize operational efficiency, responses, and the quality of information obtained.

As detailed in Chapter II, the field test differed in some ways from the planned full-scale study. Of particular note is a difference in timing of the data collection. Specifically, initial data collection from the institutions did not begin until April 1995. Consequently, the abbreviated (i.e., nine weeks) locating/interviewing schedule did not begin until August of the academic year following the one in which students were sampled. The high mobility of many sample members between school years and the abbreviated locating/interviewing period somewhat limited field test success in these areas. Thus, the field test tracing, contact, and response rates (reported herein) are expected to improve in the full-scale study.

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## II. Design And Method of The Field Test

As indicated in Chapter I, the field test was designed to test and evaluate the procedures and methods planned for the full-scale study. Consequently, with some exceptions, field test activities paralleled those to be used subsequently in the full-scale study. Obviously, the field test was conducted in a different academic year than the full-scale study; moreover, procedures that proved ineffective (including some interview item structures that proved time-ineffective) will not be included in the full-scale study. Further, methodological experiments, which are inappropriate for a full-scale study, were imbedded in the field test design. The principal remaining differences, together with implications, are specified below.

- *Timing.* Field-test collection of student data was conducted during the months of April (when forms clearance was obtained) through October; full-scale data collection will be conducted during the months of February through September. Of particular relevance is the fact that few field test interviews were conducted in the same academic year during which the student was sampled; in addition the tracing/interviewing stage of the field test was considerably abbreviated.
- *Population of Schools and Students.* Both the full-scale and field-test institution samples were selected from the same sampling frame. To avoid undue burden on postsecondary institutions, no school selected for the full-scale NPSAS:96 was eligible for the field test. Moreover, since one field-test activity involved evaluating two potential overlapping samples (drawn under different sampling approaches) for NPSAS:96 and since that evaluation could not be completed prior to drawing the field test institution sample, the field test sample was further constrained to be excluded from the first stage of *either* of the two "potential" full-scale institution samples. Because very large schools were selected with certainty under one or the other full-scale sample, these types of schools and the students associated with them (plus the unique survey challenges associated with such schools and students) were not represented in the field test.
- *Institutional Sampling Procedures.* While the full-scale study represents a probability sample at all stages of sampling, the field test did not select institutions randomly. Rather, given the constraints already placed on the field-test sample, institutions for the field test were selected purposively from those schools *not* in the first-stage sample selected for the full-scale study. Because the two full-scale samples were already selected and actually evaluated during the field test period (and because the three-stage approach had already been implemented in the previous three NPSAS waves), no additional evaluation of random institutional selection procedures were deemed necessary in the field test. Subsequent field-test sampling was random, however, to evaluate student list acquisition and selection procedures to be used in the full-scale study.

- *Student Subsampling.* While both record abstraction and interviews were attempted for *all* sampled students during the field test, the full-scale study (for budgetary reasons) calls for interviewing only a subsample of students. It would have been possible to test the subsampling approach in the field test; however, it was considered more important (for other field test objectives) to obtain data for the full field test sample, which would still allow modeling of different approaches to student subsampling.
- *Parent Interview Subsampling.* Among those students to be interviewed, students were subsampled for parent interview with somewhat more simplistic student categorizations in the field test than will be the case in the full-scale study,<sup>1</sup> since the principal purpose of this sample in the field test was to test the data collection instrument. Nonetheless, the same basic procedures (i.e., establishing and applying separate rates for distinct student groups) will be used in both implementations.

With the noted exceptions, the field-test procedures described in the remainder of this chapter apply equally to the procedures that will be used in the full-scale NPSAS:96.

#### A. The NPSAS:96 Samples

The defined target population for NPSAS:96 consists of students enrolled in postsecondary education in the United States, District of Columbia, or Puerto Rico in any term beginning between May 1, 1995 and April 30, 1996.<sup>2</sup> The target population for the field test was comparable, as defined by the 1994-95 school year.

##### 1. The Institutional Sample

Effectively all (U.S. Military Academies were excluded due to their atypical funding/tuition base) U.S. institutions offering academically or vocationally oriented postsecondary programs were eligible for NPSAS:96 participation.<sup>3</sup> Specifically, to be eligible for NPSAS:96, a non-Military-Academy educational institution must have:

- offered a program designed for persons who have completed secondary education;
- offered at least one academic, occupational, or vocational program lasting at least 3 months or 300 contact hours;

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<sup>1</sup> At this writing, final plans for full-scale subsampling for parent interview have not been finalized; however, none of the several candidate procedures under consideration are fully consistent with field test subsampling procedures.

<sup>2</sup> Ideally, the population of interest would be students enrolled in any term starting during the *1995-96 financial aid award year*, which would be after July 1, 1995 and before June 30, 1996; using such a definition, however, would have introduced considerable delays in the study with only marginal associated benefits, since the bulk of the ideal population is contained within the operationally defined population.

<sup>3</sup> The NPSAS universe, for both the full-scale study and the field test includes all otherwise eligible institutions in the 1993-94 Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics (IC) file.

- offered courses that are open to more than the employees or members of the company or organization (e.g., Union) that administered the institution;
- offered more than just correspondence courses; and
- been located in the 50 states, the District of Columbia, or Puerto Rico.

Institutions serving postsecondary students were excluded if they offered only avocational, recreational, or remedial courses (e.g., hang gliding schools, exercise classes, dance courses) or if they reported zero enrollment for the 1993-94 academic year.

As indicated previously, the field-test and full-scale institutional samples were constrained to be disjoint. To allow the broadest institutional population for the full-scale study, the full-scale sample was selected first and the field test sample was selected from the residual frame members. Actually, two independent (but overlapping) NPSAS:96 full-scale study institutional samples were selected, to evaluate, as part of field test activities, cost and precision trade-off parameters under two sampling approaches (i.e., a two-stage sampling approach, with institutions as the first stage versus a three-stage sampling, beginning with a first stage area sample -- the procedure that had been used in all prior NPSAS waves). A description of these two full-scale samples, together with the cost/precision evaluation, is provided in Chapter IV.

The field test institutional sample was selected purposively from the institutions that did not fall in the first-stage sample of *either* full-scale institution sample. (Specifically, no field test school was selected from a first-stage area selected in the three-stage sampling approach, and no institution selected in the two-stage approach was selected for the field test.) For purposes of testing TDD technology to enhance direct participation by the hearing impaired, Gallaudet University was selected. Also, to evaluate procedures for improving the contacting and interviewing of students selected in Puerto Rico, three institutions in Puerto Rico were selected. The remaining field-test institutions were chosen to represent as complete a spectrum as possible of the residual institutions on the sampling frame and to represent (again to the extent possible) each of the institutional strata planned for the full-scale study samples. Additionally, the sample was selected from several separate geographic areas (including Puerto Rico).

In total, 78 institutions were selected for the field test; this figure was chosen to yield 65 institutions that *both were eligible and would provide lists for student sampling*.<sup>4</sup> A breakdown of sampled institutions by original institutional stratum is provided in Table II.A.1. (Some errors in actual institutional level and control existed in the stratum classification; these errors have not been corrected for this presentation, but are corrected in subsequent presentations.<sup>5</sup>) This table also shows, in total and by stratum among the sampled institutions, eligibility rates and rates for

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<sup>4</sup> Past NPSAS experience suggested that only about 90 percent of selected institutions would meet NPSAS eligibility requirements and that of those 95 percent would agree to participate.

<sup>5</sup> These classification errors were detected during initial eligibility verification contact with the institutions; specifically, one less-than-2-year school classified as public was found to be private, non-profit, *and* one public school classified as 2- to 3-year was found to be less than 2-year.

**Table II.A.1—NPSAS:96 Field Test Institutional Sampling, Eligibility, and List-Providing, by Sampling Stratum**

Stratum	Control	School Sampling Stratum <sup>a</sup>		Sampled Schools		Eligible Schools		Provided Lists	
		Level	Number	Percent <sup>b</sup>	Number	Percent <sup>c</sup>	Number	Percent <sup>d</sup>	
	Total	Total	78	100.0	73	93.6	66	90.4	
	Public	Total	36	46.2	35	97.2	34	97.1	
1		LT 2 Years	6	7.7	5	83.3	5	100.0	
2		2-3 Years	7	9.0	7	100.0	7	100.0	
3		4+ Years, non-doctoral	11	14.1	11	100.0	11 <sup>e</sup>	100.0	
4		4+ Years, doctoral	12	15.4	12	100.0	11	91.7	
	Private	Total	27	34.6	27	100.0	24	88.9	
5		LT 4 Years	5	6.4	5	100.0	4	80.0	
6		4+ Years, non-doctoral	10	12.8	10	100.0	10	100.0	
7		4+ Years, doctoral	12	15.4	12	100.0	10	83.3	
	Private For Profit	Total	15	19.2	11	73.3	8	72.7	
8		LT 2 Years	10	12.8	7	70.0	5	71.4	
9		2 or more Years	5	6.4	4	80.0	3	75.0	

NOTE: In addition to identifying institutional eligibility, initial contact with selected institutions identified errors in the school classification used on the sampling frame; specifically, one less-than-2-year school classified as public was found to be private, non-profit, and one public school classified as 2-3 year was found to be less than 2 year. These classification errors have not been corrected for this presentation.

- <sup>a</sup> To avoid even smaller cell sizes, categories of level of offering have been collapsed within the two private sectors.
- <sup>b</sup> Percent is based on overall total within column.
- <sup>c</sup> Percent is based on number sampled within row.
- <sup>d</sup> Percent is based on number eligible within row.
- <sup>e</sup> When subsampling down to 65 schools, one school in this stratum that had previously provided student lists was subsequently excluded from the study, and no students were sampled from that school.

providing student lists. Overall, over 93 percent of the sampled institutions met NPSAS eligibility requirements, and, of those, over 90 percent provided lists for student sampling.

Because the achieved institutional yield was greater than expected (and greater than had been budgeted for), 65 of the 66 institutions providing lists were sampled for field-test implementation. The one institution that was not subsampled was from Stratum 3 (public, 4-year, non-doctorate-granting).

## 2. The Student Sample

Not all students enrolled in eligible institutions were considered eligible for NPSAS. In addition to being enrolled at a NPSAS-eligible school during a term starting between the appropriate dates (for the field test on or after May 1, 1994 but no later than April 30, 1995; for the full-scale study on or after May 1, 1995 but no later than April 30, 1996), NPSAS-eligible students must have:

- been 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 contact hours of instruction to receive a degree, certificate, or other formal award;
- *not* been concurrently enrolled in high school; and
- *not* been enrolled *solely* in a GED or other high school completion program.

Students were selected from "unduplicated"<sup>6</sup> student lists provided by participating institutions, using the same procedures to be implemented in the full-scale study. While schools were made aware of student eligibility requirements, as in previous waves of NPSAS, the bulk of student eligibility determination was accomplished after sampling from the provided lists (i.e., during record abstraction or student interviewing). Incorrect information provided by institutions as to student status also resulted in some other misclassification errors, which were also corrected after the sampling.

As in previous NPSAS applications, students are stratified, within selected institutions, (in both the full-scale study and the field test) into four student strata. Separate strata were established for graduate students, first professional, and undergraduates; moreover, the undergraduate stratum was subdivided into two mutually exclusive strata. The first undergraduate strata consisted of probable first-time beginning students (FTBs), who were to be selected to provide the cohort for an additional wave of the longitudinal Beginning Postsecondary Students study (BPS:96) study (and its associated field tests).<sup>7</sup> The second

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<sup>6</sup> In some instances, the lists could be unduplicated by the supplying institutions; however, in many cases, institutions were unable (or unwilling) to do this, and the unduplicating process was accomplished by contractor staff.

<sup>7</sup> The first cohort of the mandated BPS studies, BPS:90, was spawned from NPSAS:90, and plans still call for spinning off this longitudinal study in every other NPSAS wave. The NPSAS:90 and BPS:90 experience clearly indicated that institutions are unable to accurately identify FTBs; however, they can identify first-year undergraduate students, a subset of which will be FTBs.

undergraduate stratum comprised "other" undergraduates.<sup>8</sup> Institutions were requested to provide separate lists for each student stratum or to identify students as to stratum on provided lists. The "Potential" FTB stratum was over-sampled, because past experience had demonstrated that schools would include a relatively large percentage of "false positives" on the lists.<sup>9</sup>

Student sample sizes for the field test were set to yield similar sample sizes for potential FTBs, other graduate students, and graduate/first professional students. The FTB sample sizes were allocated to institutional strata to yield equal numbers of eligible FTBs (for use in field tests of the longitudinal "spin-off." The other student sample sizes were allocated to institutional strata based on the distribution planned for the full-scale study. Separate sampling rates were then established for each applicable student by institution stratum (based again on imputation in some cases). Established sampling rates were applied to the unduplicated student lists to attain the sample, using stratified systematic sampling procedures. Barring operational constraints, which led to exceptions in applying these rates,<sup>10</sup> this procedure would have produced a self-weighting sample within institution by student strata.

The expected and achieved student samples are shown in Table II.A.2 by student stratum and level of institutional offering.<sup>11</sup> Overall, the application of predetermined sampling rates yielded a sample that was only slightly inflated over expectations; however, differences between sample yield and expectation were systematic within student strata. Specifically, regardless of institutional level, the potential FTB sample was consistently greater than expected, while the other undergraduate sample was consistently less than expected. Similarly, the graduate student sample was greater than expected, while the first professional sample was less. An additional perspective of the student sample, taking into account institutional control, is shown in Table II.A.3.<sup>12</sup> Almost half of the overall and undergraduate samples were selected from public institutions (reflecting the higher undergraduate enrollment in such institutions); however, the graduate/first professional sample was approximately equally distributed among public and private nonprofit schools.

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<sup>8</sup> In actuality, one additional undergraduate stratum was used; namely, "undetermined undergraduates." This stratum is needed at those institutions that are either unable or unwilling to identify their undergraduates as to membership in the two other undergraduate strata. This situation arose within one sampled school, and students were selected from that school at rates consistent with the FTB stratum.

<sup>9</sup> False positives subsequently identified from data of record or interview responses remain eligible for the NPSAS:96 study; however, they are lost to the longitudinal component.

<sup>10</sup> The two constraints were (1) no less than 40 students were to be selected from each institution even if the sampling rates had to be raised, and (2) the total sample from an institution was not allowed to exceed 50 more than the expected sample size (i.e., the expected sample size based on 1993-94 IPEDS information) to which the school had agreed, even if rates had to be reduced.

<sup>11</sup> For this and subsequent presentations, institution type variables have been corrected to the value verified by the institution itself; however, student classification has not been fully corrected. Subsequent to sampling, one entire sampling list was determined to have been misclassified (i.e., graduate students were mistakenly labeled as potential FTBs); this error has been corrected for this and all subsequent presentations. As expected (and verified following record abstraction), the original student frames also reflected errors of classification; such errors have not been corrected for presentations in this section.

<sup>12</sup> For this presentation, the two undergraduate student strata have been combined; also, the graduate student and first professional strata have been combined into a single graduate/first professional group.

**Table II.A.2— Expected and Achieved Student Samples by Student Stratum, and Level of Institutional Offering**

Student Stratum <sup>a</sup>	Institutional Level <sup>b</sup>	Number Expected <sup>c</sup>	Students Sampled	
			Number Achieved	Percent <sup>d</sup>
<b>Total</b>	<b>Total</b>	3,649	3,781	103.6
Potential FTB	Subtotal	1,359	1,569	115.5
	Less than 2 year	334	459	137.4
	2-3 Year	416	433	104.1
	4+ Year	609	707	116.1
Other Undergraduate	Subtotal	1,262	1,125	89.1
	Less-than-2-year	140	22	15.7
	2-3 Year	203	240	99.5
	4+ Year	919	863	93.9
First-Professional	4+ Year	514	465	90.5
Other Graduate	4+ Year	514	622	121.0

NOTE: Subsequent to sampling, one entire sampling list was determined to have been misclassified (i.e., graduate students were mistakenly labeled as potential FTBs), resulting in an incorrect initial classification students sampled from that list; this error has been corrected for this presentation.

- <sup>a</sup> As expected (and verified following second abstraction), the original sampling frames misclassified some individual students as to undergraduate/graduate first professional status; statistics presented in this table are based on the initial sampling frame classification (with the single correction indicated above).
- <sup>b</sup> Institution classification for this table has been corrected to agree with that verified by the participating institutions.
- <sup>c</sup> Based on sampling rates and 1993-94 IPEDS IC file counts.
- <sup>d</sup> Percent reported reflects the ratio of “achieved” to “expected.”

**Table II.A.3—Initial Classification of Student Sample by School Type and Student Stratum**

Institution Type <sup>a</sup>		Student Sampling Stratum <sup>b</sup>					
		Total Sample		Undergraduate Sample <sup>c</sup>		Graduate/First Professional Sample <sup>c</sup>	
Control	Level	Number	Percent	Number	Percent	Number	Percent
Total	Total	3,781	100.0	2,694	100.0	1,087	100.0
Public	Total	1,859	49.2	1,332	49.4	527	48.5
	Less than 2 Years	169	4.5	169	6.3	NA	NA
	2-3 Years	392	10.4	392	14.6	NA	NA
	4 or More Years	1,298	34.3	771	28.6	527	48.5
Private, Non-Profit	Total	1,456	38.5	896	33.3	560	51.5
	Less than 4 Years	244	6.4	244	9.1	NA	NA
	4 or More Years	1,212	32.1	652	24.2	560	51.5
Private, For Profit	Total	466	12.3	466	17.3	NA	NA
	Less than 2 Years	230	6.1	230	8.5	NA	NA
	2 or More Years	236	6.2	236	8.8	NA	NA

NOTE: Subsequent to sampling, one entire sampling list was determined to have been misclassified (i.e., graduate students were mistakenly labeled as potential FTBs), resulting in an incorrect initial classification students sampled from that list; this error has been corrected for this presentation. All percents are based on column totals.

<sup>a</sup>Institution classification for this table has been corrected to agree with that verified by the participating institutions. To avoid even smaller cell sizes, categories of level of offering have been collapsed within the two private sectors.

<sup>b</sup>As expected (and verified following record abstraction), the original sampling frames misclassified some individual students as to undergraduate/graduate first professional status; statistics presented in this table are based on the initial sampling frame classification (with the single correction indicated above).

<sup>c</sup>For this presentation, the two undergraduate strata have been combined and the graduate student stratum and the first professional student stratum have been combined into a single graduate first professional stratum.

### **3. Parent Interview Subsample**

The primary purpose of this subsample is to obtain accurate, augmenting, and/or validating information from parents about Adjusted Gross Income (AGI) and other data needed to establish Expected Family Contribution (EFC) to the student's postsecondary expenses. This is usually (but not always) available in data abstracted from student records, for those students receiving federal aid; however, unaided students typically do not have such information in their records. Further, based on prior experience with postsecondary student interviews in a number of NCES studies, student-provided information about parental finances is typically neither reliable nor valid.

Consequently, a subsample of students was selected for augmentation interview with their parent(s). Sampling was implemented only when student record data had been collected, to allow further classification of students. The subsampling was implemented only for undergraduates who were less than 30 years old.<sup>13</sup> Undergraduate students were classified into four basic strata defined by whether they were in the "potential" FTB or "other" undergraduate stratum and whether or not abstracted information indicated they were aided or unaided. Aided "other" undergraduates were further partitioned into three substrata based on the completeness of Student Aid Record (SAR) information obtained from records. Specifically, the three substrata were (1) students determined to have been aided and with SAR data containing Parents' AGI; (2) students determined to be aided but with no SAR data; and (3) students with SAR information that did not include parents' AGI information.

Differential rates were applied within the established strata and substrata to select the students whose parents would also be interviewed. Rates were established to yield slightly more parent interview cases than were needed, to accommodate the fact that some students would subsequently be determined as ineligible. Also the "potential" FTB group was over-sampled, since (as indicated previously) precise determination of FTB status could not be made from the information collected from the students' records. Because parental financial information was typically available for aided students, unaided students were generally selected at higher rates than aided students. The frame for, and result of, the parent interview subsampling is shown in Table II.A.4.

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<sup>13</sup> These measures served as surrogates for student "independence"; since obviously EFC was inapplicable for independent students. For the full-scale study, additional measures of student independence will be collected from records and used for classification.

Table II.A.4 — The NPSAS:96 Field Test Parent Interview Student Subsample

Student Stratum for Subsampling	Number Age Eligible <sup>a</sup>	Subsample	
		Number	Rate <sup>b</sup>
TOTAL	1,964	317	16.1
Potential FTB, Aided	821	96	11.7
Potential FTB, Unaided	219	86	39.3
Other Undergraduate, Unaided	324	60	18.5
Total Other Undergraduate, Aided	600	79	11.3
Those with Full Available SAR Data	466	0	0.0
Those with No Available SAR Data	45	34	75.6
Those Missing Parent AGI on SAR Data	89	45	50.56

NOTE: This subsampling was implemented only for undergraduate sample members.

<sup>a</sup>Undergraduate students were eligible for subsampling *only if* they were less than 30 years old.

<sup>b</sup>Rate expressed as a percentage of eligible undergraduates (as defined in footnote a).

### B. Overall Operational Design

NPSAS:96 involves 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 (ESCAR) information directly from the Department of Education Central Processing System (CPS) for federal aid applications.<sup>14</sup> The second stage involves abstracting information from the student's records at the school from which he/she is sampled; starting with NPSAS:93, these data have been collected through a Computer Assisted Data Entry (CADE) system (to facilitate transfer of the information to subsequent electronic systems). The third stage involves 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.

<sup>14</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, which include EFC, are created. The SAR information is made available to all institutions that the student indicates.

A schematic of the operational flow of major data collection components of the NPSAS:96 field test is shown in Figure II.B.1 and discussed in additional detail in the following subsections. It should be noted that to meet established dates for conclusion of all field test 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 (1) selection of the institutional sample and initial institutional mailings and verification calls, and (2) cut-off of interviewing. Start and end dates for the several study activities are shown in Table II.B.1. To facilitate completion of activities within the defined time frame, activities involving collection and/or verification of institutional data of record were initiated prior to the receipt of OMB forms clearance on April 12, 1995.

**Table II.B.1 — Start and End Dates for Major NPSAS:96 Field Test Activities**

Field Test Activity	Start Date <sup>a</sup>	End Date <sup>b</sup>
Select Institutional Sample	12/10/94	12/10/94
Mail and Phone Contact with Chief Administrator	12/19/94	02/01/95
Mail and Phone Contact with Institutional Coordinator	02/03/95	03/26/95
Obtaining Lists for Student Sampling	02/12/95	05/15/95
Select Student Samples	03/05/95	05/25/95
Request/Obtain CPS Data	04/12/95	06/02/95
Preload CPS Data into CADE Records	04/17/95	06/05/95
Implement CADE Record Abstraction	05/04/95	08/03/95
Preload CADE Data into CATI Records	08/07/95	08/23/95
Implement CATI Interviewing of Students and Parents	08/16/95	10/17/95

<sup>a</sup> This is the date on which the activity was initiated for the first applicable school and/or its associated students (and parents).  
<sup>b</sup> This is the date on which the activity was completed for the last applicable school and/or its associated students (and parents).

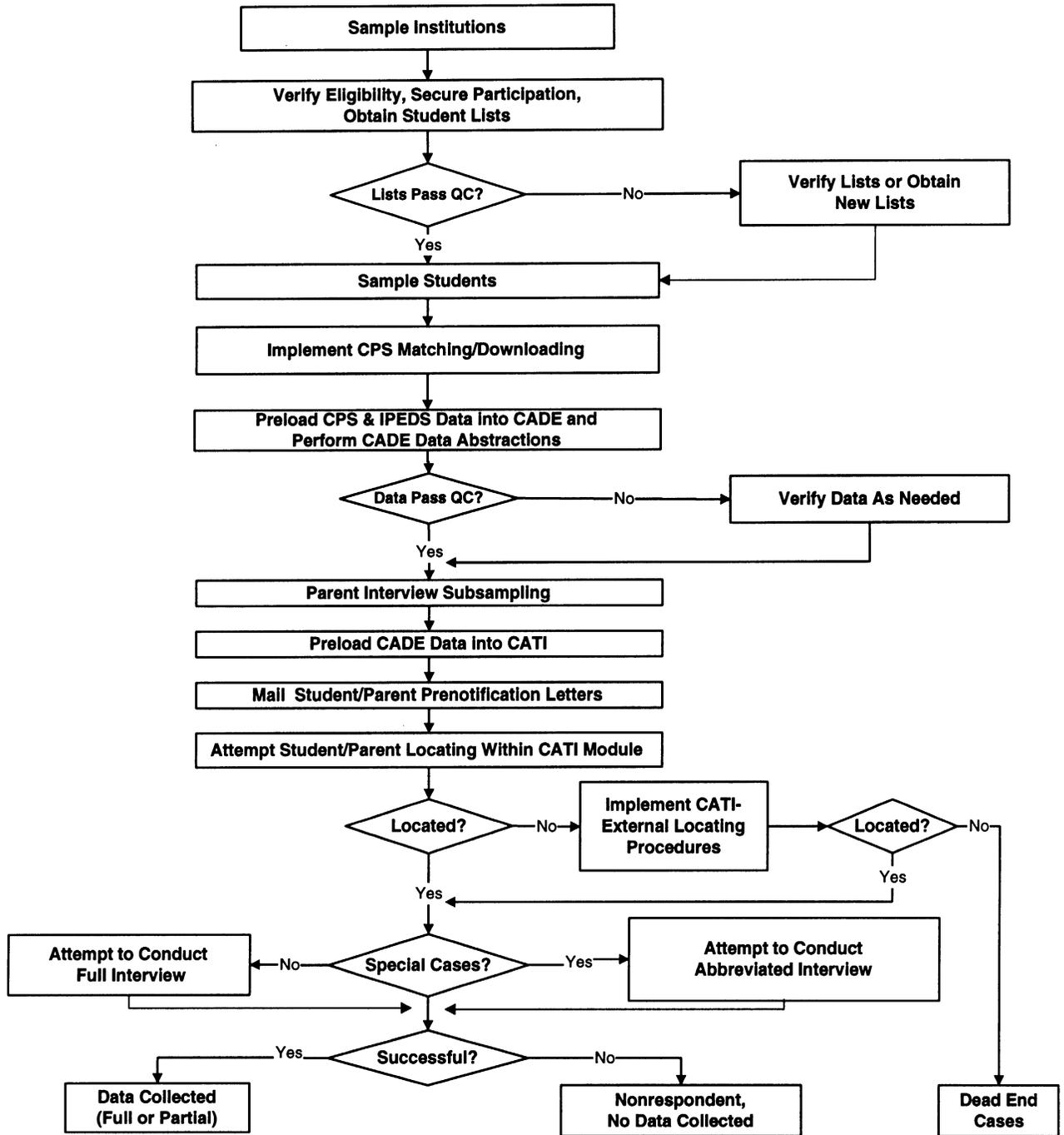


Figure II.B.1—Schematic of NPSAS:96 Field Test Major Data Collection Components Flow

**1. Institutional Contacting and Student List Acquisition and Sampling**

Once institutions were sampled, procedures were initiated 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, signed by the Commissioner of Education, 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 materials mailed to sampled institutions, students, or parents during the course of the field test, are included in Appendix A). 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.

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 phone 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 and to set a date by which they would be able to provide the list(s). (Sampled schools with 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--in the *last* term of enrollment during the study-defined year; and
- an indication of FTB status: namely, separately or as a single indicator, undergraduate students first enrolled at the school during a term in the study-defined year and who were classified as freshmen or first-year students at that time.

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 one week following the date previously set by the IC for list provision (and on any subsequently established delivery date). 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 any of the below-listed conditions existed:

- potential FTBs were not identified (unless the institution explicitly indicated that no such students existed in their school);
- Social Security numbers were not provided; or
- Student level--undergraduate, graduate, or first professional--was not clear.

Quality checks were performed by checking the unduplicated count from provided lists against the *non-imputed* unduplicated counts from (in order of preference) the 1994-95 IPEDS file or the 1993-94 IPEDS file (from which the institutional frame was constructed).<sup>15</sup> For 4-year schools, separate checks were made for undergraduate, graduate, and first professional students; for less than 4-year schools, checks were made against total enrollment. The institution failed the check if the count for any unduplicated list differed by 25 percent from the IPEDS *non-imputed* count.<sup>16</sup>

The student sample was actually selected on a flow basis as the lists were received, reconciled, and unduplicated (as applicable).<sup>17</sup> Stratified systematic sampling procedures were used to facilitate sampling from both electronic and hard-copy lists. For each institution, student sampling *rates*, rather than student sample sizes, were fixed.<sup>18</sup>

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<sup>15</sup> If counts on both these files were imputed, no quality check was performed.

<sup>16</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.

<sup>17</sup> Duplicated lists provided in electronic form were unduplicated using Social Security or student ID numbers prior to sampling. Hard copy duplicated lists (typically lists by term) were not unduplicated *per se*; rather, samples were drawn from the "earliest" list (typically a fall term) as well as from subsequent term lists, and the "earliest" term sample was retained while the other *samples* were unduplicated against that "earliest" sample.

<sup>18</sup> The use of fixed rates rather than sample sizes facilitated (1) sampling students on a flow basis, (2) procedures used to "unduplicate" the samples selected from duplicated hard-copy lists, and (3) obtaining approximately equal overall probabilities of selection within the ultimate student strata.

## **2. Obtaining Central Processing System (CPS) Information**

To reduce institutional burden in subsequent data collection, the NPSAS:96 contractor, with the assistance of NCES, arranged to obtain, through Electronic Data Interchange (EDI), information from a central data system, the CPS (which is operated for the Department of Education by a separate contractor, National Computer Systems - NCS), to access certain information provided by all federal financial aid applicants that had been selected in the sample. 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. Copies of the SAR and FAFSA are provided in Appendix B, to show the type of information available from them.

The NPSAS:96 contractor, RTI, was assigned a "special designation" code, which allowed use of existing procedures. Under this procedure, ESAR data were requested through a standard Federal Data Request (FDR) process.<sup>19</sup> The request involved submitting a file, containing, for each sample member, Social Security number and the first two letters of the last name (sample members for whom no Social Security number was available were not submitted). The initial FDR was submitted shortly after Office of Management and Budget forms clearance, for those students who had already been sampled by that time. Subsequently FDRs were initiated semiweekly on a flow basis, as student samples were completed for the remaining institutions. The CPS was also accessed semiweekly to download ESAR data from the completed request.

## **3. 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 II.B.4) and the Data Dictionary System planned for the full-scale study (see Section II.C). Institutions were urged to have their own staff accomplish these activities (with compensation for staff time, where requested), using the software developed for NPSAS:96, since this provided better confidentiality protection for records of students not selected for the study. However, institutions were given the option of having the abstraction done by contractor field interviewers (FIs). 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 FI, depending on stated institutional preference, which subsequently changed in some cases.<sup>20</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 (where obtained), (b) previously verified institutional characteristics and identifiers

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<sup>19</sup> This is a request process similar to that available to state and federal requests from the system, through which information can be requested about individuals regardless of the institution they attend; institutional requests, on the other hand, are restricted to applicants to their institution only.

<sup>20</sup> Some institutions eventually photocopied relevant records and provided them to the FIs or contractor central staff for direct entry into CADE.

from the contractor sampling files (e.g., level of offering, control, calendar system, grading system, stratum), (c) student names, ID numbers, and sampling strata (from the contractor sampling files), and (d) customizing additional financial aid sources/programs unique to the specific institution and associated state.

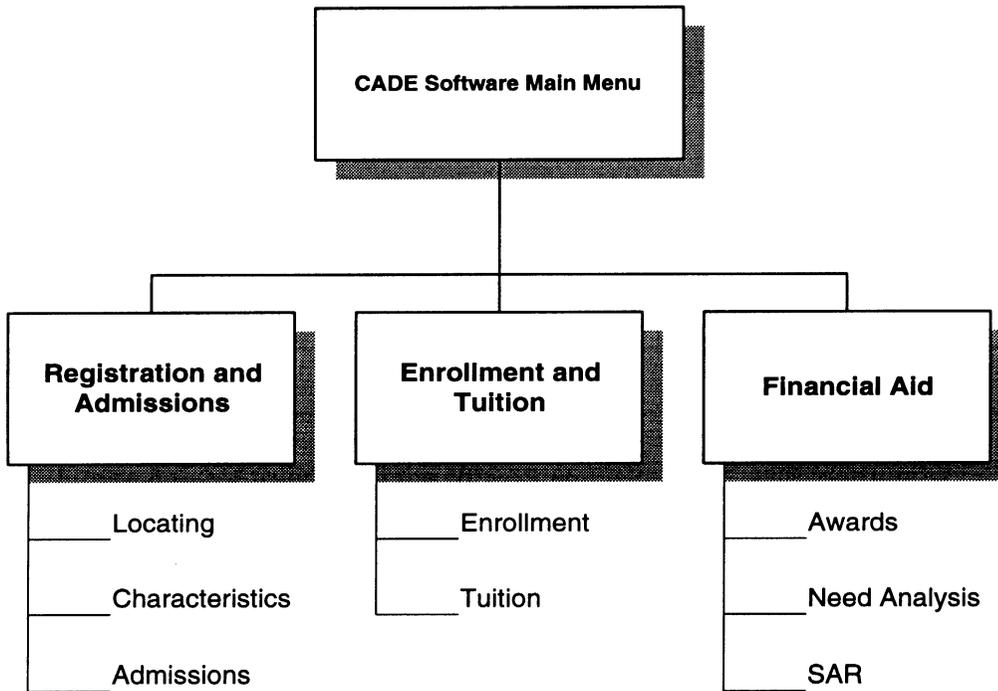
The preloaded CADE package were distributed on a flow basis to either the IC (on floppy disks) or to the FI (electronically). Packages also included a hard-copy Users' Guide, an embedded, programmed Tutorial, and a Fact Sheet (which summarized information previously provided by the institution regarding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

- an installation check, which accessed the configuration file of the host PC 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);
- 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.

The CADE student record was divided into three major sections (reflecting typical different physical record locations on campus) and eight subsections; this structure is shown in Figure II.B.2. 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 to be collected through CADE is provided 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.
- *Admissions.* Collected standardized test scores and high school rank in class.
- *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.

Figure II.B.2--Structure of the NPSAS:96 Field Test CADE Instrument



- *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 (see Appendix B); 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 to be collected and the exact wording of the screens, is provided as Appendix C.

Routine (weekly) telephone calls were initiated to ICs or FIs (as applicable) to determine the numbers of records completed for each school at which record abstraction 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, it was immediately checked to ensure that it could be read, and, if so, each record was subsequently subjected to five edit checks; specifically the presence of (a) at least one legitimate telephone number or address; (b) either a Social Security number or date of birth; (c) information on at least one term; (d) a determinate answer to the gate question to the *Need Analysis* subsection; and (e) if yes to "d," EFC or dependency status answered in that section. Data from an institution failed the edit check if 15 percent or more of the student records failed any of these checks.<sup>21</sup>

#### 4. Student and Parent CATI Interviews

NPSAS:96 student and parent interviews are 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.

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

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<sup>21</sup> No institution failed the checks in the field test.

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 respondent(s). Much of the locating challenge was associated with the fact that by the time CATI was initiated, most sample members 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 directory assistance calls and calls to the institutional student locator service); 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 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.

In some occasions, student/parent tracing activities were executed that were not imbedded in the CATI system. Such systems involved searches, by telephone staff or a subcontractor, of various electronic databases. The specific tracing activities are listed below.

- *Query of the TransUnion database.* Contractor staff had direct electronic access to this database, which is maintained by a major credit check contractor. The database includes names, Social Security numbers, and current and former addresses and telephone numbers of individuals for whom credit histories have been assembled. The file can be sorted by address to obtain telephone numbers of neighbors who are in the system.
- *Query of the Select Phone Book CD ROM data.* This database contains every published telephone number in the United States, with associated names and addresses. It can be sorted within city by address, to obtain telephone numbers and names of neighbors.
- *Referral to Equifax.* Equifax is another large credit bureau company that maintains credit files on a large number of individuals. Equifax also has arrangements with some states to access their Drivers License databases. Cases were batched for submission to Equifax, but they were returned from Equifax on a flow basis.

To reduce interview burden and to guide the interview through appropriate branchings (e.g., questions appropriate only for graduate students), considerable information 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>22</sup> For the full-scale study, plans call for preloading and implementing CATI on a flow basis, as the CADE results are received from the institutions. For the field test, this was not done

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<sup>22</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.

due to delays in developing, changing, and further refining the CATI instrument; consequently, CATI was not begun until all CADE data had been returned.<sup>23</sup>

Features of the CATI system that facilitated smooth and appropriate conduct of the interview included:

- extensive use of appropriate branching of interviewees based on preloaded information or responses to questions asked previously in the interview;
- extensive use of "fill" features in screen presentations of questions to be asked by interviewers (i.e., filling in part of a question with preloaded data or a previously provided response--that is, instead of asking the respondent something about "job number three", the question would be presented with the name of the third job held imbedded in the screen wording);
- a "breakoff/resume" feature allowing interview continuation after a breakoff to move automatically to the next applicable question for the respondent; and
- provision of context-sensitive "help" screens (available with a single keyboard entry) to provide the interviewer with information about particular questions to help clarify its intent.

Additionally, 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.

The Student CATI Interview consisted of 10 sections that were administered sequentially.<sup>24</sup> A depiction of the nature of, and the flow through the 10 student interview sections is shown in Figure II.B.3. Progression through the sections is ordered to collect the most important data early in the interview (before the respondent has a chance to become agitated, which may lead him or her to break off the interview).<sup>25</sup> 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.

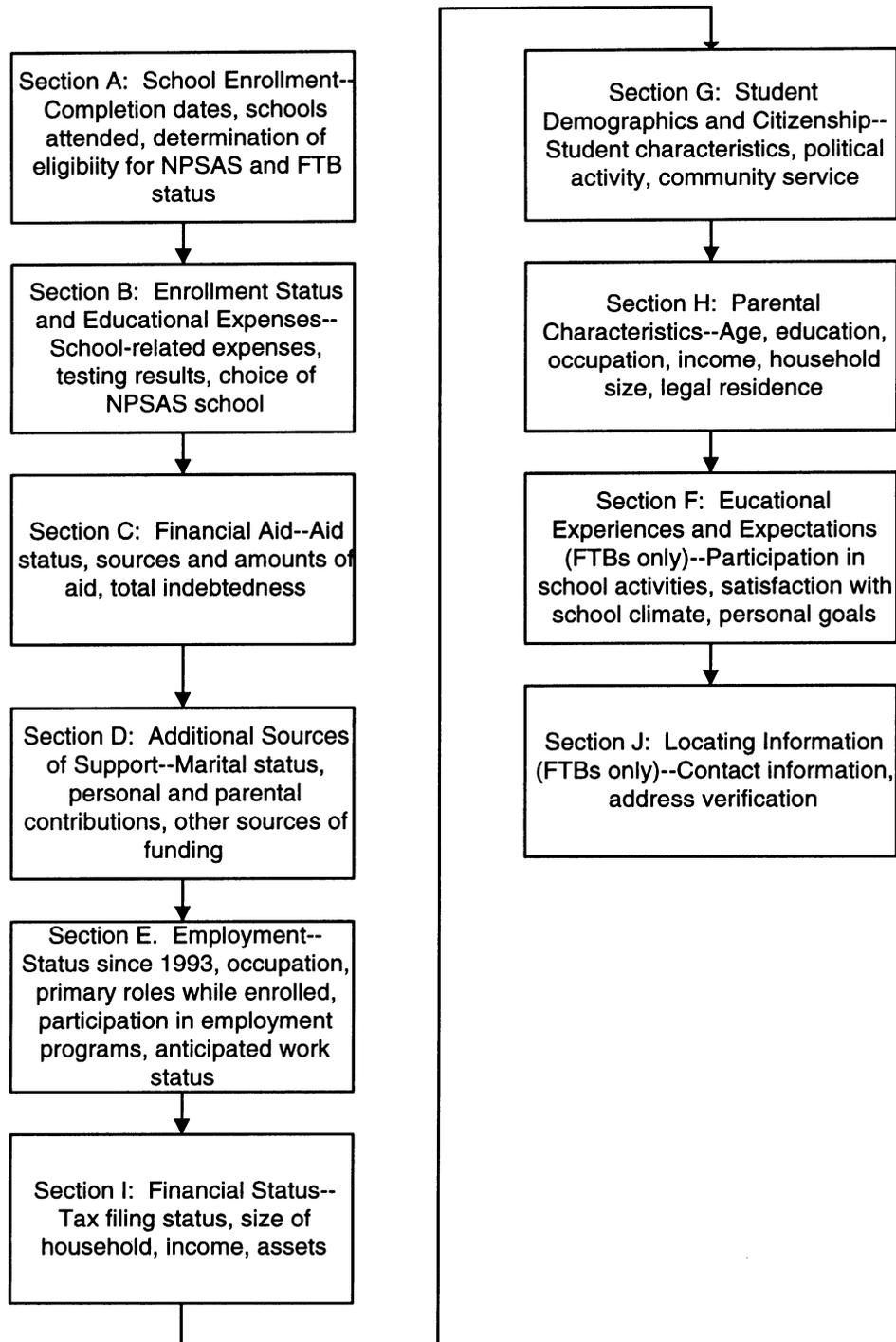
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<sup>23</sup> Because of the turnaround time needed for preloading CADE data into CATI, CATI was still initiated in three waves; however, the time between waves was quite small.

<sup>24</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>25</sup> The alphabetical labeling of the sections is not in order, because they reflect an initial ordering that was subsequently changed. The original labeling was maintained to accommodate the labeling of specific questions within the sections (based on the original ordering) in related data systems and disseminated material.

Figure II.B.3--Structure and Flow of NPSAS:96 Field Test Student CATI



The parent 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>26</sup> The parent interview (a facsimile copy of which is included in Appendix D), contained six sections: (a) parental support, (b) student dependence, (c) employment and financial status, (d) reasons for not seeking financial aid, (e) reasons for choosing NPSAS school, and (f) parent demographics.

Results of CATI interviewing were monitored daily through the study Integrated Management System (IMS--see Section II.C). Daily reports of production, with revised projections of future production to satisfy study requirements, were available to both NCES and contractor staff.

Two 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 telephone administration to those who could speak only Spanish.<sup>27</sup> The questions in this abbreviated interview were also reproduced in hard-copy form and mailed, for completion, to the hearing impaired (who completed only Section A--establishing study eligibility-- through TDD). This same hard-copy instrument was used in a mailing to respondents who indicated that they would complete a mailed copy but would *not* participate in a telephone interview. Copies of all abbreviated interviews/questionnaires are provided in Appendix D.

### **C. The Integrated Management System (IMS)**

All operational and management activities, including sampling, locating, collecting institutional records data, interviewing, and data processing were under the control of an Integrated Management System (IMS), consisting of a series of PC-based, fully linked modules. The various modules of the IMS provided the means to conduct, control, and monitor these complex, interrelated activities required in the NPSAS:96 field test; report production, data analyses, and document archiving were also integrated into this system.

The IMS structure allowed for streamlining of 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 II.C.1 provides a comprehensive listing of IMS menu options and their purposes.

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<sup>26</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.

<sup>27</sup> Spanish speakers who could speak some English were guided through the full interview by bilingual interviewers; however, translation "on the fly" of the full interview to one who spoke only Spanish was considered inappropriate.

Figure II.C.1 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. Information was integrated through the implementation of a case-level control system which monitored status in the various stages of production: prenotification mailing; pre-CATI tracing (telephone and field); CATI locating; interviewing; data abstraction; and data editing. Status from separate stages was transmitted to the master IMS to allow control of the flow of events in the system and monitoring of performance of study requirements.

Within the system, Lotus cc:Mail and Lotus Magellan facilitated telecommunications among project personnel (within and between three contractor organizations and NCES) for project-wide correspondence, transfer of files, and information access. This provided vehicles for raising critical issues and allowed quick responses from appropriate staff members. Documentation of decisions reached were available for later reference as needed. Project scheduling was maintained and monitored with the use of TimeLine. Greater detail of the CADE and CATI-related components of the IMS are provided elsewhere in this report.

#### **D. Methodological Experiments and Evaluation Approaches**

Evaluation of field test procedures have obvious implications for possible improvement of procedures for the subsequent full-scale study (as well as for enhancements for subsequent waves of NPSAS). Each major component of the field test 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. Summative evaluations assessed the results of the field test, including procedural changes instituted during the course of the study. Results of summative evaluations will be used to optimize procedures in the full-scale study. A summary of NPSAS:96 field test evaluations that were planned and implemented is provided in Table II.D.1.

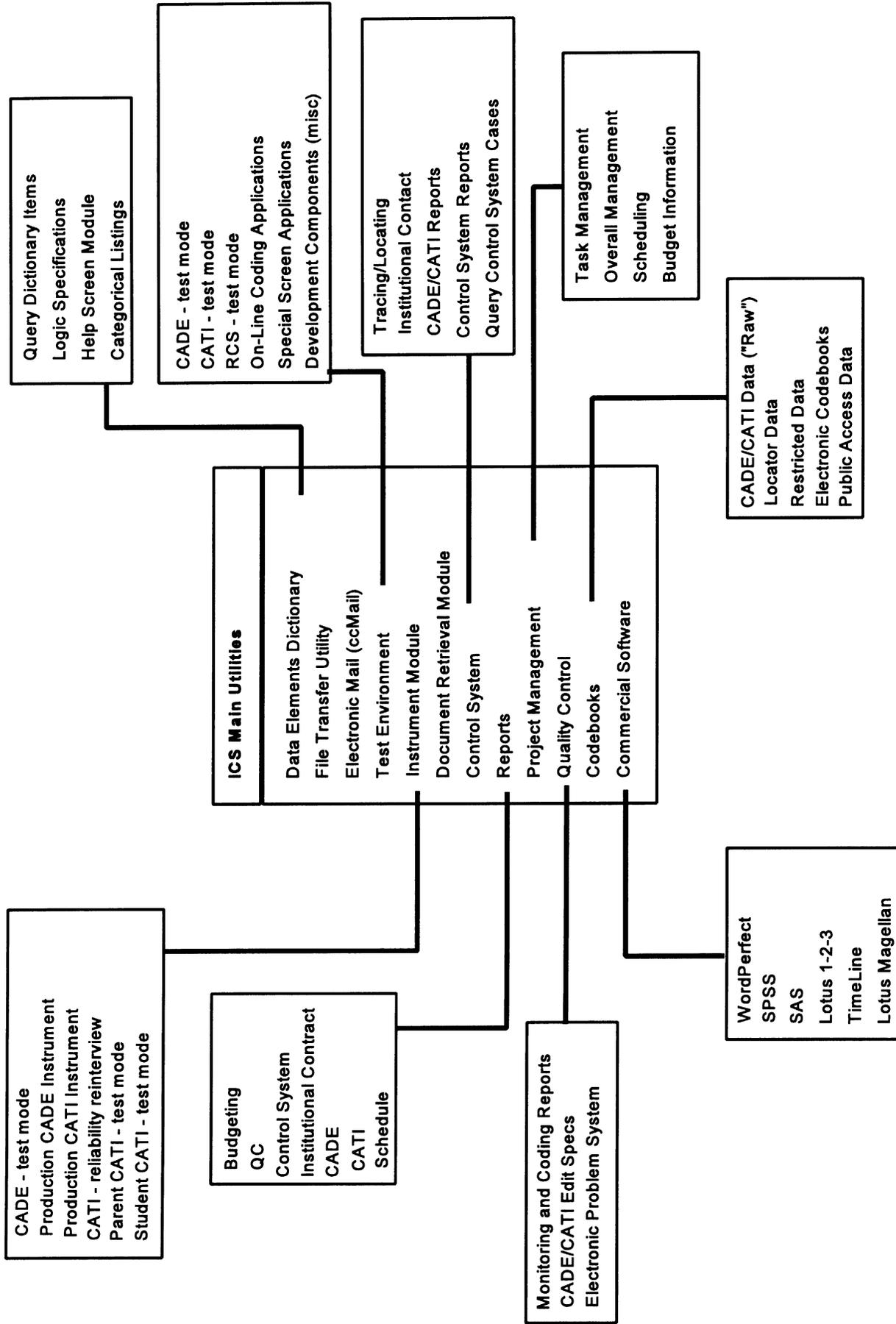
**Table II.C.1—IMS Menuing System**

Main Menu Entry	Sub-Menu Entry	Selections Within Sub-Menu	Purpose	Software Platform
General	Exit to OS		DOS/VMS operating system	
Mail	cc:Mail		Access cc:Mail for DOS	cc:Mail
Mail	VAX Mail		Access RTI VAX mail	Pathworks Mail
RCS	Monitoring Report		View Daily RCS status report	FICS/DOS/VMS
RCS	Access RCS		Run the RCS (query RCS data, post events to RCS, enter/read comments)	FICS/DOS/VMS
RCS	Participation Reports	Abstraction Method	Summarizes current status, by abstraction method, within stratum categories	FICS/DOS/VMS
		Institution Name	List of the participating schools, alphabetical by school name (shows abstraction method)	FICS/DOS/VMS
		IPEDS ID	List of the participating schools, by IPEDS ID (shows abstraction method)	FICS/DOS/VMS
		State	List of the participating schools, by state (shows abstraction method)	FICS/DOS/VMS
		Participation Freqs	Lists data and crosstabs from RCS for participating schools	FICS/DOS/VMS
		Non-participation	Lists non-participating schools, by state, stratum, etc.	FICS/DOS/VMS
RCS	Event Control Report		List of all RCS status codes, with frequency count showing # of schools at that status	FICS/DOS/VMS
Reports	Monitoring Report		View the RCS monitoring report	FICS/DOS/VMS
Reports	CATI Reports	CATI Status Report	View the CATI Report (shows previous day's production by status codes)	FICS/Lotus
		Student Spreadsheet	View summary spreadsheet (All students)	FICS/Lotus
		Parent Spreadsheet	View summary spreadsheet (All parents)	FICS/Lotus
		BPS Spreadsheet	View summary spreadsheet (All BPS students)	FICS/Lotus
		By Stratum	View stratum summary report (crosses institution stratum with student stratum)	FICS/Lotus
		CATI Production Rates	View production report (compares total interviews with production hours)	FICS/Lotus
Reports	Schedule		View the current project schedule	TimeLine for DOS
Management	Schedule		View the current project schedule	TimeLine for DOS
Management	Document Archives		Access npsas document archives	Lotus Magellan

**Table II.C.1 (continued)**

Main Menu Entry	Sub-Menu Entry	Selections Within Sub-Menu	Purpose	Software Platform
CADE	CADE Tutorial		Run the CADE tutorial	Proteus (Version 7.0)
CATI	CATI Reports	Same Selections as CATI Reports Listed Above	View CATI Reports	FICS/Lotus
CATI	CATI Prototype		Run the current CATI instrument	CASES 4.1
Print	Schedule		Print current copy of project schedule	DOS/VMS
Print	Monitoring Report		Print current copy of RCS monitoring report	DOS/VMS
Print	Participation Reports	Abstraction Method	Print the report	DOS/VMS
		Institution Name	Print the report	DOS/VMS
		IPEDS ID	Print the report	DOS/VMS
		State	Print the report	DOS/VMS
		Participation Freqs	Print the report	DOS/VMS
		Non-participation	Print the report	DOS/VMS
Print	Event Control Report		Print the current copy of the RCS event control report	DOS/VMS
Download	Select Reports	All of the Reports	Identify which reports are to be zipped and downloaded	PKZIP
		Schedule	Identify which reports are to be zipped and downloaded	PKZIP
		Monitoring Report	Identify which reports are to be zipped and downloaded	PKZIP
		Participation Reports	Identify which reports are to be zipped and downloaded	PKZIP
		Event Control Report	Identify which reports are to be zipped and downloaded	PKZIP
Download	View Download ZIP file		See the contents of .ZIP file to be downloaded to NCES	PKUNZIP
Download	Initiate Download		Download the .ZIP file containing selected reports	R2CALL/R2HOST
Problem Tracking	Enter Problems		Enter a problem into the Electronic Problem Tracking System (EPTS)	Visual Basic
Problem Tracking	Resolve Problems		Query problems from the EPTS	Visual Basic/FICS

**Figure IIC.1 -- Integrated Management System Utilities**



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

**Table II.D.1—Summary of NPSAS:96**

Major Area of Evaluation	Evaluation Approaches
System Operation	Observe (and correct) all anomalous systems operations.
Training	Debrief institutional coordinators. Debrief field Abstractors. Debrief CATI staff.
Sampling	Analyze cost/precision of two approaches to full-scale institutional sampling.
List Acquisition	Analyze overall response rate, accuracy, costs, and time to produce lists.  Debrief institutional coordinators.
Record Abstraction	Evaluate electronic data interchange (EDI) approaches.  Analyze data quality (missing data) under conditions of self-CADE, field staff-CADE, and EDI approaches.  Debrief institutional coordinators.  Debrief field staff.  Analyze results of information verification study.
Tracing Activities	Debrief tracing staff and supervisors.  Analyze all levels of tracing results and costs.  Analyze cost benefits of CATI-external tracing activities.
Interview Administration/Data Quality	Analyze silent monitoring quality control data.  Analyze CATI operational parameters (e.g., numbers of calls per case, total interviewer hours per completed interview).  Debrief interviewers, monitors, and supervisors.  Analyze rates and patterns of interview nonresponse.  Analyze response temporal stability (reliability) through reinterviews of selected items.  Analyze response increments resulting from “Student Guide” experiment.

A critical part of the field test operational evaluation was regular quality circle meetings with survey operations staff, 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 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. Based in part on debriefing comments, additional adjustments will be made to item wording, question format, and survey procedures, as necessary, to ensure more efficient and effective full-scale survey implementation of both CADE and CATI.

The field test included one methodological experiment, evaluated for possible implementation in the NPSAS:96 full-scale study. Specifically, a free government published document overviews the Federal Student Aid Program and process, entitled "The Student Guide" was included in the student mailing to half of the student sample. It was hypothesized that inclusion of this "guide" could enhance participation rates of students to be interviewed. The sample to receive The Student Guide was randomly allocated among those students within each participating institution.

As indicated in Table II.D.1, the study design included two components for direct evaluation of data quality. First, 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. Second, validity of information collected from CADE was evaluated by having ICs (or their designee) compare samples of previously collected CADE data to institutional records and to note discrepancies. The verification study involved a random sample of five students per institution, for each of whom five selected data elements were presented for comparison with records.

### III. Overall Institution, Student, and Parent Outcomes

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 obtained in the field test.<sup>1</sup> Further examination of factors related to the outcomes, together with results of other evaluations, with recommendations for the full-scale study are provided in Chapters V and VI.

#### A. Institutional Participation

As noted in Chapter II (see Table II.A.1), 5 of the 78 institutions (6.4 percent) selected for the field test were found to be ineligible. One of these institutions had closed, and the remaining four failed to meet one or more of the NPSAS eligibility criteria (see Section II.A.1). At the 73 eligible institutions, 68 (93.2 percent) of the chief administrators agreed to participate; all of these appointed an Institutional Coordinator (IC) to assist with study requirements.<sup>2</sup>

The first request of the ICs was to provide student enrollment lists to be used in selecting the student sample. While none of the appointed ICs *explicitly* refused to provide an enrollment list, only 66 (90.4 percent) of the eligible institutions provided these lists within the four-month time frame allocated for the activity. As previously shown in Table II.A.1, both eligibility and list provision (among eligible schools) varied by type of school considered; the percentage of schools providing enrollment lists ranged from about 70 percent to 100 percent. The lowest rates of both eligibility and providing lists were among the private, for-profit schools, which is consistent with prior NPSAS studies.

The lists requested (see also Section II.B.1) were to provide a basis of all students enrolled in any term starting during the NPSAS:96 year. The preferred list requested was a single, unduplicated (i.e., with duplicate entries over terms of enrollment removed) electronic list, since such lists required no preprocessing prior to an electronic sampling; however, any set of electronic lists was still preferable to hard-copy lists, since they could be easily unduplicated using the institutional student ID number. Types of lists provided by participating schools are shown in Table III.A.1,<sup>3</sup> 35 (53 percent) provided some sort of electronic list(s). Another 15 (23 percent of the total) provided a single, unduplicated hard-copy list; the remainder provided hard copy lists that required unduplication by the contractor (see Section II.B.1).

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<sup>1</sup> As noted elsewhere the field test differed from the full-scale study in a number of ways (see Chapter 2). Of particular relevance, in the field test the entire sequential process of obtaining student records (first the CPS EDI, then the CADE operation) then locating and interviewing the student was constricted to a 6-month period (with the final stage, CATI, being the most impacted); for the full-scale study, this process is scheduled for 8 months.

<sup>2</sup> At some of the smaller schools, the chief administrator also served as IC.

<sup>3</sup> The diversity of hard-copy lists shown reflects neither the diversity experienced with a greater number of institutions in the full-scale NPSAS:93 nor that anticipated for the full-scale NPSAS:96.

Table III.A.1—Types of Student Lists Provided by Institutions

Type of List Received	Frequency	Percent <sup>a</sup>
Total	66	
Electronic <sup>b</sup>	35	53.0
Hard copy	31	47.0
Single, Unduplicated	15	48.4
By term	9	29.0
By level	5	16.1
By major and Day/Night	1	3.2
By campus	1	3.2

<sup>a</sup> Percentages are based on the total or subtotal under which the referent category is indented.

<sup>b</sup> Five of these also included hard copy printouts.

Since plans (and budget) for the field test were predicated on 65 participating schools, one of the 66 schools that provided enrollment lists was randomly selected for removal from the field-test sample. All of the 65 remaining institutions participated in all remaining phases of the study; consequently, the *effective* rate of full participation among eligible schools (with subsampling accounted for) was 90.4 percent.

### B. Student Record Abstraction

Obtaining information from student records was a sequential 2-stage process (see Section II.B). The first stage, which was implemented for the first time in NPSAS:96, involved an electronic data interchange with a Department of Education (ED) Central Processing System (CPS) database of electronic Student Aid Reports (ESARs). The second stage involved collection of information from student records at the field test sample of postsecondary institutions using a Computer Assisted Data Entry (CADE) system (accomplished either by staff at the NPSAS school or by contractor field interviewers [FIs]).<sup>4</sup> Outcomes of these activities are considered separately in this section.

<sup>4</sup> To avoid duplication of effort, student information obtained in the first stage was preloaded into the CADE records for affected students.

### 1. CPS Electronic Data Interchange (EDI) for Student SAR Data

Obtaining SAR data for NPSAS:96 student sample members from the ED CPS (see Section II.B.2) required a matching student Social Security number (SSN) in the CPS database. This was not possible if (1) the student was not contained within the CPS database (i.e., had not applied for *federal* student aid); or (2) his/her SSN had not been included on the list(s) provided by the host institution. Consequently, the students (a total of 153) from two schools that provided no SSNs for their students were not submitted for matching.

Attempts were made to obtain a CPS match for all sampled students from the remaining institutions. A total of 3,628 were submitted (this included a total of 41 students with an indeterminate SSN).<sup>5</sup> Over the 63 institutions involved, the median within-school match percentage was 57.5 percent; however, the median, maximum, and/or minimum within-institution match rate varied considerably as a function of school type, as shown in Table III.B.1. Identified values in the table are slightly depressed (since students were submitted who could not be matched because of indeterminate SSN), but the major differences shown over school type reflect students that were not included in the CPS database, suggesting differential application for federal student aid at different types of schools.<sup>6</sup>

Because different numbers of students were selected from different types of schools (see Section II.A.2), a somewhat different perspective of the CPS operation is shown in the student-level matching rates, as shown in Table III.B.2. In the field-test schools CPS matching was accomplished and SAR data obtained for 57.6 percent of the students; however, this rate again varied by type of school and by type of student (undergraduate or graduate/first professional).

The overall student-level matching rate is quite similar to the median of within institution rates, but while the trends shown (over school type) for the student-level data are similar to the within-institution medians, they are somewhat more pronounced when giving greater weight to schools with more sampled students. Moreover, the matching rates for undergraduates are substantially higher than that for graduate/first professional students, within the types of schools from which the graduate/first professional sample was drawn. Again, although identified rates are slightly depressed by indeterminate SSNs, the bulk of rate differences shown are attributable to the number of different types of students at different types of schools who are in the CPS database.

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<sup>5</sup> Original plans involved excluding these students from the submission on an individual basis; however, in the press to complete record abstraction as soon as possible and to provide as much time as possible for interviewing, this was not accomplished.

<sup>6</sup> Note that the institutional sample was not a probability sample and that these are unweighted data. Weighted medians would differ somewhat from those reported here; however, weighting would have no effect on the minima and maxima shown.

**Table III.B.1 — Institution-Level CPS Matching Rate Statistics by Institutional Level and Control**

Institution Type		Number of Institutions <sup>a</sup>	Matching Rate Percentage Distribution Statistics <sup>b</sup>		
Control	Level		Minimum	Median	Maximum
Total	Total	63	4.7	57.5	97.3
Public	Total	31	18.2	57.5 <sup>c</sup>	89.7
	Less than 2 years	4	57.4	74.2 <sup>c</sup>	80.4
	2-3 years	6	43.6	52.3	78.4 <sup>c</sup>
	4 or more years	21	18.2	57.5	89.7
Private, non-profit	Total	25	4.7	54.8 <sup>c</sup>	92.2
	Less than 4 years	5	5.8	55.6	92.2
	4 or more years	20	4.7	54.7 <sup>c</sup>	87.5
Private, for-profit	Total	7	69.2	75.9	97.3
	Less than 2 years	4	69.2	74.3	75.9
	2 or more years	3	78.0	81.3	97.3

NOTE: Institution classification for this table has been corrected to agree with that verified by the participating institutions. Within-institution matching rate statistics are depressed (but in no case by more than 2 percentage points) in identified cases by missing SSN for 41 students selected from the 63 institutions.

- <sup>a</sup> These statistics exclude the two institutions (one public, less-than-2 year and one private, for-profit, less-than-2 year) that failed to provide SSNs for *any* student sample member (a total of 153 students were selected from these two institutions).
- <sup>b</sup> Statistics provided are derived from the distribution of matching rates for students selected within an institution, over the institutions devined in the row under consideration.
- <sup>c</sup> This value is depressed (but by no more than 2 percentage points) due to students for whom no SSN was provided.

Table III.B.2—Student-Level CPS Matching Rates by School Type and Classification

Institution Type <sup>a</sup>		Student Classification <sup>b</sup>	Number Submitted to CPS	CPS Matches Obtained	
Control	Level			Number	Percent
Total	Total	Total	3,628	2,091	57.6 <sup>c</sup>
		Undergraduate	2,551	1,656	64.9 <sup>c</sup>
		Graduate/first professional	1,077	435	40.4 <sup>c</sup>
Public	Total	Undergraduate	1,238	787	63.6 <sup>c</sup>
	Less than 2 years	Undergraduate	169	121	71.6 <sup>c</sup>
		Undergraduate	288	170	59.0 <sup>c</sup>
	2-3 years	Undergraduate	288	170	59.0 <sup>c</sup>
	4 or More Years	Total	1,298	741	57.1
		Undergraduate	781	496	63.5
Graduate/first professional	517	245	47.4		
Private, non-profit	Total	Undergraduate	896	521	58.2 <sup>c</sup>
	Less than 4 years	Undergraduate	244	132	54.1 <sup>c</sup>
		Total	1,212	579	47.8 <sup>c</sup>
	4 or More years	Undergraduate	652	389	59.7 <sup>c</sup>
		Graduate/first professional	560	190	33.9 <sup>c</sup>
Private, for profit	Total	Undergraduate	417	348	83.5
	Less than 2 years	Undergraduate	181	134	74.0
		Undergraduate	236	214	90.7

NOTE: Statistics are reported for the 2,091 students from institutions that provided SSNs for *at least one* student sample member from the institution; excluded are 153 student sample members from two institutions that failed to provide any SSNs. Percentages are based on total within row under consideration.

<sup>a</sup> Institution classification for this table has been corrected to agree with that verified by the participating institutions. To avoid even smaller cell sizes, categories of level of offering have been collapsed within the two private sectors.

<sup>b</sup> Student classification reported reflects final status reconciliation based on CADE and CATI data.

<sup>c</sup> Reported matching rates are slightly depressed, where indicated, due to 41 cases submitted with missing SSNs; such students necessarily could not have been matched through CPS procedures. All but two of such cases arose from the private, non-profit sector, where rates are depressed by 2 percentage points; in the public sector and in grand totals, rates are depressed by less than .5 percentage points.

## 2. Student Record Abstracting at Sampled Schools

At all sampled schools, the IC was given an option as to how information about sampled students was abstracted from school records. The first option involved abstraction (guided by the CADE program) by institutional staff,<sup>7</sup> while the second option was to have contractor FIs abstract the records (again using CADE). The first option was the recommended option, since it was less expensive and ensured no access to records of institutional students who had not been sampled by contractor staff during abstraction.

The large majority of field-test ICs (those at 59 of the 65 institutions, 91 percent) *initially* chose the first option (self-CADE); the remaining 6 chose the contractor FI abstracting (FI-CADE). Subsequently, nine institutions initially opting for self-CADE (about 15 percent of those with that initial choice) changed their preference, typically after indicating that the abstracting job was greater than they had originally imagined and that neither they nor other institutional staff had sufficient available time to accomplish the task. Of those changing from their initial choice, seven chose FI-CADE and the remaining two chose a third option (providing photocopies of applicable portions of sampled students' records to the NPSAS:96 contractor staff for CADE entry). As a consequence, 50 schools (slightly more than three-fourths of those participating) completed student record abstracting under the self-CADE approach; this figure was a considerably higher percentage than had been anticipated when developing study plans.

Initial and final institutional choices of student record abstracting method are shown, by institutional control and highest level of offering, in Table III.B.3. While some sector differences exist<sup>8</sup> in initial choice (which ranges from a high of 100 percent among for-profit schools to a low of 85 percent among private non-profit schools), final choice within sectors of institutional control are quite comparable (slightly above three-fourths).

NPSAS:93 experience suggested that schools with very large student enrollment (which were not represented in the field test sample--see Section II.A.1) were much more likely to choose the FI-CADE method. This is attributable, at least in part, (and verified by informal NPSAS:93 IC debriefings) to the size of the sample at the large schools. Because student sample size is positively related to school enrollment,<sup>9</sup> the burden of record abstraction becomes greater with increased enrollment.<sup>10</sup>

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<sup>7</sup> While the CADE system was self-directing and contained a number of checks to ensure proper installation and use (see Section II.B.3), 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.

<sup>8</sup> These differences are marginal given the relatively small cell sizes; most differences within sector cannot be interpreted due to even smaller cell sizes.

<sup>9</sup> Because fixed rates are used, within institutional strata, in NPSAS student sampling, the sample size for a school 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.

Even though the upper end of institutional size was restricted among the field-test schools (see Section II.A.1), the choice of record abstracting method does appear to be related to differences in size (and associated differences in abstracting burden), as shown in Table III.B.4, although (to maintain sufficient sample sizes for this presentation) the cut point used for student enrollment was only 2,500. The "burden effect" is best observed in the percentage decreases between initial and final choices of abstraction method. The 20 percent decrease experienced among the "larger" institutions is twice that experienced among the smaller institutions.

During the CADE operation, 190 students were initially classified as ineligible by the record abstractors. In the bulk of these cases, some student record data had already been abstracted into the CADE record prior to obtaining a data element indicating that the student was ineligible. On closer examination of these cases by contractor central staff, the other data collected for 11 of them suggested that the initial classification may have been in error; consequently only 179 students were excluded as ineligible following CADE.<sup>11</sup>

Completeness of CADE data collection was quite high among the remaining 3,452 sample members, as shown in Table III.B.5. Some record abstract data were collected for all but 6 (less than 0.2 percent) of those not finalized as ineligible at the conclusion of CADE operations. Complete abstraction data<sup>12</sup> were collected for 3,452 sample members (almost 96 percent of the remaining eligible student sample). The remaining group was comprised of individuals for whom varying degrees of data incompleteness existed. (The nature and quality of the abstracted data is not considered here, but is addressed in Chapter V.)

Completeness rates by CADE subsection (See Section II.B.3 and/or Appendix B) are shown in Table III.B.6. With one exception, within-subsection completion rates exceed 99 percent. The exception (about 96 percent and to which is attributed the bulk of overall "partial" completions) is the subsection on tuition costs. This information was sometimes missing because the FI was unable to determine in- or out-of-jurisdiction for a student; however, the major source was a single school for which this information was routinely omitted.

In addition to obtaining student financial aid data, enrollment data, and other postsecondary data from school records (the most reliable and valid source available), CADE operations also was designed to obtain information necessary to contact the student. For this 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. One check involved the

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<sup>11</sup> The remaining 3,602 students (including the 11 potential ineligible misclassifications) were moved to the interviewing step, during which independent checks for eligibility were available.

<sup>12</sup> The "completeness" statistics reported here are based on indices imbedded in each CATI record (the purpose of such indices was quality assurance--principally to alert the record abstractor of which sections and subsections within CADE had been worked to sufficient completion to be considered complete). Because of both (a) considerable variation in the extent of data to be collected (e.g., the number of addresses and phone numbers for a sample member) and (b) the large number of skip patterns within CADE and the abstractors' need to move relatively freely within and between sections/subsections (e.g., different records were frequently kept in different physical locations on campus), the indices are not inclusive.

**Table III.B.3—Institutional Initial and Final Choices of Record Abstraction Method by Institutional Level and Control**

Institution Type <sup>a</sup>		Sample Size	Initial Choice <sup>b</sup>				Final Procedure Used <sup>c</sup>			
			Self-CADE		FI-CADE		Self-CADE		FI-CADE	
Control	Level		Count	Percent	Count	Percent	Count	Percent	Count	Percent
Total	Total	65	59	91	6	9	50	77	15	23
Public	Total	32	30	94	2	6	25	78	7	22
	Less than 2 years	4	3	75	1	25	2	50	2	50
	2-3 years	7	6	86	1	14	5	71	2	29
	4 or more years	21	21	100	0	0	18	86	3	14
Private, non-profit	Total	25	21	84	4	16	19	76	6	24
	Less than 4 years	5	4	80	1	20	4	80	1	20
	4 or more years	20	17	85	3	15	15	75	5	25
Private, for profit	Total	8	8	100	0	0	6	75	2	25
	Less than 2 years	5	5	100	0	0	4	80	1	20
	2 or more years	3	3	100	0	0	2	67	1	33

NOTE: Statistics are presented for all participating NPSAS:96 Field Test institutions. Choices included: (1) "Self-CADE," abstraction by the staff of the participating institution and (2) "FI-CADE," abstraction by contractor field interviewers. 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. To avoid even smaller cell size, categories of level of offering have been collapsed within the two private sectors.

<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. Among the nine institutions that shifted abstracting method from an initial choice, *all* shifted from an initial choice of self-CADE to another procedure.

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

**Table III.B.4—Institutional Initial and Final Choices of Record Abstraction Method by Institution Size**

Control	Institution Type <sup>a</sup>	Level	Sample Size	Initial Choice <sup>b</sup>				Final Procedure Used <sup>c</sup>			
				Self-CADE		FI-CADE		Self-CADE		FI-CADE <sup>d</sup>	
				Count	Percent	Count	Percent	Count	Percent	Count	Percent
Total			65	59	91	6	9	50	77	15	23
Total student enrollment of less than 2,500			35	31	89	4	11	28	80	7	22
Total student enrollment of 2,500 or more			30	28	93	2	7	22	73	8	27

**NOTE:** Statistics are presented for all participating NPSAS:96 Field Test institutions. Choices included: (1) "Self-CADE," abstraction by the staff of the participating institution and (2) "FI-CADE," abstraction by contractor field interviewers. All percentages are based on the sample size for the row under consideration.

<sup>a</sup> As determined by unduplicated yearly enrollment.

<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 with which record abstraction was *completed* at the institution; the initial method may have been used to collect some data. Among the nine institutions that shifted abstracting method from an initial choice, *all* shifted from an initial choice of self-CADE to another procedure.

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

Table III.B.5—Summary of CADE Record Extraction Completeness

Completeness Category <sup>a</sup>	Distribution	
	Number	Percent
All complete	3,445	95.8
Two full sections complete <sup>b</sup>	131	3.7
One full sections complete <sup>b</sup>	6	0.2
Only some partially complete sections <sup>c</sup>	3	0.1
No data collected <sup>d</sup>	6	0.2

NOTE: Statistics are based on 3,602 students found NPSAS-eligible after CPS and CADE operations. Counts include 11 students initially determined to be ineligible by the IC during self-CADE, but for whom subsequent checks of other available data suggested that the IC assessment may have been incorrect.

- <sup>a</sup> For purposes of quality assurance, *completeness indices* were imbedded in each CADE record to provide a check for the data collector that each subsection had been accessed and that some entry had been made for certain items within the subsection. Section Completion indices, reported in this table, were constructed from the subsection indices. The nature and quality of the recorded responses were not reflected in the indices; consequently, even if "data not available" responses were all that had been entered in a subsection, the index would still reflect at least a partial response.
- <sup>b</sup> The remaining sections may have contained partial or no data.
- <sup>c</sup> At least one section contained partial data; the remaining sections may have contained partial or no data. However, this classification does not include cases returned containing only preloaded CPS data.
- <sup>d</sup> This classification includes four returned cases containing only preloaded CPS data.

determination of whether or not a legitimate<sup>13</sup> telephone number and/or address had been abstracted. Among the 3,602 students in the CATI sample, legitimate addresses were obtained for 3,444 (95.8 percent); legitimate telephone numbers were obtained for 3,343 (92.8 percent); and one or the other of these were found for 3,591 (99.7 percent).

<sup>13</sup> Checks for "legitimacy" *did not* ensure that the number and/or address were valid, only that they were present and conformed to legitimate configurations and conventions for telephone numbers and addresses (e.g., an address must have a street address as well as a city and state code).

Table III.B.6—CADE Completeness Rates, by Record Abstract Instrument Subsection

Record Abstract Form Subsection	Percent Complete <sup>a</sup>
Locating information	99.7
Student characteristics	99.7
Admissions information	99.7
Enrollment history for NPSAS year	99.4
Tuition payments	96.3
Financial aid awards	99.3
Needs analysis information	99.5
Student aid report (SAR) information	99.5 <sup>b</sup>

NOTE: Statistics are based on 3,602 students found NPSAS-eligible after CPS and CADE operations. Counts include 11 students initially determined to be ineligible by the IC during self-CADE, but for whom subsequent checks of other available data suggested that the IC assessment may have been incorrect.

<sup>a</sup> For purposes of quality assurance, *completeness indices* were imbedded in each CADE record to provide a check for the data collector that each subsection had been accessed and that some entry had been made for certain items within the subsection. Section completion indices, reported in this table, were constructed from the subsection indices. The nature and quality of the recorded responses were not reflected in the indices; consequently, even if "data not available" responses were all that had been entered in a subsection, the index would still reflect at least a partial response.

<sup>b</sup> Of the total eligible student group, 57.4 percent had these data preloaded, and thus were "complete" by definition; an additional 42.1 percent of the total group was completed by record abstractors.

### C. Student and Parent Locating and Interviewing

For purposes of 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>

<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-eligible).

Telephone interviewing of a previously selected sample of students (and parents of a subsample of those students) is sometimes as straightforward as placing a single telephone call; however, the operation frequently involves 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> Also 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>

As implied by the sequential nature of activities that may be required for any given case, successful completion of interviews with those that are difficult either to locate or to interview requires considerable calendar time. As indicated previously, the time available for these operations for the NPSAS:96 field test was limited to 64 days (compared to a more optimal 120 days). Consequently, implementation of procedures for those most difficult to locate and for those most difficult to interview were constricted. Because the constriction was greater for interviewing activities, and since locating is a necessary (but not sufficient) condition for completing the interview, these two major steps are considered separately.

### 1. Students

Figure III.C.1 presents a schematic of the outcomes of student locating and interviewing (the first page of the figure is devoted to locating, the second to interviewing) and related case-resolution activities. As shown on the first page of the figure, attempts were made to locate 3,602 student-sample members during CATI operations (this excludes the 179 cases determined as NPSAS-ineligible in prior data collection steps). Among those for whom locating was attempted, 3,081 were located, 485 were *not* located, and 36 were considered "exclusions."

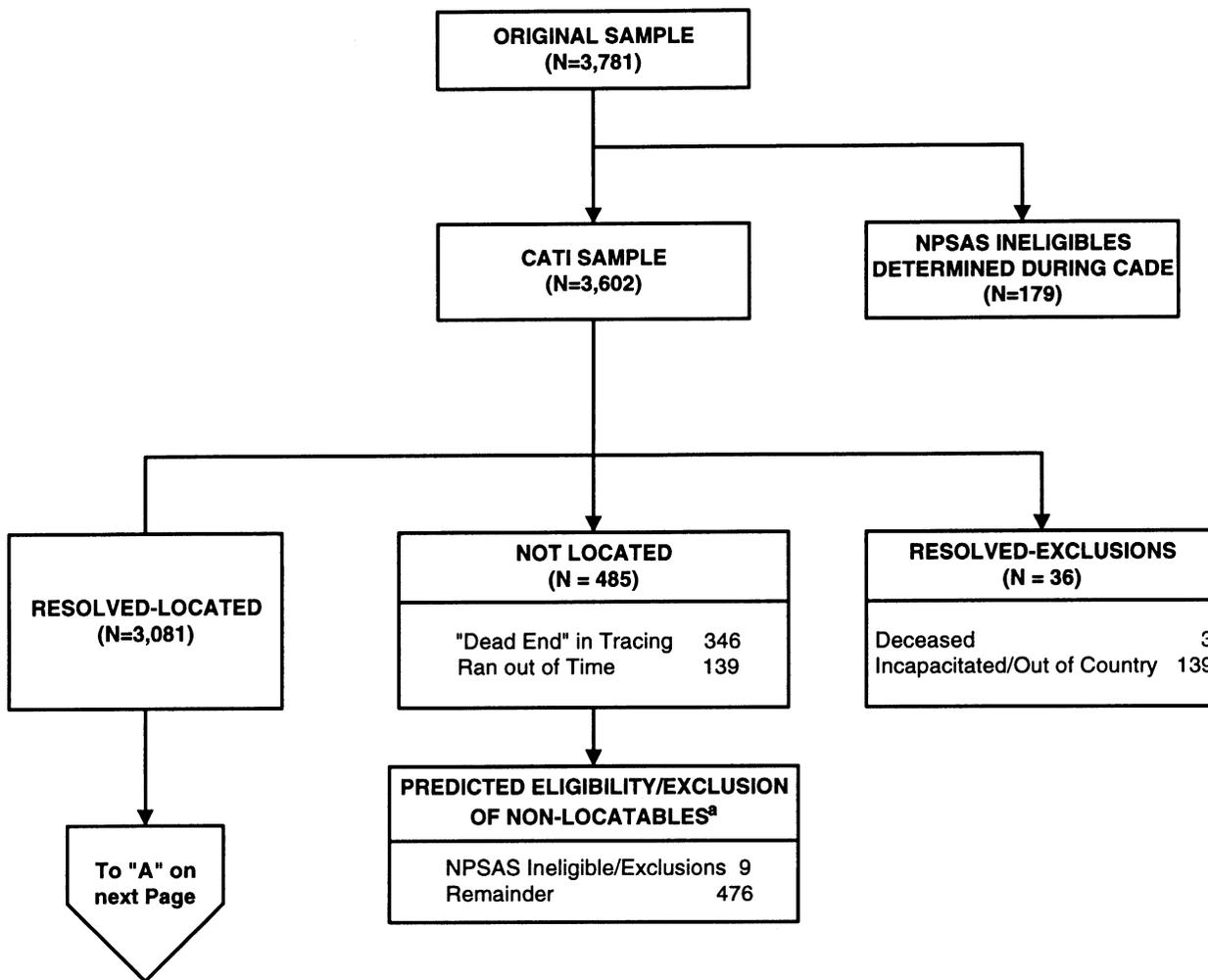
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<sup>15</sup> Sequential activities associated with locating can involve: sequencing through the preloaded telephone numbers until the operable one is found; calling new numbers uncovered during calls to preloaded numbers; contacting directory assistance 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., database searches, referral to credit firms--see Section II.B.4).

<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 school years).

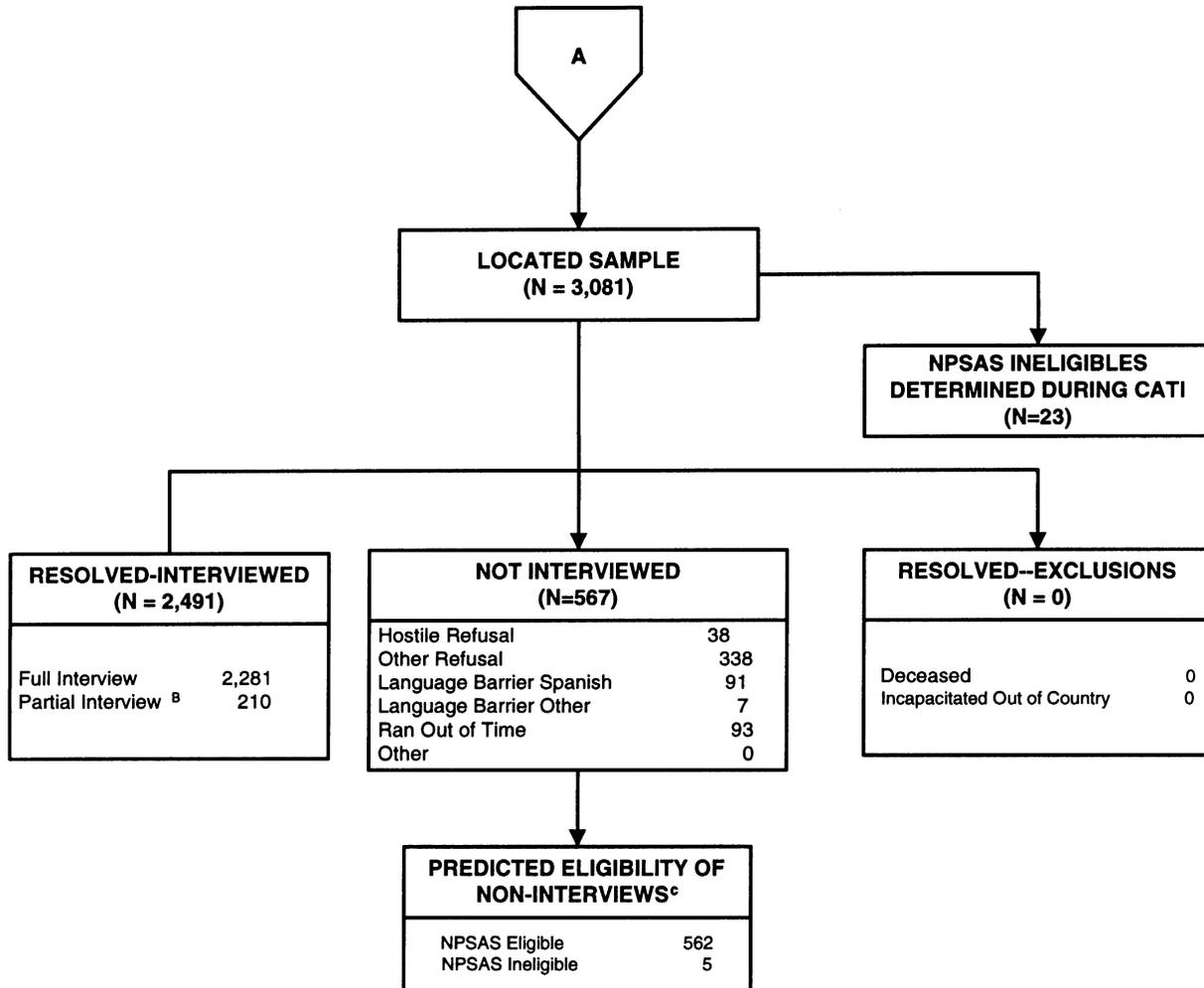
<sup>17</sup> Among other features, optimal calling plans involve (a) calling individuals who have yet to be reached during different time segments (early morning, mid-morning, mid-day, afternoon, early evening, late evening, Saturday, and Sunday) than those at which they were not reached in previous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

Figure III.C.1--Case Flow Through Locating, Interviewing, and Related Case Resolution Activities for Student Sample



<sup>a</sup> Predictions based on estimated exclusion rate of approximately 1.00 percent and interview-level NPSAS ineligibility rate of approximately 0.91 percent.

Figure III.C.1 (continued)--Case Flow Through Locating, Interviewing, and Related Case Resolution Activities for Student Sample



<sup>b</sup>Includes restricted interviews and mail questionnaire returns.

<sup>c</sup>Predictions based on estimated interview-level NPSAS ineligibility rate of approximately 0.91 percent.

Exclusion cases consisted of those whose status (generally obtained through some contacted third party) was determined to be "deceased" (a total of three) or such that attempts at locating/interviewing them during the CATI operational period would be futile (e.g., incarcerated, institutionalized, incapacitated, or out of the country--total of 33). The designation "exclusions" indicates that, even though the status of the case was successfully resolved, such cases are considered "out-of-scope" for locating and interviewing operations.

Not located cases are classified into two groups: (1) "ran out of time," those for whom telephone tracing *within the CATI-imbedded locator module* was still ongoing (but still not fruitful) when data collection activities were ceased and (2) "dead end" cases, those for whom all telephone tracing attempts *within the CATI-imbedded locator module* 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. The second category also reflects effects of constricted time, since the category includes cases who had been (or could have been--given a longer time frame) assigned to CATI-external tracing activities, which themselves had not been completed prior to ceasing data collection.

Some of the students who were not located can be expected to be either exclusions or NPSAS-ineligibles (and, consequently, out-of scope); projected numbers of such students are also shown in Figure III.C.1. Using these projection and other entries from the figure, the NPSAS:96 field-test locating rate for in-scope students can be determined as:

$$\text{In-scope Student Locating Rate} = 3,081 / (3,081 + 476) = 86.6 \text{ percent.}$$

This rate considers neither the exclusions nor the projected ineligible/exclusions.

Table III.C.1 shows NPSAS:96 field-test student locating results by type of institution and student stratum.<sup>18</sup> Many of the locating rate percentages reported in the table are based on relatively small sample sizes, and row and column "total" percentages are somewhat misleading (due principally to the non-probability sampling of institutions and the differential allocations of students to types of schools and to student strata within schools). Nonetheless, some relatively consistent (and relatively easily understandable) differences in locating rates can be observed in the table.

The most noticeable difference, within the undergraduate student strata, is that in all but one level of offering classifications (the single exception being 2-3 year schools) students from private, for-profit institutions were markedly more difficult to locate than students from either public or private, non-profit schools. This result is consistent with findings from other NPSAS waves and with BPS:90 follow-up results. This may be because clients of the for-profit schools are more mobile than students in other sectors.

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<sup>18</sup> The statistics in Table III.C.1 exclude the 179 NPSAS-ineligible sample members determined during record abstraction as well as the 36 "exclusions" previously discussed; they do not exclude the 8 projected ineligible/exclusions. As in Table III.C.1, institution type has been corrected to reflect the type verified by the institution; however, not all student stratum classification errors have been corrected.

Table III.C.1--Student Locating Results by Institution Type and Student Stratum

Institution Type <sup>a</sup> Highest Level of Offering	STUDENT STRATUM <sup>b</sup>											
	TOTAL			POTENTIAL FIBS			OTHER UNDER-GRADUATES			Graduate/First Professional <sup>c</sup>		
	Located		Base	Located		Base	Located		Base	Located		Base
	Count	Percent		Count	Percent		Count	Percent		Count	Percent	
Total	3,566	3,081	86.4	1,428	1,225	85.8	1,080	937	86.1	1,050	919	87.5
Public	1,717	1,495	87.1	560	490	87.5	650	559	86.0	507	446	88.0
Private, non-profit	1,402	1,228	87.6	459	405	88.2	400	350	87.5	543	473	87.1
Private, for-profit	447	358	80.1	409	330	80.7	38	28	73.7	NA	NA	NA
Less than 2 year	428	352	82.2	409	336	82.2	19	16	84.2	NA	NA	NA
Public	163	143	87.7	154	134	87.0	9	9	100.0	NA	NA	NA
Private, non-profit	52	45	86.5	52	45	86.5	0	0	NA	NA	NA	NA
Private, for-profit	213	164	77.0	203	157	77.3	10	8	70.0	NA	NA	NA
2 to 3 year	573	504	88.0	336	296	88.1	237	208	87.8	NA	NA	NA
Public	297	253	85.2	158	132	83.5	139	121	87.1	NA	NA	NA
Private, non-profit	188	169	89.9	100	90	90.0	88	79	89.8	NA	NA	NA
Private, for-profit	88	82	93.2	78	74	94.9	10	8	80.0	NA	NA	NA
4 years or more	2,565	2,225	86.7	683	593	86.8	832	713	85.7	1,050	919	87.5
Public	1,257	1,099	87.4	248	224	90.3	502	429	85.5	507	446	88.0
Private, non-profit	1,162	1,014	87.3	307	270	87.9	312	271	86.9	543	473	87.1
Private, for profit	146	112	76.7	128	99	77.3	18	13	72.2	NA	NA	NA

NOTE: Statistics exclude 179 NPSAS-ineligible sample members (as determined during record abstraction), 3 deceased sample members, and 33 sample members who were either incarcerated, institutionalized, incapacitated, or out of the country during the data collection period. All percentages are computed using the specified base for the institution and student classification considered.

<sup>a</sup> Institutional classification reported is the status reported by the institution during initial contacts.

<sup>b</sup> Major frame classification errors determined during sampling have been corrected; remaining frame misclassifications *have not* been corrected.

<sup>c</sup> Graduate students and first professional students.

Within the 4-or-more-year schools (the only applicable schools), graduate/first professional students were consistently located at lower rates than potential FTB students but at marginally higher rates than other undergraduates (however, these comparisons are somewhat confounded since graduate/first professional students were not selected at all schools of this type). Also, within the 2- to 3-year as well as the 4 or more year schools, potential FTB students were located (with one exception--public, 2- to 3-year schools) at higher rates than other undergraduates, regardless of sector considered. Certainly, part of this difference is attributable to the greater effort devoted to the potential FTB sample (particularly during the latter stages of data collection, to ensure that the BPS:96 field test sample would be adequate); however, the differences are not as great as may have been anticipated in light of the extra effort expended. A possible counteracting effect could be that a disproportionately higher number of first-year students leave school during or after their first-year (with associated mobility that makes locating more difficult).

This hypothesis is supported somewhat by examining locating rates of potential FTBs at less-than-2-year (effectively one-year) schools. Since most of the students at these schools would have completed their course of study and left the school after the NPSAS year (note the very small sample sizes for other undergraduates at those schools), the hypothesis would predict that such students would be at least or more difficult to locate than potential FTBs in 2- to 3- year schools or in 4 or more year schools. With one exception (public, 2 to 3 year), this is the case, regardless of sector considered.

Student interviewing results, for those students who were located, are shown in the schematic on page 2 of Figure III.C.1. Only 23 of the 3,081 located sample members were determined to be NPSAS-ineligible during their interview. (While determination of NPSAS-ineligibility represents a full status resolution and was considered "completing the interview" for such students, these students are not considered in subsequent interviewing rate determinations.) No additional exclusion cases were determined during the interviewing stage.<sup>19</sup>

A total of 2,491 (of the 3,058 eligible located students) were interviewed. The bulk of these (2,281) completed the entire interview; however, 210 completed only a partial interview. Most of the partial interviews (129) were the typical case of respondent break-off after completing part of the interview (break-off could have represented an explicit or implicit refusal or the arising of some other matter requiring the attention of the respondent, but such cases could not be converted or recontacted to complete the interview by the end of the data collection period). A substantial number (81) of partial interviews, however, resulted from administration of a "minimal" set of questions to certain sample members (see Chapter V for additional details).

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<sup>19</sup> It is not unusual in postsecondary student surveys, particularly immediately following a school year, for students to move out of the country after they are located but before the interview can be completed sufficiently to be considered a partial response. The fact that no such students were identified after initial locating during the NPSAS:96 field test is probably attributable to the late start of CATI interviewing (after most school years had ended).

These administrations were conducted mostly by telephone;<sup>20</sup> however, some represented mail returns of a minimal questionnaire mailed to a small subset of sample members.<sup>21</sup>

A total of 567 eligible, located students were not interviewed. Of these, 38 were hostile refusals,<sup>22</sup> and 7 were limited-English, non-Spanish speaking sample members.<sup>23</sup> These cases represent situations in which subsequent attempts at interviewing is infeasible or unwise. Not interviewed cases also included 93 sample members for whom time ran out prior to completing the interview; such cases clearly reflect, at least in part, the constricted data collection period.<sup>24</sup>

The remaining two categories of non-interview cases also reflect in varying degrees the constricted data collection period. The bulk of those not interviewed (338) are classified as "other" (i.e., non-hostile) refusals. Although at least two separate refusals were required from the sample member to be included in this category, subsequent work by special refusal converters was limited (and past experience with such converters suggests that up to 25 percent of this category can be converted). The non-interviewed group labeled Spanish language barrier reflects both the constricted time frame and the fact that only two bilingual (Spanish/English) interviewers were available during the field test (greater detail on the Spanish-speaking subgroups is provided in Chapter V).

As with those not located, it is quite likely that some of the located sample members, who were not interviewed, would prove to be NPSAS-ineligible. Consequently, using an interview-level ineligibility rate of about .91 percent,<sup>25</sup> five of the not-interviewed cases are projected to be NPSAS-ineligible. Using these projection and other entries from the figure, the NPSAS:96 field-test interview rate for located, in-scope students can be determined as:

$$\text{In-scope student interviewing rate} = 2,491/(2,491+562) = 81.6 \text{ percent.}$$

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<sup>20</sup> Field test plans called for administration of only a subset of questions to Spanish-speaking students with a decided lack of oral English proficiency; the Spanish interview for these students, principally selected from schools in Puerto Rico, is included in Appendix A.

<sup>21</sup> Plans had called for self-administration of mailed hard-copy questionnaires to sample members who were hearing-impaired (even though initial contact and preliminary questions were accomplished through TDD); since some non-hearing-impaired sample members indicated that they would not complete a telephone interview but would complete a mailed questionnaire, they were mailed the same questionnaire; a copy of this questionnaire is included in Appendix A.

<sup>22</sup> This classification is given to sample members who threaten lawsuits or notification of their Congressperson or some other government official if additional calls are made.

<sup>23</sup> While the interviewer pool did contain Spanish/English bilingual individuals, it is not cost-effective to maintain interviewer staff to accommodate, in their native language, a broader range of non-English speaking sample members.

<sup>24</sup> This group likely contains, however, an unknown number of implicit refusal cases (individuals who after first contact use answering machines or friends/relatives as gatekeepers, as well as those who continue to make (and then break) appointments for an interview "in the future."

<sup>25</sup> This rate is determined by dividing the number of eligibles by the total number for which eligibility was determined during interviewing; that number included the 23 determined ineligible, the 2,491 interviewed, and five cases who were interviewed sufficiently to determine they were eligible but insufficiently to be classified as interviewed.

**Table III.C.2--Student Interviewing Results Among Those Located, by Institution Type and Student Stratum**

Institution Type <sup>a</sup> Highest Level of Offering	STUDENT STRATUM											
	TOTAL			POTENTIAL FTBs			OTHER UNDER-GRADUATES			Graduate/first professional <sup>c</sup>		
	Base	Interviewed		Base	Interviewed		Base	Interviewed		Base	Interviewed	
		Count	Percent		Count	Percent		Count	Percent		Count	Percent
Total	3,058	2,491	81.5	1,216	1,031	84.8	931	755	81.1	911	705	77.4
Public	1,486	1,222	82.2	487	412	84.6	556	458	82.4	443	352	79.5
Private, non-profit	1,220	979	80.2	405	350	86.4	347	276	79.5	468	353	75.4
Private, for-profit	352	290	82.4	324	269	83.0	28	21	75.0	NA	NA	NA
Less than-2-year	347	289	83.3	331	279	84.3	16	10	62.5	NA	NA	NA
Public	142	117	82.4	133	111	83.5	9	6	66.7	NA	NA	NA
Private, non-profit	45	40	88.9	45	40	88.9	0	0	NA	NA	NA	NA
Private, for-profit	160	132	82.5	153	128	83.7	7	4	57.1	NA	NA	NA
2-3 year	501	405	80.8	294	245	83.3	207	160	77.3	NA	NA	NA
Public	251	191	76.2	131	110	84.0	120	81	64.5	NA	NA	NA
Private, non-profit	169	148	87.6	90	77	85.6	79	71	89.9	NA	NA	NA
Private, for-profit	81	66	81.5	73	58	79.5	8	8	100.0	NA	NA	NA
4 years or more	2,210	1,797	81.3	591	507	85.8	708	585	82.6	911	705	77.4
Public	1,093	914	83.6	233	191	85.7	427	371	86.9	443	352	79.5
Private, non-profit	1,006	791	78.6	270	233	86.3	268	205	76.5	468	353	75.4
Private, for-profit	111	92	82.9	98	83	84.7	13	9	69.2	NA	NA	NA

NOTE: Statistics are based on students who were located, exclusive of 23 cases subsequently identified as NPSAS-ineligible. All percentages are computed using the specified base for the institution and student classification considered.

<sup>a</sup> Institutional classification reported is the status reported by the institution during initial contacts.

<sup>b</sup> Major frame classification errors determined during sampling have been corrected; remaining frame misclassifications *have not* been corrected.

<sup>c</sup> Graduate students and first professional students.

This rate considers neither the ineligible nor the projected ineligible. Because the interviewing rate was computed as conditional upon locating, it is possible to determine an in-scope response rate as the product of the previously reported in-scope locating rate and the in-scope conditional interviewing rate as:

$$\text{In-scope student response rate} = 100 * 0.866 * 0.816 = 70.7 \text{ percent.}$$

The rate reflects constriction of the available data collection period.

To examine differences in conditional interviewing rates, Table III.C.2 shows NPSAS:96 field-test interviewing results among located students by type of institution and student stratum<sup>26</sup>. As with locating statistics, some interview rate percentages in this table are based on relatively small sample sizes, and the previously discussed constraints in interpreting marginal percentages also apply here. Generally, the differences in conditional interviewing rates are more pronounced than the previously presented locating differences.

As was the case with locating, interviewing was also least likely to be accomplished among students of for-profit institutions regardless of control sector considered, with minor exceptions.<sup>27</sup> This again mirrors findings in previous NCES telephone surveys of postsecondary students. Unlike the locating results, interview results are markedly lower for Graduate/first professional students than either of the undergraduate groups, within the four-or-more-year schools.<sup>28</sup> This is also consistent with prior NPSAS results; it may reflect the more rigorous academic demands of graduate/first professional students or the greater willingness to say "no" among these older students. The first of these hypotheses is supported within private non-profit institutions, in which the initial graduate/first professional refusal rate among was lower than that among either undergraduate group; however, the second hypothesis is supported within the public institutions, where the graduate/first professional refusal rate exceeded that for the undergraduate groups by at least 6 percentage points (see **Table V.??**, in Chapter V).

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<sup>26</sup> The statistics in Table III.C.1 exclude the 179 NPSAS-ineligible sample members determined during record abstraction as well as the 36 "exclusions" previously discussed; they do not exclude the 8 projected ineligible/exclusions. As used in Table III.C.1, institution type has been corrected to reflect the type verified by the institution; however, not all student stratum classification errors have been corrected.

<sup>27</sup> In less-than-2-year schools, potential FTB students from for-profit institutions were interviewed at slightly higher rates than comparable students from public schools; also, the for-profit rate among other undergraduates is the highest rate within the 2-3 year schools, but that rate is based on only eight cases.

<sup>28</sup> Again recall that this comparison is somewhat confounded, since undergraduate results are not restricted to only those schools from which graduate/first professional students were selected.

While the additional effort directed towards potential FTB students is supported, in the over-school totals, by higher interviewing rates in that group, these results are somewhat artifactual. Considering only the four comparisons between potential FTBs and other undergraduates, *within specific types of schools in which both groups contain at least 50 students*,<sup>29</sup> the differences favor the other undergraduates in two instances and the potential FTBs in the other two (albeit the differences favoring FTBs are of a markedly larger magnitude).

## 2. Parents

Locating and interviewing parents was given a somewhat lower priority than student operations from the very beginning of the CATI implementation; however, about 4 weeks into interviewing, operational decisions were made to exclude certain parent sample members from further consideration. Specifically, 72 of the cases yet to be worked (pending obtaining information from students--who had not yet been contacted--on how to contact the parent) were excluded, as were an additional 25 cases in which the student had been located but parent information had not yet been obtained. Operations continued for the remaining parent sample (all of whom had some locating data present and had been worked prior to the exclusion decisions), again under a lower priority.

A schematic showing locating and interviewing results for the parents of 317 selected students is provided in Figure III.C.2. The 97 previously discussed exclusions are shown as well as 2 additional exclusions (parents who were--according to the student--too infirm to be disturbed). Additionally, five of the original sample were determined ineligible. Ineligible parents arose either from determination of NPSAS-ineligibility of the student or that the student was older than 30 (in which case parents were not to be sampled)<sup>30</sup>. Two of these five parents had been located and one had completed an interview before they were determined ineligible.

Among the remaining 213 parents, 183 were located, for a *raw locating rate of 84.7 percent*. The lower priority assigned to parents is reflected in the locating rate and in the nature of those not interviewed, within which the "ran out of time" classification was applicable to 5 times more individuals than the "dead end" category.

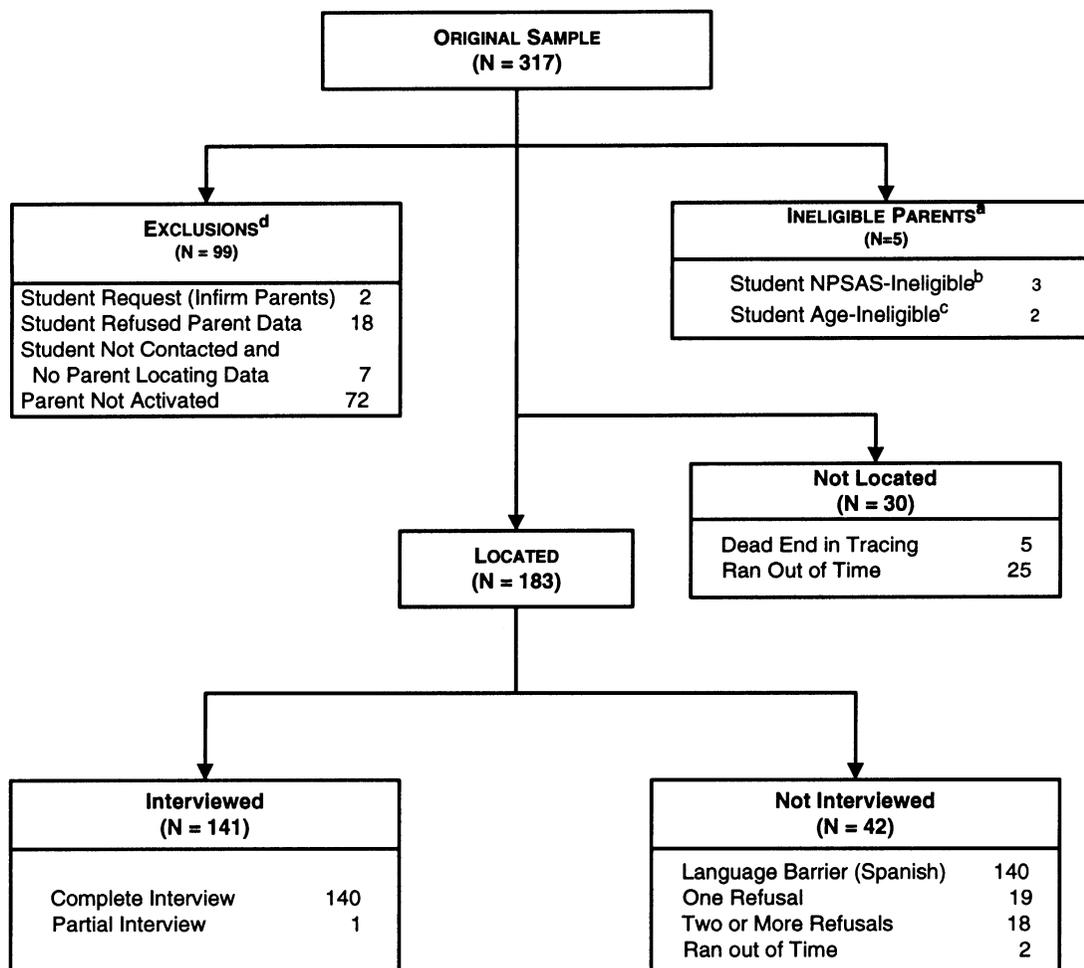
Of the 183 located parents, 141 were interviewed (all but one of whom completed the entire parent interview); the associated *raw interviewing rate among located parents was 77.0 percent*. These results also reflect the lower priority assigned to the parent operation, as do the classifications of those not interviewed. All of the not-interviewed parents are represented in categories that would normally receive additional attention, and almost half of them were concluded after only one (non-hostile) refusal (normally cases are not even referred to special refusal converters until two refusals have been recorded).

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<sup>29</sup> The comparisons are: 2-3 year public, 2-3 year private non-profit, 4-or more-year public, and 4-or-more-year private.

<sup>30</sup> Actually, the NPSAS-ineligibles had all been identified during record abstraction and should not have been selected initially (but were on the basis of defective code in the selection program); the age-ineligible students were selected because their date of birth had not been obtained during record abstraction; when this was determined as greater than 30 during the student interview, the parents became ineligible.

Figure III.C.2--Case Flow Through Locating, Interviewing, and Related Case Resolution Activities for Parent Sample



<sup>a</sup>One interview was conducted among these parents, prior to discovery of student ineligibility.

<sup>b</sup>Three cases were determined to be ineligible during record abstraction; however, parents were sampled due to an error in the selection program.

<sup>c</sup>No date of birth was obtained for associated students during record abstraction; when student was interviewed, age was greater than the cut-off for parent interview.

<sup>d</sup>With the exception of the first category listed, these exclusions were initiated, with NCES approval, for operational expedience.

Reflecting the relatively low locating and conditional interviewing rates, the raw overall response rate for parents is given as:

$$\text{Parent response rate} = 100 * .847 * .770 = 65.3 \text{ percent.}$$

Because of the small size of the field test parent sample, no breakdowns of locating or interviewing statistics were attempted.

#### **D. Other Data Collection Activities**

In addition to the procedures reported so far in this chapter, two other data collection activities were implemented during the NPSAS:96 field test. The first of these involved the record abstraction verification activity, whereby the reliability of data abstracted from student data were to be evaluated. The second was the CATI reliability reinterview activity, whereby the temporal stability of student interview responses were to be evaluated. While the results of the evaluations are reported in Chapters V and VI, respectively, the results of the data collection procedures, *per se*, are reported below in this section.

##### **1. Record Abstraction Verification**

Several weeks after completion of data collection, each of the ICs in 65 field test institutions was asked to verify five selected record abstract data elements for each of five randomly selected students from the institution. Tailored forms were computer generated for each institution (listing the five selected students, the five data elements, and the recorded value of those data elements).<sup>31</sup> The IC (or his/her designee) were instructed to mark the recorded data elements as either correct or incorrect and, if incorrect, to write in the correct value. (A copy of this form, together with cover letter and instructions, is provided in Appendix A.) Even though all 65 ICs initially indicated institutional willingness to perform the verification, only 61 of the 65 institutions (94 percent) returned a completed form in the time allowed for this activity.

##### **2. Reliability Reinterviews**

Among eligible sample members who completed the NPSAS:96 field test interview, a sample was selected to participate in a reliability reinterview (containing a small subset of the interview items and to be conducted 2-3 weeks after the initial interview). 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 the reinterview or to refuse it at that time.

A total of 252 respondents were selected for the reliability reinterview. The reinterview sample, together with rates of agreement and subsequent participation in a reinterview are shown in Table III.D.1. Due to the built-in delay in administering the reinterview and the need to

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<sup>31</sup> Missing values for the variable were also included, in order to evaluate errors of omission as well as those of commission.

complete reinterviews during the same time frame as other interviews, the reinterview population was obviously most heavily weighted with those who responded relatively early to the initial interview; consequently, reported agreement and response rates are probably biased upwards.<sup>32</sup>

**Table III.D.1--Reliability Reinterview Results, by Student and Institution Classifiers**

Classifier Considered	Selected for Reinterview		Agreed to Participate		Reinterviewed	
	Count	Percent <sup>a</sup>	Count	Percent <sup>b</sup>	Count	Percent <sup>c</sup>
Total	252	100.0	249	98.8	226	90.8
Student Stratum <sup>d</sup>						
Potential FTB	103	40.9	101	98.1	91	90.1
Other undergraduate	78	31.0	78	100.0	68	87.2
Graduate/first professional <sup>e</sup>	71	28.2	70	98.8	67	95.7
Institutional Control <sup>f</sup>						
Public	133	52.8	131	98.5	121	92.4
Private, non-profit	97	38.5	96	99.0	85	88.5
Private, for-profit	22	8.7	22	100.0	20	90.9

- <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 errors were not corrected; consequently, some classification errors may exist.
- <sup>e</sup> Graduate students and first professional students.
- <sup>f</sup> Institution control has been corrected to agree with the status verified by the institution.

Despite the nature of the selection process, the reinterview sample was quite representative of the total respondent group in respect to institutional control and student stratum. Specifically, the percentage distribution of the reinterview sample over institutional control as shown in Table III.D.1 (second column) closely approximates that for all respondents (namely, public: 49.1 percent; private, non-profit: 39.3 percent; and private, for-profit: 11.6 percent), as is that for student stratum (potential FTBs: 41.4 percent; other undergraduates: 30.3 percent; and graduate/first professional: 28.3).<sup>33</sup>

Among the 252 student respondents sampled for reinterview, 249 (approximately 99 percent) agreed to participate. Agreement rate differences among subgroups are minimal, as

<sup>32</sup> By implication, such individuals were those most easily located and most easily convinced to participate in the initial interview.

<sup>33</sup> The referenced percentages for the distributions over the classifiers for the entire set of respondents can be obtained using the "interviewed" counts that have been presented previously in Table III.C.2.

would be expected with such a high overall agreement rate. Nonetheless, the lowest rate for agreement to participate shown in the table is for the potential FTB group (the group with the longest--on average--interview).

Among the 249 selected students agreeing to participate in the reinterview, 226 (approximately 91 percent) completed the reinterview. Over half of the previously agreeing cases that could not be interviewed represented individuals who could not be recontacted by phone; some of the inability to recontact probably represented implicit refusals (e.g., using answering machines or friends to serve as "gate keepers"). Because of the relatively small sample sizes, the relatively small group differences (the largest shown being only about 8 percentage points) serve only to indicate possible trends. The most notable of these is that despite the fact that the graduate/first professional student group were more difficult to interview initially (see Table III.C.2, above), they were most likely to be reinterviewed if they had agreed to it.

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#### IV. Analysis of Two-Stage Versus Three-Stage Design Options For NPSAS:96

All previous waves of NPSAS have been implemented as 3-stage sampling designs in which the three stages of sampling are: (1) geographic areas (based on 3-digit ZIP codes), (2) institutions, and (3) students. The NPSAS:96 field test involves an assessment of the relative merits of a 2-stage design, in which institutions are selected directly at the first stage, versus the 3-stage design. The assessment was based on the expected relative costs and relative precision for these two designs.

##### A. Cost Comparison

Difference in total costs between the two sample designs derives entirely from the difference in costs for implementing the CADE abstractions of student data at sample institutions. Institutions are given the option of completing these abstractions with their own staff (self-CADE) or with the assistance of a contractor field interviewer (FI-CADE). Choice of design (2- or 3-stage) has no impact on cost with regard to schools opting for self-CADE; however, the 3-stage (area clustered) design is expected to produce lower CADE costs primarily because it should require less travel and subsistence to process institutions requiring field interviewers (FIs). Consequently, we have restricted the cost comparison to comparison of estimated costs only for implementing CADE under the two designs. We have further restricted the comparison to variable costs, since fixed costs will accrue equally under either design.

The real cost difference for implementing CADE depends on the number of institutions that will require the assistance of an FI. In the NPSAS:96 field test, FIs were sent to only about 20 percent of the schools. At another 3 percent (approximately) of the institutions, records were copied and sent to FI (or to contractor central staff) for data abstraction and entry. The experience in the full-scale NPSAS:93 was quite different. FIs were sent to approximately 47 percent of the participating institutions in NPSAS:93, and hard-copy materials were sent to the FIs (or the central office) by an additional 8 percent of the participating institutions.

We expect the percentage of FI-CADE schools in the full-scale NPSAS:96 to be greater than in the field test for two reasons. *First*, as indicated previously, the field test did not include any of the largest institutions in the population. Most of these will be in the full-scale study, and they will have large student sample sizes. We anticipate (and NPSAS:93 experience confirms) that schools with large sample sizes are more likely to require an FI to perform CADE. *Second*, we anticipate that FIs will be sent to some schools in the full-scale study simply to expedite CADE completion so that the student and parent CATI interviews can proceed on schedule.

Therefore, we have compared cost estimates for two rates of FI-CADE: 35 percent and 55 percent. The 35 percent rate is consistent with our earlier projections and appears to be a reasonable expectation, given the field test experience. The 55 percent rate is consistent with the NPSAS:93 experience, and serves as an anticipated worst-case scenario for NPSAS:96.

Table IV.1 summarizes our cost estimates for the two designs (2-stage and 3-stage) and the two potential FI-CADE rates (35 percent and 55 percent). The cost estimates were developed from the following considerations and assumptions:

- # Simulated FI-CADE samples were examined for each institutional design and percentage FI-CADE to arrive at an expected number of interviewers to be hired under each design and the specific counties from which those interviewers are likely to be recruited. It was assumed that the number of field interviewers to be hired would not depend on the percentage of FI-CADE schools because it would be too late in the process before we would have that information. For each design, approximately 110 field interviewers were projected. It was further assumed that field interviewers would all be recruited from counties with a relatively large existing file of potential interviewers. It is expected that this is a good approximation to the efficiency with which we will be able to match interviewer recruitment with actual FI-CADE schools.
  
- # Expected average CADE costs were developed for the cost categories shown below.
  1. Self-CADE schools that require little assistance (low-maintenance self-CADE).
  2. Self-CADE schools that require considerable assistance (high- maintenance self-CADE).
  3. Hard-copy CADE schools (those for which a field interviewer or on-site RTI staff member must enter the CADE data from hard copy records).
  4. FI-CADE schools for which the closest interviewer:
    - a. is local (within 50 miles), requiring no stay-over.
    - b. is within commuting distance (50-200 miles), requiring a stay-over.
    - c. is long distance; must fly (over 200 miles) and rent auto.
  
- # In total, 300 simulations were implemented for each design and each percentage of FI-CADE (35 percent and 55 percent) to estimate the expected number of institutions in each of the above six cost categories. A geographic information system (GIS) was used to determine the distance from each sample county to the nearest county with an interviewer. We monitored the simulated assignments to interviewers so that no interviewer was assigned more than three institutions because we found that three was about the average number of schools one interviewer could work in NPSAS:93.<sup>1</sup>

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<sup>1</sup>Scheduling constraints typically preclude an interviewer from working more than three institutions, because many of the FI-CADE institutions are identified on a flow basis as self-CADE schools convert to FI-CADE.

**Table IV.1— Estimated Costs for Implementing CADE Student Record Abstractions for the Full-Scale NPSAS:96 Under Two Sampling Designs and Two Levels of FI-CADE Schools**

School CADE Cost Category	Assuming 35 Percent FI-CADE <sup>a</sup>						Assuming 55 Percent FI-CADE <sup>e</sup>					
	2-Stage Design		3-Stage Design		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	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				
FI-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 FI-CADE schools in 300 simulations. For each simulation, FI-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 FI-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 (FI) staff (or central staff), in the “hard-copy” category.

## B. Precision Comparison

Variance models were developed from the NPSAS:93 data base in order to estimate the precision that could be expected for NPSAS:96 statistics, using the variables listed in Table IV.2. These statistics involve the proportions of students receiving various types of aid within specified institution and student analysis domains, and the average amount of aid received among the domain of aid recipients.

The variance models developed are approximate models intended only for the purpose of providing approximate comparison of the precision to be expected under the 2-stage and 3-stage designs. The sampling variance for the 3-stage design was modeled for a sample mean<sup>2</sup>,  $\bar{y}$ , as

$$Var(\bar{y}) = d_w V_{SRS} d_c,$$

where

$d_w$  = unequal weighting design effect for  $\bar{y}$ ,

$V_{SRS}$  = simple random sampling variance of  $\bar{y}$ , and

$d_c$  = design effect for  $\bar{y}$  due to intracluster correlation, or multi-stage sampling.

The unequal weighting design effect for each statistic was assumed to be approximately the same for the NPSAS:93 and NPSAS:96 designs. Hence, the unequal weighting design effect was computed for each statistic based on the NPSAS:93 analysis weights as

$$d_w = \frac{n \sum w_i^2}{(\sum w_i)^2},$$

where

$n$  = the number of NPSAS:93 respondents in the analysis domain, and  
 $w_i$  = the analysis weight for the  $i$ -th respondent.

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<sup>2</sup>Exactly the same formulae are applicable for modeling the variance of a sample proportion, except that the analysis variable,  $y_i$ , is a (0,1) indicator for receipt of aid, rather than the dollar amount of aid received by the  $i$ -th student.

**Table IV.2—Analysis Variables for Which Variance Components Were Estimated**

<b>UNDERGRADUATE STUDENTS (INCLUDING BACCALAUREATE RECIPIENTS)</b>	
A.	Overall Aid Status--Indicator of receipt of aid and dollar amount of aid for:
1.	Any Aid (TOTAID)
2.	Federal Aid (TFEDAID2)
3.	Institutional Aid (INSTAMT)
4.	State aid (STATEAMT)
5.	Any grants (TOTGRT)
6.	Any loans (TOTLOAN)
7.	Any work-study (TOTWKST)
B.	Federal Aid Status--Indicator of Receipt of Aid and dollar amount of aid for:
1.	Federal grants (TFEDGRT)
2.	Federal loans (TFEDLN)
3.	Federal work-study (CWSPERND)
<b>GRADUATE STUDENTS (INCLUDING FIRST-PROFESSIONAL STUDENTS)</b>	
A.	Overall Aid Status--Indicator of receipt of aid and dollar amount of aid for:
1.	Any Aid (TOTAID)
2.	Federal Aid (TFEDAID2)
3.	Institutional Aid (INSTAMT)
4.	State aid (STATEAMT)
5.	Any grants (TOTGRT)
6.	Any loans (TOTLOAN)
7.	Any work-study (TOTWKST)

The computed value of  $d_w$  was then assumed to apply to the NPSAS:96 estimate for that same statistic.

The simple random sampling variance was estimated from the NPSAS:96 data for the analysis domain as<sup>3</sup>

$$V_{SRS} = \frac{1}{n} \cdot \frac{\sum_j w_i (y_i - \bar{y})^2}{\sum_j w_i + 1},$$

where

$y_i$  = response of the I-th NPSAS:93 participant ((0,1)-indicator of aid or dollar amount)

$w_i$  = analysis weight for the I-th NPSAS:93 participant,

$\bar{y} = \sum w_i y_i / \sum w_i$ , and

$n$  = anticipated domain sample size in NPSAS:96.

The survey design effect due to intracluster correlation was modeled for the 3-stage sampling design by first using the SAS Procedure VARCOMP<sup>4</sup> (without analysis weights) to compute three variance components :

$F_1$  = variability between area PSUs within regional strata

$F_2$  = variability between institutions within area PSUs

$F_3$  = variability between students within institutions.

This analysis assumes that the variability between the NPSAS:96 PSUs will be approximately the same as between the NPSAS:93 PSUs, even though the area PSUs have been re-defined<sup>5</sup>. These estimated variance components were then used to estimate the proportion of total variability associated with each stage of sampling, or the intracluster correlation, as

$$*_{1} = F_1^2 / (F_1^2 + F_2^2 + F_3^2), \text{ and}$$

$$*_{2} = F_2^2 / (F_1^2 + F_2^2 + F_3^2) .$$

These estimates of intracluster correlations were then used to model the design effect due to multi-stage sampling as follows:

$$d_c = 1 + *_{1} (n_1 - 1) + *_{2} (n_2 - 1) ,$$

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<sup>3</sup> \*For a sample proportion,  $p$ , this is equivalent to  $V_{srs} = p(1 - p) / n$  .

<sup>4</sup>\*\*\*Need reference to SAS manual here.

<sup>5</sup>The OBE Region was treated as a fixed stratum effect at the first stage of sampling when computing these variance components.

where

$n_1$  = average number of respondents per PSU expected for the analysis domain under the NPSAS:96 design, and

$n_2$  = average number of respondents per institution expected for the analysis domain under the NPSAS:96 design.

Sample sizes used for each student domain are based on the projected numbers of CADE respondents, as shown in Table IV.3, because it is expected that the CADE data will be sufficient for the types of student aid variables being analyzed.

Variance components and the survey design effect due to intracluster correlation were modeled in a completely analogous manner for the 2-stage survey design. The SAS Procedure VARCOMP was used to compute two variance components using the NPSAS:93 data base, treating the institutions as the first stage of sampling; namely:

$F_1$  = variability between institutions within the nine NPSAS:96 institutional strata, and  
 $F_2$  = variability between students within institutions.

The institutional strata defined for NPSAS:96 were treated as fixed stratum effects when computing these variance components. These estimated variance components were then used to estimate the intracluster correlation for students within institutions as

$$* = F_1^2 / (F_1^2 + F_2^2) .$$

The estimated intracluster correlation was then used to model the design effect due to 2-stage sampling as:

$$d_c = 1 + * (n_2 - 1) .$$

Full results of these analyses have been presented, both for the full sample and by institutional stratum, in a separate report; however, a sampling of these results, for the full sample, and for selected variables are provided in Table IV.4. For each variable considered, the table presents the NPSAS:93 estimate for a survey statistic (proportion of students receiving a specific type of aid, or average amount of aid received by recipients of the specified type of aid), the estimated standard error for the same statistic based on a 3-stage NPSAS:96 design, the estimated standard error for that statistic based on a 2-stage NPSAS:96 design, and the estimated percentage reduction in standard error using the 2-stage design. These statistics are presented separately for the undergraduates and graduate/first professional student analysis domains.

**Table IV.3—Anticipated Numbers of CADE Respondents in NPSAS:96**

Institutional Stratum	CADE Respondents				
	Actual FTB	Other Undergrads	Grad Students	First-Pro Students	Total
Total	7,412	13,978	5,493	1,653	28,536
Public, less-than-2-year	181	196			377
Public, 2-year	668	1,342			2,010
Public, 4-year, non-doctorate-granting	1,257	2,524	1,024		4,805
Public, 4-year, doctorate-granting	1,400	2,813	2,236	637	7,086
Private, not-for-profit, less-than-4-year	355	516			871
Private, not-for-profit, 4-year, non-doctorate-granting	1,157	2,326	1,014		4,497
Private, not-for-profit, 4-year, doctorate-granting	1,252	2,515	1,173	1,000	5,940
Private, for-profit, less-than-2-year	635	729			1,364
Private, for-profit, 2-year or more	507	13,798	5,493	1,653	28,536

**Table IV.4—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.

There are three perspectives from which the projected improvements in precision can be interpreted. First, the percentage reduction in standard errors is directly relevant to percentage reduction in the width of confidence interval estimates. Second, the projected absolute reduction in standard errors is also relevant. If the percentage reduction in standard errors is large for a given statistic, but the projected standard error is quite small under both designs, then the reduction in standard error may not be of great practical significance. Third, one may wish to consider the reduction in relative standard errors (RSEs), especially for estimated average amounts of aid received. Although the RSE statistics are not explicitly reported in the tables, they can be computed directly from the information given.

## C. Cost/Precision Analysis

### 1. Cost Analysis

As expected, under either full-CADE scenario, the projected total variable costs shown in Table IV.1 for conducting CADE are less for the 3-stage design than for the 2-stage design. However, the difference is less than expected. The difference is, as modeled, strictly limited to FI-CADE cases. While the total number of such cases is the same under both sample designs, the distributions among the types of FI cases (which have differing costs) are not the same. The total increase of variable CADE costs of 2-stage over 3-stage sampling is about \$20,000 under both sets of assumptions regarding percentages of FI-CADE cases. The percentage increase in FI-CADE costs is about 3.3 percent, under 35 percent FI-CADE, and about 2 percent under 55 percent FI-CADE. The relatively stable difference in actual costs reflects the natural clustering of institutions under the 2-stage approach.

Using a geographic information system (GIS), locations of the sample counties were plotted under both the 2-stage and 3-stage designs. Although the 3-stage design has fewer sample counties, and has larger samples of institutions in several counties, the overall impression is that there is not a great deal of difference in the sample clustering. The difference is primarily evident in the mid-West, where the 3-stage design has sample institutions in noticeably fewer counties. One reason that the difference in clustering is not great may be that the institutions were stratified geographically within each institutional stratum when the direct sample of institutions was selected for the 2-stage design, which resulted in proportionate allocation of the sample to counties with large student populations.

### 2. Precision Analysis

The precision achieved with a 2-stage design is *not necessarily* no worse than the precision achieved with a comparable 3-stage design because an additional stage of sampling can only increase sampling error. However, the model results within some institutional domain (not shown in Table IV.4) often predicted better precision for the 3-stage design, or a negative percent reduction in the standard errors for a 2-stage design. This occurred partly because of sampling variation in the estimates of the variance components, which are notoriously difficult to estimate

accurately. Principally, however, this situation occurred in the present analyses because of the small number of sample institutions within many sample PSUs, especially when attention is restricted to those institutions in a particular institutional domain (e.g., public, 2-year institutions). When this situation occurs, there are too few degrees of freedom available for estimating the between-institution (within PSU) variance component,  $F_2$ . As a result, the between-institution variance component tends to be underestimated and some of the variability between institutions is incorrectly attributed to variability between PSUs,  $F_1$ . In that case, because the NPSAS:96 design has fewer sample institutions than the NPSAS:93 design, the 3-stage standard errors are underestimated for this application. Where occurring, predicted decreases in precision with the 2-stage design (negative percent reduction in standard error) are best interpreted as a prediction of no difference in precision. Of greater importance, however, this effect likely results in an underestimate of the gain in precision for other statistics with the 2-stage design, especially for the estimates within institutional domains.

Table IV.4 generally shows that the 2-stage design will result in a greater percentage reduction in standard errors for estimates of percentages of students receiving aid than for estimates of the average amount of aid received. The estimated improvements in standard errors for overall population estimates of percentages of students receiving aid generally range from 10 to 25 percent. For estimated average amounts of aid received, the percentage improvements in standard errors generally are estimated to be less than 10 percent. Moreover, if one examines the magnitudes of the standard errors relative to the NPSAS:93 estimates, one sees that there is not a great deal of difference in the predicted standard errors, even when the predicted percentage improvement is large (i.e., standard errors for overall population estimates are relatively small because of the large NPSAS sample sizes).

#### **D. Conclusion and Recommendation**

From the final result of the cost/precision comparison of the 2-stage and 3-stage sampling designs for NPSAS:96, a convincing argument can be made for either design; however, there is no strong evidence that one is clearly superior to the other. *In support of the 2-stage design*, one can argue that there is little difference in cost between the two designs, and, therefore, one should implement the design known to produce the best precision for all survey statistics, namely the 2-stage design. However, *in support of the 3-stage design*, it can be argued that there is little expected difference in precision for important survey statistics (because of the large sample size), and, therefore, one should implement the least costly design, namely the 3-stage design.

Argument for the 2-stage design seems most compelling because it involves doing the best possible science with available funds.

NOTE: One should interpret each negative "Percent Reduction" as a prediction of no difference in precision.

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## V. Evaluation of Field Test Operations

As indicated in Section I.D, the principal purpose of the NPSAS:96 field test was to test and evaluate all operational and methodological procedures, instruments and procedures planned for use in the full-scale Study. The results of the evaluations are presented in this chapter together with recommendations therefrom for full-scale implementation. To maintain continuity of discussion, recommendations are presented together with the procedural evaluation(s) that prompted them (rather than in a separate recommendations section).

### A. Obtaining Adequate Numbers of First Time Beginning Students (FTBs)

#### 1. General

##### a. Background

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. The BPS:90 studies were only followed through 2 Follow-up surveys, principally due to the relatively small number of *actual* FTBs interviewed in NPSAS:90.<sup>2</sup> Consequently, a major objective of this field test was to develop and implement appropriate sampling and screening procedures to yield an adequate number of students *that are accurately identified as FTBs* for the full-scale BPS cohort. Procedures specific to this purpose were implemented at almost every step of field test 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).

The previously agreed upon definition of *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 field test to include those who had previously enrolled but who *had not completed a postsecondary course for credit* prior to July 1 1994. This

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<sup>1</sup> Recommendations for refinements to procedures/systems have been previously presented to NCES staff and to the study Technical Review Panel (TRP) in a meeting held in November of 1995. All recommendations included in this chapter have been approved for implementation.

<sup>2</sup> Specifically, the NPSAS:90 initial target of about 16,000 FTBs was not realized in the sampling and data collection, and only about 12,000 (non-verified) FTBs were made available as the BPS:90 cohort; further, when verified, *approximately 30 percent of those available proved not to be FTBs.*

expanded definition shifts the requirement from the act of enrollment to successful completion of a postsecondary course.

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. The field test provided a laboratory in which to examine the extent of these challenges (although the basic nature of the challenges had already been identified in the previous NPSAS:90 and BPS:90 work).

**b. Sequential Procedures for Screening FTBs**

Locating and interviewing suspected FTBs is particularly important, since final FTB determination rests on student responses to specific questions<sup>3</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 school to a degree-granting academic school, *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>4</sup>. Sampling procedures implemented during the NPSAS:96 field test accounted for potential definitional difficulties in a number of ways. As a first screening, schools were asked to identify potential FTBs, using as criteria that such students be:

- # *undergraduate* students,
- # having a *first* enrollment at the school in a term starting during the NPSAS:96 year (between May 1, 1994 and April 30, 1995 for the field test), and
- # classified by the school as *freshman*, or *first-year student* at the time of that first enrollment.

These three criteria proved, during BPS:90, to be the best predictors of actual FTB status readily available to schools during list acquisition.

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<sup>3</sup> A number of questions were contained in the student interview to screen for FTB status, including: whether the student received any prior postsecondary degrees or certificates; whether and when the student completed the first class toward a postsecondary degree or certificate after high school at a postsecondary institution; and, prior to May 1994, what was the most recent year in which the student attended a postsecondary institution.

<sup>4</sup> Simply asking the school 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 (both occurred in NPSAS:90).

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 Section II.A.2).

A second stage of screening for FTB status occurred during record abstraction. A total of 131 students from the potential FTB stratum were identified from records as starting at the sample school prior to May 1, 1994 or as being classified second-year students or higher during their first term at the school were flagged as "probable non-FTBs."<sup>5</sup> The final (CATI interview) FTB screening, was accomplished very early in the interview (immediately following NPSAS study eligibility determination<sup>6</sup>). The FTB screening questions (see Appendix B) were asked of all sampled 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.

## 2. Basic Results for Establishing the BPS:96 Field Test Cohort

In addition to highlighting challenges for FTB identification in the full-scale study, field test procedures identified FTBs who will also serve as the field test sample for the BPS:96 follow-up studies. To demonstrate the challenges for the full scale NPSAS:96 and to document the field test sample for follow-up, Figure V.A.1 shows the flow of locating, interviewing, and identifying results for establishing the BPS:96 field test cohort. (The first page of the figure is directed toward locating outcomes, while the second page is devoted to interviewing and identifying outcomes, among those located.) As indicated in the figure, the BPS cohort starts with the students sampled within the potential FTB stratum<sup>7</sup>, but is augmented by students identified as FTBs from other student strata.

### a. Locating

Of the 1,569 undergraduates sampled as potential FTBs, 127 were determined (during the record abstraction phase) to be ineligible for NPSAS. Of note is the fact that while this student stratum represents only about 41 percent of the total field-test student sample, it produced about 71 percent of the total NPSAS ineligibles determined during record abstraction (see Section II.C.1). Of the 1,442 remaining potential NPSAS-eligible students in this student stratum, fourteen students were identified as "exclusions" during tracing operations.

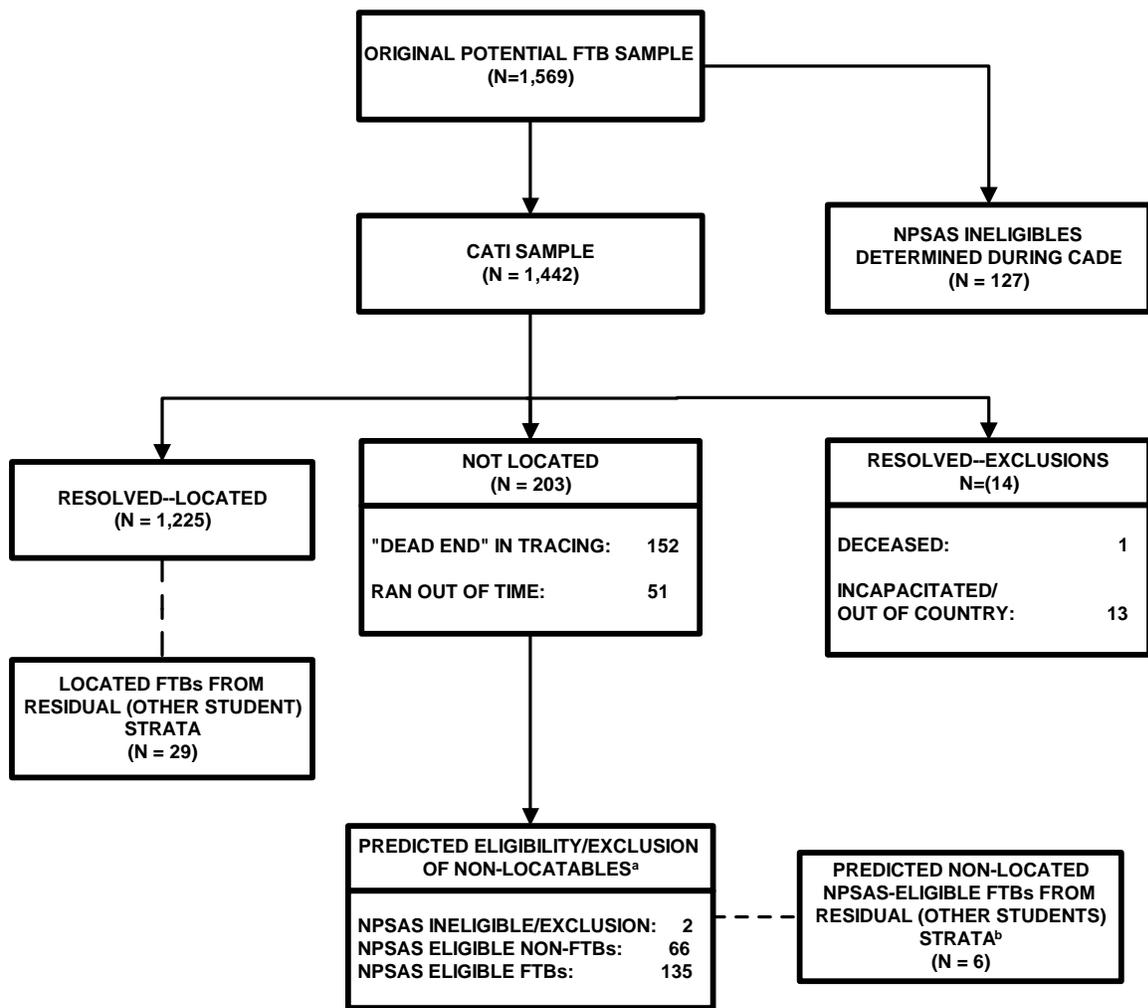
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<sup>5</sup> This indicator was temporary, since final FTB determination was not made until the student CATI interview.

<sup>6</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.

<sup>7</sup> For this presentation and associated statistics, the 131 students identified during record abstraction as "probable non-FTBs" are included.

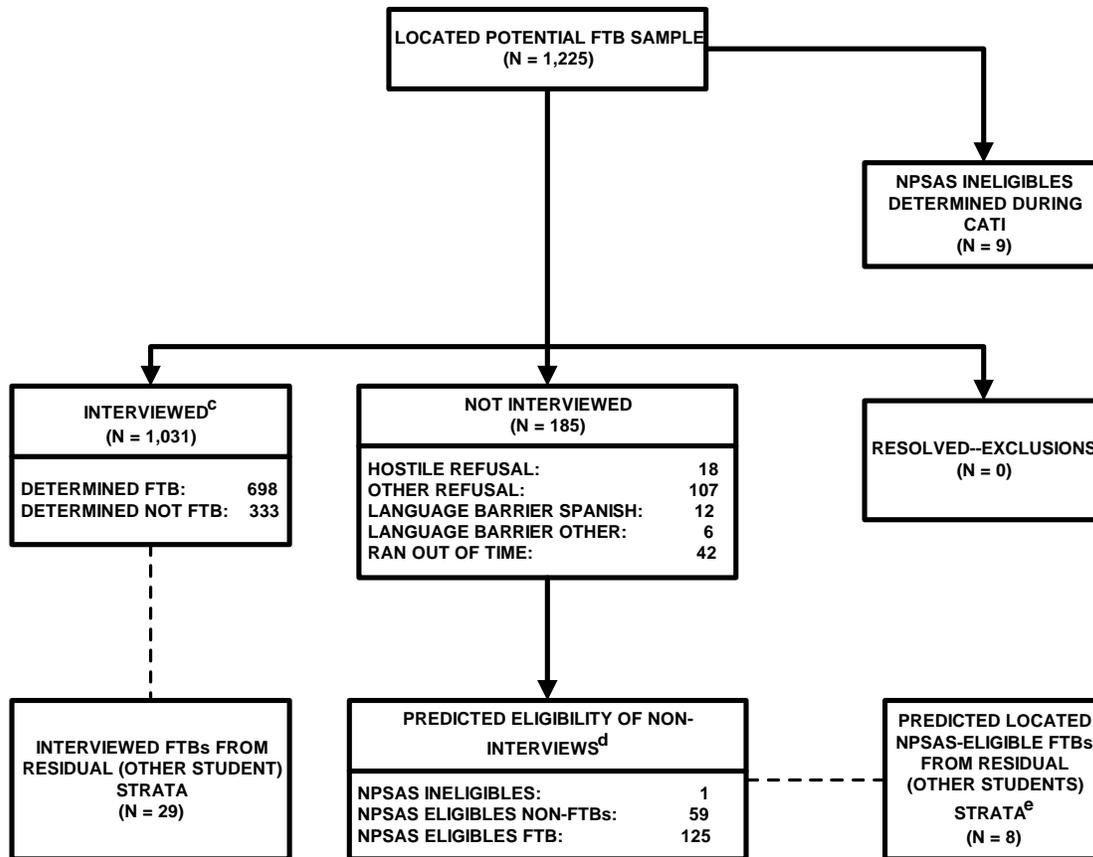
Figure V.A.1--Case Flow Through Locating, Interviewing and Related Case Resolution Activities For BPS Cohort



<sup>a</sup>Predictions based on estimated exclusion rate of 1.0 percent, CATI-level NPSAS eligibility rate of 0.7 percent, and FTB false positive rate of 32.3 percent (see second page).

<sup>b</sup>Predictions based on residual sample statistics (which may be determined by subtractions of counts in Figure III.C. and this figure, applying NPSAS eligibility rate of 0.8 percent and FTB false negative rate of 2.0 percent).

Figure V.A.1 (continued)--Case Flow Through Locating, Interviewing and Related Case Resolution Activities For BPS Cohort



<sup>c</sup>Includes full, partial, and restricted interviews.

<sup>d</sup>Predictions based on estimated CATI-level NPSAS eligibility of 0.7 and FTB false positive rate of 32.3 percent.

<sup>e</sup>Predictions based on residual sample statistics (which may be determined by subtracting counts in Figure III.C.1 and this figure) applying NPSAS ineligibility rate of 0.8 percent and FTB false negative rate of 2.0 percent.

Discounting ineligible and exclusions, 1,225 potential FTB students were located and 203 were not, yielding a raw locating rate for this student stratum of 85.8 percent. Further discounting an estimated 68 remaining ineligible, exclusions, and non-FTBs in the uncontacted group (shown in Figure V.A.1) the adjusted locating rate for the potential FTB sample is 90.1 percent.<sup>8</sup> The BPS sample also includes the false negative cases sampled from other student strata but who proved to be FTBs; 29 such students (determined in CATI to be FTBs) were traced. It is also estimated that six actual FTBs sampled from other student strata were not located.<sup>9</sup> Consequently, a comprehensive adjusted locating rate for the BPS cohort is given as:

$$\text{BPS Cohort Locating Rate} = (1225 + 29)/(1,225+29+135+6) = 89.9 \text{ percent.}$$

Obviously, the brief field test data collection period limited the success of the locating effort for the BPS cohort. The full-scale study should benefit from a longer data collection period as well as initiation of CATI operations closer in time to the times of enrollment.

#### b. Interviewing and Eligibility Determination

As shown on the second page of Figure V.A.1, a total of 1,031 of the located potential FTB stratum were interviewed.<sup>10</sup> Nine were determined ineligible for NPSAS during CATI (0.7 percent -- which, unlike the CADE ineligibility statistics, is comparable to the rate within the other student strata). Discounting the ineligible the raw conditional (on those located) interviewing rate for the Potential FTB stratum was 84.8 percent. Further discounting the residual 60 estimated non-FTBs and NPSAS-ineligibles the adjusted conditional interviewing rate for the Potential FTB stratum was 89.2 percent.<sup>11</sup> Since false negative FTBs, sampled from other strata, are considered part of the BPS sample, 29 additional FTBs were added to the sample from these strata. Further, 8 other located but not interviewed FTBs from the other strata are projected.<sup>12</sup> Taking these additional cases into consideration, the comprehensive conditional interviewing rate for the BPS sample can be computed as:

<sup>8</sup> The projections are based on an estimated locating exclusion rate of 1.0 percent plus CATI-level rates of NPSAS ineligibility (0.7 percent) and FTB false positives (32.3 percent).

<sup>9</sup> This prediction is based on sample statistics for the other strata, applying a NPSAS ineligibility rate of 0.8 percent and FTB false positive rate of 2.0 percent.

<sup>10</sup> These included full and partial CATI interviews as well as restricted hard copy interviews. Only the CATI interview respondents are considered in the FTB-related tables, though, since only they received the full set of questions enabling determination of effective FTBs and pure FTBs. The hard copy interview enabled determination of pure FTBs only.

<sup>11</sup> These estimates are based on CATI-level NPSAS ineligibility rate of 0.7 percent and FTB false positive rate of 32.3 percent for this stratum (the counts include full CATI, restricted interviews, and hard copy respondents).

<sup>12</sup> Estimates are based on the experienced false negative rate of 2 percent and a NPSAS ineligibility rate of 0.8 percent in the other student strata.

*Comprehensive BPS Interview Rate = (1,031+29)/(1,031+29+125+ 8) = 88.9 percent.*

As with locating results, the field test response rate suffered from a brief data collection period. Certain procedures, such as refusal conversion and follow-up after intensive locating effort is done, could not be fully implemented in many cases.

**c. Response Rates**

Overall response rates (including both locating and interviewing) can be obtained as the product of the previously reported locating rates and conditional interviewing rates. *The raw overall response rate for the potential FTB stratum was 72.7 percent. When projected non-FTBs and NPSAS-ineligibles are excluded, the adjusted response rate was 80.3 percent. Finally, factoring in the actual and projected FTBs sampled from other strata the comprehensive BPS cohort response rate was 79.9 percent.*

**3. Alternate FTB Definitions, Distributions, and Classification Error Rates**

Although "Pure" FTB determination among respondents was achievable regardless of the data collection method used (e.g., full CATI, abbreviated CATI, hard copy instrument), determination of "effective" FTB status or other FTB-related status could only be achieved conclusively for those NPSAS-eligible students who completed at least Section A of the student full-CATI interview (where all questions necessary for the determination were asked). For the purpose of assessing possible additional inclusions for the BPS cohort for use in the full-scale sample, respondents were grouped into one of five categories:

- # Pure FTBs:           undergraduate students who enrolled for their first postsecondary education experience after high school during the NPSAS year.
- # Effective FTBs:     undergraduate students who enrolled prior to the NPSAS year but did not *complete* their first postsecondary course until some time during the NPSAS year.
- # Rebeginners:        first- or second-year undergraduate students, meeting neither of the above listed criteria, but with no prior degrees and whose most recent postsecondary education experience prior to the NPSAS year was 1985 or earlier.
- # Lower-level first- or second- year undergraduate students, meeting none of undergraduates:    the above listed definitions, but with no prior degrees.
- # Other non-FTBs:    Respondents meeting none of the above listed criteria.

The final category includes sample members who refused or "did not know" the answer to one or more of the questions used in defining the previous categories.

Table V.A.1 shows the distribution, overall and within student sampling strata, for the 2,371 students for whom the full classification scheme could be applied (i.e., those completing Section A of the full CATI instrument)<sup>13</sup> Of the 976 CATI respondents from the potential FTB stratum, 616 were determined pure FTBs and 43 were effective FTBs; (In combination, these two groups meet the finally adopted field test definition for inclusion in the BPS cohort. Combining these two FTB types, only 659 (67.5 percent) of the sample from the potential FTB stratum who completed the full set of classification questions proved to be actual FTBs. The false positive rate, applicable only to the potential FTB stratum, is, consequently, 32.5 percent<sup>14</sup>

Some pure- and effective-FTBs were screened from other strata, principally the other undergraduate stratum, in which a total of 25 were identified<sup>15</sup> These false negatives are, of course, added to the BPS cohort. Overall, the false negative rate shown in Table V.A.1 is about 1.9 percent (3.5 percent for the more applicable other undergraduate stratum), suggesting that schools were more effective in excluding FTBs from enrollment lists of strata not considered as potential FTBs.

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<sup>13</sup> Please note that counts in Table V.A.1 (and in all subsequent tables in Section A) differ from those reported in Figure V.A.1; the latter include results of the hard copy and abbreviated interview, the former do not.

<sup>14</sup> This high false-positive rate highlights the fact that schools are generally unable (or unwilling) to determine conclusively which students are first-time beginners and that this information must come from the students themselves.

<sup>15</sup> Additionally, one FTB was identified in each of the graduate stratum and first-professional stratum. these cases are exceptionally anomalous and may represent intended respondent misrepresentation; however, similar cases, reflecting data entry errors in institutional files, were experienced in BPS:90.

**Table V.A.1 -- FTB-Related Classifications by Student Sampling Strata**

FTB-Related Classification	Total		Student Sampling Stratum					
	Number	Percent	Potential FTB		Other Undergraduate		Graduate or First Professional <sup>a</sup>	
			Number	Percent	Number	Percent	Number	Percent
Total	2,371	100.0	976	100.0	720	100.0	675	100.0
Pure FTB <sup>b</sup>	633	26.7	616	63.1	15	2.1	2 <sup>g</sup>	0.3
Effective FTB <sup>c</sup>	53	2.2	43	4.4	10	1.4	0	0.0
Rebeginner <sup>d</sup>	28	1.2	14	1.4	14	1.9	0	0.0
Lower-Level Undergraduate <sup>e</sup>	356	15.0	110	11.3	245	34.0	1	0.1
Non-FTB <sup>f</sup>	1,301	54.9	193	19.8	436	60.6	672	99.6

NOTE: Statistics are based on NPSAS-eligible cases completing Section A of the full CATI instrument; all percentages are based on column totals.

<sup>a</sup> Graduate and first professional strata are combined to simplify presentation of results.

<sup>b</sup> First postsecondary education enrollment, after high school, occurred on or after May 1994.

<sup>c</sup> Not pure FTB, but completed first postsecondary course on or after July 1994.

<sup>d</sup> Neither pure nor effective FTB; first- or second-year undergraduate with no prior degrees and with most recent postsecondary education experience (prior to May 1994) in 1985 or earlier.

<sup>e</sup> Not pure FTB, effective FTB, or rebeginner but first- or second-year undergraduate with no prior degrees but with most recent postsecondary education experience (prior to May 1994) in 1986 or later.

<sup>f</sup> Those not otherwise classified.

<sup>g</sup> One pure FTB was identified in the graduate student stratum and one in the first-professional student stratum.

#### 4. Correlates of FTB Identification and Misidentification

Table V.A.2 presents FTB rates (100 minus the false positive rate) by institution type among full CATI instrument respondents within the potential FTB student stratum. For public institutions and private not-for-profit institutions, FTB confirmation rates generally increase monotonically (and, conversely, false positive rates decrease monotonically) with increasing offering (the one exception of public 2-3 year schools). The exact opposite trend occurs within the for-profit schools, where FTB confirmation rates decrease (and false-positive rates increase) with increasing level of offering. Confirmation rates are less than 70 percent (false positive rates greater than 30 percent) at all offering levels for-profit institutions (*less than 50 percent at 4-year schools in this sector*); at private not-for-profit less than 2-year schools (50 percent); and at less than 4-year public institutions. These findings are similar to those observed within the BPS:90 cohort sample that arose from NPSAS:90.

**Table V.A.2—FTB Confirmation Rate by Institution Type Within The Potential FTB Stratum**

Institution Type <sup>a</sup>		Total with Full FTB-Related Classification	Confirmed FTB	
Level	Control		Number	Percent
Total	Total	976	659	67.5
	Public	382	272	71.2
	Private, not-for-profit	334	235	70.4
	Private, for-profit	260	152	58.5
Less than 2 Year	Total	271	166	61.3
	Public	111	66	59.5
	Private, not-for-profit	40	20	50.0
	Private, for-profit	120	80	66.7
2-3 Year	Total	219	134	61.2
	Public	90	51	56.7
	Private, not-for-profit	72	51	70.8
	Private, for-profit	57	32	56.1
4 or more Years	Total	486	359	73.9
	Public	181	155	85.6
	Private, not-for-profit	222	164	73.9
	Private, for-profit	83	40	48.2

NOTE: Statistics are based on NPSAS-eligible sample members from the potential FTB student stratum and who completed Section A of the full CATI instrument. All percentages are based on row totals.

<sup>a</sup>Classification variables used are those that were verified by the institution.

Differences in false positive rates are probably associated with a number of factors. One likely candidate is natural propensities of higher FTB rates among first year undergraduates at certain types of schools (e.g., community college systems encourage enrollment of community members, many of whom may have previously attended one or more other postsecondary institutions; public and private technical schools frequently are used in job retraining for displaced workers, many of whom may have attended postsecondary schools previously). Another major factor is probably related to the types of (and accessibility of) records maintained by different types of schools (or even different types of programs within schools), which can be used to definitively distinguish actual FTBs from other undergraduate students; or, even if they have the information, different types of schools may have differential propensities to provide such information to a third-party contractor.

Schools that focus on a self-contained, specific occupational curriculum and an associated certificate/diploma (e.g., flying school) have little reason to maintain information about prior postsecondary education. Using comparable reasoning, occupational schools with multiple programs may fail to share (by design or otherwise) prior enrollments between the different programs. Schools that offer programs leading to an academic degree may grant credits from other academic institutions (but not from technical programs, even if they are related to the academic degree); however, different organizational units within some such schools (particularly continuing education units) may have no need for or easy access to information about other schools previously attended.

Toward decreasing the false positive rates from that experienced during the field test, contractor staff also investigated the relationships between misclassifications and two other variables that could be easily collected during the record abstraction process. First, the existence of transfer credits for a student at the sample school is known to be a predictor (but not a perfect one) that the student is not an FTB. A second factor known to be highly predictive of FTBs is the year of high school completion (i.e., students completing high school during the previous school year are quite likely to be FTBs).

Tables V.A.3 and V.A.4 provide, respectively, information about the predictiveness of these two additional variables (as collected from CPS and/or institutional record abstraction procedures). Both tables indicate that by using these correlates of FTB status, one can partition students in the field test potential FTB stratum into two groups; one with a false positive rate markedly lower than the 32.5 percent realized for the total group and the remainder with a false positive rate markedly higher than that realized for the total group.

**Table V.A.3—Recorded Transfer of Credits for determined FTBs and Non-FTBs Selected from the Potential FTB Student Stratum.**

Determined FTB Status <sup>a</sup>	Total		Credit Transfer Recorded			
			No <sup>b</sup>		Yes	
	Number	Percent	Number	Percent	Number	Percent
Total	976	100.0	871	89.2	105	10.8
FTB	659	67.5	634	72.7	25	23.8
Non-FTB	317	32.5	237	27.2	80	76.2

NOTE: Statistics are based on NPSAS-eligible cases in the potential FTB student stratum completing Section A of the full CATI instrument; transfer credit status is based on data abstracted from institutional records. All marginal percentages are based on the grand total; other percentages are based on the column total.

<sup>a</sup> First time beginners include those first enrolling in postsecondary education (after high school) during the NPSAS year (pure FTBs) as well as those completing their first postsecondary course during that year (effective FTBs).

<sup>b</sup> Counts include 5 cases (2 classified as FTB and 3 as non-FTB) for whom the report of presence of transfer credits was indeterminate.

Considering first Table V.A.3, it is observed that transfer credits were reported<sup>16</sup> for only about 11 percent of the potential FTB students for whom CATI FTB determination was made; however, among those with such credits, only 23.8 percent were actually FTBs (which corresponds to a false positive rate of over 76 percent in this group). On the other hand, if no credits were reported, almost 73 percent were actual FTBs (27.2 percent false positive rate). The group verified as FTB but having transfer credits appears to pose a contradiction; however, such credits could easily reflect advanced placement credits, "life experience" credits, or other postsecondary credits attained prior to postsecondary entry after high school.

Table V.A.4 classifies students from the potential FTB stratum by determined FTB status and a binary composite high school completion variable<sup>17</sup>. The first high school completion value is comprised principally of those with reported high school completion in 1994 or later; however the classification also contains 21 sample members for whom school records indicated the student did not complete high school (18 determined to be FTB and 3 determined to be non-FTB). The second high school completion value is comprised principally of those who completed high school prior to 1994; however the category includes 128 cases (70 determined as FTB and 58 as non-FTB) for whom high school graduation date was reported as missing.

<sup>16</sup> It should be noted that the presence of transfer credits was a direct indication of the classification, while absence of such credits could have resulted from inability of the record abstractor to locate records indicating such credits (5 cases with no report of transfer credits represented explicit "don't know" reports).

<sup>17</sup> Although the combination rules for the composite variable were established empirically on the basis of comparability of false positive rates in combined categories.

**Table V.A.4—Recorded High School Completion Date for determined FTBs and Non-FTBs Selected from the Potential FTB Student Stratum.**

Determined FTB Status <sup>a</sup>	Total		High School Completion			
			1994 or Later or Did Not Complete <sup>b</sup>		All Other <sup>c</sup>	
	Number	Percent	Number	Percent	Number	Percent
Total	976	100.0	397	40.7	579	59.3
FTB	659	67.5	387	97.5	272	47.0
Non-FTB	317	32.5	10	2.5	307	53.0

NOTE: Statistics are based on NPSAS-eligible cases in the potential FTB student stratum completing Section A of the full CATI instrument; transfer credit status is based on data abstracted from institutional records. All marginal percentages are based on the grand total; other percentages are based on the column total.

<sup>a</sup> First time beginners include those first enrolling in postsecondary education (after high school) during the NPSAS year (pure FTBs) as well as those completing their first postsecondary course during that year (effective FTBs).

<sup>b</sup> Of the 21 who had not completed high school, 18 were classified as FTB and 3 as non-FTB.

<sup>c</sup> Counts include 128 cases (70 classified as FTB and 58 as non-FTB) for whom the report of high school graduation year was "unknown" or indeterminate.

While only about 41 percent of the potential FTB sample (with determined actual FTB status) graduated from high school since 1994 (or did not graduate), the false positive rate within this smaller subset was only 2.5 percent (1.9 percent for those graduating in 1994 or subsequently and 14.3 percent among those who had not graduated from high school). The false positive rate in the residual group was 53 percent (about 55 percent in the group graduating prior to 1994 and about 45 percent among those for whom high school graduation rate could not be determined).

The false positives in the most recent high school graduation group should represent students who graduate after the Winter Quarter or Fall Semester and immediately enroll in postsecondary education (and thus have both enrolled in, and completed course credits in, postsecondary education prior to the beginning of the NPSAS year<sup>18</sup>). The relatively high predictiveness of true FTB status (about 86 percent) in the small group of sample members identified as not having completed high school, can be attributed to at least three types of individuals which may comprise the group: (1) those in programs not requiring high school completion, (2) those who graduated from high school and enrolled late in the NPSAS year and

<sup>18</sup> Some may also represent error in the high school graduation rate and/or error in answering (or recording answers to) the FTB verification questions in the full CATI instrument.

for whom high school graduation has yet to be included in their institutional file, and (3) older students admitted on the basis of life experiences.

The "all other" high school completion group represents about 60 percent of the total potential FTB stratum with determined FTB status and still is comprised of almost half actual FTBs; in fact, there are well over two thirds as many actual FTBs in this (larger) group than among those completing high school in 1994 or later. An interesting feature of the identified FTBs in the group completing high school earlier than 1994 is that all such students represent students who did not go into high school *directly* after high school completion. To be sure some of this group represents those who graduated late in 1993 and did not enter postsecondary school until the following Summer or Fall (or other cases in which an earlier enrollment term was not available at the institution of choice); however, a substantial portion of the group probably represents the non-traditional student who delays a year or more between completion of high school and commencing postsecondary education.

## 5. Evaluation and Recommendations

A critical factor for the success of the full-scale study is achieving a sufficient yield of known first-time beginning students (FTBs) for the Beginning Postsecondary Student (BPS) longitudinal follow-up study. From the results presented previously, it should be clear that this is no trivial undertaking and that a number of factors affected the yield of FTBs from the NPSAS:96 field-test sample. Recognizable challenges exist in meeting the response rates required, and sampling procedures must accommodate the differential attrition from any potential FTB sample as a consequence of initial misclassification of the potential FTB group by participating institutions.

The additional time for, and more optimal timing of, the full-scale data collection effort will allow the effective use of proven sequential tracing and interviewing approaches that should dramatically improve response rates within the BPS cohort; however, the challenges associated with initially providing a sufficient base to yield an adequate longitudinal sample are more problematic. Such FTB-related challenges are actually exacerbated for the full scale study. Due to budget constraints, subsampling of students for interviewing will be necessary in the full-scale survey; however, the current intent is to include effectively all actual FTBs in the CATI subsample. This becomes a particularly thorny activity when (as is the case here) *actual FTBs can not be accurately identified until CATI is conducted*.

An obvious solution is to reduce the false positive rate in the potential FTB lists provided by the schools; this requires better prediction of actual FTBs by the schools (or their providing more data which the contractor can use to cull the lists provided). In the field test, instructions for enrollment lists indicated that potential FTBs should be identified as those undergraduates attending the sample school for the first time during the sample year and were classified as undergraduate first-year (freshman) students during the first term in which they were enrolled that year. Results have indicated the predictive ability of other information that might be available to schools in establishing potential FTB listings with lower false positive rates. The use of these (or other data elements) must consider both the availability of such lists and the consequences of excluding some actual FTBs from the list.

To further explore the availability of predictive factors as possible enhancements to the enrollment list request instructions, contractor staff contacted a sample of thirteen field test institutions to ask if they had access to transfer credit information and high school completion information.<sup>19</sup> All but one of the schools kept such information in readily available form. School staff, with one exception, also indicated that excluding students from the potential FTB group if they had transfer credits would cause no extra burden. However, nearly all of the schools indicated that transfer credit information *would only be available in the term following admittance* (e.g., it would be available in the Spring semester for fall enrollees at traditional semester institutions). Since the sample is selected after any Fall terms have concluded and since the bulk of the NPSAS sample students begin in a Fall (or previous Summer) term, and since using this additional data element to refine the potential FTB list would not create a major increase in false negatives, the approach is recommended. Although the field test experience is not necessarily indicative of full-scale outcomes, adding this condition will likely reduce the FTB false positive rate in the full-scale study.

Although high school completion information is also readily available at the institutions, using this data element in the initial list request poses some hazards. In particular, if those graduating from high school in 1995 are excluded, the sampling will underrepresent a fairly large portion of the actual FTB population. (It should be noted that individuals excluded from the potential FTB list will still be represented in the CATI sample, by coming in as false negatives; however, they may then not occur in the final BPS cohort in sufficient numbers to support analyses directly addressing non-traditional students. Such students have typically been considered as a very important segment of the BPS population.) Consequently, the use of that data element in establishing the initial list is not recommended. It is, however, recommended that the oversampling from the potential FTB list be increased to accommodate the higher than expected NPSAS-ineligibility rate and false positive rate in that population.

It is anticipated that high school completion information will be very helpful in predicting likely FTBs once record abstract data are collected but prior to CATI data collection. Thus, it is recommended that this data element be obtained in the record abstraction, together with transfer credits (the additional time between list acquisition and record abstraction may be sufficient for these data to be placed in the files of students entering during a later term) as well as other information known to be predictive of FTB status.<sup>20</sup> Such data elements can then be used to refine the potential FTB group, initially determined during sampling. Specific items recommended for FTB-likelihood prediction include: high school completion date; transfer credit status; student classification/level during the first term of enrollment during the NPSAS year; and the date of first attending the NPSAS school. An additional data element for these purposes is available on the new (1995-96) FAFSA, which will be included on the ESAR and collected through the CPS matching procedure. Specifically federal aid applicants report their year in school, with first-year students also indicating whether or not it was their first time in postsecondary education. This

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<sup>19</sup> Schools were selected from each of the institutional sectors except the less-than-two-year institutions, where transfer credit information is typically not available or relevant.

<sup>20</sup> Extensive analyses of predicting FTB status from institutional record data were conducted during the BPS:90 follow-up studies; these analyses will be used to guide subsequent modelling.

newly-available information may prove to be one of the best pre-CATI FTB predictors so far available.

Based on these record abstract data, considerably greater precision regarding the FTB likelihood in established groups can be achieved in the subsampling for interview, particularly when such data elements are used in conjunction with institutional type (which in itself differentiates false positive rates). Also, by using these data, students can be treated as potential FTBs (in subsampling for CATI) even if they were sampled initially as other undergraduates. Consequently, since the final FTB determination still must be accomplished in CATI, the CADE and CPS data should enable more efficient CATI subsampling procedures toward appropriate selection of actual FTBs for interviewing.

The field test included both pure FTBs and effective FTBs in the BPS group. This definition has several advantages and is recommended for the full scale study. In addition to providing increased total yield for the BPS cohort, the defined group closely approximates the BPS:90 eligible population, thereby allowing relatively straightforward comparative analyses between the cohorts.<sup>21</sup> BPS:90 eligibility was restricted to pure FTBs; however, effective FTBs (false starters) are quite similar in that they did not complete any postsecondary course work prior to the sample year.

## **B. Obtaining Data from Institutions and External Data Sources**

Three major NPSAS activities involved collecting information of record from selected institutions or external data bases:

- # student list(s) acquisition for student sampling,
- # EDI of student ESAR data from the ED CPS, and
- # abstracting student data from institutional records through CADE.

The basic nature of these activities and overall outcomes therefor have been discussed previously in Sections II.B and III.A or III.B, respectively. Evaluations of these procedures are discussed separately in this section.

### **1. List Acquisition and Processing**

Most of the challenges associated with obtaining and processing student lists had been anticipated on the basis of experience during prior NPSAS studies. Some such anticipated challenges involved FTB identification by the schools, which has been discussed in Section V.A. Principal among those remaining were: (a) obtaining the list(s) in a timely manner; (b) appropriate format and accuracy of lists, and (c) problems of multiplicity of selection probability when duplicated lists were provided.

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<sup>21</sup> A data element distinguishing between the two groups will, of course, be maintained in the data file to satisfy analyses that require precise comparability of population definitions.

**Obtaining the Lists.** As previously shown in Table II.A.1, lists (in some form) were ultimately received from 66<sup>2</sup> of the 73 eligible institutions in the NPSAS:96 field test sample. Considering that 5 of the 73 institutions explicitly refused to participate in the study, lists were not obtained within a four month time frame from 3 percent of the 68 eligible schools *that had previously agreed to participate*. 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 follow-up prompting calls, as the institutions missed deadline after deadline.

This problem has been a fairly generic one in obtaining institutional data during past NPSAS implementations (though certainly not unique to NPSAS and occurring with regularity in other studies requiring such data); for that reason, the approach of establishing an IC has been developed as a partial solution. Nonetheless, some delay problems will continue to exist, since study requirements compete with institutional requirements of involved institutional staff members, and no solid evidence exists that the use of *affordable* incentives would ameliorate the problem.

During debriefings, some ICs did recommend a procedure that might facilitate both the acquisition of lists and the completion of self-CADE record abstraction at some institutions. Specifically, NPSAS has typically recommended that the Chief Administrator at the institutions appoint someone from the financial aid office as the IC. ICs in such a position indicate that many of their major delays in obtaining data derive from delays associated with the Registrar's office (from which they have no direct authority to request information); they suggested that placing the IC in the Office of Institutional Research (which has direct authority to request information from effectively all administrative units) could preclude such delays.

While this approach (which is recognized as potentially self-serving for those in the financial aid office) may produce an improvement in response to list acquisition, it could, conceivably, create other bottlenecks during subsequent record abstraction. While such a untested change in procedures can not be recommended for the full-scale NPSAS:96, it is recommended as a methodological study for subsequent NPSAS field tests.

**Appropriate Format and Accuracy of Lists.** Some of the types of accuracy and appropriateness problems experienced with lists provided by the 66 schools that provided such lists is shown in Table V.B.1. While not all problems of format appropriateness are covered, the listing provides a flavor of the *potiori* of situations that were experienced with institutionally-provided student lists. Of interest is that only 25 of the 66 institutions (about 38 percent) provided lists with no notable problems. This is somewhat misleading, however, since another 32 percent had only problems with student counts (and, as discussed below, such problems could just as easily reflect problems with the counts used for verification). As indicated in the table note, student counts were discrepant for about 45 percent of the institutions for either total undergraduates, graduate students, or first professional students.

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<sup>22</sup> Only 65 of these institutions were maintained in the working field test sample.

As indicated earlier, not all format and content problems are reported in Table V.B.1. Preferences are always for unduplicated lists or for electronic lists (which are much more easily processed and unduplicated, where needed). As shown previously (Table III.A.1) about three fourths of the provided lists met such preferences. Although considerable effort was devoted to couching instructions as to the desired format and content of lists, the lists obtained during the NPSAS:96 field test represented only a slight improvement over what was experienced in the NPSAS:93 effort.<sup>23</sup> Considerable effort was obviously made by some ICs to conform the provided lists to contractor desires; however, in many instances, the reality of the situation was that the contractor must accept the list provided by the institution or no list at all (quite frequently this represents the best listing that they can feasibly provide).

**Table V.B.1—Types of Problems Encountered with Returned Student Lists**

Type of Problem(s)	Frequency	Percent
Total	66	100.0
None	25	31.8
Count(s) out-of-bounds	21	31.8
FTBs not identified	5	7.6
Count(s) out-of-bounds & FTBs not identified	4	6.1
Insufficient documentation	3	4.5
Count(s) out-of-bounds and insufficient documentation	3	4.5
Sent freshmen only	1	1.5
Social Security numbers not provided	1	1.5
Social Security numbers not provided and FTBs not identified	1	1.5
Count(s) out-of-bounds and Social Security numbers not provided and FTBs not identified	1	1.5
Count(s) out-of-bounds and Social Security numbers not provided and Only FTBs sent	1	1.5

NOTE: At least one of the student count(s) was out-of-bounds for approximately 45 percent of the institutions and this percentage varied little by type of institution.

<sup>23</sup> The NPSAS:93 effort was somewhat more demanding on 4-year institutions in that it required separate lists of seniors receiving Baccalaureate Degrees (who appeared to be more difficult to segregate from other undergraduates than were potential FTBs); however, NPSAS:93 was considerably less demanding on less-than-4-year schools, that did not offer such degrees.

List accuracy was also only marginally improved over that experienced for NPSAS:93, although the quality assurance procedures implemented in NPSAS:96 were somewhat more stringent. Specifically, these procedures involved checking the student counts from lists provided against first, the 1993-94 IPEDS Institutional Characteristics file and second (if needed) the comparable 1992-93 file, *provided that the IPEDS entry for the check under consideration was not imputed*.<sup>24</sup> If counts from the obtained lists were more than 25 percent discrepant with the non-imputed IPEDS counts, then the institution was contacted to verify the accuracy of the lists provided<sup>25</sup>.

A total of 30 institutions (45.5 percent of the 66 providing lists) failed the student count check for at least one of the student strata applicable at the school. The ratio which was checked (list count divided by IPEDS count) among the IPEDS-discrepant schools ranged from zero to infinity (the former value representing a positive IPEDS count but no list, the latter representing a list but a zero IPEDS count for the student group considered). Among the 30 schools showing IPEDS-discrepant counts, 26 (about 87 percent) confirmed that the list counts were correct. The remaining 4 schools provided new lists; however, all of these new lists subsequently failed the check, when applied.

Discounting the student count problems (which can not truly be attributed to error arising from the NPSAS:96, the character of the lists provided were about that expected, and probably approach the best that can be expected under the circumstances. Frequent call-back to the ICs and the "hot line" maintained by the contractor, were recognized in IC debriefings as being quite useful, and such procedures will be maintained for the full scale study. Again, the use of an IC in the Office of Institutional Research may improve the content (as well as the timeliness) of provided lists; however, such an approach can not be recommended until adequately tested in a field test.

**Multiplicity on Duplicated Lists.** When student sampling lists provided by institutions are such that the same student can appear on more than one list (typically, separate lists for each term during the year) that student has multiple opportunities of being sampled unless the lists are "unduplicated" or unless selection probabilities (and subsequently student weights) are adjusted for such multiplicities of listings.<sup>26</sup> When each of several non-disjoint lists are supplied in electronic form, unduplication prior to selection is readily accomplished by machine matching on SSN, institutional ID, first X characters of last name, date of birth, etc. Such procedures were implemented during the NPSAS:96 field test.

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<sup>24</sup> Separate checks were performed, where applicable, for undergraduates, graduate students, and first professional students. In cases for which both IPEDS values were imputed, no checks were performed; however, no case existed in which values were imputed in both files for all groups checked.

<sup>25</sup> Since the IPEDS file used was at least one-year removed from the year represented by the counts and since the same institutions provided the non-imputed data included in the IPEDS files, the use of the term "accuracy" may be somewhat misleading.

<sup>26</sup> Theoretically, the likelihood of multiplicity of selection also exists when students transfer from one sampled institution to another during the NPSAS year, even if both schools provide unduplicated lists for the year. This occurrence is not treated here because of the relative rareness of such an event.

Duplicated hard-copy lists pose a much more labor intensive problem of unduplication prior to selection; consequently for the field test the contractor carried over the procedure used in NPSAS:93 of unduplicating the samples from such lists, and determining a multiplicity factor for use in weight development. The procedure used involved selecting the first sample from a "Fall" list, and unduplicating the remaining samples for other terms included. Table V.B.2 provides parameters related to the sample unduplication process for the NPSAS:96 field test.

Two estimates of sampling multiplicity were computed and are shown in the table. The first estimate was determined from an independent sample of 100 individual drawn from the Fall list; the estimate is computed as the total number of times these individuals were listed *on all lists* divided by the sample size (100). The second estimate is derived from the actual field test student sample from those lists (which is sometimes greater and sometimes smaller than the independent sample of 100); that estimate is computed as the total time any of the unduplicated sample members appear on any of the lists divided by the size of the unduplicated sample. A conservative multiplicity factor of 2 was chosen to apply to NPSAS:96 sample weights from the schools providing duplicated hard-copy lists.

Procedures and multiplicity values obtained in the field test are comparable to those determined for NPSAS:93, consequently, since the procedure appears relatively stable it is recommended for use in the full-scale implementation of NPSAS:96.

**Unanticipated Problems.** Only one noteworthy unanticipated problem arose during the list acquisition and processing activities. Specifically, a list of graduate students from one of the schools was inappropriately labeled as potential FTBs. Because of the mislabeling, students were selected from this list at the potential FTB rate rather than the graduate student rate. The error was not detected until CADE data collection had been initiated, and when detected, the students were subsequently reclassified for appropriate routing through CATI. The effects of this error on subsequent operations was not great; however, the *post hoc* effort needed to correct the error was non-trivial. Consequently, additional quality control procedures (involving double checking student level on provided lists to ensure that they agree with the list label) have been initiated for the full-scale study.

## 2. CPS Matching and Electronic Data Interchange (EDI).

During NPSAS:93, self-CADE institutions repeatedly observed that they were entering data that was redundant with data maintained in "federal computer systems". An ED contractor maintains a Central Processing System (CPS) for all federal aid applicants; this CPS process FASFA forms completed by students and produces SAR data in either electronic or hard copy form to involved institutions (and other interested parties -- e.g., State Departments of Education). The NPSAS:96 field test was used to evaluate the effectiveness of matching selected students to the data base, downloading these data from the CPS, and preloading the data into the CADE records (where they could be verified), in order to reduce CADE burden relative to such data elements.

**Table V.B.2—Student Multiplicity Estimates for Institutions that Provided Duplicated Hard-Copy Lists**

Institutional Stratum	Types of Students	Number of Lists	Number Selected Before Unduplicating	Multiplicity Estimates Based On	
				Test Sample	NPSAS <sup>b</sup> Sample
Public, 2-year	All undergraduates	2	97	1.7	1.76
Public, 4-year, non-doctorate-granting	All undergraduates	3	130	2.08	1.88
Public, 4-year, doctorate-granting	Combined undergraduate and graduate students	6	149	1.84	2.04
	Combined undergraduate and graduate students	3	140	2.03	1.97
	Combined undergraduate and graduate students	4	172	2.04	2.02
Private, not-for-profit, less-than-4-year	Non-FTB undergraduates	3	25	1.42	1.92

<sup>a</sup>Determined as: (total times listed) ÷ 100 for a test sample of 100 students from the Fall list.

<sup>b</sup>Determined as: (total sample lines, including duplicates) ÷ (unduplicated sample size).

Since no previous study had accessed CPS data, the operational feasibility of the approach was unknown. Consequently, the field test attempted to address the below-listed questions prior to attempting to incorporate the procedure in a full scale implementation.

- # To what extent would institutions be willing to provide Social Security Numbers (SSNs -- necessary for matching students to the CPS) for all students on the enrollment lists?
- # Would relatively straightforward and viable procedures be allowable and available to submit and retrieve information from CPS?
- # Would data be obtained from CPS in a sufficiently timely manner?
- # For what proportion of NPSAS sample members would SAR data be obtained from CPS files?
- # For what proportion of aid applicants would no SAR data be obtained from CPS files?

The answers to each of these questions, as obtained in the field test were extremely supportive of using the method, as further discussed in this subsection; consequently, the method is recommended for incorporation in the full-scale study.

**Institution Provision of Social Security Numbers.** The unique identifier used in CPS is an 11-character ID composed of the social security number and the first two letters of the last name. To minimize the time between selecting a student and submitting the student for CPS matching (particularly important within the constricted data collection period of the field test), SSN was requested for every student on the school enrollment file. (An alternative approach of selecting a sample of students then sending the sample back to obtain SSN only for the sample will be offered in the full scale study, due to the overall advantages of the CPS approach and the longer data collection period.) As indicated previously, only 2 (3 percent) of the 65 participating institutions withheld SSN from their enrollment lists (based on confidentiality concerns or inability to easily append SSN to extant hard copy lists for the entire student enrollment).

**Feasibility and Procedures for CPS Access.** Access to the CPS was easily arranged through ED, and a procedure was already in place for requesting ESAR data (a.k.a. Institutional Student Information Records -- ISIRs) through a Federal Data Request (FDR) file. CPS provided transmission software for this purpose as well as instructions for making the requests. The NPSAS contractor was provided with a unique ID number which was activated in CPS to allow the request. In sum, the approach was completely feasible and procedures necessary for the EDI were quite simple.

**Timeliness of Response to Requests.** While no formal statistics on turnaround time were maintained, the field test experience was quite positive. Typically, requests were submitted to CPS on Tuesdays and Thursdays and retrieved on Fridays and Mondays. It was most unusual to receive information back from a request later than 2 collection days following

submission. An example of one week's transactions is provided below to provide a flavor for the excellent turnaround experienced.

- # Tuesday: Submitted 506 student requests to CPS;
- # Thursday: Submitted another 289 student requests to CPS;
- # Friday: Retrieved 258 matches from CPS (all from Tuesday submission);
- # Monday: Retrieved 163 matches from CPS (159 from Thursday submission and 4 from Tuesday submission).

As observed in this example, "batch integrity" was not always maintained by CPS (i.e., for a set of student requests submitted to CPS on a given request day, not all matched records from that request were received on the same receipt day). No major problems arose from the dissolution of submission batches, although occasionally CPS data for a single student was received after CADE records for his/her school had already been preloaded and sent to the field. This required some unnecessary data entry for the involved student; however, the number of such cases is estimated to be less than 5.

**CPS Match Rate.** As previously reported (see Table III.B.2), matches were obtained and SAR data obtained for almost 65 percent of the undergraduate sample and for over 40 percent of the GIP samples. The within institution match rates ranged from 4.7 percent to 97.3 percent, with higher median within-institution matching rates in the for-profit institutions (see Table III.B.1). Since the field test sample was not completely representative of the full scale study sample, direct inferences to the full-scale results can not be drawn; however, estimates from prior full-scale NPSAS implementations suggest that CPS data will be available for more than half of the full-scale sample, which will result in considerable savings in data entry effort during the CADE record abstraction procedure.

**Miss Rate (False Negatives) for CPS Submissions.** It was not expected that all non-matches to the CPS file would be non-applicants for student aid. Consequently, the record abstraction process allowed for collection of SAR data from institutional files, even if it had not been obtained during the CPS request. Cases for whom SAR data were obtained from institutional data but not from the CPS request are here designated as misses (or false negatives). Obviously no CPS matches were expected for the two schools providing no SSNs on their student lists. Also, because the CPS is a dynamic system, some misses were expected to reflect no more than the temporal delay between the CPS request and the institutional record abstraction. Others were expected due to typographical errors (in either the SSN or the last name) in either the student lists or the CPS entries, or due to name changes (e.g., as a consequence of marriage), that were not reflected on both files.

Table V.B.3 shows false negative rates, as previously defined, for the CPS matching procedure. For this presentation, none of the students from the schools that provided no SSNs have been included, nor have 41 additional students from other schools for whom the SSN was not provided or contained insufficient digits. A total of only 69 of the 1,496 base represented

Table V.B.3 — CPS False Negative Rates by School Type and Student Classification

Institution Type <sup>a</sup> Control	Level	Student Classification <sup>b</sup>	Number not Matched through CPS	SAR Reported in CADE		
				Number	Percent	
Total	Total	Total	1,496	69	4.6	
		Undergraduate	864	56	6.5	
		Graduate/First Professional	632	13	2.1	
Public	Total	Undergraduate	449	19	4.2	
		Less than 2 Years	47	4	8.5	
		2-3 Years	117	6	5.1	
		4 or More Years	Total	557	15	2.7
			Undergraduate	285	9	3.2
			Graduate/First Professional	272	6	2.2
Private, Non-Profit	Total	Undergraduate	336	24	7.1	
		Less than 4 Years	106	8	7.5	
		4 or More Years	Total	600	23	3.8
			Undergraduate	240	16	6.7
			Graduate/First Professional	360	7	1.9
		Private, For Profit	Total	Undergraduate	69	13
Less than 2 Years	47			10	21.3	
2 or More Years	22			3	13.6	

NOTE: Statistics are reported for the 1,496 students with a provided social security number and no CPS match. Excluded are 153 student sample members from two institutions that failed to provide any social security numbers as well as 41 additional students for whom no social security number was provided. "False Negative Rates" represent students for whom no match was obtained in the CPS but SAR information was collected during record abstraction. Some such discrepancies have been traced to faulty social security numbers, others result from SAR data that had not yet been entered into the CPS at the time that the match was attempted.

<sup>a</sup> Institution classification for this table has been corrected to agree with that verified by the participating institutions. To avoid even smaller cell sizes, categories of level of offering have been collapsed within the two private sectors.

<sup>b</sup> Student classification reported reflects final status reconciliation based on CADE and CATI data.

misses, yielding an overall miss rate is less than 5 percent (6.5 percent for undergraduates and 2.1 percent for Graduate/First Professional students). This is quite acceptable. Of note, however, is the disparity of miss rates among students from different types of institutions. Generally, miss rates are markedly higher (by a factor of greater than 2) among students sampled from the for-profit institutions. Because those institutions generally operate on a "rolling admissions" system, however, they are more likely than other types of schools to be affected by time delays between the CPS request and the record abstraction. Misses among undergraduates are generally lowest among the institutions offering programs of four or more years, and these schools are more likely to be on set calendar terms.

### **3. Institutional Record Abstraction**

#### **a. General**

The use of CADE procedures, by both contractor field interviewers and institutional staff, to obtain abstraction of student institutional records was first initiated in NPSAS:93. As a result of the NPSAS:93 experiences and informal feedback from NPSAS:93 self-CADE 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. In particular, CADE developmental activities were directed toward:

- # inclusion of a user's manual, greater on screen instructions, on line help, and an imbedded tutorial to help the self-CADE users, none of whom had received the formal training with the program that was provided to the contractor's abstracting field staff;
- # inclusion of both scrolling and branching approaches to facilitate ease of movement from one part of the instrument to another;
- # imbedding data quality control and verification checks directly in the CADE program, to alert users of potential omissions or "outlier" entries;
- # imbedding an installation routine, including a virus detector, to facilitate loading the program onto a wide range of the microcomputer systems that might be encountered at different institutions, and
- # inclusion of features allowing considerably greater capacity for preloading information and customizing the program for State- and institution-specific financial aid vehicles.

Additional input into final CADE development was obtained from the NASFAA research committee, to which the final prototype of the system was demonstrated.

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.

**b. Ease of Using CADE Software**

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. The "hot line" established was generally well received by CADE coordinators at the schools; the types of problems reported in trying to use CADE are reported in Table V.B.5.<sup>27</sup>

As can be seen from the table, the most frequent call requested information as to the specific meaning of one or more data elements that were being requested in CADE. While the information requested was, in some cases, available in the User's Manual, this problem reflected a generic one that has been corrected for the full-scale study. Specifically, even though considerable positive feedback was received from self-CADE users and field data collectors regarding the on-screen instructions, the on-line help for the field test version of CADE received little attention during CADE development, due to schedule constraints, and was of little usefulness to users. The on-line help screens have been greatly expanded for the full-scale CADE instrument, including explanations as to the specific nature of information being requested.

The next most frequent problem arising involved specific situations of incompatible (frequently peculiarly configured, but in other cases requiring a real need to clear additional memory -- in all but 4 cases use of institutional hardware was facilitated) 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 memory check failed inappropriately under certain Windows 3.1 configurations. The memory check routine has been modified for the full-scale implementation in an attempt to correct for this problem, although to some degree this and other hardware configuration incompatibility will remain unavoidable. Also, additional material has been included in the User's Manual to clarify the distinction of types of memory and to give some examples of how to reconfigure systems to allow installations.

Problems with packaging were exclusively the result of a self-CADE user inadvertently choosing the package option, which closed the CADE package and allowed no additional access except after implementing an "unpackaging" option. This situation was not adequately treated in the field test User's Manual (in fact, the unpackaging procedures had been intentionally excluded). To address this problem in the full-scale implementation, material has been added to the User's Manual to fully describe the consequences of packaging. Also, an additional packaging confirmation screen has been added explaining the nature and consequences of packaging and asking the user "Do you really want to package at this time?" This screen appears when the

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<sup>27</sup> It should be noted that the numbers reported in Table V.B.5 represent call-counts from only 50 of the 59 institutions initially opting for self-CADE.

packaging option is chosen and requires a confirmatory response to implement packaging (which should considerably reduce inadvertent packaging).

**Table V.B.5 -- Nature of Calls Received on the Self-CADE Hot Line**

Nature of Call Problem	Number of Calls
Seeking clarification of CADE data elements	27
Reporting hardware problems, installation problems, or ‘Insufficient RAM’ message during installation	22
Seeking assistance in packaging and sending back completed CADE records	11
Reporting a virus detection during CADE installation or packaging <sup>a</sup>	4
Requesting a computer be provided due to institution hardware limitations <sup>b</sup>	4

NOTE: Calls reported were received from 50 of the 59 schools that at some time chose the Self-CADE option.

The remaining two problem areas shown in Table V.B.5 occurred quite infrequently, but are worthy of note. In 2 instances, the virus detector imbedded within CADE interacted with the host system to erroneously indicate the presence of a virus; in the other 2 cases, viruses actually existed on the host system. Further, in initial conversations, the contractor promised to provide hardware to accommodate Self-CADE, if the hardware at the institution was insufficient; in these 4 cases, sufficiently powerful laptop computers were provided.

**c. Abstracting Record Data into CADE**

To reduce CADE data entry effort, a large number of elements were preloaded into CADE records; moreover, the financial aid award section of CADE was customized to include non-federal aid that was common to a particular school. The most extensive set of preloaded data involved EDI downloads from the CPS (see Section V.B.2), which included a full subsection of CADE, where present. Although, users were asked to update the information as necessary and to supply any information that was missing, analyses conducted revealed few instances (less than 5 percent of the cases) in which at least one final CADE values differs from a non-missing CPS preload value, indicating that corrections were seldom necessary.<sup>28</sup> Considerable positive feedback was received regarding the CPS preloads.

<sup>28</sup> During planning for the field test, some concern had been expressed by financial aid administrators that SAR data was sometimes modified in financial aid offices and such corrections not reentered into the CPS; the current study suggests that this is the case but that the incidence of this is small.

Other data were preloaded from the IPEDS IC file, as subsequently verified by the ICs, or from other data of record. In addition to student name, SSN, date of birth, and stratum (the latter needed to guide specific portions of CADE applicable to the three student types), this additional information was typically school specific and included: Name of institution, State in which institution was located, IPEDS number, level and control of institution, school sampling stratum, institutional calendar, institutional grading system, clock or credit hour awards. These items of information were included in each student CADE record to guide the CADE or as information subsequently needed for analysis. Although no direct feedback was received regarding the efficiency gained by these preloaded data elements, such efficiency is obvious.

Customization involved identifying, prior to beginning data collection, the names of up to four of the most common state-funded financial aid programs for each of the 50 states, plus the District of Columbia and Puerto Rico. The actual names of such programs were then preloaded into CADE (as appropriate for the state in which the institution was located) as fixed response options. Similarly, for those institutions that award institution grants or scholarships, the names of up to three such awards were listed in CADE. Such customization was attempted to reduce the burden of "fill in the blank" forms of aid and to allow an easier match of an aid source name that was likely to appear in a student's record. While no specific comments were received from self-CADE users or field abstractors, this appears to have worked well, and will be repeated for the full scale study.

With one exception, no systematic feedback was received regarding difficulties in entering data into CADE as formatted for the field test; however, field data collectors and institution coordinators alike reported that the enrollment terms user exit in CADE was clearly the most difficult part of the system. For these data elements, users were required to construct a list of terms for the institution (called the master term list or MTL), and then pick from the MTL each of the terms in which a student was enrolled. Constructing the MTL, adding additional terms, or deleting an incorrect term seemed to be the most problematic areas. Consequently, for the full scale study we have asked institution coordinators to provide this information in advance and the MTL will be customized for each institution prior to sending out the CADE package for an institution CADE. Also, the interface has been improved to simplify adding and deleting terms.

#### **d. Completeness of CADE Data**

Although direct positive feedback on the data verification checks was received only from the contractor's field data collectors, previously presented results (see Tables III.B.5 and III.B.6) have suggested their effectiveness in avoiding the relatively large number of inadvertently omitted CADE data elements experienced during NPSAS:93. 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. In the NPSAS:96 field test, when a user indicated a subsection was complete, the software looked for missing data in specific fields; if missing data was discovered, the user was prompted to please provide the missing information. Consequently, almost 96 percent of the returned CADE records contained all sections complete; subsection completion rates, in all but one instance, exceeded 99 percent.

In a postsecondary record abstracting environment, however, completeness of data collection is not always simply defined. A positive entry (e.g., an indication that some financial aid had been obtained) certainly implies that information was discovered to be entered and was entered and then it is clear that the data element is completed. On the other hand, a negative entry (e.g., no indication that a particular form of financial aid was received) may imply that the aid was definitely not received (in which case the data element is complete), or it may only indicate that the record showing such aid was not uncovered. This problem is exacerbated when all records are not located centrally.

There is considerable evidence that graduate and first-professional assistantships represent a form of financial aid that falls in the category of not being reported because the record was not uncovered. Specifically, of the 1047 graduate and first professional students in the field test sample, only 19 assistantships were reported in CADE. On the other hand, of the 705 graduate and first-professional students interviewed in CATI, 73 reported receiving assistantships. In order to investigate the nature of what appears to be a serious underreporting of assistantships, follow-up calls were made to the 15 schools in which no assistantships were reported in CADE but at least one student from the school reported receipt of an assistantship. Five of the schools involved were not contacted by the time field test operations were concluded. At 2 of the 10 remaining schools, the IC actively sought out records from other offices (e.g., the Graduate School, Departmental Offices) and confirmed receipt of assistantships for all students who reported receiving them in CATI. ICs at the remaining 8 schools, indicated that typically such records were not kept in the financial aid office at their schools and that assistantship data is difficult to obtain, in large part because it is maintained in diverse locations and sometimes treated as employment or human resources data, subject to confidentiality restrictions.

An attempt at development of cost-feasible solutions to what is clearly a completeness problem with the record abstracting approach used in the field test (and in prior NPSAS studies) is currently underway; however, the likelihood of solving this problem prior to full scale implementation is considered low.

**e. Timeliness of Record Abstraction**

An indication of the duration of CADE activities, in days, by type of institution is provided in Table V.B.6. The proxy measure<sup>29</sup> used for time of abstracting is the number of calendar days between the date on which the CADE system for a school 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

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<sup>29</sup> More exact data regarding time needed for record abstraction were not maintained.

Table V.B.6 -- Institution-Level CADE “Duration” by Institution Level and Control

Control	Institution Type <sup>a</sup>	Level	Number of Institutions	CADE Duration, in Days		
				Minimum	Median	Maximum
Total		Total	65	6	42	91
Public		Total	32	6	42	83
		Less than 2 Years	4	6	29.5	63
		2-3 Years	7	14	30	67
		4 or More Years	21	18	44	83
Private, Non-Profit		Total	25	8	38	91
		Less than 4 Years	5	9	30	50
		4 or More Years	20	8	42	91
Private, For Profit		Total	8	15	49	57
		Less than 2 Years	4	44	55	57
		2 or More Years	3	15	29	31

NOTE: 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>a</sup> Institution classification for this table has been verified by the participating institutions.

the contractor's main campus. This measure is a relatively good index for self-CADE schools, for which the CADE package was typically sent to the school on the day it was initialized. For field-CADE schools, 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 school.

The table provides minimum days, maximum days, and median days of CADE duration in total and for different types of schools. Considerable variation in CADE duration (from 6 days to 91 days) is shown in the table; also, duration for half the schools exceeded about 1 and a half months. Interpretation of sector differences from Table V.B.6 should not be made, since the type of CADE abstraction performed and the number of records abstracted differ by sector and are related to duration, as shown in Tables V.B.7 and V.B.8.

**Table V.B.7 -- Institution-Level CADE “Duration” by Method of Abstraction**

Abstraction Method <sup>a</sup>	Number of Institutions	CADE Duration in Days		
		Minimum	Median	Maximum
Total	65	6	42	91
Self CADE	50	18	42	91
Field CADE <sup>b</sup>	13	6	15	54
Hardcopy CADE	2	80	81.5	83

NOTE: 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>a</sup> For the self CADE method, institution staff completed the data abstraction and entered data into the CADE software; for field CADE method, contractor field data collectors were sent to the school to perform abstraction and enter the data; for the (unplanned) hardcopy CADE method, institutions began the data abstraction and entry process, but rather than completing it themselves or allowing a field data collector to complete the process, the institution mailed hardcopy records to the contractor for data entry by central project staff. (This latter abstraction method typically results in incomplete data and is used only as a last resort.)

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

Even with the recognized inflation in some of the duration measures for field-CADE schools, that method of data abstraction is accomplished in a markedly more timely manner than at self-CADE schools, as seen in Table V.B.7. This is not particularly surprising, since the field data collectors are being paid by the contractor for full time work, while the institutional staff accomplishing the self-CADE abstractions are not. The obvious trade off is between time to completion and costs. Similarly the results shown in Table V.B.8 are not particularly revealing; median Cade duration increases with the number of students for whom abstracting is required.

The duration statistics for field-CADE reflect an improvement over that realized in NPSAS:93. In the field test, initial appointments for campus visits by field data collectors were made by project staff in advance of the training for the field staff. In addition to reducing the time needed for completing field-CADE, this approach accomplished two additional goals: (1) training materials better reflected potential coordinator questions and appropriate responses, and (2) data collectors began their first actual abstraction assignments very shortly after having been trained and, thus had less time to forget procedures taught them. Considering both the time savings and the positive feedback from the field data collectors about this approach, it will be maintained in the full-scale study.

**Table V.B.8 -- Institution-Level CADE “Duration” by Size of Student Sample**

Size of Student Sample <sup>a</sup>	Number of Institutions	CADE Duration in Days		
		Minimum	Median	Maximum
Total	65	6	42	91
40 or Fewer Students	15	8	38	57
41-60 Students	33	6	42	91
61 or More Students	17	14	46	69

NOTE: 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>a</sup> Institutional groups were established using quartiles of the distribution of student sample size to distinguish the "tail" categories.

In July of 1995 (after CADE data collection had been completed) contractor staff had additional opportunities to meet with ICs at the NASFAA conference to discuss delays in completing self-CADE. Most of the ICs indicated that major delays were experienced in obtaining access to records in other offices, from which the financial aid office had no direct authority to request. A recommendation from a number of coordinators was to encourage chief administrators to appoint their Director of Institution Research as the coordinator, rather than the Financial Aid Administrator, because these individuals are more likely to have access to data other than financial aid data. As discussed previously, this approach was not recommended for the full-scale study, but it is recommended as a methodological experiment in a future NPSAS field test.

## C. Computer Assisted Locating and Interviewing

### 1. General

The CATI locating and interviewing systems used in NPSAS:96 represented marked improvements over those used in NPSAS:93 (see related discussion in Section II.B.4). First, the entire system was programmed using a new release of CASES 4.1 software; expanded screen logic allowed much greater flexibility for compact screen presentation and full screen editing of "matrix" and "check all that apply" items. Under the new programming system, the locator module of CATI was also made considerably easier for interviewers to use and allowed greater flexibility in recording (and subsequently reviewing) tracing history for a given case.

Capability for in-house tracing was further augmented by inclusion of two CATI-external<sup>30</sup> data bases of names, addresses, and telephone numbers. Tracing procedures were also established to use a subcontractor (EQUIFAX) to assist in locating cases that could not be traced through in-house approaches.

In general, the supporting systems for the locating/interviewing effort performed quite well, and were considered major improvements by the locator/interviewers. Minor (and some more-than-minor) programming problems (and needed additional improvement of system user friendliness) in the systems arose throughout the locating/interviewing period, and appropriate corrections and adjustments were subsequently implemented, as needed. Weekly (or more frequent during early stages) quality circle meetings were held among programmers and locator/interviewers in which most of the mechanical and operational problems of the process were uncovered.

Due to the constraining window of time in which to accomplish the field test locating/interviewing, much of the intensive CATI-external tracing procedures were not fully evaluated (simply because sufficient cases did not reach that point of operation during the abbreviated time period). As an example, only 25 cases were sent to EQUIFAX for intensive tracing; while 12 of the cases were "located", the new addresses/telephone numbers could not be verified, since the cases were returned following the data collection end date. Generally, however, feedback from locator/interviewers during quality circles indicated that they considered the two external data bases worked quite effectively, when used.

## 2. Standard Locating and Interviewing Operations

As previously reported (Section III.C) locating and interviewing results suffered from the abbreviated data collection period of the field test. Operational decisions to prioritize operations for certain populations also depressed the results obtained for other groups. Nonetheless, the ability to locate and interview sample members showed some real variation over different types of schools, even within prioritized and non-prioritized groups (see above, Tables III.C.1 and III.C.2). Some of these differences (which have been observed in a number of previous studies) can likely be attributed to different age and mobility characteristics of students in different postsecondary sectors; however, evaluation of other potential causes of differential rates (focusing on locating, where differences were expected to be greatest) were undertaken.

Cases with insufficient initial locating information are notoriously difficult to reach. Even though a "form-legitimate"<sup>31</sup> telephone number was obtained during CADE abstraction (or CPS EDI) for all but 272 cases, some question remained of the adequacy of such phone numbers which were collected under different modes of record abstracting. Specifically, successful locating was

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<sup>30</sup> While these data bases could not be accessed on the same computer running the CATI program (thus CATI-external), these data bases could be accessed on the same server through a separate computer set up in the same booth with the CATI locator/interviewer; consequently, the data bases could be accessed on the second machine while the case to be traced was still open on the first machine.

<sup>31</sup> In this context, form-legitimate means only that the telephone number had the appropriate 10 digits, not all of which were 9.

examined as a function of whether the abstracting had been accomplished by self-CADE or field-CADE. Also, since CPS telephone numbers and addresses were obtained, success in locating was also examined as a function of whether or not a CPS match (and associated download of information) had been obtained.

The results of these examinations are presented in Tables V.C.1 and V.C.2, respectively. Differences shown in these results are singularly unimpressive<sup>32</sup>. Lack of meaningful and systematic differences suggest that the factors considered are unrelated to ability to locate students. It should be recalled, however, that these results are based on data that have not allowed the full range of tracing approaches to be implemented; consequently, with additional tracing time, differences may have been observed. The most likely conclusion regarding difficulties in tracing is that additional calendar time is needed to achieve the needed locating rate; this will, of course, be available for the full-scale study.

The ability to complete an interview with a sample member, after that sample member has been located remains principally determined by avoiding (or converting, if it occurs) refusals on the part of the sample member. There are of course, other situations that have received attention in the survey literature, the most notable of which is the use of gatekeepers to screen calls to the sample member (recently, the answering machine has become a very important player as a mechanical gatekeeper). These other situations also typically relate to a refusal, even though in these other cases the refusal is implicit rather than explicit.

As shown in Table V.C.3, an initial explicit refusal was experienced for over one-fifth of the NPSAS:96 field test sample members. Within groups of sufficient size to support stable estimates, initial refusal rates were concentrated within the 20 percent to 24 percent range, and no meaningful systematic differences in these rates were observed among types of schools or types of students. The observed rate is also reasonably consistent with initial refusal rates found in telephone surveys of a young adult population.

The time frame for data collection did allow for implementation of some refusal conversion approaches (although the extent of such operations were curtailed by the abbreviated data collection period). The success of conversions of initial refusals during the NPSAS:96 field test is shown in Table V.C.4. The overall conversion rate was about 38 percent. While considerable fluctuation in rates are observed in the various table cells, the bulk of such variation is restricted to cells with 50 or fewer cases, in which stability of the estimates are not as great. The only potentially meaningful trend is within the public and private institutions offering four or more year programs, where success in conversion drops almost monotonically from the potential FTB group to the other undergraduate group to the graduate/first professional group. Greater success in the potential FTB group would be expected, since greater effort was directed to these cases; however, another contributing factor is probably age. The groups in the order specified are progressively older (on average), and younger students are commonly more easily persuaded.

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<sup>32</sup> One difference (the graduate/first professional student difference under the two forms of CADE administration -- Table V.C.1) approaches statistical significance using a level of .05; however, that difference is not directionally consistent with other differences in the same table.

**Table V.C.1 -- Locating Results by Student Stratum and Mode of CADE Administration at NPSAS School**

	Mode of CADE Administration at NPSAS School											
	TOTAL					Self CADE					Field CADE or Hard Copy	
	Base	Located		Base	Count	Percent	Base	Located		Base	Count	Percent
		Count	Percent					Count	Percent			
<b>Student Stratum <sup>a</sup></b>												
TOTAL	3,566	3,081	86.4	2,786	2,406	86.4	780	675	86.5			
Potential FTB	1,428	1,225	85.8	1,095	934	85.3	333	291	87.4			
Other Undergraduate	1,088	937	86.1	886	758	85.6	202	179	88.6			
Graduate/First Professional	1,050	919	87.5	805	714	88.7	245	205	83.7			

NOTE: Statistics exclude 179 NPSAS ineligible sample members (determined during CADE), 3 deceased sample members, and 33 sample members who were either incapacitated or out of the country during the data collection period. All percentages are computed using the base for the row and mode of CADE administration considered.

<sup>a</sup> Major uncovered frame labeling errors have been corrected; however, other frame error misclassifications have not been corrected.

**Table V.C.2 -- Locating Results by Student Stratum and CPS Match Status**

	CPS Match Hit Status														
	TOTAL					No CPS Match					CPS Match				
	Base	Located		Base	Percent	Base	Located		Base	Percent	Base	Located		Base	Percent
		Count	Percent				Count	Percent				Count	Percent		
<b>Student Stratum <sup>a</sup></b>															
TOTAL	3,566	3,081	86.4		1,507	1,294	85.9		2,059	1,787	86.8				
Potential FTB	1,428	1,225	85.8		427	356	83.4		1,001	869	86.8				
Other Undergraduate	1,088	937	86.1		464	401	86.4		624	536	85.9				
Graduate/First Professional	1,050	919	87.5		616	537	87.2		434	382	88.0				

NOTE: Statistics exclude 179 NPSAS ineligible sample members (determined during CADE), 3 deceased sample members, and 33 sample members who were either incapacitated or out of the country during the data collection period. All percentages are computed using the base for the row and mode of CADE administration considered.

<sup>a</sup> Major uncovered frame labeling errors have been corrected; however, other frame error misclassifications have not been corrected.

**Table V.C.3—Initial Student Refusals by Institution Type and Student Sampling Stratum**

Level	Institution Type <sup>a</sup>	Student Sampling Stratum														
		Total				Potential FTB				Other Undergraduate				Graduate/First Professional		
		Number Located	Initial Refusals	Percent Refusal		Number Located	Initial Refusals	Percent Refusal		Number Located	Initial Refusals	Percent Refusal		Number Located	Initial Refusals	Percent Refusal
Total	Total	3,081	656	21.3	1,225	249	20.3	937	198	21.1	919	209	22.7			
	Public	1,495	310	20.7	490	96	19.6	559	103	18.4	446	111	24.9			
	Private, not-for-profit Private, for-profit	1,228 358	268 78	21.8 21.8	405 330	87 66	21.5 20.0	350 28	83 12	23.7 42.9	473 --	98 --	20.7 --			
Less than 2 Year	Total	352	79	22.4	336	72	21.4	16	7	43.8	--	--	--			
	Public	143	36	25.2	134	33	24.6	9	3	33.3	--	--	--			
	Private, not-for-profit Private, for-profit	45 164	11 32	24.4 19.5	45 157	11 28	24.4 17.8	-- 7	-- 4	-- 57.1	-- --	-- --	-- --			
2-3 Year	Total	504	107	21.2	296	59	19.9	208	48	23.1	--	--	--			
	Public	253	50	19.8	132	21	15.9	121	29	24.0	--	--	--			
	Private, not-for-profit Private, for-profit	169 82	34 23	20.1 28.0	90 74	18 20	20.0 27.0	79 8	16 3	20.3 37.5	-- --	-- --	-- --			
4+ Year	Total	2,225	470	21.1	593	118	19.9	713	143	20.1	919	209	22.7			
	Public	1,099	224	20.4	224	42	18.8	429	71	16.6	446	111	24.9			
	Private, not-for-profit Private, for-profit	1,014 112	223 23	22.0 20.5	270 99	58 18	21.5 18.2	271 13	67 5	24.7 38.5	473 --	98 --	20.7 --			

NOTE: Statistics are based on students who were located, exclusive of those identified subsequently as ineligible or unavailable for the study. All percentages are based on the number located value for the row and student stratum considered.

<sup>a</sup> School categorization has been verified by participating institutions.

The constricted data collection period factor is also quite evident in Table V.C.4. Past experience of the contractor with similar groups of young adults have frequently led to considerably higher (from 55 to 70 percent) conversion rates for initial refusals. To realize such rates, however, requires additional calendar time, since the number of special "refusal converters" are limited in number.

Implicit refusals (e.g. use of answering machines or other gatekeepers, making future appointments and being "away" at the scheduled time and for subsequent call back attempts) actually represent a more difficult problem than explicit refusals, since the refusal converters can not get through to the sample member to attempt persuasion. Unfortunately records maintained in the field test were inadequate to fully evaluate the efficacy of resolving these types of problems.

One method that has been somewhat successful in preventing or converting refusals is the use of incentives, which may be monetary or informational in content. A methodological study of using an informational incentive was imbedded within the field test design. An informational booklet (see Appendix A) describing the availability of postsecondary student financial aid was included with the initial mailing to a half sample of the field test sample. The effect of such an incentive would appear only in interviewing of located cases.

The result of the use of the "Student Guide" on interview completion rates is shown in Table V.C.5.<sup>33</sup> Since, allocation to the half sample was accomplished within each school and within each student stratum at the school, aggregated results such as those shown in the table are, stochastically, not contaminated by potential hidden effects unique to a particular type of school or student. As expected, the mailing of the guide was not associated with differences in locating rate; however, it was also not associated in any meaningful manner with interviewing rates among those who were located. As a consequence of the ineffectiveness of the pamphlet, the expense of producing and mailing the material to students was not considered warranted, and use of the guide is not recommended for the full scale study.

### 3. Interview Burden and Effort

The time, in minutes, needed to conduct a student interview is shown, by interview section and student type<sup>34</sup>, in Table V.C.6. 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 summed to obtain total administrative time. Sections are listed in the table in the order in which they were presented, and as might be expected the number of cases contributing to a particular analysis is monotonically non increasing over sections. 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);

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<sup>33</sup> Individuals to whom the initial mailing could not be made or for whom the initial mailing was returned undeliverable are not included in these analyses; those who were subsequently determined to be NPSAS-ineligible or otherwise excludable are also excluded.

<sup>34</sup> The student classification used in Table V.C.6 has been verified in CATI.

**Table V.C.4 -- Student Refusal Conversion Rates by Institution Type and Student Sampling Stratum**

Institution Type <sup>a</sup>	Student Sampling Stratum															
	Total				Potential FTB				Other Undergraduate				Graduate/First Professional			
	Initial Refusal	Number Converted	Convert Percent		Initial Refusal	Number Converted	Convert Percent		Initial Refusal	Number Converted	Convert Percent		Initial Refusal	Number Converted	Convert Percent	
Control																
Total	654	248	37.9		249	110	44.2		197	72	36.5		208	66	31.7	
Public	309	112	36.2		96	37	38.5		102	39	38.2		111	36	32.4	
Private, not-for-profit	267	101	37.8		87	43	49.4		83	28	33.7		97	30	30.9	
Private, for-profit	78	35	44.9		66	30	45.5		12	5	41.7		--	--	--	
Less than 2 Years																
Total	79	37	46.8		72	36	50.0		7	1	14.3		--	--	--	
Public	36	13	36.1		33	13	39.4		3	0	0.0		--	--	--	
Private, not-for-profit	11	6	54.4		11	6	54.5		--	--	--		--	--	--	
Private, for-profit	32	18	56.3		28	17	60.7		4	1	25.0		--	--	--	
2-3 Year																
Total	107	45	42.1		59	23	39.0		48	22	45.8		--	--	--	
Public	50	18	36.0		21	7	33.3		29	11	37.9		--	--	--	
Private, not-for-profit	34	17	50.0		18	9	50.0		16	8	50.0		--	--	--	
Private, for-profit	23	10	43.5		20	7	35.0		3	3	100.0		--	--	--	
4 or more Years																
Total	468	166	35.5		118	51	43.2		142	49	34.5		208	66	31.7	
Public	223	81	36.3		42	17	40.5		70	28	40.0		111	36	32.4	
Private, not-for-profit	222	78	35.1		58	28	48.3		67	20	29.9		97	30	30.9	
Private, for-profit	23	7	30.4		18	6	33.3		5	1	20.0		--	--	--	

NOTE: Statistics are based on located students who initially refused to participate in the study (Exclusive of those subsequently determined to be ineligible or unavailable for the study). All percentages are computed using as a base the number who initially refused participation for the row and student stratum considered.

<sup>a</sup> School categorization has been verified by participating institutions.

**Table V.C.5 -- Locating and Interviewing Rates by whether Student Guide Was Mailed**

Student Guide Group	Total		Located		Interviewed <sup>c</sup>	
	Number	Percent <sup>a</sup>	Number	Percent <sup>b</sup>	Number	Percent <sup>d</sup>
Total	3,344	100.0	2,932	87.7	2,391	81.5
Sent Student Guide	1,671	50.0	1,462	87.3	1,199	82.0
Not Sent Student Guide	1,673	50.0	1,470	87.9	1,192	81.1

NOTE: Statistics are based on 3,334 sample members, sample members excluded include determined NPSAS-ineligibles (deceased or otherwise unavailable), those to whom no mailing was sent since (lacking sufficient mailing address), and those for whom the mailing was returned undeliverable.

- a Percentages are based on column total.  
b Percentages are based on total for row under consideration.  
c Includes full and partial interviews of those determined NPSAS-eligible.  
d Percentages are based on the number located in row under consideration.

however, some data loss for these analyses resulted from contaminated time stamps<sup>35</sup>, in which case all affected sections were discarded for a case.

Average administration time to complete the student interview was 39.2 minutes for the BPS cohort members (i.e., verified FTBs) and 28.0 to 28.5, respectively for graduate/first professional students and undergraduates. The additional time required for the BPS cohort is principally attributable to Section F (which was only administered to such 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 and probably are attributable to two major factors: (a) the shorter time that FTBs have been in school, and (b) the fact that relatively few other undergraduates and no graduate students were sampled from less than four year schools.

Some additional insight into the burden of the interview on student sample members was obtained from those who completed the reliability reinterview. It should be kept in mind that this subgroup represents an extremely cooperative set of students; they completed the first interview and then agreed to (and ultimately did) complete still another interview. At the conclusion of the reliability reinterview, these students were asked:

"In the first interview were there any terms that you found difficult to understand or any questions that were particularly hard to answer? Also, were there any items you recommend deleting?"

<sup>35</sup> Time stamps were typically contaminated by interviewers "backing up" in the interview to correct previous entries that were subsequently discovered to be in error. Procedures were developed to avoid this problem, but they were not implemented for all of the time stamps in the interview.

**Table V.C.6 -- Average Minutes to Complete the NPSAS:96 Field Test Student Telephone Interview by Section and Student Type**

Section <sup>a</sup>	Student Type <sup>b</sup>					
	FTB Students Only		Other Undergraduate Students		Graduate/First Professional Students	
	Count	Time	Count	Time	Count	Time
TOTAL TIME <sup>c</sup>	--	39.2	--	28.5	--	28.0
Section A: School Enrollment	686	4.1	1029	5.2	655	5.0
Section B: Enrollment Status and Educational Expenses	670	5.5	1016	5.0	643	4.7
Section C: Financial Aid	658	2.2	1000	2.5	638	2.9
Section D: Additional Sources of Support	649	2.8	986	2.3	628	1.9
Section E: Employment	640	4.1	966	4.6	622	4.3
Section I: Financial Status	633	3.1	951	3.5	620	3.8
Section G: Student Demographics and Citizenship	630	2.5	945	2.6	619	2.8
Section H: Parental Characteristics	624	3.1	941	2.7	615	2.3
Section F: Educational Experiences and Expectations <sup>d</sup>	605	7.4	--	--	--	--
Section J: Locating Information	601	4.5	941	0.2	615	0.2

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

<sup>a</sup> Sections are presented in the order in which they were administered, which does not conform precisely to an alphabetical ordering.

<sup>b</sup> Student classifications reflect status as verified in CATI.

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

<sup>d</sup> This section was only administered to FTBs.

A total of 72 separate comments were provided; these are coded and tabulated in Table V.C.7. The most prevalent comment, by far, (almost 57 percent of all comments) was that requested financial information was too difficult to recall. Not surprisingly, both the nature and the relative frequency of the comments corresponded quite closely to unsolicited comments reported by interviewers during debriefings.

**Table V.C.7—Comments by Reliability Reinterview Respondents Regarding the Full Student Interview**

Comment	Frequency	Percent
Too difficult to recall financial items	41	56.9
Certain items were irrelevant to that student	10	13.9
Some interview items were too personal	10	13.9
Interview took too much time	7	9.7
Too difficult to recall dates	4	5.6

NOTE: Statistics are based on 72 coded comments from 64 students who were prompted for comments about the difficulty and relevance of the full student interview after they completed the reliability reinterview.

Administration time for the parent interview is shown in Table V.C.8<sup>6</sup>. On average a complete parent interview lasted about a quarter of an hour.

As a consequence of examining administration time by the study Technical Review Panel, certain items were recommended for deletion from both interviews for the full-scale study. Items chosen for exclusion were typically those which showed a lack of temporal stability or extremely low variance of responses (see Chapter V).

Interview administration time, however, reflects only a small fraction of the time required to obtain a completed interview. Time is spent by locator/interviewers in locating, 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 was slightly more than 2.5 hours.

<sup>36</sup> The presence of a contaminated time stamp exclusion is clearly present in the table.

**Table V.C.8—Average Minutes to Complete the NPSAS:96 Field Test Parent Telephone Interview, by Section**

Section	Count	Time
TOTAL TIME <sup>a</sup>	--	15.6
Section L: Financial Support for Education	141	5.6
Section M: Household School Enrollment	140	2.1
Section N: Employment Status and Financial Condition	139	5.0
Section Q: Reasons for Not Seeking Financial Aid	139	0.6
Section R: Choice of NPSAS School	139	0.8
Section P: Parent Demographics	140	1.5

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

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

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## VI. Evaluation of Data Quality

### A. Reliability Reinterview Results

Reliability reinterviews were administered to a randomly selected subsample of NPSAS student respondents to assess the short-term temporal stability of selected items. Items were selected for reinterview based on the following criteria: (1) items not selected for prior NPSAS or BPS reliability reinterview studies; (2) items that, taken together, would be broadly representative of the student interview; (3) items that have been problematic in prior NPSAS surveys; and (4) items for which responses should not change over time. Percent agreement and appropriate correlational analyses were used to estimate response stability between two interview administrators conducted two to four weeks apart. Lack of agreement (or low correlation) between responses from the same individuals would reflect instability over short time frames due to measurement error and to the extent this occurs, suggests the need to delete or revise the item(s) in question. On the other hand, high indices of agreement suggest that the student interview responses are relatively free of measurement errors that cause response instability over short periods of time.

Reinterview respondents were asked a subset of questions from the full field test student interview covering educational experiences, education expenses and finances, work and community service experiences, and participation in school-related activities. Analyses were based on the 226 respondents who completed reinterviews (see Chapter III). In the reinterview questionnaire, information from the initial interview was preloaded into the reinterview to ensure that school-specific and occupation-specific items were asked for the same school or the same job across the two interviews. In the tables which follow, respondent sample sizes are presented for all results because numbers of cases vary due to applicability (or inapplicability) of the item being investigated and analyses are restricted to cases with determinate responses in both interviews.

Items on the reinterview included normal, ordinal, continuous variables. Percent-agreement was computed for nominal and ordinal variables based on the number of responses that were exactly the same in both interviews; for continuous variables (e.g., dollar amounts), percent agreement was based on the number of paired matches within one standard deviation unit of each other. One of three relational statistics were used, depending on the properties of the particular variable: (1) Pearson's product moment correlation coefficient for the continuous measures such as year of graduation or dollar amounts; (2) Cramer's V statistic for items with discrete, unordered response categories; and (3) Kendall's Tau coefficient for items with discrete, ordered response categories.

#### 1. Educational Experiences

Reliability indices for reports of high school completion and enrollment at the NPSAS postsecondary school are presented in Table VI.A1. Temporal consistency for reports of type and date of high school completion were very high, as measured both by the percent-agreement and the correlational statistic. Similarly, reports of first postsecondary school attended and date of first attendance were highly stable across the two interview administrations.

**Table VI.A1—Reliability Indices for High School Completion and Postsecondary School Enrollment**

Data Element Considered	Number of Cases	Percent Agreement	Relational Statistic
Type of high school diploma	225	98.7	0.97 <sup>a</sup>
Year of high school graduation/completion	223	100.0	1.00 <sup>b</sup>
NPSAS school was first postsecondary experience	225	95.6	0.91 <sup>a</sup>
Date of first postsecondary enrollment	219	98.2	0.94 <sup>b</sup>
Degree program in first term of NPSAS year	209	80.9	0.66 <sup>a</sup>
Level or year in program during first term of NPSAS year			
Undergraduates	90	81.1	0.84 <sup>c</sup>
Graduates/First Professionals	47	61.7	0.32 <sup>c</sup>

<sup>a</sup>Indicates Cramer's V statistic.

<sup>b</sup>Indicates a Pearson correlation statistic.

<sup>c</sup>Indicates a Spearman correlation.

Student reports of type of degree program enrolled in during the first term at the NPSAS school were fairly stable as were undergraduate responses to year or level in program; however, reports of year in program among graduate students showed somewhat lower temporal stability, both in terms of percent agreement (61 percent) and correlation (.32).

## 2. Education and Living Expenses

Table VI.A2 contains measures of response consistency for students' reports of education and living expenses during the 1994-95 school year. The results presented in this table are fairly consistent with results of prior investigations of similar items and respondent groups, and indicate that students' reports for items dealing with dollar amount estimates (of expenses, awards, earnings) are generally somewhat less stable across time than are their reports of events and activities. The two measures of temporal stability appear contradictory; however, the generally higher levels of percent-agreement may reflect a substantial number of cases where a response of zero was reported on both occasions. This would reduce the overall variance of the differences, giving greater weight to differences between pairs of non-zero responses. In such a case, one would expect the value of the relational statistics to be lower. It is interesting to note that these two indices are consistently high with regard to the responses to the number of financial dependents, in which case the number of non-zero paired responses are so minimal that they have little effect in reducing the value of the relational statistics.

**Table VI.A.2—Reliability Indices for Selected Educational and Living Expenses  
During the 1994-95 School Year**

<b>Data Element Considered</b>	<b>Number of Cases</b>	<b>Percent Agreement</b>	<b>Relational Statistic<sup>a</sup></b>
Annual Educational Expenses			
Commuting to class	184	85.3	0.35
Other educational expenses	190	85.8	0.27
Monthly Living Expenses			
Food/meals	200	77.5	0.43
Car loans, maintenance, and insurance	198	84.3	0.37
Personal expenses ( <i>e.g.</i> , clothing, dry cleaning, recreation)	202	87.6	0.31
Other expenses ( <i>e.g.</i> , telephone bill, child support, life or health insurance, repayment of other loans)	212	86.3	0.24
Children or other dependents supported on July 1, 1994	225	92.4	0.84

<sup>a</sup>All statistics shown are Pearson correlations.

### 3. Loans

Items indicating receipt of loans from sources other than the federal or state government, institutions, or student's employer were evaluated during the field test. Although the number of students receiving such loans was too small to compute reliable measures of temporal consistency for items pertaining to source and amount of such loans, Table VI.A3 presents these measures with respect to students' responses of whether or not loans from these sources (which include parents, relatives, and commercial banks) were received. Generally, reliability of these data is acceptable and consistent with prior investigations, with exact agreement of responses at 85 percent; the relational statistics of .34 reflects sensitivity to small systematic changes in the distribution of responses examined.

**Table VI.A.3—Reliability Indices for Sources and Amounts of Other Loans**

<b>Data Element Considered</b>	<b>Number of Cases</b>	<b>Percent Agreement</b>	<b>Relational Statistic</b>
Received loans from parents, relatives, banks, credit unions, or other sources	225	85.3	0.34 <sup>a</sup>

<sup>a</sup>Indicates Cramer's statistic.

#### **4. Employment and Community Service**

Table IV.A4 presents measures of response consistency for items asking about students' employment status, participation in "work assistance" programs (i.e., work-study, teaching or research assistantships), and performance of community service activities. In general, the reliability estimates for these items were high, with percent agreement values ranging from 85 to 98 percent and relational statistic values ranging from .69 to .77 (correlations for teaching and research assistantships, which were restricted to graduate students and reported by only small numbers were not computed).

**Table VI.A.4—Reliability Indices for Employment Status and Community Service During NPSAS Year**

<b>Data Element Considered</b>	<b>Number of Cases</b>	<b>Percent Agreement</b>	<b>Relational Statistic<sup>a</sup></b>
Employed for pay at anytime	225	91.6	0.73
Participated in College Work Study	225	96.0	0.77
Participated in teaching assistantship <sup>b</sup>	55	98.2	--
Participated in research assistantship <sup>b</sup>	55	96.4	--
Performed community service	224	85.3	0.69

<sup>a</sup> All statistics shown are Cramer's V statistics.

<sup>b</sup> Limited to graduate and first professional students; insufficient cell sizes prohibit computation of a Cramer's statistic.

### 5. Participation in School-Related Activities (FTBs Only)

First-time beginning students were asked to indicate the frequency of their participation in a number of school-related activities, using a scale of 0 to 9 (with 9 indicating 9 or more times). These items were included in prior BPS interviews but with a three-point verbally-anchored response scale (i.e., 1 = never, 2 = sometimes, 3 = often), which yielded little response variation for several items. Therefore, the item set was included in the reinterview to investigate the temporal stability of responses to the new 10-point scale.

As shown in Table VI.A5, percent exact agreement for the various school-related activities included in the item set were consistently low (ranging from 34 percent to 62 percent); correlational statistics were similarly unimpressive, ranging from .40 to .56, but are consistent with those of prior BPS studies for similar item rates (e.g., participation in political activities). Part of the problem might stem from vague or unclear item wording, which can be corrected for the full-scale. For example, only 32 students provided a scale response for ‘participation in student assistance center/programs,’ more than half of the FTBs asked about this activity responded “don’t know,” indicating that they were not sure what was meant by this question.

**Table VI.A5—Reliability Indices for Frequency of Participation in School-Related Activities Among First Time Beginning Students, 1994-95 School Year**

Data Element Considered	Number of Cases	Percent Agreement	Relational Statistic <sup>a</sup>
School-Related Activity:			
Have academic discussions with faculty outside class	68	41.2	0.40
Meet with advisor about academic plans	68	35.3	0.45
Have informal/social contacts with advisor or other faculty outside of class/office	68	55.9	0.41
Participate in study groups outside of class	68	38.2	0.44
Participate in student assistance center/program	32	62.5	0.40
Go places with friends	68	52.9	0.51
Participate in school clubs	67	61.2	0.56
Attend academic or career-related lectures, conventions, or field trips	68	33.8	0.36

<sup>a</sup>All statistics shown are Kendall’s tau.

Nevertheless, it would appear that the 10 point scale is partially responsible for the resulting temporal instability and should be revised or deleted for the full-scale survey.

## 6. Additional Student Impressions

Following the reinterview, responding students were given the opportunity to comment on the questions comprising the instrument. A total of 72 students provided such comments. Over half (57 percent) of these students reported that it was too difficult for them to recall accurately, the financial information and expenses and loans that was requested, and about 14 percent indicated that some of the questions may be too personal. With respect to the preferred scale for use in assessing frequency of participation in school-related activities, twice as many respondents preferred the “verbal” three-point scale (never, sometimes, often) to the ten-point (“how many times”) response option.

### B. Indeterminate Responses

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 (RE) to interview questions are most common for items considered sensitive by the respondent, while “don’t know” (DK) responses may result from a number of potential circumstances. The most obvious reason a respondent will offer a DK response is that the answer is truly unknown or in some way inappropriate for the respondent. But DK 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. RE and DK responses introduce indeterminacies in the data set and must be resolved by imputation or subsequently dealt with during analysis; to the extent possible, they need to be reduced.

Summaries of RE and DK responses for student CATI of the NPSAS:96 field test are provided, by interview section, in Tables VI.B.1. Within each section, statistics are provided for the number and percentage of items in each section in which any RE or DK response was given, and for maximum level RE and DK counts and rates for respondents. Respondent-based rates are calculated *only for those sample members for whom each item was applicable and asked*; as such, maximum counts and rates do not necessarily apply to the same items.

Overall, item refusal rates in the student CATI were fairly low, with only four of the ten sections producing refusal responses in over half the items presented. Sections least likely to evoke refusal responses were those focused on factual information related to the NPSAS school-enrollment status (Section A; 21 percent), cost of attending (Section B; 19 percent), and financial aid (Section C; 14 percent). The sections containing items most likely to evoke refusals were those on student income and assets (Section F; 52 percent), student characteristics (Section G; 60 percent), parent characteristics, including income and assets (Section H; 57 percent), and the academic experiences and personal goals of FTBs (Section F; 75 percent). Section H evoked the highest percentage of items (over 34 percent) containing at least 10 refusal responses, and Section I items were next highest (16.7 percent). Student respondents are reluctant to provide

**Table VI.B.1 — Summary of NPSAS:96 Field Test Indeterminate Responses by Interview Section of the Student CATI**

Interview Section	Number of Items in Section <sup>a</sup>	Refusal Responses						Don't Know Responses					
		Items with Any Refusal Responses		Items with More Than 10 Refusal Responses		Per Item Refusals		Items with Any Don't Know Responses		Items with More Than 10 Don't Know Responses		Per Item Don't Know	
		Number	Percent <sup>b</sup>	Number	Percent <sup>b</sup>	Maximum Number	Maximum Percent <sup>c</sup>	Number	Percent <sup>b</sup>	Number	Percent <sup>b</sup>	Maximum Number	Maximum Percent <sup>c</sup>
Total	694	259	37.3	38	5.5	149	16.7	406	58.5	133	19.2	495	100.0
A	97	20	20.6	1	1.0	12	2.9	33	34.0	16	16.5	223	54.1
B	116	22	19.0	5	4.3	20	2.0	51	44.0	22	19.0	203	80.0
C	113	16	14.2	0	0.0	4	2.2	51	45.1	9	8.0	75	66.7
D	45	14	31.1	0	0.0	10	3.3	25	55.6	9	20.0	215	22.8
E	55	24	43.6	2	3.6	46	2.5	43	78.2	9	16.4	205	11.5
I	86	45	52.3	14	16.3	149	16.7	67	77.9	25	29.1	263	100.0
G	42	25	59.5	1	2.4	11	3.2	22	52.4	5	11.9	179	15.1
H	35	20	57.1	12	34.3	53	5.5	34	97.1	24	68.6	495	82.7
F	79	59	74.7	0	0.0	8	1.2	65	82.3	7	8.9	57	22.6
J	28	14	50.0	3	10.7	12	4.1	15	53.6	7	25.0	32	8.2

NOTE: Statistics are based on sample members with full or partial interviews or appropriate subsets for whom specific sections/questions were applicable and reached. Indeterminacies in Sections H and I are *prior* to conversion. (See Table VI.B.2 for indeterminacy conversion results.)

<sup>a</sup>Includes all possible repeats of questions and responses within user exits.

<sup>b</sup>Percent is based on number of items in section.

<sup>c</sup>Percent is based on number of cases for whom question was applicable (*i.e.*, reaching the point in the interview, not legitimately skipped, and not determined “not applicable”). It should be noted that, under this definition, the maximum percentage reported may not correspond to the same question as maximum count reported.

information about their parents, and most reluctant to provide parent incomes; almost six percent of respondents refused to answer items requesting parents' income for 1993 and 1994. Of some note is the fact that while 75 percent of these items in Section F evoked at least one referral response, none of the items in that section were refused by 10 or more sample members.

DK responses were evoked in almost 59 percent of interview items, with Sections F (78 percent), H (97 percent), I (82 percent), and the section on employment (Section E; 78 percent) yielding the highest percentage of items with DK responses. Again, Section H produced the most DK responses with all but one of its items ending at least once DK and 69 percent of the items evoking at least 10 DK responses. Considering the sensitive nature of the information collected in Section H, namely parent education, household information, income, and assets, respondents may have provided DK responses as implicit refusals to respond; about half of the respondents did not know the father's/single parent's income for 1993 and 1994, while 45 percent reported not knowing mother's income for those two years.

Questions seeking specification of income amounts often yield high indeterminacy rates. In order to reduce the indeterminacy rates for student, student's spouse, and parent income items in the NPSAS:96 field test, specific questions were included to route initial DK responses through screens designed to provide income estimates within amount ranges (e.g., 30 to 39 thousand). The percentage of responses converted from an indeterminate DK to a determinate response represents the conversion rate.

Indeterminacy conversion attempts, as shown in Table VI.B.2, produced mixed results. For 1994 income estimates, the conversion procedure was very successful; up to 89 percent of initial DK responses for 1994 income were converted to an income estimate using the conversion process. Consistent with previous findings, conversions were more successful for student and student's spouse's income than for parent income, suggesting that students are better able to estimate their own financial situation than their parents' or that DK response for parent income are really implicit refusals. (Prior use of this approach with explicit refusals has shown it to be ineffective in converting such responses.).

In marked contrast to the relatively successful conversions for 1994 income, DK responses for 1993 income converted at rates no higher than 32 percent (student income) and as low as 9 percent (mother's income). Examination of the income questions in the CATI revealed that such low rates of conversion were in fact an error in the logic used to administer the item. Rather than immediately attempting to convert all DK responses for 1993 income, telephone interviewers were trained to first ask if the respondent's 1993 income was "about the same as 1994." If so, a code was entered which would copy the income value for 1994 to 1993 (and no further questions were asked about that income item). However, if the response to the initial associated question about 1994 income was also DK, the program copied the code representing the DK response to the 1993 line, rather than any 1994 income estimated in the conversion process. As a result, the number of DK responses for 1993 income are overestimated and conversion rates extremely low.

**Table VI.B.2 — Conversion of “Don’t Know” Indeterminate Responses for Income Questions in the NPSAS:96 Field Test Student CATI**

Item type	Initial Indeterminacies/ Conversions	“Don’t Know”	
		Number	Percent
Total	Initial	1811	42.1
	Converted	762	
Student income -- 1994	Initial	217	89.4
	Converted	194	194
Student income -- 1993	Initial	207	31.9
	Converted	66	
Spouse’s income -- 1994	Initial	44	68.2
	Converted	30	
Spouse’s income -- 1993	Initial	45	66.7
	Converted	30	
Father’s/single parent’s income -- 1994	Initial	495	56.4
	Converted	279	
Father’s/single parent’s income -- 1993	Initial	470	9.8
	Converted	46	46
Mother’s income -- 1994	Initial	168	61.3
	Converted	103	
Mother’s income -- 1993	Initial	165	8.5
	Converted	14	

NOTE: Statistics are based on items in which respondents initially answered “Don’t Know.”

### C. CADE Verification

Verification (and correction if needed) of CADE responses was requested of Institution Coordinators (ICs) at all 65 field test institutions for five CADE data elements for each of five students from the school. Responses from 61 ICs yielded an analysis base of 305 students for each of five variables. Tables VI.C.1 and VI.C.2 present the results of the CADE verification. In total, the range of “Percent Agreement” values across the five data items was from 86.2 percent for Total Tuition Charges to 98.7 percent for Citizenship Status. The results of the CADE verification are considered to be quite good.

The five data elements chosen for the CADE verification were:

- Enrollment Status During Fall of 1994
- Citizenship Status
- Total Tuition Charges for 1994-95

**Table VI.C.1 — CADE Verification Percent Agreement, by Abstraction Method**

CADE Item Verified	Total		Abstraction Method			
	Number	Percent Agreement <sup>b</sup>	Self CADE <sup>a</sup>		Field CADE	
			Number	Percent Agreement <sup>b</sup>	Number	Percent Agreement <sup>b</sup>
Enrollment Status, Fall Term (94)	305	87.2	250	89.6	55	76.4
Citizenship	305	98.7	250	99.2	55	96.4
Total Tuition Charges	305	86.2	250	86.4	55	85.5
Expected Family Contribution	305	97.4	250	98.0	55	94.6
Total Financial Aid Received	305	90.2	250	90.8	55	87.3

NOTE: 61 of the 65 field test institutions returned the CADE verification form. Hence, verification data were collected for a total of 305 students (five students from each of the 61 schools that responded to the verification request).

<sup>a</sup> The "Self CADE" classification includes two schools that abstracted hardcopy records and mailed them to RTI for keying into CADE.

<sup>b</sup> "Percent agreement" refers to the percentage of the cases in the corresponding "Number" column for which the IC indicated the value entered in CADE was correct.

**Table VI.C.2 — Number of CADE Verification Errors, by Error Type and Abstraction Method**

CADE Item Verified <sup>a</sup>	Total (N=305)		Abstraction Method			
			Self CADE <sup>a</sup> (N=250)		Field CADE (N=55)	
	Comission <sup>b</sup> Errors	Omission <sup>c</sup> Errors	Comission Errors	Omission Errors	Comission Errors	Omission Errors
Enrollment Status, Fall Term (94)	4	35	2	24	2	11
Citizenship	2	2	2	0	0	2
Total Tuition Charges	37	5	29	5	8	0
Expected Family Contribution	7	1	4	1	3	0
Total Financial Aid Received	26	4	20	3	6	1

<sup>a</sup> The “Self CADE” classification includes two schools that abstracted hardcopy records and mailed them to RTI for keying into CADE.

<sup>b</sup> Verification results were classified as a Comission error if the Institution Coordinator (IC) indicated that an item that had been completed during CADE was INCORRECT.

<sup>c</sup> Verification results were classified as a Omission error if the Institution Coordinator (IC) indicated that an item that had been left blank during CADE was INCORRECT. In the case of Total Tuition Charges, Expected Family Contribution, and Total Financial Aid Received, the IC also provide a non-blank “correct” value.

- Expected Family Contribution (EFC) for 1994-95
- Total Financial Aid Received for 1994-95

It should be noted that Enrollment Status During Fall of 1994 was not a single CADE variable. Rather, this value was derived for each of the randomly selected students based on their attendance status during the institution's "Fall Term."<sup>1</sup> The Enrollment Status During Fall of 1994 verification item was derived based on the student's CADE data record. Since the CADE data record did not explicitly indicate terms in which the student was not enrolled, the lack of a reference to the Fall Term was interpreted to mean "The student was not enrolled during the Fall of 1994." Hence, the Percent Agreement values for this item are considered to be lower than would have been observed had a specific term from the institution's term list been chosen for the verification.

Table VI.C.1 reveals that, for all five variables, Percent Agreement was higher for Self CADE institutions than for Field CADE institutions. This may be an artifact of the verification process. In the case of Self CADE institutions, the person performing the verification was (in most cases) the same person that performed the original abstraction, possibly increasing the likelihood that mistakes in the original abstraction were repeated during the verification. However, in the case of the Field CADE institutions, the person who performed the verification was never the same person who performed the original abstraction (i.e. no field data collectors ever performed the CADE verification).

In evaluating the results of the CADE verification, two types of errors were observed. Table VI.C.2 presents these two types of errors, errors of omission and errors of commission, that were identified during the verification. Errors of omission were identified when the CADE data was blank for an item (specified as "no data" or "student not enrolled in Fall of 1994" on the verification form), but the IC indicated a value was actually available or the student was actually enrolled. Errors of commission were identified when the CADE item contained data, but the IC indicated the keyed value was incorrect.

It can be seen in Table VI.C.2 that types of errors observed do not appear to vary by method of abstraction. For each item except Citizenship, the "direction" of errors (that is, whether errors of omission or errors of commission were more prevalent for a variable) is the same under both abstraction methods. In the case of Citizenship, even though the "direction" of the errors is opposite for the two abstraction methods, so few cases were in error that no significance can be attached to these results.

Table VI.C.2 also reveals that the highest number of errors of commission occurred for the Total Tuition Charges and Total Financial Aid Received items. For the CADE verification analyses, items were only considered to be in agreement if the IC reported that the value was Correct. Inspection of the data revealed that 43 percent of the total errors of commission, and 75 percent of the Field CADE errors of commission, were within 8 percent of the amount provided by the IC on the verification form for Total Tuition Charges. Similarly, 27 percent of the total errors

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<sup>1</sup> Ten of the 65 institutions did not have an explicitly-named Fall term, although seven of the ten had a term that began in September of 1994 and the other three had terms that started in August, 1994 and ended in December, 1994.

of commission, and 33 percent of the Field CADE errors of commission, were within 7 percent of the value provided by the IC for Total Financial Aid Received . Several entries in each category were within \$25, and some varied by only \$1.

**D. Pell Matching Results**

Following the CADE data collection, the field test sample undergraduate students for whom a social security number was obtained were matched against the Department of Education Pell File, which includes one or more records for each Pell Grant recipient or awardee. While no analyses were conducted comparing CADE-reported versus actual Pell amounts, comparisons were made between CADE-reported and actual Pell recipient status. These comparisons, presented in Table VI.D.3, were made by Type of Institution and Overall. Comparisons were also made by Method of Abstraction, for which no differences were found and therefore are not presented in this report.

The Pell Match data were analyzed by constructing a series of 2 X 2 contingency tables for each domain of interest. Cells of the contingency tables were:

(a) Recipient In Pell File but Not Pell Recipient in CADE (CADE False Negatives)	(b) Recipient in Pell File and Pell Recipient in CADE
(c) Not Recipient In Pell File and Not Pell Recipient in CADE	(d) Not Recipient in Pell File but Pell Recipient in CADE (CADE False Positives)

The Phi ( $\Phi$ ) Coefficient was calculated for each of the combinations of institution level and control presented in Table VI.C.3. Phi measures the magnitude of "agreement" in Pell recipient status between the Department of Education Pell File (considered to be the definitive source for this data item) and CADE. Phi is calculated as:

$$\Phi = (bc - ad) / \text{sqrt}[(a+b)(c+d)(a+c)(b+d)]$$

The level of agreement between CADE and the Pell file was quite good, with an overall Phi coefficient of .879. However, the most striking finding from this analysis was relatively low value of Phi in the For Profit, Less Than 2 Year institution sector ( $\Phi=.516$ ). Even more intriguing, the Phi value of .932 in the For Profit, 2 Year or More sector is nearly the highest observed.

The primary source of "disagreement" in the For Profit, Less Than 2 Year sector was a large number of CADE False Positives. According to CADE, 148 students received a Pell grant. However, only 89 of these 148 students were found on the Pell file. No other sector was observed to have had such a dramatic Pell False Positive rate.

A more detailed investigation of this finding has not yet been performed. However, one can conceive of possible explanations for this result. For example, since the For Profit, Less Than 2 Year institutions generally use "rolling admissions" in accepting students, it is possible that some of the Pell grants reported in CADE had been awarded late in the NPSAS year. And, since the Dept. of Ed. Pell file is a payment-level file, it is also possible that the relatively late payments of the Pell grants may not have been reflected in the Pell file used for these analyses. Further investigation will be conducted prior to performing the Pell file match for the full scale study.

**Table VI.D.1—Results of Matching CADE Data Against the Department of Education Pell File, by Type of Institution**

Institution Type Control Level		Number of Undergraduates With Valid SSN <sup>a</sup>	Number of Undergraduates With Pell Data in the Dept. Of Ed. Pell File	Number of Undergraduates With Pell Data in CADE	Number of Undergraduates With Pell DATA in Both CADE and the Dept. Of Ed. Pell File	Number of Undergraduates With No Pell Data in Either CADE or Dept. Of Ed. Pell File <sup>b</sup>	Φ Coefficient
<b>Total</b>	<b>Total</b>	<b>2,524</b>	<b>962</b>	<b>1,041</b>	<b>927</b>	<b>1448</b>	<b>.879</b>
<b>Public</b>	<b>Total</b>	<b>1,223</b>	<b>477</b>	<b>489</b>	<b>461</b>	<b>718</b>	<b>.925</b>
	<b>Less than 2 years</b>	<b>163</b>	<b>76</b>	<b>78</b>	<b>72</b>	<b>81</b>	<b>.877</b>
	<b>2-3 Years</b>	<b>296</b>	<b>125</b>	<b>128</b>	<b>121</b>	<b>164</b>	<b>.924</b>
	<b>4 or More Years</b>	<b>764</b>	<b>276</b>	<b>283</b>	<b>268</b>	<b>473</b>	<b>.935</b>
<b>Private Not Profit</b>	<b>Total</b>	<b>854</b>	<b>281</b>	<b>294</b>	<b>270</b>	<b>549</b>	<b>.909</b>
	<b>Less then 4 Years</b>	<b>240</b>	<b>101</b>	<b>108</b>	<b>97</b>	<b>128</b>	<b>.875</b>
	<b>4 or more Years</b>	<b>614</b>	<b>180</b>	<b>186</b>	<b>173</b>	<b>421</b>	<b>.922</b>
<b>Private For Pffofit</b>	<b>Total</b>	<b>447</b>	<b>204</b>	<b>258</b>	<b>196</b>	<b>181</b>	<b>.711</b>
	<b>Less then 4 Years</b>	<b>213</b>	<b>92</b>	<b>148</b>	<b>89</b>	<b>62</b>	<b>.516</b>
	<b>4 or more Years</b>	<b>234</b>	<b>112</b>	<b>110</b>	<b>107</b>	<b>119</b>	<b>.932</b>

<sup>a</sup> A valid Social Security number was required in order to match records against the Pell file.

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## **VII. Recommendations for the Full-Scale Study**

The NPSAS:96 field test was successful in providing useful information with respect to planning for the full scale study. While many aspects of the survey design and instrumentation worked quite well, some field test outcomes and evaluation results, documented in Chapters III through VI of this report, justify procedural and substantive modifications to the full scale survey implementation. These recommended changes were presented in the preceding chapters, under the applicable topic, and are summarized below by major area.

### **A. Institutional Sample Selection**

Comparative evaluations of the 1-stage (unclustered) versus 2-stage (clustered) institutional designs were conducted using data from NPSAS:93 and from the NPSAS:96 field test survey. The results of these evaluations showed that the 1-stage design would yield more analytic precision for estimates of important subpopulations, while the cost of implementing both designs were virtually the same. Consequently, the 1-stage institutional sample is recommended for the full scale NPSAS:96 study.

### **B. Downloading SAR Data from the Central Processing System (CPS)**

The NPSAS:96 field test represented the first attempt to match sampled students at each sample institution against the CPS files and electronically download SAR data for the student aid applicants. This procedure proved quite effective, both in obtaining higher quality data (by avoiding transcription errors typically experienced in on-site data entry from school records) and in reducing costs associated with in-field data abstraction. Further, by reducing the burden on institutions associated with abstracting these data, it enhanced participation and timeliness of the institutional data collection component of the study. Therefore, it is recommended that the CPS data files be accessed for the full-scale study.

### **C. CADE**

The CADE software and collection procedures proved highly effective in the field tests, with very few exceptions. Debriefings conducted with institutional and field staff involved in abstracting the student record information and entering it into the CADE software suggested a few areas in which improvement is feasible and recommended. Specifically, to better compensate for the lack of formal training of institutional staff at self-CADE schools, improvements of the CADE Users' Guide and enhancement of help screens are recommended. Additionally, it is recommended that the institutional term list be built in advance of data collection (through early contact with the institutional coordinator) and preloaded into CADE to avoid having to construct this term list after receiving the software.

Another set of recommendations stems from the apparent inability to locate and collect teaching/research assistantship data for graduate students at field test institutions. Several changes are recommended, including: obtaining better information beforehand on where this information is kept at the institution, emphasizing this issue in training materials and during training, and enhancing on-line help (e.g., adding help screens pointing out that these assistantships should be considered financial aid and not simply jobs).

**D. CATI Training**

Information obtained from quality circle meetings with telephone interview staff, qualitative monitoring of telephone interviews, and examination of problem sheets completed by interviewers after completing an interview, all point to the need for more training on the student and parent interviews, generally, and on the SIC/SOC coding items, in particular. Consequently, recommended changes include adding four hours to the current two-day NPSAS training session for interviewers and conducting training in smaller groups (not to exceed 25 interviewers per session). Also, improved training materials and on-line help for the full scale CATI interviews is recommended.

**E. CATI Student and Parent Interviews**

Major revisions are recommended for both the Student and Parent CATI interview based on (1) examination of field test reinterview results, (2) examination of item indeterminate data, (3) results of timing analyses, (4) quality circle debriefings with telephone interviewers and supervisors, and (5) discussions with members of the study Technical Review Panel. Recommended changes pertain to deleting items (with and without substitution of alternative items), revising items, changing the logic specifying which groups of students are appropriate for particular item(s). For example, among the items recommended for deletion are expenses for rent, food, etc., since field test data (as well as data from other studies) indicate that this information cannot be accurately and reliably obtained from student reports. Also, questions dealing with filing federal tax returns will be deleted from the full scale, as will lengthy item sets asking respondents to rate each in terms of its importance to their career. Recommended item revisions, to increase clarity of the questions or the appropriateness of response option, are too numerous for inclusion in this report but will enhance the quality of data obtained through the full scale student and parent interviews.

**F. Student Guide**

A copy of the "Student Guide", a government publication containing information about federal student aid programs and how to apply for them, was included with the student prenotification mailout materials for half of the field test sample. It was hypothesized that students who received the Student Guide would be more likely to complete the subsequent CATI interview than those who did not. However, no differences were obtained in the response rates for both groups. Therefore, eliminating the Student Guide from the prenotification mailing to students in the full scale study is recommended.

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# Appendix A

Institutional and Student/Parent Notification Materials





U. S. DEPARTMENT OF EDUCATION  
OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT

NATIONAL CENTER FOR EDUCATION STATISTICS

**[PAST PARTICIPANT]**

Dear Chief Administrator:

Thank you for your past participation in the National Postsecondary Student Aid Study!

Your institution has been selected to participate in the field test for the 1996 National Postsecondary Student Aid Study (NPSAS:96), conducted for the U.S. Department of Education. Institutions that participate in the field test will not be asked to participate in the full-scale study in 1996. Please appoint a NPSAS Coordinator for your institution to help provide information for the field test. Because your previous NPSAS Coordinator is familiar with the study, we ask that you appoint the same person, if possible, and provide the information on the enclosed reply sheet.

The person you appoint as NPSAS Coordinator will be asked to send the enrollment lists/files for all students enrolled in 1994-95 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 field test conducted in 1995, the National Center for Education Statistics (NCES) will test procedures planned for the full-scale study. The field test sample will include approximately 65 institutions, 3,000 students, and 300 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 RTI Educational Analyst, Elizabeth Becker (1-800-334-8571) at RTI or the NCES Project Officer, Drew Malizio at 202-219-1448.

Thank you for your continued cooperation and prompt return of the enclosed reply sheet.

Sincerely,

Emerson J. Elliott  
Commissioner



U. S. DEPARTMENT OF EDUCATION  
OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT

NATIONAL CENTER FOR EDUCATION STATISTICS

**[NEW PARTICIPANT]**

Dear Chief Administrator:

Your institution has been selected to participate in the field test for the 1996 National Postsecondary Student Aid Study (NPSAS:96), a major nationwide study on how students and their families finance education after high school, conducted for the U.S. Department of Education. I am asking that you appoint a NPSAS coordinator for your institution, and provide the information on the enclosed reply sheet. Your institutions's participation in the field test is very important to the continued success of this study. Institutions participating in the field test will not be asked to participate in the full-scale study in 1996.

The first NPSAS was conducted during 1986-87. The second and third cycles of NPSAS, completed during 1989-90 and 1992-93, enhanced the basic data collected in NPSAS:87 to more fully meet 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 field test conducted in 1995, the National Center for Education Statistics (NCES) will test procedures planned for the full-scale study. The field test sample will include approximately 65 institutions, 3,000 students, and 300 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.

The person you appoint as coordinator of the study will be asked to send the enrollment lists/files for all students enrolled in 1994-95 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. Please select the coordinator based on your institution's organization and method of recordkeeping. 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, Elizabeth Becker (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,

Emerson J. Elliott  
Commissioner

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) field test. We would like to thank you for your participation in this important study. 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 the field test in 1995, NCES will test procedures planned for the full-scale study.

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 every three years.

Enclosed for your information is the packet of materials that was sent to the Chief Administrator of your institution. These materials discuss the background of NPSAS, as well as information on the purposes and processes of NPSAS:96. Information from institutions will be gathered in two stages. The first step is to obtain enrollment files 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 detailed 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 a data-preparation person or a computer programmer. To assist you as Coordinator, the following items are enclosed:

- A Coordinator Information Sheet explaining 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.

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 postpaid 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, to discuss 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 Elizabeth Becker at 1-800-334-8571. Thank you again for your cooperation.

Sincerely,

John Riccobono, Ph.D.  
Project Director  
Research Triangle Institute



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## STUDY SUMMARY

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The National Center for Education Statistics (NCES), part of the U.S. Department of Education, is authorized by federal law to collect, analyze, and publish statistics and other data related to education in the United States and in other nations. As part of its program, NCES periodically conducts the National Postsecondary Student Aid Study (NPSAS), a comprehensive study of students enrolled in less-than-two-year institutions, community and junior colleges, 4-year colleges, and major universities in the United States and Puerto Rico. Undergraduate and graduate students who receive financial aid, as well as those who do not receive aid, participate in NPSAS.

NPSAS:96 will be conducted during 1995-96, with the field test occurring during 1994-95. NPSAS:96 will update student financial aid information, provide a more recent basis for comparison of trends in student financial aid, and examine how families pay for postsecondary education. In addition, NPSAS:96 will provide baseline data for a longitudinal cohort of about 16,000 first time beginning students. NCES plans to follow this cohort at 2-year intervals to examine issues such as persistence, attainment, and other education outcomes.

Preliminary data analyses for NPSAS:93 indicate that:

- About 40 percent of the 18.5 million undergraduates enrolled in 1992-93 received some type of financial aid, averaging about \$4,300 per student. Amounts varied considerably depending on the type of institution that students attended.
- About 35 percent of the 2.7 million graduate and first professional students enrolled in 1992-93 received some type of financial aid, averaging about \$9,100 per student. Amounts of aid awarded varied considerably depending on the type of institution and type of student program.

NPSAS:96 will include both a field test and a full-scale study. The field test will be conducted to refine the design and data collection procedures for NPSAS:96. This field test will involve approximately 65 postsecondary institutions, 3,000 students, and 250 parents.

For the full-scale study, the sample will involve about 60,000 students selected from enrollment lists at 850 postsecondary institutions. The field test will include the following series of events:

- 1) Chief administrators at postsecondary institutions name coordinators to work with Research Triangle Institute (RTI) on NPSAS:96.
- 2) RTI contacts coordinators (by mail and phone) to solicit cooperation and explain responsibilities.
- 3) Coordinators supply RTI with enrollment lists of students.
- 4) RTI selects a sample of students from enrollment lists.
- 5) Coordinators, or their designees, supply locating, demographic, and academic information for the sampled students.
- 6) RTI conducts telephone interviews with sampled students and a subset of their parents.

These activities may differ somewhat according to your type of institution and method of recordkeeping. Computer software has been developed to facilitate your participation in the data-gathering phase and to minimize the burden on institutional staff. We believe that this software is user-friendly; however, field staff will be available for assistance.

**HOW THE STUDY WILL BE  
CONDUCTED**

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## **CONFIDENTIALITY ISSUES**

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During 1996, the fourth cycle of NPSAS will be conducted on behalf of the National Center for Education Statistics of the U.S. Department of Education (NCES). Research Triangle Institute, as contracted by NCES, has been given the authority to collect information from institutional records under the provisions of the Family Education Rights and Privacy Act of 1974 (FERPA) (20 U.S.C. 1232g). FERPA allows the release of institutional record information to the Secretary of Education or his agent without prior consent of survey members [20 U.S.C. 1232g (b) (3)]. Since the National Center for Education Statistics is an authorized representative of the Secretary of Education, compliance with NCES's official request for information constitutes compliance with section 406(g) of the General Education Provisions Act.

A plan for ensuring confidentiality of this project has been developed by NCES and Research Triangle Institute. This plan includes signed confidentiality agreements obtained from all personnel who will have access to individual identifiers, personnel training regarding the meaning of confidentiality, and controlled access to computer files. More detail on protecting electronic and hardcopy data is provided below.

Strict confidentiality of all information obtained from NPSAS is assured by current federal laws and regulations. The National Education Statistics Act of 1994 (P.L. 103-382) establishes that all records on individuals must be kept confidential by NCES and its contractors under penalty of law. Researchers are subject to fines and imprisonment for misuse or disclosure of individual data. Procedures have been implemented to ensure confidentiality and privacy of all information obtained.

Specifically:

### **Protection of Electronic Files**

All electronic data from institution records and student and parent interviews will be carefully protected. Computer accounts used to access electronic data will be password protected, and only those project staff members with clearance from the study database manager will be able to logon to these accounts. Personally-identifying variables (e.g., name, address, and phone numbers) will be kept separate from data variables such as grade-point average or financial aid awards. Backups and inactive files will be maintained on tape or floppy diskette in locked storage.

### **Protection of Hardcopy Records**

All hardcopy records will be maintained in locked storage cabinets. A unique study identification variable (not the social security number or school ID) will be created and maintained for each survey participant to protect against inadvertent disclosure of confidential data.

### **Preparation of Data for Public Release**

Any data released to the general public (for example, statistical tables) will be tailored so that it is not possible to identify specific individuals or institutions.

## SCHEDULE

Data collection for the field test will begin with the contacting of postsecondary institutions in December, 1994. Telephone interviewing of students and parents will begin in spring, 1995. Similarly, the full scale study will involve continuing contacting institutions in December, 1995 and interviewing students and parents beginning in spring, 1996.

## ENDORSEMENTS

American Association of Collegiate Registrars and Admissions Officers  
American Association of Community Colleges  
American Association of State Colleges and Universities  
American Council on Education  
Career College Association  
Council of Graduate Schools  
The College Board  
National Accrediting Commission of Cosmetology Arts and Sciences, Inc.  
National Association of College and University Business Officers  
National Association of State Universities and Land-Grant Colleges  
National Association of Student Financial Aid Administrators  
National Institute of Independent Colleges and Universities

## BASIC ISSUES

NPSAS:96 will address such questions as:

- What are the costs to students and their families for obtaining a postsecondary education and how have these costs changed?
- How do students and families pay for postsecondary education?
- Why do some students receive more financial aid than other students from apparently similar backgrounds?
- How much have students and families borrowed to pay for postsecondary education?
- What are the family characteristics of aided and non-aided students?
- How do aided and nonaided students compare on total resources available for education and other expenses?
- How do costs and financial aid influence students' choices of schools and majors?
- How have costs and financial aid packages changed over the years?
- Why do some students and families not apply for financial aid?
- How is financial aid related to the academic performance and persistence of first-time entering students?

## DATA ANALYSIS AND DISSEMINATION

To make the data as useful as possible, NCES will publish information in several ways:

- descriptive reports on selected topics
- special tabulations
- data files
- conferences on study findings

**FOR MORE INFORMATION**

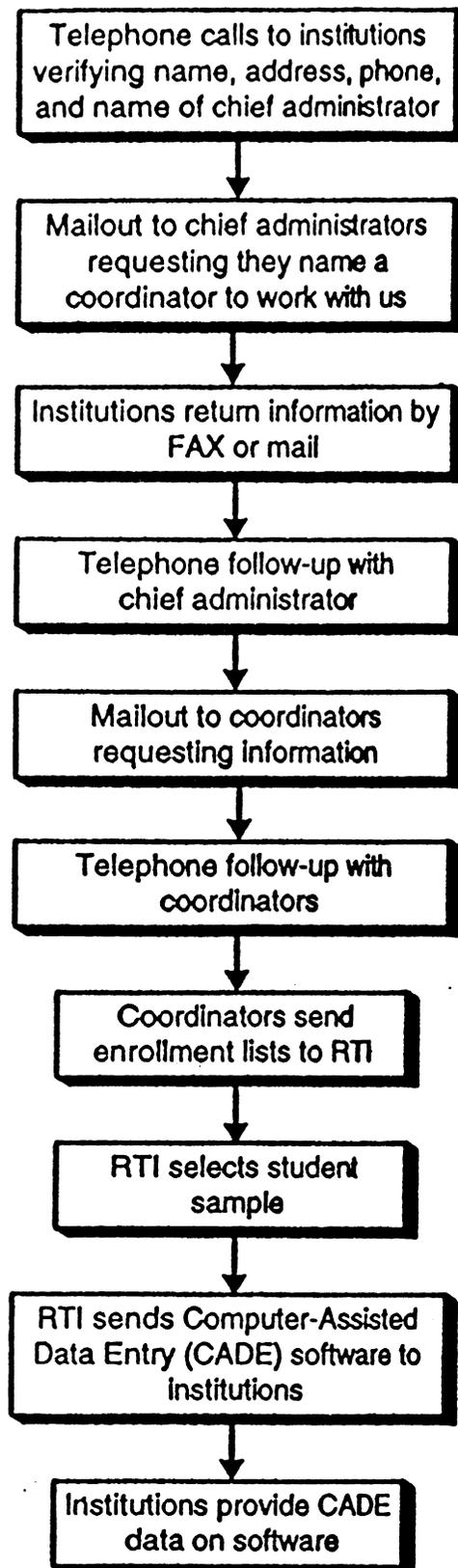
Please contact:

Education Analyst  
Ms. Elizabeth Becker (1-800-334-8571) or  
Becker@RTI.ORG

RTI Project Director  
Dr. John Riccobono (1-800-334-8571)

If you have additional questions, please call the NCES Project Officer,  
Dr. Drew Malizio at (202) 219-1448.

# NPSAS:96 Institutional Contacting and CADE Data Abstraction



**National Postsecondary Student Aid Study: 1996  
Field Test and Full-Scale Study  
General Summary**

During 1995 and 1996, the National Center for Education Statistics (NCES) will conduct the fourth cycle of NPSAS, a major study on how students and their families finance education after high school. The National Education Statistics Act of 1994 authorizes NCES to conduct this study in response to the continuing need for the data provided by NPSAS.

**Schedule**

Activity	Date
<b>Field Test</b>	
Initiate contacts with institutions to request enrollment lists	Winter and Spring, 1995
Select student sample	Spring, 1995
Collect data abstracted from student financial aid records	Spring, 1995
Conduct telephone interviews of students and parents	Summer, 1995
Process data, construct data files, prepare field test report	Fall, 1995 - Fall, 1996
<b>Full-Scale Study</b>	
Initiate contacts with institutions to request enrollment lists	Winter and Spring, 1996
Select student sample	Spring, 1996
Collect data abstracted from student financial aid records	Spring and Summer, 1996
Conduct telephone interviews of students and parents	Spring and Summer, 1996
Process data, construct data files, prepare reports	Summer, 1996 - Spring 1998

**Burden**

The time required to complete this information collection is estimated to average 11.5 hours per institution, including the time to review instructions, search existing data resources, gather and maintain the data needed, and complete and review the information collection. **If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving the data collection procedure, please write to:**

Information Management and Compliance Division  
U.S. Department of Education  
600 Independence Avenue, SW  
Washington, DC 20202-4651

**If you have any comments or concerns regarding your institution's submission of the data, write directly to:**

Andrew Malizio  
U.S. Department of Education  
National Center for Education Statistics  
555 New Jersey Avenue, NW  
Room 130G/OMB  
Washington, DC 20208-5652

## **Agency and Association Endorsements for the 1996 National Postsecondary Student Aid Study**

American Association of Collegiate Registrars and Admissions Officers

American Association of Community Colleges

American Association of State Colleges Universities

American Council on Education

Career College Association

Council of Graduate Schools

The College Board

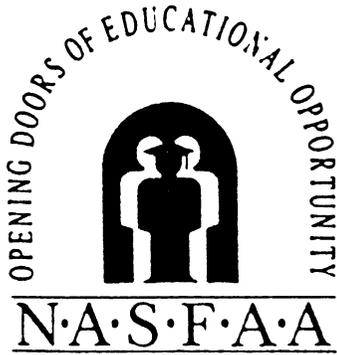
National Accrediting Commission of Cosmetology Arts and Sciences, Inc.

National Association of College and University Business Officers

National Association of State Universities and Land-Grant Colleges

National Association of Student Financial Aid Administrators

National Institute of Independent Colleges and Universities



December 1994

Dear Colleague:

We are writing to request that you take the time to participate in the field test for the 1996 National Postsecondary Student Aid Study (NPSAS), the major study on student financial aid. NPSAS is sponsored by the National Center for Education Statistics of the U.S. Department of Education, and will be conducted by Research Triangle Institute.

The purpose of NPSAS is to obtain information about student financial aid. The data collected will provide information on the cost of postsecondary education, the distribution of financial aid, and a profile of both aided and non-aided students and their families. Past NPSAS studies have made a valuable contribution to the education community by informing numerous policy debates with reliable data and analysis.

Please note that NPSAS information is used for research purposes only. The privacy and confidentiality of all data will be maintained according to the highest standards. In addition, institutions that agree to participate in the 1995 field test will be exempted from the main study in 1996.

Your cooperation and assistance will be greatly appreciated.

Sincerely,

Dallas Martin  
President



# American Association of Collegiate Registrars and Admissions Officers

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One Dupont Circle, NW • Suite 330 • Washington, DC 20036-1171  
(202) 293-9161 • FAX (202) 872-8857

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### Assistant Executive Director

Cecilia A. Balazs

1995 Annual Meeting  
April 16-19, 1995  
Indianapolis, Indiana

1996 Annual Meeting  
April 14-18, 1996  
Reno, Nevada

December 1994

Dear Colleague:

The Department of Education is currently conducting the National Postsecondary Student Aid Study (NPSAS) to gather reliable and objective data on how students and their families finance education after high school. The study is being conducted for the Department of Education by the Research Triangle Institute in North Carolina. Since the Institute is contracted by the Department of Education to act on its behalf, the data collection is permitted under the Family Education Rights and Privacy Act (FERPA) also known as the Buckley Amendment.

I am writing to encourage you to try to make the time available in your busy schedule to provide the information required for this study. It is only through this survey that information is gathered to assist Congress, the Administration, the states and others determine the needs of our students and implement or modify the programs that provide financial assistance.

Your cooperation and assistance in providing the information requested will be greatly appreciated.

Sincerely yours,

Nancy C. Sprotte  
AACRAO President



750 First Street, NE, Suite 900  
Washington, DC 20002-4242

(202) 336-6700  
FAX (202) 336-6828

December 7, 1994

Dear Colleague:

The Career College Association encourages you to take the time to participate in the National Postsecondary Student Aid Study (NPSAS). NPSAS is sponsored by the National Center for Education Statistics of the U.S. Department of Education and is the principal study on student financial assistance.

The purpose of NPSAS is to gather information on how families and individuals finance postsecondary education, the distribution of financial assistance, and the cost of postsecondary education. The participation of private career colleges and schools is critical for the results of this year's NPSAS to be thorough. We have been assured that the confidentiality of all information provided will be maintained according to the highest standards.

Your participation and cooperation in providing the material requested will be greatly appreciated.

Sincerely,

A handwritten signature in cursive script that reads "Stephen J. Blair".

Stephen J. Blair  
President





NATIONAL ACCREDITING COMMISSION OF COSMETOLOGY ARTS & SCIENCES

901 North Stuart Street, Suite 900 Arlington, VA 22203-1816 • (703) 527-7600 • FAX (703) 527-8811

December, 1994

Dear Colleague:

The National Accrediting Commission of Cosmetology Arts and Sciences encourages the schools, students and parents selected for the National Postsecondary Student Aid Study (NPSAS) to participate fully. This may include agreeing to interviews, filling out survey forms, and submitting other information on how students are paying for education after high school.

The Congress already has begun to debate new ways to fund students in cosmetology programs. The results may greatly reduce federal assistance to these students unless statistics and information convince Congress of the need. Your contribution to the NPSAS study, which is done for the U.S. Department of Education's National Center for Education Statistics, will result in needed data.

None of the statistics specific for a school, student or parent will be revealed, it will be confidential. Information will be used in the aggregate only, such as a general profile of students who receive federal aid and those who do not.

Your participation is valuable to continuing federal support to students in cosmetology.

Sincerely,

William Oswald  
Chair

WO:bn

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# Appendix B

Facsimile CADE Instrument

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## FACSIMILE CADE INSTRUMENT

### I. REGISTRATION/ADMISSIONS

#### A. Student Locating Information

- Question 1. Student's LOCAL phone number [area code + number]  
Student's LOCAL address  
Student's LOCAL city  
Student's LOCAL state  
Student's LOCAL zip code
  
- Question 2. Is the student's PERMANENT address same as the LOCAL address?  
[y/n]
  
- Question 3. Student's PERMANENT phone number [area code + number]  
Student's PERMANENT address  
Student's PERMANENT city  
Student's PERMANENT state  
Student's PERMANENT zip code
  
- Question 4. Is locating information available for parents of the student?  
[y/n]
  
- Question 5. LAST NAME, FIRST NAME and MIDDLE Initial of parent for whom locating information is available.

- 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
  
- Question 7. Is locating information available for a different parent at a different address?  
[y/n]
  
- Question 8. Is locating information available for a relative or friend of the student?  
[y/n]
  
- Question 9. LAST NAME, FIRST NAME and MIDDLE Initial of Question 7 *parent* or Question 8 *relative/friend* for whom locating information is available.
  
- Question 10. Relationship of Question 7 *parent* or Question 8 *relative/friend* to STUDENT.  

1. FATHER	7. AUNT
2. MOTHER	8. GRANDFATHER
3. SPOUSE	9. GRANDMOTHER
4. BROTHER	10. FRIEND
5. SISTER	11. CO-WORKER
6. UNCLE	90. OTHER (SPECIFY)

- Question 11. For parent named in question 7 or relative/friend in Question 8  
please provide:  
Phone number [area code + number]  
Address  
City  
State  
Zip code  
Country

**B. Student Characteristics**

- Question 1. Student's LAST Name  
Student's FIRST Name  
Student's MIDDLE Initial  
Student's Suffix
  
- Question 2. Student's Social Security Number
  
- Question 3. STUDENT's Date of Birth
  
- Question 4. STUDENT'S Gender
  
- Question 5. STUDENT's Driver License Number  
STUDENT's Driver License State of Issue

- Question 6. STUDENT's Marital Status (Use key below)
  - 1. Not Married (Single, Widowed, Divorced)
  - 2. Married
  - 3. Separated

If married, please also provide:

STUDENT's MAIDEN NAME  
SPOUSE's NAME
  
- Question 7. STUDENT's High School Degree (Use key below)
  - 1. High School Degree
  - 2. GED or other Equivalency
  - 3. Certificate
  - 4. No High School Degree or Certificate
  
- Question 8. Is STUDENT of Hispanic Origin ?  
[y/n]
  
- Question 9. STUDENT's Race/Ethnicity (Use key below)
  - 1. White
  - 2. Black
  - 3. American Indian/Alaskan Native
  - 4. Asian or Pacific Islander
  - 5. Other (specify)
  
- Question 10. STUDENT's Citizenship (Use key below)
  - 1. U.S. Citizen or U.S. National
  - 2. Federal Aid-eligible non-citizen
  - 3. Other
  
- Question 11. STUDENT's Cumulative GPA (for the courses taken at this institution)

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**C. Admissions Information**

- Question 1. STUDENT's SAT Verbal Score  
STUDENT's SAT Math Score  
YEAR SAT taken
  
- Question 2. STUDENT's COMPOSITE ACT Score  
YEAR ACT taken
  
- Question 3. STUDENT's GRE Verbal Score  
STUDENT's GRE Math Score  
STUDENT's GRE Analytic Score  
YEAR GRE taken
  
- Question 4. If available, provide the SCORE(s) and YEAR TAKEN for the following tests:

Undergraduate Tests

ASSET  
CPAT  
CPP  
P.A.R  
PSAT  
TABE  
TALS (Form A or B)  
WONDERLIC (Scholastic Level)  
WONDERLIC (Personnel Level)  
TOEFL  
Other Test (specify)

Graduate Tests

DAT  
GMAT  
LSAT  
MCAT  
Miller's Analogies  
Other Test (specify)

## II. ENROLLMENT/TUITION SECTION

### A. Enrollment Sub-Section [MUST BE COMPLETED BEFORE TUITION SUB-SECTION]

- If student was enrolled in a course for credit during the study period, list all terms for which the student was enrolled and provide the following information for each term:

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]  
 Type of Term (Use key below):  
     1=Semester  
     2=Quarter  
     3=Trimester  
     4=Mini-Term  
     5=Other

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]

- Question 1. During [ FIRST TERM ENROLLED], in what type of degree programs was this student enrolled (Use key below):

1=Associate's Degree Program (e.g., AS, AA, AAS, etc.)  
 2=Bachelor's Degree Program (e.g., BS, BA, etc.)  
 3=Certificate or Other Undergraduate Formal Award  
 4=Undergraduate Special Student (non-matriculated)  
 5=Master's Degree Programs (e.g., MA, MS, MBA, etc.)  
 6=Doctoral or First Professional Degree Program  
     (e.g., PhD, EdD, DPA, JD, MD, DDS, etc.)  
 7=Graduate Special Student (non-matriculated)

- Question 2: What is the name of the degree (e.g., AS, AA, AAS, BS, BA, MA, MS, etc.) this student was working toward during [FIRST TERM ENROLLED]?

- Question 2b. [IF Question 1=7]  
Which of the following Doctoral or First Professional degrees was the student working toward during [FIRST TERM ENROLLED]?  
(Use key below):

## DOCTORAL DEGREES

1. Doctor of Philosophy (PhD)
2. Doctor of Education (EdD)
3. Doctor of Theology (ThD)
4. Doctor of Business Adm. (DBA)
5. Doctor of Engineering (DEng)
6. Doctor of Fine Arts (DFA)
7. Doctor of Public Adm. (DPA)
8. Doctor of Science (Dsc/ScD)
9. Other Doctoral Degree

SPECIFY: \_\_\_\_\_

## 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 (DUM)
18. Law (LLB or JD)
19. Theology (M.Div., MHL, BD)

- Question 3. During [FIRST TERM ENROLLED], what was this student's level?  
(Use key below)  
1=1st Year/Freshman  
2=2nd Year/Sophomore  
3=3rd Year/Junior  
4=4th Year/Senior  
5=5th Year or Higher Undergraduate  
6=1st Year Graduate/professional  
7=2nd Year Graduate/professional  
8=3rd Year Graduate/professional  
9=Beyond 3rd Yr. Graduate/professional
  
- Question 4. During [ LAST TERM ENROLLED], in what type of degree programs was this student enrolled? (Use key below)  
1=Associate's Degree Program (e.g., AS,AA, AAS, etc.)  
2=Bachelor's Degree Program (e.g., BS, BA, etc.)  
3=Certificate or Other Undergraduate Formal Award  
4=Undergraduate Special Student (non-matriculated)  
5=Master's Degree Programs (e.g., MA, MS, MBA, etc.)  
6=Doctoral or First Professional Degree Program  
(e.g., PhD, EdD, DPA, JD, MD, DDS, etc.)  
7=Graduate Special Student (non-matriculated)

- Question 5. What is the name of the degree (e.g., AS, AA, AAS, BS, BA, MA, MS, etc.) this student was working toward during [LAST TERM ENROLLED]?
- Question 5b. [IF Question 4=7]  
Which of the following Doctoral or First Professional degrees was the student working toward during [LAST TERM ENROLLED]?  
(Use key below)

## DOCTORAL DEGREES

1. Doctor of Philosophy (PhD)
2. Doctor of Education (EdD)
3. Doctor of Theology (ThD)
4. Doctor of Business Adm. (DBA)
5. Doctor of Engineering (DEng)
6. Doctor of Fine Arts (DFA)
7. Doctor of Public Adm. (DPA)
8. Doctor of Science (Dsc/ScD)
9. Other Doctoral Degree

SPECIFY: \_\_\_\_\_

## 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 (DUM)
18. Law (LLB or JD)
19. Theology (M.Div., MHL, BD)

- Question 6. During [LAST TERM ENROLLED], what was this student's level?  
(Use key below)  
1=1st Year/Freshman  
2=2nd Year/Sophomore  
3=3rd Year/Junior  
4=4th Year/Senior  
5=5th Year or Higher Undergraduate  
6=1st Year Graduate/professional  
7=2nd Year Graduate/professional  
8=3rd Year Graduate/professional  
9=Beyond 3rd Yr. Graduate/professional
- Question 7. Has this student EVER enrolled at [THIS INSTITUTION] prior to May 1, 1994 ?  
[y/n]
- Question 7b. Was this student enrolled at [YOUR INSTITUTION] between July 1, 1993 and April 30, 1994?  
[y/n]

- Question 8. When did this student enroll at [YOUR INSTITUTION] for the FIRST time?  
[mm/yr]
- Question 9. Did this student transfer any credits from another post-secondary institution?  
[y/n]
- Question 10. Has this student completed the requirements for the [DEGREE]?  
[y/n]
- Question 11. When was the [DEGREE] awarded or if it has not yet been awarded, when will it be awarded?  
[mm/yr]
- Question 12a. What is this student's current or most recent major or field of study?  
[specify major only if school is credit-hour institution]

OR

- Question 12b. What is the name of the current or most recent program in which this student is enrolled?  
[specify program only if school is clock-hour institution]
- Question 13. What is the total length of the program in clock/contact hours?  
[specify hours only if school is clock-hour institution]
- Question 14. How many hours (lab and classroom) are required per week?  
[specify hours only if school is clock-hour institution]

**B. Tuition Sub-Section**

- Question 1a. For each of the terms in which the student was enrolled (listed at the beginning of the enrollment Sub-Section) please indicate the tuition charges associated with their attendance (prior to any waivers or discounts)

OR

- Question 1b. Please provide the TOTAL tuition charges (prior to any waivers or discounts) associated with the student's enrollment in the terms listed at the beginning of the enrollment Sub-Section.

### III. FINANCIAL AID INFORMATION

#### A. Financial Aid Awards

- Question 1. Did the student receive any financial aid for the terms/courses that started between May 1, 1994 and April 30, 1995, inclusive?  
[y/n]

IF NO, YOU HAVE COMPLETED THIS SUB-SECTION.

- Question 2. Please enter the amounts of financial aid awarded to the student within each program:

#### Federal Aid Programs

- A. Pell Grant Program
- B. Stafford Loan - Subsidized
- C. Stafford Loan - Unsubsidized
- D. Direct Loan - Subsidized
- E. Direct Loan - Unsubsidized
- F. PLUS Loan
- G. FSEOG
- H. Federal Perkins Loan
- I. FWS (Federal Work Study)

#### State Aid Programs (List up to 4 awards)

- programs
- A. Note: The names of up to four state grant/scholarship
  - B. were preloaded into CADE for each institution based on
  - C. state in which the school was located.
  - D.
- the

#### Institutional Grants and Scholarships

- programs
- A. Note: The names of up to three institution grant/scholarship
  - B. were preloaded into CADE, if the coordinator indicated
  - C. the school awarded institution grants or scholarships.
  - D. Athletic Scholarship
  - E. Tuition Waivers (employees/dependents)
  - F. Tuition Waivers (graduate assistantships)
  - G. Teaching Assistantships
- that

- H. Research Assistantships
- I. Graduate fellowships

Please also report any other financial aid received including:

1. the *name* of the award
2. the *type* of award (Use key below)
  1. Grant or scholarship
  2. Loans
  3. Work Study
  4. Assistantship
  5. Veteran Benefits
  6. Vocational Rehabilitation
  7. Tuition Reimbursement
  8. Other
3. whether the award is need or merit based
4. the source of the award (Use key below)
  1. Federal
  2. State
  3. Institution
  4. Employer
  5. Other
5. the amount of the award

## B. Need Analysis

- Question 1. Is there a financial aid budget or an EFC value for the student?  
[y/n]
- 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
- 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 Non-School-Owned (without parents)

3. Off-Campus or Non-School-Owned (with parents)

- Question 4. Please provide the Expected Family Contribution (EFC) amount for the student.
- Question 5. Is there a Cost of Attendance or Student Expense Budget available for this student?  
[y/n]
- 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

OR

Total Cost of Attendance

**C. Student Aid Report**

- 9. Student's State of Legal Residence
- 19. First Bachelor's Degree by 7/1/94 [Y/N]
- 20. Year in College in 1994-95
  - 1=1st Year, Never Attended
  - 2=1st Year, Attended Before
  - 3=2nd Year/Sophomore
  - 4=3rd Year/Junior
  - 5=4th Year/Senior
  - 6=5th Year/Other Undergraduate
  - 7=1st Year Graduate/Professional
  - 8=2nd Year Graduate/Professional
  - 9=3rd Year Graduate/Professional
  - 10=Beyond 3rd Year Graduate/Professional
- 32. Child Care Paid for How Many Children?
- 45. Born Before 1-1-71? [Y/N]

- 
- 46. Veteran of U.S. Armed Forces? [Y/N]
  - 49. Orphan or Ward of Court? [Y/N]
  - 50. Have Dependents Other than Spouse? [Y/N]
  - 51. Number of Family Members in 1994-95?
  - 52. Number in College in 1994-95?
  - 58. Type of 1993 Tax Form Used
    - 1=Completed 1040A/1040 EZ
    - 2=Completed 1040
    - 3=Estimated 1040A/1040 EZ
    - 4=Estimated 1040
    - 5=Will Not File
  - 59. Exemptions Claimed
  - 60. Adjusted Gross Income from IRS Form
  - 61. U.S. Income Tax Paid
  - 62. Student's Income Earned from Work
  - 63. Spouse's Income Earned from Work
  - 64. Annual Social Security Benefits
  - 65. Annual AFDC/ADC
  - 66. Annual Child Support Received
  - 67. Other Untaxed Income
  - 99. Cash, Savings, and Checking

- 100. Student's Other Investments Value
- 101. Student's Other Investments Debt
- 102. Student's Business Value
- 103. Student's Business Debt
- 104. Student's Farm Value
- 105. Student's Farm Debt
- 56. Number of Members in Parents' Family in 1994-95
- 57. Number in Parents' Family in College in 1994-95
- 69. Type of 1993 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
- 70. Exemptions Claimed by Parents
- 71. Adjusted Gross Income from Parents' IRS Form
- 72. U.S. Income Tax Paid by Parents
- 73. Father's Income Earned from Work
- 74. Mother's Income Earned from Work

- 75. Parents' Annual Social Security Benefits
- 76. Parents' Annual AFDC/ADC
- 77. Parents' Annual Child Support Received
- 78. Parents' Other Untaxed Income
- 107. Parents' Cash, Savings, and Checking
- 108. Parents' Other Investments Value
- 109. Parents' Other Investments Debt
- 110. Parents' Business Value
- 111. Parents' Business Debt
- 112. Parents' Farm Value
- 113. Parents' Farm Debt

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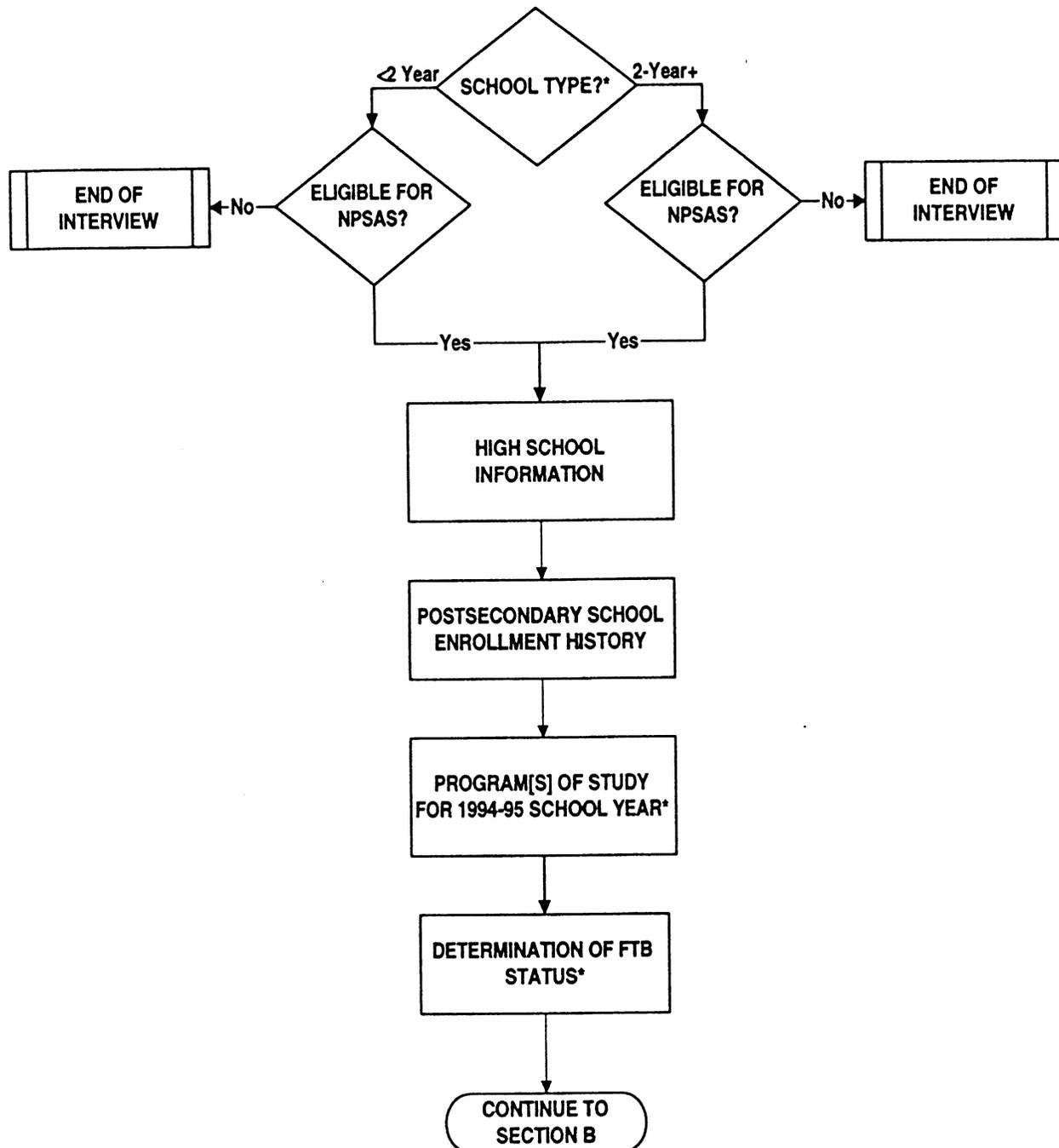
# Appendix C

Flowchart of Student Interview  
Facsimile Student and Parent Interviews

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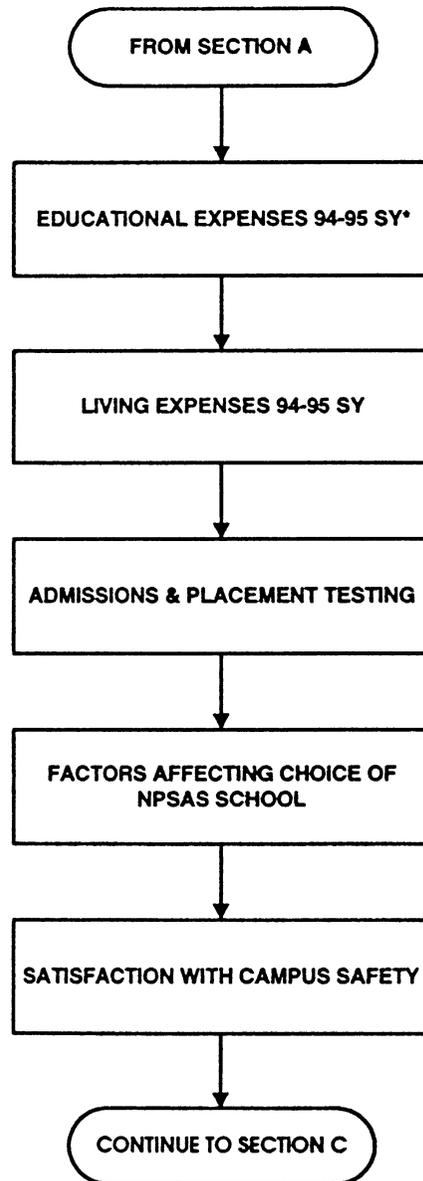


# CATI SECTION A: SCHOOL ENROLLMENT

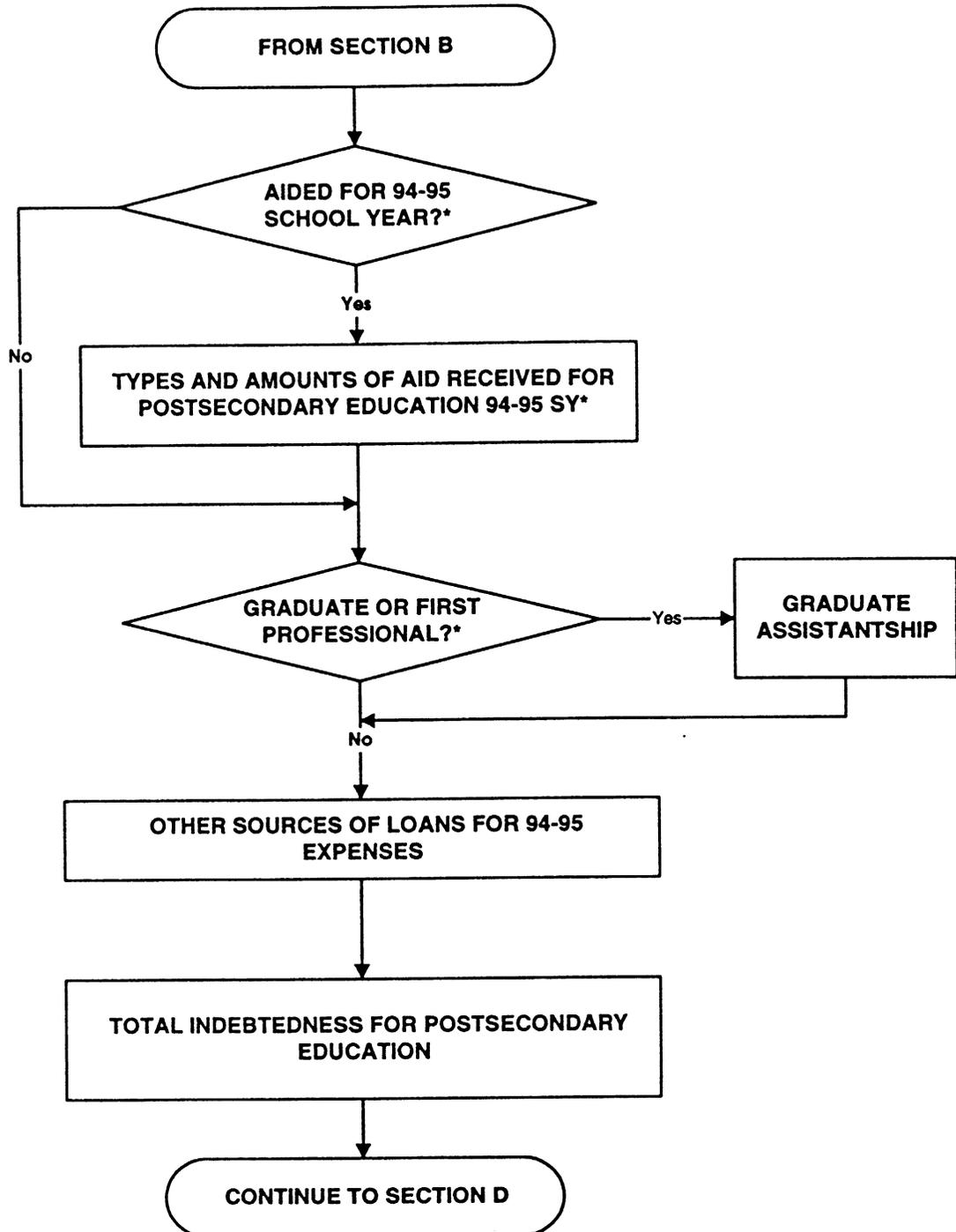


\*Some information may have been preloaded.

## CATI SECTION B: ENROLLMENT STATUS AND EDUCATIONAL EXPENSES

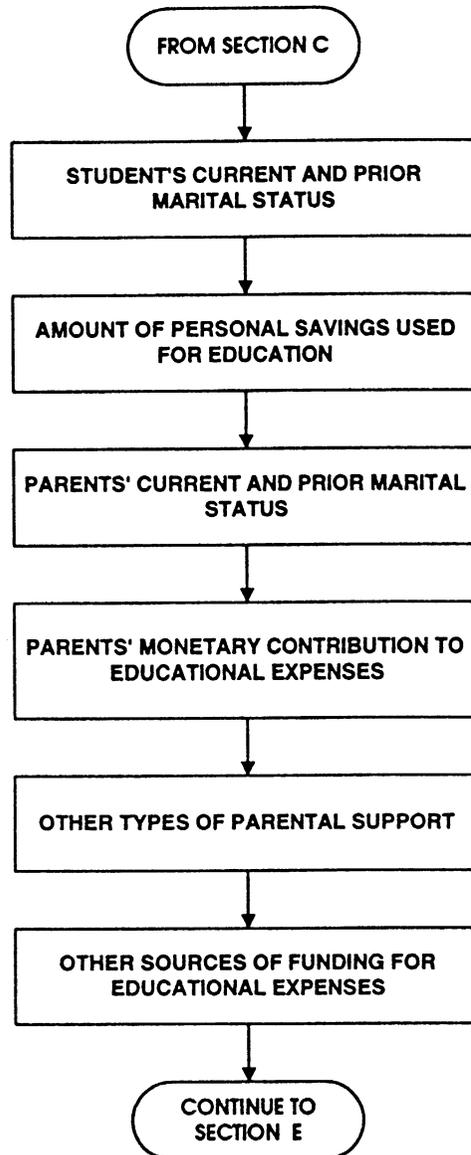


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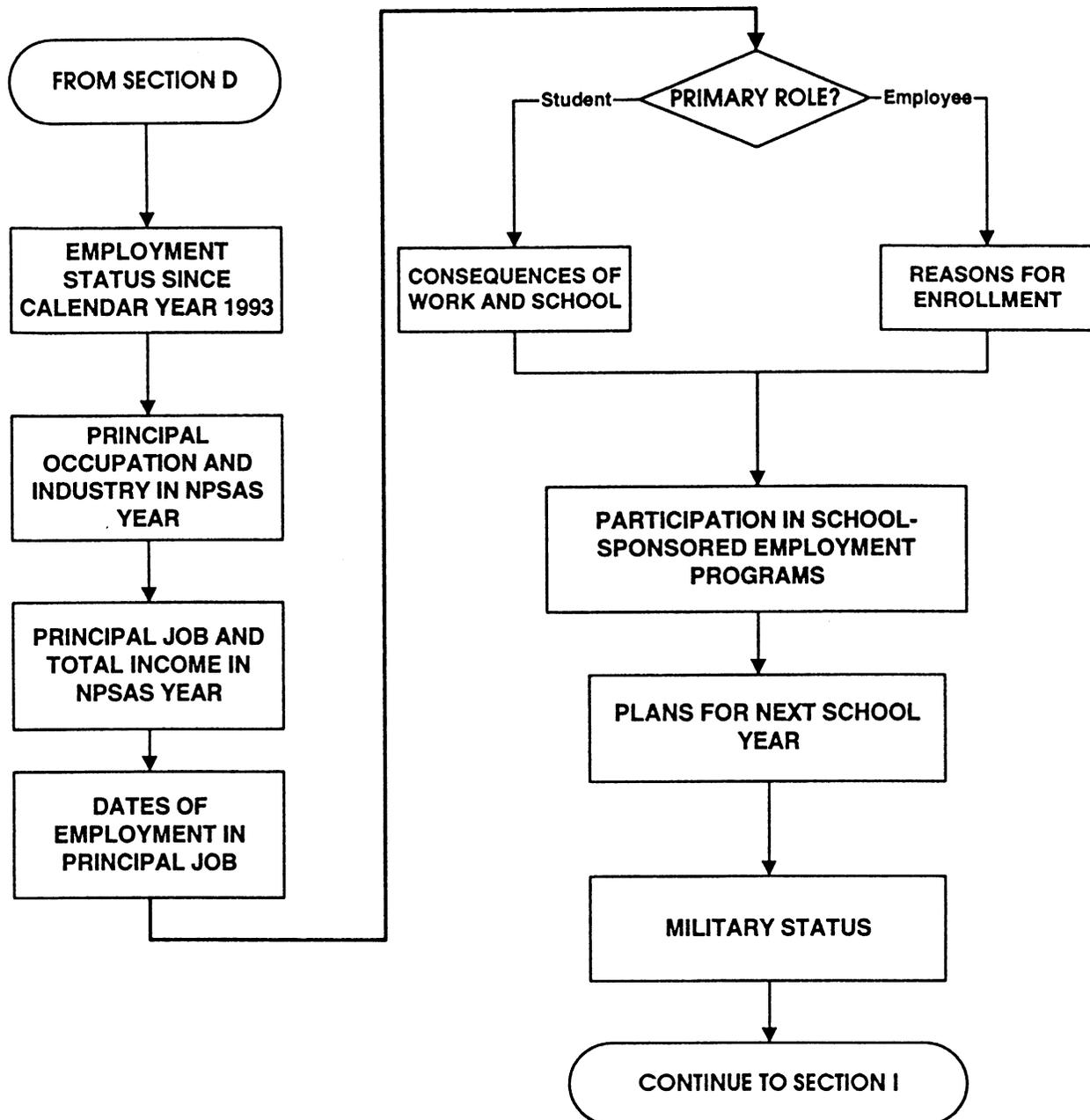
**CATI SECTION C: FINANCIAL AID**

\*Some information may have been preloaded.

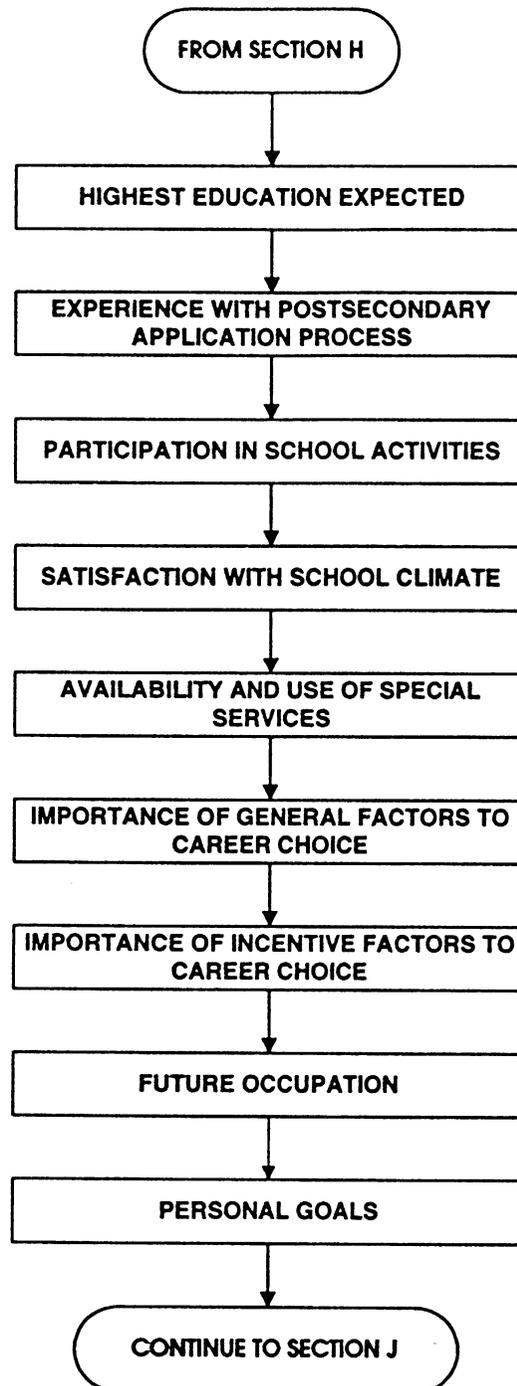
## CATI SECTION D: ADDITIONAL SOURCES OF SUPPORT



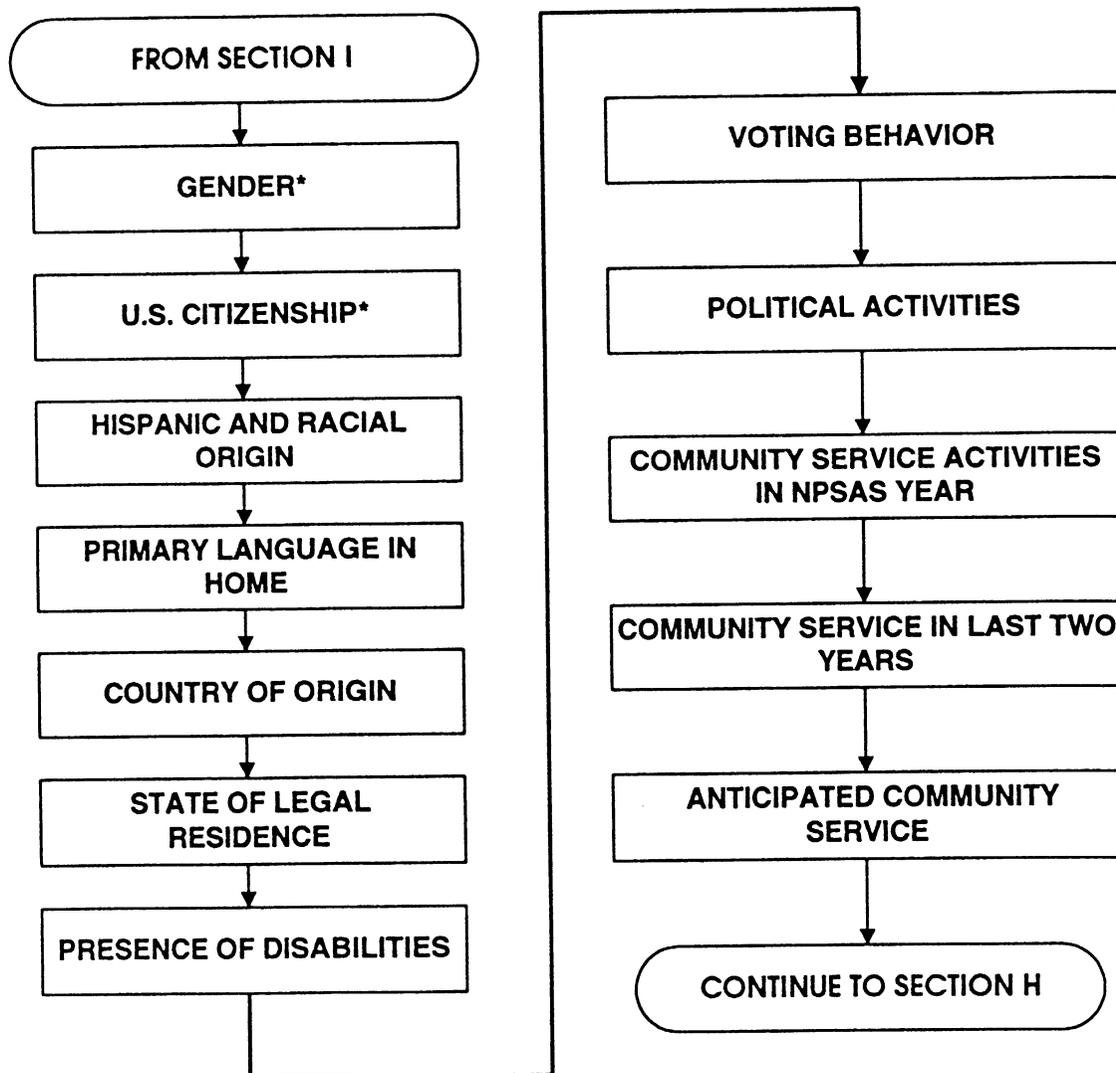
## CATI SECTION E: EMPLOYMENT



**CATI SECTION F: EDUCATIONAL EXPERIENCES AND EXPECTATIONS**

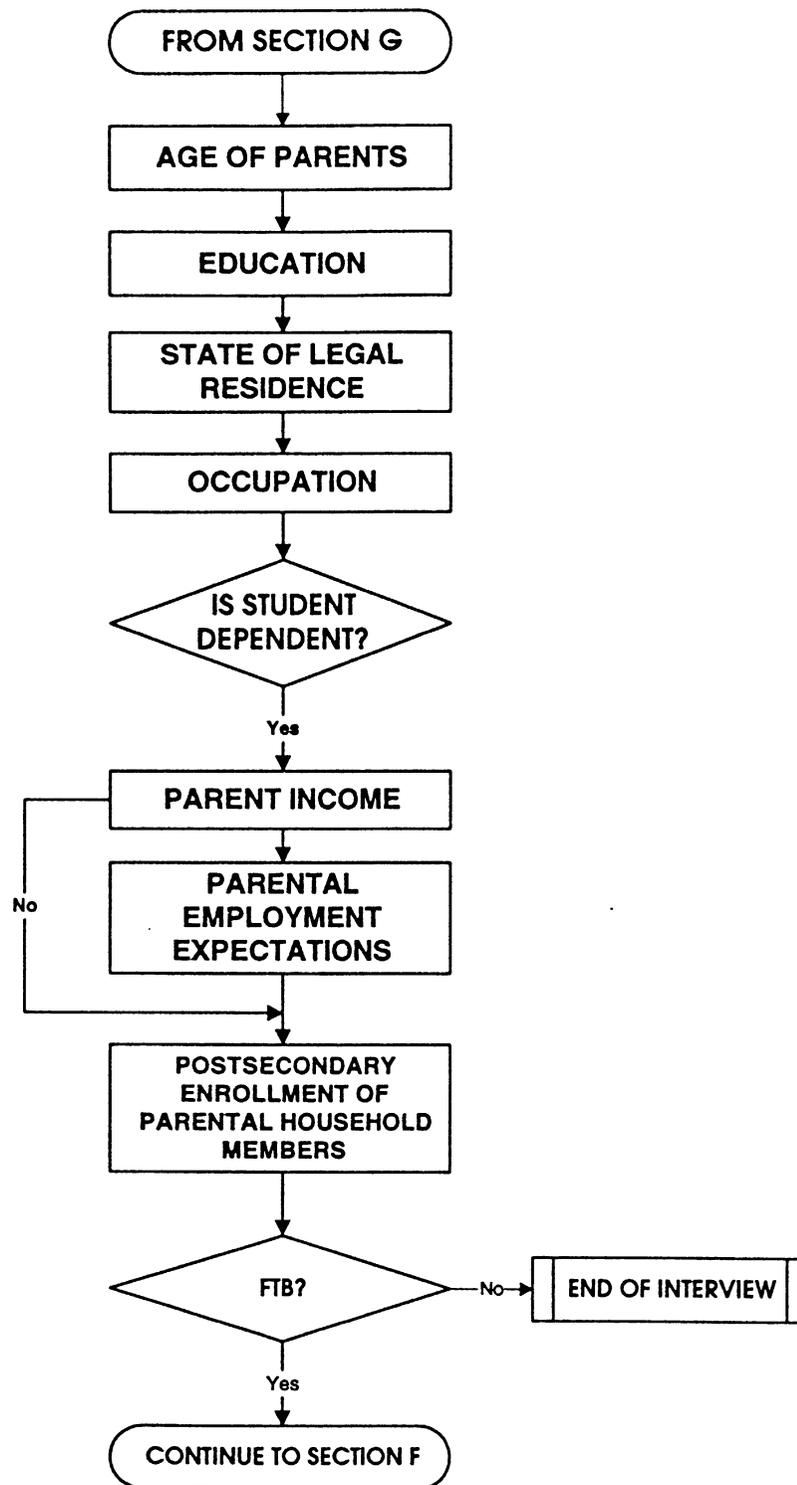


## CATI SECTION G: STUDENT DEMOGRAPHICS AND CITIZENSHIP

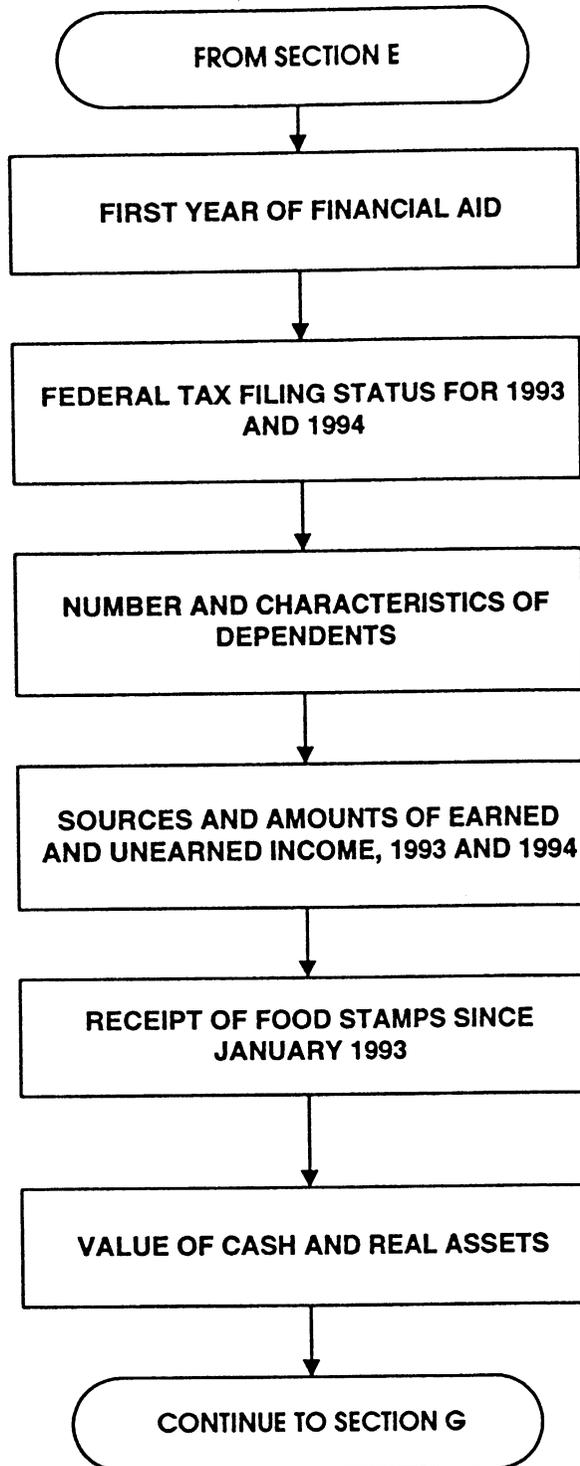


\*Some information may have been preloaded.

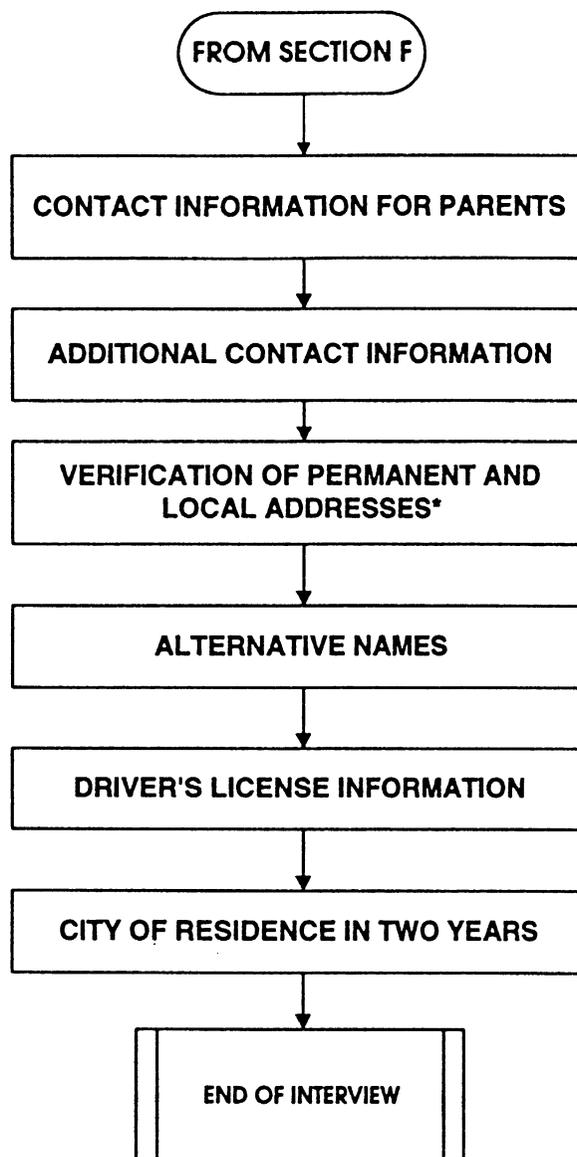
## CATI SECTION H: PARENTAL CHARACTERISTICS



# CATI SECTION I: FINANCIAL STATUS



## CATI SECTION J: LOCATING INFORMATION



\*Some information may be preloaded.

**FACSIMILE STUDENT INTERVIEW**  
**SECTION A: SCHOOL ENROLLMENT**

CATI ITEM	FTB ONLY	UG	G/1P
<p>A_CRDVER@ANS</p> <p>According to our information, you were enrolled AT [FILL SCHOOL] between July 1, 1994 and June 30, 1995. Is that correct?</p> <p>1 = YES 2 = NO</p>		X	X
<p>A_CRDVER@CK</p> <p>IF NOT ENROLLED BETWEEN JULY 1, 1994 AND JUNE 30, 1995</p> <p>Were you enrolled AT [FILL SCHOOL] between May 1, 1994 and June 30, 1994?</p> <p>1 = YES 2 = NO</p>		X	X
<p>A_ELGCRD@ELGCRD</p> <p>While you were enrolled at [fill school], were you enrolled in a program or taking courses leading to a certificate?</p> <p>1 = YES 2 = NO</p> <p>A_CK HOUR</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>		LEVEL=<2YR	
<p>A_ELGCRD@ELGDEG</p> <p>While you were enrolled at [fill 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)?</p> <p>1 = YES 2 = NO</p>		LEVEL=2YR+	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>A_ELIG3 IF NOT ENROLLED FOR CERTIFICATE, REQUIRING 300 CLOCK HOURS, OR DEGREE.</p> <p>At anytime between May 1, 1994 and June 30, 1995/July 1, 1994 and June 30, 1995, were you enrolled in a course bearing credits that could be transferred to another school?</p> <p>1 = YES 2 = NO</p>		X	X
<p>A_EXPLAI IF PREVIOUS RESPONSES MAKE RESPONDENT INELIGIBLE FOR NPSAS</p> <p>According to our records you received financial aid to attend [fill school]. Did you pay tuition to [fill school] for the 94-95 school year? 1 = YES 2 = NO</p> <p>A_EVRENR</p> <p>Have you ever attended or were you ever enrolled at [fill school]? 1 = YES 2 = NO</p> <p>A_ATTDAT</p> <p>When were you last enrolled at [fill school]?</p> <p>NOTE: TRY TO GET MONTH AND YEAR OF LAST ATTENDANCE AT THE NPSAS SCHOOL.</p> <p>MONTH: YEAR:</p> <p>A_WHYSMP</p> <p>Do you know of any reason why my information shows that you were enrolled at [fill school] at some time during the period on or after May 1, 1994?</p> <p>Based on the information you've given me, it seems you may not be eligible for this survey. After checking with my supervisor, I may need to call you back.</p> <p>Thank you for your time.</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>A_DIPLOM Did you receive...</p> <p>1 = a high school diploma, 2 = pass a General Educational Development (GED) test, 3 = or receive a certificate of high school completion granted by your state? 4 = DID NOT COMPLETE HIGH SCHOOL OR HIGH SCHOOL EQUIVALENCY PROGRAM</p>		X	X
<p>A_HSDATE When did you receive your [if a_diplom@ans eq &lt;1&gt;]high school diploma/certificate? YEAR:</p>		X	X
<p>A_HSCMP IF RESPONDENT HAS NOT COMPLETED HS OR GRADUATED IN CURRENT STUDY YEAR. Were you still completing high school requirements for the entire time you were enrolled in [fill SCHOOL] between May 1 1994 and June 30 1995?</p> <p>1 = YES 2 = NO</p>		X	X
<p>A_HSTYPE Was your high school a public or private school?</p> <p>INTERVIEWER: PROBE IF PRIVATE,</p> <p>Was it a catholic, other religious, or non religious private high school?</p> <p>1 = PUBLIC 2 = PRIVATE, CATHOLIC 3 = PRIVATE, OTHER RELIGIOUS 4 = PRIVATE, OTHER NON-RELIGIOUS</p>		X	X
<p>A_FSTSCH@SAMPSCH After high school, was [fill school] the first school you enrolled in to take courses?</p> <p>1 = YES 2 = NO</p> <p>A_FSTSCH@FRSTNAM What was the first school you ever enrolled in to take courses, after high school?</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>A_SCHSTR When did you first attend [fill school] after high school?  @MONTH / @YEAR</p>		X	X
<p>A_OTHSC1@ANS During the 94-95 school year, were you enrolled in any other schools (other than [fill school])? 1=YES 2=NO  INTERVIEWER: PLEASE ENTER THE NAME OF THE FIRST OTHER SCHOOL AND CODE THE SAME IN THE USEREXIT</p>		X	X
<p>A_OTHSC1@CLOCK At [fill @sch], were you enrolled on a clock or credit hour basis (1=CLOCK 2=CREDIT)?</p>		X	X
<p>A_OTHSC1@PGDR IF ENROLLED IN CLOCK HOUR PROGRAM How long does your certificate program typically take to complete?  1 = "0-12 MONTHS(1 yr)" 2 = "13-24 MONTHS (2 yr)" 3 = "25+ MONTHS (2+ yr)" REPEAT ITEM SET FOR EACH SCHOOL</p>		X	X
<p>A_S1UXT Next, I'll need to ask you about the dates of your enrollment during the 94-95 school year.  INTERVIEWER: PLEASE ENTER THE RESPONSES IN THE USER EXIT.  1 = ENTER THE USEREXIT 1 = RE-ENTER THE USEREXIT 2 = SKIP OVER THE USEREXIT</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p><b>A_FSTPRG</b>            What type of degree program were you enrolled in during the [R]first[N] term at [fill school] that began in [fill a_fill4],[fill a_fill14]?</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-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-MATRICULATED)</p>		X	X
<p><b>A_FSTGRD</b>            IF IN POST-BACCALAUREATE PROGRAM            What degree were you working toward in your first term at [fill school] in the 1994-1995 school year?</p> <p>Doctoral Degrees</p> <p>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 (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>			X

CATI ITEM	FTB ONLY	UG	G/1P
<p>A_FSTCRT IF IN CERTIFICATE PROGRAM</p> <p>What type of certificate were you seeking?</p> <p>1 = ANIMAL CARE                      19 = TRAVEL AGENT 2 = APPLIANCE REPAIR                20 = AIR CONDITIONING 3 = AUTOMOTIVE MECHANIC/ REPAIR                                    21 = ARCHITECTURAL 4 = BOOKKEEPING                        TECHNOLOGY/DRAFTING 5 = CHILDCARE OR EARLY               22 = BUSINESS ADMINISTRATION CHILDHOOD EDUCATION                23 = COMPUTER PROGRAMMER/ 6 = COSMETOLOGY/BEAUTICIAN/ BARBER                                    TECHNOLOGY 7 = ELECTRONICS/ELECTRICIAN        24 = HOME HEALTH AIDE 8 = FLORIST                                25 = INDUSTRIAL PLANT 9 = FOOD SERVICE                        MAINTENANCE 10 = INTERIOR DECORATING            26 = LAW ENFORCEMENT 11 = LEGAL ASSISTANT                    27 = MACHINIST 12 = MEDICAL/DENTAL OFFICE         28 = MECHANICAL DRAFTING 13 = MEDICAL/DENTAL TECHNICIAN    29 = PHLEBOTOMY 14 = MEDICAL TRANSCRIPTION        30 = PLUMBING 15 = NURSING AIDE                       31 = SURVEYING 16 = REAL ESTATE                        32 = TOOL AND DIE MAKING 17 = SECRETARIAL SCIENCE             33 = WELDING 18 = TEACHER AID 40 = NOT AVAILABLE 99 = OTHER (DO NOT SPECIFY)</p>		X	
<p>A_FSTMAJ</p> <p>What was your major, or program of study, at [fill school] during the first term in the 94-95 school year? INTERVIEWER: PLEASE ENTER THE INFO IN THE FOLLOWING SCREENS OF THE USEREXIT</p> <p>1 = RE-ENTER THE USEREXIT 2 = SKIP OVER THE USEREXIT 1 = ENTER THE USEREXIT</p>		X	X
<p>A_FSTLVU@ANS</p> <p>During the first term you were enrolled at [fill school] in the 1994-1995 school year, what was your level in the program? UNDERGRADUATE: 1 = FIRST YEAR/FRESHMAN 2 = SECOND YEAR/SOPHOMORE 3 = THIRD YEAR/JUNIOR 4 = FOURTH YEAR/SENIOR 5 = FIFTH YEAR OR HIGHER UNDERGRADUATE</p> <p>INTERVIEWER THE STUDENT IS A BEGINNING STUDENT HE/SHE CANNOT HAVE A LEVEL ABOVE 2ND YEAR. PLEASE MAKE A CORRECTION</p>		X	

CATI ITEM	FTB ONLY	UG	G/1P
<p>A_FSTLVU@FSTLVU</p> <p>By the end of your first term, had you completed the first year of your program of study?</p> <p>1 = YES 2 = NO</p>		LEVEL=<2YR	
<p>A_FSTLVG</p> <p>During the first term you were enrolled at [fill school] in the 1994-1995 school year, what was your level in the program?</p> <p>GRADUATE:</p> <p>6 = FIRST YEAR 7 = SECOND YEAR 8 = THIRD YEAR 9 = FOURTH YEAR 10 = FIFTH YEAR 11 = SIXTH YEAR 12 = SEVENTH YEAR 13 = EIGHTH YEAR 14 = NINTH YEAR 15 = BEYOND NINTH YEAR</p>			X
<p>A_GRSTDT</p> <p>In what year did you begin your graduate program?</p> <p>INTERVIEWER: WE ARE INTERESTED IN THEIR FIRST GRADUATE PROGRAM, IF THEY WENT THROUGH MORE THAN ONE</p> <p>(50-95)</p>			X
<p>A_PRGCHG</p> <p>Did your degree program, major, or level change during the 94-95 school year while attending [fill school]? If so, what changed?</p> <p>1 = YES - DEGREE PROGRAM CHANGED 2 = YES - PROGRAM OF STUDY CHANGED 3 = YES - LEVEL (I.E. FIRST YEAR, SECOND YEAR) CHANGED 4 = NO CHANGE</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>A_LSTPRG IF DEGREE PROGRAM, MAJOR, OR LEVEL CHANGED IN 94-95 SCHOOL YEAR During the last term which ended in [fill a_fill6], [fill a_fill16] [endif] (at [fill school]), what was your degree 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-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-MATRICULATED)</p>		X	X
<p>A_LSTGRD IF DEGREE PROGRAM, MAJOR, OR LEVEL CHANGED IN 94-95 SCHOOL YEAR</p> <p>Which of the following Doctoral or First Professional degrees were you working toward in your last term at [fill school] in the 1994-1995 school year?</p> <p>Doctoral Degrees</p> <p>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 (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>			X

CATI ITEM	FTB ONLY	UG	G/1P																																				
<p>A_LSTCRT IF DEGREE PROGRAM, MAJOR, OR LEVEL CHANGED IN 94-95 SCHOOL YEAR What type of certificate were you seeking (IN THE LAST TERM)?</p> <table border="0"> <tr> <td>1 = ANIMAL CARE</td> <td>18 = TEACHER AIDE</td> </tr> <tr> <td>2 = APPLIANCE REPAIR</td> <td>19 = TRAVEL AGENT</td> </tr> <tr> <td>3 = AUTOMOTIVE MECHANIC/ REPAIR</td> <td>20 = AIR CONDITIONING, HEATING, REFRIGERATION</td> </tr> <tr> <td>4 = BOOKKEEPING</td> <td>21 = ARCHITECTURAL TECHNOLOGY/DRAFTING</td> </tr> <tr> <td>5 = CHILDCARE OR EARLY CHILDHOOD EDUCATION</td> <td>22 = BUSINESS ADMINISTRATION</td> </tr> <tr> <td>6 = COSMETOLOGY/BEAUTICIAN BARBER</td> <td>23 = COMPUTER PROGRAMMER/ TECHNICIAN/SYSTEMS TECHNOLOGY</td> </tr> <tr> <td>7 = ELECTRONICS/ELECTRICIAN</td> <td>24 = HOME HEALTH AIDE</td> </tr> <tr> <td>8 = FLORIST</td> <td>25 = INDUSTRIAL PLANT MAINTENANCE</td> </tr> <tr> <td>9 = FOOD SERVICE</td> <td>26 = LAW ENFORCEMENT</td> </tr> <tr> <td>10 = INTERIOR DECORATING</td> <td>27 = MACHINIST</td> </tr> <tr> <td>11 = LEGAL ASSISTANT</td> <td>28 = MECHANICAL DRAFTING</td> </tr> <tr> <td>12 = MEDICAL/DENTAL OFFICE</td> <td>29 = PHLEBOTOMY</td> </tr> <tr> <td>13 = MEDICAL/DENTAL TECHNICIAN</td> <td>30 = PLUMBING</td> </tr> <tr> <td>14 = MEDICAL TRANSCRIPTION</td> <td>31 = SURVEYING</td> </tr> <tr> <td>15 = NURSING AIDE</td> <td>32 = TOOL AND DIE MAKING</td> </tr> <tr> <td>16 = REAL ESTATE</td> <td>33 = WELDING</td> </tr> <tr> <td>17 = SECRETARIAL SCIENCE</td> <td>40 = NOT AVAILABLE</td> </tr> <tr> <td>99 = OTHER (DO NOT SPECIFY)</td> <td></td> </tr> </table>	1 = ANIMAL CARE	18 = TEACHER AIDE	2 = APPLIANCE REPAIR	19 = TRAVEL AGENT	3 = AUTOMOTIVE MECHANIC/ REPAIR	20 = AIR CONDITIONING, HEATING, REFRIGERATION	4 = BOOKKEEPING	21 = ARCHITECTURAL TECHNOLOGY/DRAFTING	5 = CHILDCARE OR EARLY CHILDHOOD EDUCATION	22 = BUSINESS ADMINISTRATION	6 = COSMETOLOGY/BEAUTICIAN BARBER	23 = COMPUTER PROGRAMMER/ TECHNICIAN/SYSTEMS TECHNOLOGY	7 = ELECTRONICS/ELECTRICIAN	24 = HOME HEALTH AIDE	8 = FLORIST	25 = INDUSTRIAL PLANT MAINTENANCE	9 = FOOD SERVICE	26 = LAW ENFORCEMENT	10 = INTERIOR DECORATING	27 = MACHINIST	11 = LEGAL ASSISTANT	28 = MECHANICAL DRAFTING	12 = MEDICAL/DENTAL OFFICE	29 = PHLEBOTOMY	13 = MEDICAL/DENTAL TECHNICIAN	30 = PLUMBING	14 = MEDICAL TRANSCRIPTION	31 = SURVEYING	15 = NURSING AIDE	32 = TOOL AND DIE MAKING	16 = REAL ESTATE	33 = WELDING	17 = SECRETARIAL SCIENCE	40 = NOT AVAILABLE	99 = OTHER (DO NOT SPECIFY)			X	
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<p>A_LSTMAJ IF DEGREE PROGRAM, MAJOR, OR LEVEL CHANGED IN 94-95 SCHOOL YEAR What was your major (at [fill school]) during your last term in the 94-95 school year?  INTERVIEWER: PLEASE ENTER THE INFO IN THE FOLLOWING SCREENS OF THE USEREXIT  1 = RE-ENTER THE USEREXIT 2 = SKIP OVER THE USEREXIT 1 = ENTER THE USEREXIT</p>		X	X																																				

CATI ITEM	FTB ONLY	UG	G/1P
<p>A_LSTLVU@LSTLVU IF DEGREE PROGRAM, MAJOR, OR LEVEL CHANGED IN 94-95 SCHOOL YEAR.</p> <p>During the last term you were enrolled at [fill school] in the 1994-1995 school year, what was your level in the program?</p> <p>UNDERGRADUATE: [#~R LSTLVU@ANS</p> <p>1 = FIRST YEAR/FRESHMAN 2 = SECOND YEAR/SOPHOMORE 3 = THIRD YEAR/JUNIOR 4 = FOURTH YEAR/SENIOR 5 = FIFTH YEAR OR HIGHER UNDERGRADUATE</p>		X	
<p>A_LSTLVU@LSTLVU IF DEGREE PROGRAM, MAJOR, OR LEVEL CHANGED IN 94-95 SCHOOL YEAR AND ENROLLED IN CERTIFICATE PROGRAM</p> <p>By the end of your last term, had you completed the first year of your program of study?</p> <p>1 = YES 2 = NO</p>		LEVEL=<2YR	
<p>A_LSTLVG IF DEGREE PROGRAM, MAJOR, OR LEVEL CHANGED IN 94-95 SCHOOL YEAR AND ENROLLED IN GRADUATE OR FIRST PROFESSIONAL PROGRAM</p> <p>During the last term you were enrolled at [fill school] in the 1994-1995 school year, what was your level in the program?</p> <p>GRADUATE: [#~R LSTLVG@ANS</p> <p>6 = FIRST YEAR 7 = SECOND YEAR 8 = THIRD YEAR 9 = FOURTH YEAR 10 = FIFTH YEAR 11 = SIXTH YEAR 12 = SEVENTH YEAR 13 = EIGHTH YEAR 14 = NINTH YEAR 15 = BEYOND NINTH YEAR</p>			X

CATI ITEM	FTB ONLY	UG	G/1P
<p>A_CMPDGN</p> <p>Did you complete your program ((if a_elgcrd@elgdeg eq &lt;1&gt;)degree [else]certificate[endif]) at [fill school]?</p> <p>1 = YES 2 = NO</p> <p>When did you complete the program (degree/certificate) at [fill school]?</p> <p>MONTH:      YEAR:      (1-12)      (94-95)</p>		X	X
<p>A_GETDGN</p> <p>Did you receive your degree[else] certificate [endif] immediately after you completed your program?</p> <p>INTERVIEWER IF THE RESPONDENT COMPLETED THE COURSE WORK BUT DID NOT RECEIVE THE FORMAL AWARD BECAUSE OF UNPAID FINES OR OTHER NON-COURSE REQUIRMENTS THE ANSWER IS "NO".</p> <p>1 = YES 2 = NO</p>		X	X
<p>A_GETDWN</p> <p>When do you expect to receive your degree/certificate from [fill school]?</p> <p>    @MONTH      @YEAR</p> <p>INTERVIEWER THE DATE YOU ENTERED IS NOT IN THE FUTURE PLEASE CORRECT THE DATE</p>		X	X
<p>A_EXPDGN</p> <p>When do you expect to complete your degree/certificate at [fill a_ISTSnam]?</p> <p>MONTH: YEAR:</p> <p>INTERVIEWER THE DATE YOU ENTERED IS NOT IN THE FUTURE PLEASE CORRECT THE DATE</p> <p>ENTER 1 TO CONTINUE</p>		X	X
<p>A_GRDSTR</p> <p>In what year did you begin your [fill a_fill7] program?</p>			X

CATI ITEM	FTB ONLY	UG	G/1P
<p>A_TRNSFR Did you transfer to [fill school] from another school for, or at any point during, the 1994-1995 school year?</p> <p>1 = YES 2 = NO</p> <p>A_TRNCRD When you transferred to [fill school], did you attempt to transfer any credits for courses you took at the other school during the 94-95 school year?</p> <p>1 = YES 2 = NO</p> <p>A_TRNCRD Did [fill school] accept all, some, or none of the credits you wanted to transfer?</p> <p>1 = ALL 2 = SOME 3 = NONE</p>		X	X
<p>A_SCALE IF GPA SCALE NOT PRELOADED What was the scale used for GPA at [fill school]?</p> <p>1 = 0 to 4.0 2 = 0 to 5.0 3 = 0 to 10.0 4 = 0 to 100.0 5 = LETTER GRADES OR OTHER SCALE USED 6 = NO GPA GIVEN/MAINTAINED BY SCHOOL</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>A_CUMGP1 BASED ON GPA SCALE SPECIFIED.</p> <p>What was your cumulative grade point average (GPA) at [fill school]? 0.01-5.00</p> <p>What was your cumulative grade point average (GPA) at [fill school]? 0.01-10.00</p> <p>What was your cumulative grade point average (GPA) at [fill school]? 0.01-100.00</p> <p>A_CUMGPO</p> <p>IF NUMERIC GPA UNKNOWN</p> <p>What was your GPA at [fill school]?</p> <p>PROBE AS NEEDED : WOULD YOU SAY YOUR GRADES AT [FILL 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</p>		X	X
<p>A_OTHDEG</p> <p>How many other degrees or certificates have you earned from a postsecondary school? (0-10)</p>		X	X
<p>A_DONECL@EVER IF FTB STATUS NOT YET DETERMINED</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>	X		
<p>A_DONECL@MONTH/YEAR</p> <p>When did you finish your first class or course offering at a postsecondary school after high school? MONTH: YEAR:</p>	X		

CATI ITEM	FTB ONLY	UG	G/1P
A_PRVPRG Prior to May 1, 1994 but after you completed or left high school, what was the most recent year in which you attended a postsecondary school? YEAR:	X		

## Section B: Enrollment Status

CAT/ITEM	FTB ONLY	UG	G/IP
<p>B_TUITN</p> <p>How much were your total tuition and fees, (BEFORE ANY DISCOUNTS OR WAIVERS), for the entire 94-95 school year for all schools?</p> <p>0-60,000</p>		X	X
<p>B_OUTST</p> <p>ONLY ASKED IF NPSAS SCHOOL IS A PUBLIC INSTITUTION</p> <p>Did you pay out-of-state or out-of-district tuition or fees?</p> <p>1 = YES 2 = NO</p>		X	X
<p>B_PAYTUI</p> <p>Who paid the bill for your tuition and fees during the 94-95 school year?</p> <p>ENTER ALL THAT APPLY. INTERVIEWER: VERIFY YOUR CHOICE WITH THE RESPONDENT. YOU CAN ENTER UP TO 4 RESPONSES. ONE ENTRY IS MANDATORY. ENTER 0 OR HIT ENTER THROUGH EXTRA RESPONSES TO EXIT</p> <p>1 = PARENTS OR GUARDIANS 2 = STUDENT 3 = EMPLOYER 4 = OTHER INDIVIDUAL(S) OR SOURCE</p>		X	X

CAT ITEM	FTB ONLY	UG	G/IP
<p>B_ED_EXP</p> <p>For the 94-95 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 OF IT'S VALUE</p> <p>@BOOKS ...books and supplies?</p> <p>@EQUIP ...equipment, such as computers? (MICROSCOPES, TOOLS, INSTRUMENTS, OR SAFETY EQUIPMENT)</p> <p>@COMMUT ...commuting to class? (INCLUDING GASOLINE &amp; ANY BUS FARE, ETC). (DO NOT INCLUDE THE COST OF CAR INSURANCE AND MAINTENANCE.)</p> <p>@TRHOME ...other educational expenses, (such as transportation to your permanent home or dependent care while attending classes)?</p>		X	X
<p>B_RESID</p> <p>During the 94-95 school year, where did you live ?</p> <p>1 = ON-CAMPUS IN SCHOOL-OWNED HOUSING,</p> <p>2 = OFF-CAMPUS IN SCHOOL-OWNED HOUSING,</p> <p>3 = IN AN APARTMENT OR HOUSE OTHER THAN WITH YOUR PARENTS OR GUARDIANS (INCLUDING HOUSES OWNED BY FRATERNITIES AND SORORITIES),</p> <p>4 = WITH YOUR PARENTS OR GUARDIANS,</p> <p>5 = WITH OTHER RELATIVES, OR</p> <p>6 = SOME PLACE ELSE?</p>		X	X
<p>B_BRDAMT</p> <p>ONLY ASKED IF RESPONDENT LIVED IN SCHOOL-OWNED HOUSING</p> <p>For the 94-95 school year, how much did you or your family pay for your housing?</p> <p>0 - 99999</p>		X	X

CATI ITEM	FTB ONLY	UG	G/IP
<p>B_PDHSE ONLY ASKED IF RESPONDENT LIVED IN SCHOOL-OWNED HOUSING</p> <p>Who paid the bill for your room and board for the 1994-1995 school year?</p> <p>ENTER ALL THAT APPLY. INTERVIEWER: VERIFY YOUR CHOICE WITH THE RESPONDENT. YOU CAN ENTER UP TO 4 RESPONSES. ONE ENTRY IS MANDATORY. ENTER 0 OR HIT ENTER THROUGH EXTRA RESPONSES TO EXIT.</p> <p>1 = PARENTS OR GUARDIANS 2 = STUDENT 3 = EMPLOYER 4 = OTHER INDIVIDUAL(S) OR SOURCE</p>		X	X
<p>B_MEALS ONLY ASKED IF RESPONDENT LIVED IN SCHOOL-OWNED HOUSING</p> <p>Does the amount spent for your housing include a meal plan?</p> <p>1 = YES 2 = NO</p>		X	X

CAT ITEM	FTB ONLY	UG	G/IP
<p>B_LIVEXP Between July 1, 1994 and June 30, 1995, how much were your average monthly expenses for...</p> <p>INTERVIEWER: ALLOWABLE RANGES ARE SPECIFIED WITHIN PARENTHESIS</p> <p>@RENT ...Rent, mortgage, and utilities, excluding telephone (AND WHAT WAS PAID FOR LIVING IN SCHOOL-OWNED HOUSING)? (0-8000)</p> <p>@FOOD ...Food, INCLUDING MEALS IN RESTAURANTS AND MEAL PLANS?] (0-2000)</p> <p>@TRANS ...Car loans, car maintenance, and insurance? (PLEASE EXCLUDE COSTS FOR COMMUTING TO SCHOOL.) (0-5000)</p> <p>@PRSEXP ...Personal expenses (CLOTHING, DRY CLEANING, RECREATION)? (0-5000)</p> <p>@DEPCR ...Daycare, babysitting, or elder care for parents? (EXCLUDE COSTS RELATED TO SCHOOL ATTENDANCE) (0-5000)</p> <p>@EDLNS ...Repayment of educational loans? (0-5000)</p> <p>@OTEXP ...Other expenses, such as telephone bills, child support, life or health insurance, or repayment of other loans? (0-5000)</p>		X	X
<p>F_INTRO Next I have a few questions about admissions tests.</p>		X	X
<p>F_ADMTST@SAT Did you take the SAT (1=YES 2=NO)? SAT Verbal Score: SAT Math Score: Year Taken</p>		<3RD YEAR STUDENTS	
<p>F_ADMTST@ACT Did you take the ACT (1=YES 2=NO)? Composite ACT score: Year Taken</p>		<3RD YEAR STUDENTS	

CATI ITEM	FTB ONLY	UG	G/IP
<p>F_ADMTST@GRE</p> <p>Did you take the GRE (1=YES 2=NO)? Are these scores or percentiles (s/p)? GRE Verbal: GRE Math: GRE Analytic: Year GRE taken:</p>		3RD YEAR + STUDENTS	X
<p>F_tst</p> <p>Any other undergraduate/graduate admissions tests? ENTER ALL THAT APPLY UP TO 4 ADDITIONAL TESTS</p> <p>Undergraduate Tests                      Graduate Tests</p> <p>1. ASSET                                      21. DAT 2. CPAT                                        22. GMAT 3. CPP    23. LSAT 4. CPT    24. MCAT 5. P.A.R.                                        25. Miller's Analogies 6. PSAT 7. TABE                                        31. Other Test, Specify 8. TALS (Forms A or B) 9. WONDERLIC (Scholastic Level) 10. WONDERLIC (Personnel test) 11. TOEFL</p>		X	X
<p>F_aptest</p> <p>Did you take any AP tests (advance placement tests)? 1=YES 2=NO</p> <p>Which ones did you take and what was your score? ENTER UP TO 6 TESTS.</p> <p>1 = Art-History of Art                      2 = Art-Studio Art (Drawing or General Portfolio) 3 = Biology                                    4 = Chemistry 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                                26 = Psychology 27 = Spanish-Language                      28 = Spanish-Literature</p>	X		

CAT ITEM	FTB ONLY	UG	G/IP
<p>F_OTHDEG</p> <p>ONLY ASKED IF RESPONDENT INDICATED HE/SHE RECEIVED A CERTIFICATE OR DEGREE OTHER THAN THE ONE THEY WERE WORKING ON DURING THE NPSAS YEAR.</p> <p>You mentioned earlier that other than your [fill a_fill10] you earned [fill a_othdeg@ans] degree(s) or certificate(s). Which degree(s) and certificate(s) have you earned? ENTER UP TO 6 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>		X	X
<p>F_CONSDR</p> <p>In deciding to attend [fill school], did you consider... INTERVIEWER: 1 = YES 2 = NO</p> <p>...the graduation rate of the school? ...the crime rate at the school? ...the job placement rate for graduates?</p>		X	X
<p>F_CHCINT</p> <p>Why did you decide to attend [fill school]? CODE ALL THAT APPLY</p> <p>1 = COSTS 2 = INFLUENCE OR RECOMMENDATION 3 = LOCATION 4 = REPUTATION/SCHOOL RELATED (FACILITIES/COURSES ETC) 0 = NONE/NO MORE</p>		X	X

CATI ITEM	FTB ONLY	UG	G/IP
<p>F_COSTS ONLY ASKED IF RESPONDENT SAID COSTS WERE A FACTOR IN DECIDING TO ATTEND NPSAS SCHOOL</p> <p>CODE ALL THE COST REASONS THAT APPLY</p> <p>1 = SHORTER TIME TO FINISH THE COURSE 2 = GOT FINANCIAL AID 3 = BETTER CHANCE TO GET JOB AT SCHOOL 4 = COSTS OTHER THAN TUITION ARE LESS 5 = TUITION COSTS ARE LESS 6 = OTHER COSTS 0 = NO MORE</p>		X	X
<p>F_INFL ONLY ASKED IF RESPONDENT SAID INFLUENCE OR RECOMMENDATION OF OTHERES WAS A FACTOR IN DECIDING TO ATTEND NPSAS SCHOOL</p> <p>CODE ALL REASONS THAT APPLY</p> <p>1 = PARTICULAR PROFESSOR TEACHES HERE 2 = FRIENDS/SPOUSE ATTENDED SCHOOL 3 = PARENTS/GUARDIANS ATTENDED SCHOOL 4 = PARENTS/GUARDIANS WANTED R TO ATTEND 5 = OTHER INFLUENCE OR RECOMMENDATION 0 = NO MORE</p>		X	X
<p>F_LOC ONLY ASKED IF RESPONDENT SAID LOCATION WAS A FACTOR IN DECIDING TO ATTEND NPSAS SCHOOL</p> <p>CODE ALL THE REASONS THAT APPLY</p> <p>1 = CAN WORK WHILE ATTENDING SCHOOL 2 = CAN LIVE AT HOME 3 = LOCATED WHERE I WANTED TO SETTLE 4 = CLOSE TO HOME 5 = FAR AWAY FROM HOME 6 = OTHER LOCATION REASONS 0 = NO MORE</p>		X	X

CAT/ITEM	FTB ONLY	UG	G/IP
<p>F_SCH ONLY ASKED IF RESPONDENT SAID SCHOOL REPUTATION WAS A FACTOR IN DECIDING TO ATTEND NPSAS SCHOOL</p> <p>CODE ALL THE REASONS THAT APPLY</p> <p>1 = LIKE CAMPUS SURROUNDINGS 2 = SCHOOL HAS GOOD REPUTATION 3 = RESEARCH CONDUCTED IS OF INTEREST 4 = LAB FACILITIES/EQUIPMENT 5 = OFFERED THE COURSE OF STUDY I WANTED 6 = GOOD REPUTATION FOR PLACING GRADS 7 = OTHER RELATED REASON 0 = NO MORE</p>		X	X
<p>F_COUNT</p> <p>Which of the reasons I just listed was most important to your selection of [fill school]?</p> <p>1 = SHORTER TIME TO FINISH THE COURSE 2 = GOT FINANCIAL AID 3 = BETTER CHANCE TO GET JOB AT SCHOOL 4 = COSTS OTHER THAN TUITION ARE LESS 5 = TUITION COSTS ARE LESS 6 = OTHER COST REASON 7 = PARTICULAR PROFESSOR TEACHES HERE 8 = FRIENDS/SPOUSE ATTENDED SCHOOL 9 = PARENTS/GUARDIANS ATTENDED SCHOOL 10 = PARENTS/GUARDIANS WANTED R TO ATTEND 11 = OTHER INFLUENCE OR RECOMMENDATION 12 = CAN WORK WHILE ATTENDING SCHOOL 13 = CAN LIVE AT HOME 14 = LOCATED WHERE I WANTED TO SETTLE 15 = CLOSE TO HOME 16 = FAR AWAY FROM HOME 17 = OTHER LOCATION REASONS 18 = LIKE CAMPUS SURROUNDINGS 19 = SCHOOL HAS GOOD REPUTATION 20 = RESEARCH CONDUCTED IS OF INTEREST 21 = LAB FACILITIES/EQUIPMENT 22 = OFFERED THE COURSE OF STUDY I WANTED 23 = GOOD REPUTATION FOR PLACING GRADS 24 = OTHER RELATED SCHOOL REASON</p>		X	X

CAT ITEM	FTB ONLY	UG	G/P
<p>F_SAFETY</p> <p>Were you satisfied with the measures taken by [fill school] to ensure the safety of its students?</p> <p>1 = YES 2 = NO</p> <p>Would you say you were ...</p> <p>1 = Never concerned? 2 = Sometimes concerned? or 3 = Often concerned for your personal safety?</p>		X	X

## SECTION C: FINANCIAL AID INFORMATION

CATI ITEM	FTB ONLY	UG	G/1P
<p>C_INTRO</p> <p>My next few questions have to do with financial aid such as grants, scholarships, loans, college work-study, fellowships, assistantships, and any aid you may have received from an employer or from the military.</p>		X	X
<p>C_APPLD</p> <p>IF AID INFORMATION NOT AVAILABLE FROM CADE</p> <p>Did you apply for any financial aid for the time you attended [fill school] during the 94-95 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</p>		X	X
<p>C_NEVAPP</p> <p>IF RESPONDENT DID NOT APPLY FOR FINANCIAL AID</p> <p>What were the reasons you and your family did not apply for financial aid?</p> <p>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>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>C_RECVD IF AID INFORMATION NOT AVAILABLE FROM CADE</p> <p>Did you receive any financial aid for the time you attended [fill school] during the 94-95 school year?</p> <p>BY FINANCIAL AID, I MEAN GRANTS, LOANS, SCHOLARSHIPS, ASSISTANTSHIPS, TUITION WAIVERS, ETC. FROM FEDERAL, STATE, INSTITUTION, EMPLOYER AND OTHER SOURCES. PLEASE DO NOT INCLUDE FINANCIAL ASSISTANCE FROM FAMILY OR FRIENDS.)</p> <p>1 = YES 2 = NO</p>		X	X
<p>C_CADAID IF AID INFORMATION AVAILABLE FROM CADE</p> <p>The records at [fill school] indicate that you received:</p> <ul style="list-style-type: none"> <li>Pell Grant</li> <li>Subsidized Stafford Loan</li> <li>Unsubsidized Stafford Loan</li> <li>Subsidized Direct Loan</li> <li>Unsubsidized Direct Loan</li> <li>PLUS Loan</li> <li>Supplemental Education Opportunity Grant</li> <li>Federal Perkins Loan</li> <li>Federal Work Study</li> <li>An Athletic Scholarship</li> <li>A Tuition Waiver</li> <li>An Assistantship or Fellowship</li> <li>Other Aid from the Institution</li> <li>Aid from the State</li> </ul> <p>The total amount of financial aid you received was \$[fill z_totaid:]. Is that about right (1=YES 2=NO)?</p> <p>(BY FINANCIAL AID, I MEAN GRANTS, LOANS, SCHOLARSHIPS, ASSISTANTSHIPS, TUITION WAIVERS, ETC. FROM FEDERAL, STATE, INSTITUTION, EMPLOYER AND OTHER SOURCES. PLEASE DO NOT INCLUDE FINANCIAL ASSISTANCE FROM FAMILY OR FRIENDS.)</p>		X	X

CATI ITEM	FTB ONLY	UG	G/P
<p><b>C_ALLAID</b>            Excluding gifts or loans from family and friends, what financial aid did you receive while you were at [fill school] during the 94-95 school year.</p> <p>Did you receive any other financial aid while you were at [fill school] during the 94-95 school year?</p> <p><b>AMOUNT:</b>  <b>TYPE:</b>            1=Grant or scholarship            2=Loans            3=Work Study            4=Assistantships            5=Veteran Benefits            6=Voc. Rehab.            7=Tuition Waiver            8=Other</p> <p><b>SOURCE:</b>            1=Federal            2=State            3=Institution            4=Employer            5=Other</p>		X	X
<p><b>C_OTHSCH</b>            ONLY ASKED IF RESPONDENT ATTENDED A SCHOOL OTHER THAN THE NPSAS SCHOOL DURING THE NPSAS YEAR.            To attend schools other than [fill school], during July 1, 1994 and June 30, 1995, what other financial aid did you receive?</p> <p><b>AMOUNT:</b>            1=Grant or scholarship            2=Loans            3=Work Study            4=Assistantships            5=Veteran Benefits            6=Voc. Rehab.            7=Tuition Waiver            8=Other</p> <p><b>SOURCE:</b>            1=Federal            2=State            3=Institution            4=Employer            5=Other</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>C_ASSIST IF NOT PROVIDED AS RESPONSE TO OPEN-ENDED AID QUESTION</p> <p>For the 94-95 school year, how much aid did you receive in assistantships or fellowships (INCLUDE TEACHING AND RESEARCH ASSISTANTSHIPS) (0-999,999)? Of the \$[fill @astamt:], how much of it was through...</p> <p>A teaching assistantship? (0-999,999) A research assistantship or fellowship? (0-999,999) Other kind of Assistantship or fellowship? (0-999,999)</p>			X
<p>C_EMPLYR IF NOT PROVIDED AS RESPONSE TO OPEN-ENDED AID QUESTION</p> <p>For the 94-95 school year, how much did you receive as employer provided tuition reimbursement (0-999,999)?</p>		X	X
<p>C_OTHLON</p> <p>Did you receive any loans from parents, relatives, banks, credit unions or other sources for the 94-95 school year. (INTERVIEWER: READ SOURCES FROM BELOW. 1=YES 2=NO)?</p> <p>INTERVIEWER: IF YES, ASK, Where did you get the loan and how much did you receive?</p> <p>1 = PARENTS OR GUARDIANS (0-999,999)? 2 = OTHER RELATIVES OR FRIENDS (0-999,999) 3 = PERSONAL LOANS SECURED THROUGH YOUR BANK, SAVINGS AND LOAN, CREDIT UNION 4 = OTHER LOAN 5 = OTHER LOAN (0 FOR NO OTHERS)</p>		X	X
<p>C_REFUSE</p> <p>Did you refuse or choose not to accept any financial aid that you were awarded for the 94-95 school year?</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>C_REFSD ONLY ASKED OF RESPONDENT REFUSED ALL OR SOME AID</p> <p>What were your reasons for refusing aid?</p> <p>ENTER ALL THE CODES IN THE ORDER MENTIONED BY THE RESPONDENT. ENTER 0 TO EXIT</p> <ol style="list-style-type: none"> <li>1. LOANS OFFERED BUT DID NOT WANT DEBT</li> <li>2. DID NOT NEED ASSISTANCE</li> <li>3. WORK-STUDY OFFERED BUT THE WORK INTERFERED WITH SCHOOL</li> <li>4. WORK-STUDY OFFERED BUT EARNED MORE ELSEWHERE</li> <li>5. OTHER REASON</li> </ol>		X	X
<p>C_EVRBOR What is the total amount you have EVER borrowed for your education since you left high school (0-9,999,999)?</p> <p>@FEDAMT How much of the \$[fill @totamt:] was in... Federal loans (0-999,999)?</p> <p>@FAMAMT loans from family and friends (0-999,999)?</p> <p>@TOTOWE Of the \$[fill @totamt:] you borrowed from all sources, how much do you still owe?</p> <p>@FEDOWE Of the \$[fill @fedamt:] in federal loans, how much do you still owe?</p> <p>@FAMOWE Of the \$[fill @famamt:] in loans from family and friends, how much do you still owe?</p>		X	X
<p>C_GRTOTB How much of the \$[fill c_evrbor@totamt:] was for graduate school?</p>			X
<p>C_GRFEDB How much of the \$[fill c_evrbor@FEDamt:] that was in federal loans, was for graduate school?</p>			X
<p>C_GRFAMS How much of the \$[fill c_evrbor@FAMamt:] in loans from family was for graduate school?</p>			X

## SECTION D: ADDITIONAL SOURCES OF SUPPORT

CAT ITEM	FTB ONLY	UG	G/1P
<p>D_MARST</p> <p>I have some questions about how you paid for your 94-95 educational expenses, but first I need to know... What is your current marital status?</p> <p>1=SINGLE, NEVER MARRIED 2=MARRIED 3=SEPARATED 4=DIVORCED 5=WIDOWED</p> <p>What was your marital status on July 1, 1994?</p> <p>1=SINGLE, NEVER MARRIED 2=MARRIED 3=SEPARATED 4=DIVORCED 5=WIDOWED</p>		X	X
<p>D_DTMR</p> <p>ONLY ASKED IF RESPONDENT IS MARRIED</p> <p>When were you married?</p> <p>MONTH: YEAR:</p>		X	X
<p>D_DTSEP</p> <p>ONLY ASKED IF RESPONDENT IS SEPARATED</p> <p>When were you separated?</p> <p>INTERVIEWER: THIS QUESTION MAY BE VERY SENSITIVE</p> <p>MONTH: YEAR:</p>		X	X
<p>D_DTDIV</p> <p>ONLY ASKED IF RESPONDENT IS DIVORCED.</p> <p>When were you divorced?</p> <p>INTERVIEWER: THIS QUESTION MAY BE VERY SENSITIVE</p> <p>MONTH: YEAR:</p>		X	X

CATI ITEM	FTB ONLY	UG	G/IP
<p>D_DTWID ONLY ASKED IF RESPONDENT IS WIDOWED</p> <p>When were you widowed?</p> <p>INTERVIEWER: THIS QUESTION MAY BE VERY SENSITIVE.</p> <p>MONTH: YEAR:</p>		X	X
<p>D_USESAV</p> <p>How much of your [fill d_fill1] personal money did you use to pay for your 1994-95 educational expenses? (savings, checking etc) (0-80,000)?</p>		X	X
<p>D_PARST4</p> <p>As of July 1, 1994, were your parents...</p> <p>INTERVIEWER: ADOPTIVE PARENTS ARE CONSIDERED PARENTS.</p> <p>1 = Married to each other. 2 = Divorced 3 = Separated or 4 = Never married to each other. 5 = ONE OR BOTH DECEASED. 6 = NEVER KNEW PARENTS AND NO GUARDIANS. 7 = NEVER KNEW PARENTS AND HAS LEGAL GUARDIAN(S).</p>		X	X
<p>D_DCSD ONLY ASKED IF PARENT IS DECEASED</p> <p>Which of your parents is deceased?</p> <p>INTERVIEWER: IF THE RESPONDENT DOES NOT WANT TO ANSWER FURTHER QUESTIONS ABOUT THE DECEASED PARENT, USE OPTIONS 4, 5 OR 6.</p> <p>1 = MOTHER 2 = FATHER 3 = BOTH 4 = SENSITIVE, MOTHER'S DEATH 5 = SENSITIVE, FATHER'S DEATH 6 = SENSITIVE, BOTH PARENTS' DEATH</p>		X	X

CAT ITEM	FTB ONLY	UG	G/1P
<p>D_GUARD Do you have any legal guardians (other than your parents)?</p> <p>1 = YES 2 = NO</p> <p>TYPE OF GUARDIAN.</p> <p>1 = GUARDIANS 2 = FEMALE GUARDIAN ONLY 3 = MALE GUARDIAN ONLY.</p> <p>Are your guardians married to each other?</p> <p>1 = YES 2 = NO</p>		X	X
<p>D_LIVE With whom do you usually live when you are not in school?</p> <p>1 = MOTHER/FEMALE GUARDIAN 2 = FATHER/MALE GUARDIAN 3 = HALF WITH MOTHER/FEMALE GUARDIAN AND HALF WITH FATHER/MALE GUARDIAN. 4 = SPOUSE/PARTNER 5 = ALONE OR WITH OTHER INDIVIDUALS</p>		X	X
<p>D_PSPP1@PSPP1 ONLY ASKED IF RESPONDENT'S PARENTS/GUARDIANS ARE NOT CURRENTLY MARRIED</p> <p>Between July 1, 94 and June 30, 95, which guardian /parent provided you with the most financial support?</p> <p>1 = EQUAL CONTRIBUTION 2 = MOTHER/FEMALE GUARDIAN 3 = FATHER/MALE GUARDIAN 4 = NEITHER PARENT/GUARDIAN PROVIDED SUPPORT</p>		X	X

CAT ITEM	FTB ONLY	UG	G/P
<p>D_PSPP1@PSPP2 ONLY ASKED IF RESPONDENT IS NOT SUPPORTED BY EITHER PARENT/GUARDIAN AND PARENTS/GUARDIANS ARE NOT CURRENTLY MARRIED</p> <p>Which guardian/parent provided you with the most financial support when you were last supported by them?</p> <p>1 = EQUAL CONTRIBUTION 2 = MOTHER/FEMALE GUARDIAN 3 = FATHER/MALE GUARDIAN 4 = NEITHER PARENT/GUARDIAN PROVIDED SUPPORT</p>		X	X
<p>D_ANYCON IF REPONDENT IS FINANCIALLY INDEPENDENT</p> <p>Has either of your guardian/parents contributed or loaned you money toward your 94-95 school year expenses? (1994-1995 SCHOOL YEAR)</p> <p>1 = YES 2 = NO</p>		X	X
<p>D_PGIFT IF RESPONDENT IS FINANCIALLY INDEPENDENT</p> <p>Excluding any loans, how much money did your parents/guardians give you directly for your 1994-95 school expenses?</p> <p>0-80000= 1 = PER WEEK 2 = PER MONTH 3 = PER YEAR 4 = PER TERM</p>		X	X
<p>D_OTSUP</p> <p>Between July 1, 1994 and June 30, 1995, did your parents/guardians provide you with other forms of support such as housing, meals, clothing, the use of charge cards, or help with car payments, repairs, or any type of insurance?</p> <p>1 = YES 2 = NO</p> <p>How much do you think it was worth?</p> <p>1 - 80000</p>		X	X

CAT/ITEM	FTB ONLY	UG	G/1P
<p>D_SUPTYP</p> <p>Did your parents/guardians provide you with...</p> <p>INTERVIEWER: 1=YES 2=NO</p> <p>@SUPHS ...Housing?</p> <p>@SUPMLS ...Meals?</p> <p>@SUPCLS ...Clothing?</p> <p>@SUPCRD ...Charge cards?</p> <p>@SUPCLN ...Help on car loan payments?</p> <p>@SUPCRP ...Help on car repair bills?</p> <p>@SUPINS ...Help on any type of insurance, INCLUDING CAR, HEALTH, AND LIFE INSURANCE?</p> <p>@SUPOTH ...Any other type of assistance? (SUCH AS AIR LINE TICKETS)</p>		X	X
<p>D_PREPAY</p> <p>Did you or your parents/guardians use a college prepayment or state-sponsored savings plan to pay for your 94-95 school expenses?</p> <p>PROBE AS NEEDED (Who sponsored the prepayment plan)</p> <p>1 = YES - STATE-SPONSORED 2 = YES - SCHOOL-SPONSORED 3 = YES - A PRIVATE PLAN 4 = YES - OTHER TYPE 5 = NO</p>		X	X
<p>D_REFIN</p> <p>To meet your 1994-95 educational expenses, did you or your parents/guardians take out a home equity loan, a second mortgage, or refinance any real estate?</p> <p>1 = YES 2 = NO</p> <p>Did you or your parents/guardians use U. S. Savings Bonds to pay for any part of your 1994-95 school expenses?</p> <p>1 = YES 2 = NO</p>		X	X

CAT ITEM	FTB ONLY	UG	G/1P
D_OGFTLN Excluding loans, how much have other relatives or friends [bold][fill d_fill3][n] [r]contributed[n] toward your 1994-95 school expenses?  0-80000 =		X	X

## Section E: Employment

CATI ITEM	FTB ONLY	UG	G/1P
<p>E_EVRWRK</p> <p>Now I would like some information on your recent employment.</p> <p>@WRK94 Did you have a job for pay, at anytime in 1994 (1=YES 2=NO)?</p> <p>@WRK93 Did you have a job for pay, at anytime in 1993 (1=YES 2=NO)?</p> <p>@WRKNPS Did you have a job for pay, at anytime between July 1/January 1, 1995 and June 30, 1995 (1=YES 2=NO)?</p>		X	X
<p>E_EVRWRK@JBSRCH IF RESPONDENT DID NOT WORK DURING THE NPSAS YEAR</p> <p>Between July 1, 1994 and June 30, 1995, did you look for paid employment (1=YES 2=NO)?</p>		X	X
<p>E_ENRWRK</p> <p>@ENRWRK Did you have a job for pay while you were attending classes?</p> <p>@SMRWRK Did you work during the summer of 1994 (1=YES 2=NO)?</p> <p>@VACWRK Did you have a job for pay during periods that you weren't attending classes, other than during the summer, SUCH AS DURING MIDYEAR VACATIONS (1=YES 2=NO)?</p>		X	X
<p>E_ENRWRK@STUDEM IF RESPONDENT HAD A JOB WHILE ATTENDING CLASSES</p> <p>When you were both attending classed and working, were you primarily a student or primarily an employee?</p> <p>1 = PRIMARILY A STUDENT. 2 = PRIMARILY AN EMPLOYEE.</p>		X	X
<p>E_SMRWRK IF RESPONDENT WORKED ONLY DURING THE SUMMER OF 1994</p> <p>How many different jobs for pay did you hold last summer (SUMMER OF 1994) (1-10)?</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>E_SAME IF RESPONDENT WORKED ONLY DURING THE SUMMER OF 1994</p> <p>During the summer of 1994 was your principal job and employer the same as the job you had for the 1994-95 school year? 1=YES 2=NO</p>		X	X
<p>E_SMREMP ONLY ASKED IF RESPONDENT WORKED ONLY DURING THE SUMMER OF 1994</p> <p>What was your occupation and the type of industry you worked in IN YOUR PRINCIPAL JOB last summer?</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>1 = ENTER THE USEREXIT</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>E_ORGTYP IF RESPONDENT WORKED ONLY DURING THE SUMMER OF 1994</p> <p>Is this a private, for-profit company?</p> <p>INTERVIEWER: DO NOT READ ALTERNATIVES. IF STUDENT SAYS "NO", PROBE. IF STUDENT HAS JUST TOLD YOU 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 [R]NOT INCORPORATED[N] 7= SELF-EMPLOYED IN YOUR OWN BUSINESS, PROFESSIONAL PRACTICE, OR FARM THAT IS [R]INCORPORATED[N] 8= OTHER</p>		X	X
<p>E_SMRJOB IF RESPONDENT WORKED ONLY DURING THE SUMMER OF 1994</p> <p>About how many hours a week did you work in this job (1-99)?</p> <p>WE ARE INTERESTED ONLY IN THE HOURS WORKED AT THE PRINCIPAL JOB.</p>		X	X
<p>E_SMRJBS IF RESPONDENT WORKED ONLY DURING THE SUMMER OF 1994</p> <p>On average, about how many hours did you work each week in all the jobs you had last summer (1-99)? \</p> <p>What was your total income from all the job(s) you had last summer (1-99,999)?</p>		X	X
<p>E_VACWRK IF RESPONDENT WORKED ONLY DURING PERIODS WHILE NOT ATTENDING CLASSES, SUCH AS MIDYEAR BREAKS</p> <p>How many different jobs for pay did you hold during that time (1-15)?</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>E_SAMEMP IF RESPONDENT WORKED ONLY DURING PERIODS WHILE NOT ATTENDING CLASSES, SUCH AS MIDYEAR BREAKS</p> <p>During periods that you worked while not attending classes, was your principal job and employer the same as the job [if e_enrwrk@enrwrk eq &lt;1&gt;] you had while attending classes[else] you had last summer[endif] (1=YES 2=NO)?</p>		X	X
<p>E_VACEMP IF RESPONDENT WORKED ONLY DURING PERIODS WHILE NOT ATTENDING CLASSES, SUCH AS MIDYEAR BREAKS</p> <p>What was your occupation and the type of industry you worked in IN YOUR PRINCIPAL JOB between July 1, 1994 and June 30, 1995 while not attending classes?</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>1 = ENTER THE USEREXIT</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>E_ORGTYP IF RESPONDENT WORKED ONLY DURING PERIODS WHILE NOT ATTENDING CLASSES, SUCH AS MIDYEAR BREAKS</p> <p>Is this a private, for-profit company?</p> <p>INTERVIEWER: DO NOT READ ALTERNATIVES. IF STUDENT SAYS "NO", PROBE. IF STUDENT HAS JUST TOLD YOU 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 [R]NOT INCORPORATED[N] 7 = SELF-EMPLOYED IN YOUR OWN BUSINESS, PROFESSIONAL PRACTICE, OR FARM THAT IS [R]INCORPORATED[N] 8 = OTHER</p>		X	X
<p>E_VACJOB IF RESPONDENT WORKED ONLY DURING PERIODS WHILE NOT ATTENDING CLASSES, SUCH AS MIDYEAR BREAKS</p> <p>About how many hours a week did you work in this job (1-99)?</p> <p>WE ARE INTERESTED ONLY IN THE HOURS WORKED AT THE PRINCIPAL JOB.</p>		X	X
<p>E_VACJBS IF RESPONDENT WORKED ONLY DURING PERIODS WHILE NOT ATTENDING CLASSES, SUCH AS MIDYEAR BREAKS</p> <p>On average, about how many hours did you work each week in all the jobs you had during periods in which you were not enrolled in school (OTHER THAN YOUR SUMMER 1994 JOBS) (1-99)?</p> <p>What was your total income from [R]all[N] the jobs you held (1-99,999)?</p>		X	X

CAT/ITEM	FTB ONLY	UG	G/1P
<p>E_EMPNUM ONLY ASKED IF RESPONDENT WORKED DURING THE NPSAS YEAR</p> <p>How many different jobs for pay did you hold between July 1, 1994 and June 30, 1995 (1-15)?</p>		X	X
<p>E_PRNEMP ONLY ASKED IF RESPONDENT WORKED DURING THE NPSAS YEAR</p> <p>What was your occupation and the type of industry you worked in IN YOUR PRINCIPAL JOB between July 1, 1994 and June 30, 1995</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>1 = ENTER THE USEREXIT</p>		X	X
<p>E_ORGTYP ONLY ASKED IF RESPONDENT WORKED DURING THE NPSAS YEAR</p> <p>Is this a private, for-profit company?</p> <p>INTERVIEWER: DO NOT READ ALTERNATIVES. IF STUDENT SAYS "NO", PROBE. IF STUDENT HAS JUST TOLD YOU 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 [R]NOT INCORPORATED[N] 7= SELF-EMPLOYED IN YOUR OWN BUSINESS, PROFESSIONAL PRACTICE, OR FARM THAT IS [R]INCORPORATED[N] 8= OTHER</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>E_RELMAJ ONLY ASKED IF RESPONDENT WORKED DURING THE NPSAS YEAR</p> <p>How closely was your principal job related to your current major or field of study?</p> <p>1 = CLOSELY RELATED 2 = SOMEWHAT RELATED 3 = NOT RELATED</p>		X	X
<p>E_ONOFF ONLY ASKED IF RESPONDENT WORKED DURING THE NPSAS YEAR</p> <p>@ONOFF Was your principal job on or off-campus?</p> <p>1 = ON-CAMPUS 2 = OFF-CAMPUS</p> <p>@EMPTY Were you working for your school or for someone else?</p> <p>1 = SCHOOL 2 = SOMEONE ELSE</p>		X	X
<p>E_PRNJOB ONLY ASKED IF RESPONDENT WORKED DURING THE NPSAS YEAR</p> <p>About how many hours a week did you work in this job (1-99)? @PRNHRS From July 1, 1994 to June 30, 1995, what was your total income from this job (1-99,999)? @PRNINC From July 1, 1994 to June 30, 1995, what was your total income from all jobs (1-99,999)?</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>E_PRNJLN ONLY ASKED IF RESPONDENT WORKED DURING THE NPSAS YEAR</p> <p>When did your principal job/this job start? GET STARTING MONTH AND YEAR IRRESPECTIVE OF THE NPSAS YEAR. MONTH: YEAR:</p> <p>Are you still working at this job (1=YES 2=NO)?</p> <p>When did the job end? MONTH: YEAR:</p>		X	X
<p>E_PRNJBS ONLY ASKED IF RESPONDENT WORKED DURING THE NPSAS YEAR</p> <p>@TOTHRS About how many hours did you work per week at all jobs held between July 1, 1994 and June 30, 1995 (1-99)?</p> <p>@TOTINC What was your total income from all jobs held between July 1, 1994 and June 30, 1995 (1-99,999)?</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>E_PROGRM</p> <p>During the 1994-95 school year, did you participate in... INTERVIEWER: 1=YES 2=NO</p> <p>@CWS The College Work Study Program at [fill school]? Was this your principal job?</p> <p>@INTERN An internship or practicum? Was this your principal job?</p> <p>@APPREN An apprenticeship? Was this your principal job?</p> <p>@COOPED A cooperative education program? Was this your principal job?</p> <p>@TEACH ONLY FOR GRADUATE STUDENTS A teaching assistantship? Was this your principal job?</p> <p>@RSRCH ONLY FOR GRADUATE STUDENTS A research assistantship? Was this your principal job?</p>		X	X
<p>E_JOBPUR IF RESPONDENT REPORTED BEING PRIMARILY A STUDENT</p> <p>Working while attending classes can have consequences. How important were each of the following in your decision to work while attending classes.</p> <p>INTERVIEWER: 0=NOT IMPORTANT 1=IMPORTANT</p> <p>INTERVIEWER: 0=NOT IMPORTANT 1= SOMEWHAT IMPORTANT 2= VERY IMPORTANT</p> <p>Providing spending money. Paying for tuition and living expenses.</p> <p>Did having a job...(1=YES 2=NO)</p> <p>Limit your study time? Reduce your choice of classes? Limit class schedules? Assist with school subjects? Help prepare for a career or occupation? Limit your access to the library?</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>E_ENRPUR IF RESPONDENT REPORTED BEING PRIMARILY AN EMPLOYEE</p> <p>Were each of the following important or not in your decision to enroll in postsecondary while you were working.</p> <p>INTERVIEWER: 1=IMPORTANT 2=NOT IMPORTANT</p> <p>Personal enrichment or interest in the subject Recreation. Required for employment in your current job. To gain skills for advancement in your current job. To gain skills needed for a new job or career. To complete a degree or certification program.</p>		X	X
<p>E_EMPLAN</p> <p>@NXTSCH What are your plans for school in 95-96? Do you expect to be...</p> <p>1 = Enrolled full-time. 2 = Enrolled part-time. 3 = Not enrolled.</p> <p>@NXTWRK What are your plans for work next year? Do you expect to be...</p> <p>1 = Working full-time. 2 = Working part-time. 3 = Not working.</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>G_VETST</p> <p>INTERVIEWER: 1=YES 2=NO</p> <p>Are you currently in the reserves or on active duty in the US Military?</p> <p>Are you a veteran of the US military (1=YES 2=NO)?</p> <p>In which branch of the service do/did you serve?</p> <p>1 = ARMY 2 = NAVY 3 = AIR FORCE 4 = MARINES 5 = COAST GUARD 6 = NATIONAL GUARD</p> <p>Is/Was that...</p> <p>1 = Active duty or 2 = Reserves?</p>		X	X

Section F: Educational Expectations

CATI ITEM	FTB ONLY	UG	G/IP
<p>F_NPSED@NPSED</p> <p>What is the highest level of education you expect to complete at [fill school]?</p> <p>1 = LESS THAN 4-YEARS -- NO DEGREE OR CERTIFICATE                      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.)</p>	<p>X</p>		
<p>F_NPSED@HIGHED</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                      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.)</p>	<p>X</p>		
<p>F_SCHAPP</p> <p>Thinking back to when you applied to [fill school]...                      @APPLIED                      How many schools did you apply to (0-99)?                      @ACCEPT                      How many of those schools accepted you (0-99)?                      @FIRST                      Was [fill school] your first choice for postsecondary school?                      1 = YES                      2 = NO                      @DISTNC                      How far (in miles) is [fill school] from your permanent home?                      1-12450 =</p>	<p>X</p>		

CATI ITEM	FTB ONLY	UG	G/IP
<p>F_PARTIC</p> <p>I am now going to read you a list of school-related activities that you may have participated in during the 1994-95 school year, while you attended [fill school]. Please tell me how many times you participAted in the activity.</p> <p>INTERVIEWER: ENTER A NUMBER 0 TO 9</p> <p>@ADVSR Talk with faculty about academic matters outside of class time?</p> <p>@ACDMTG Meet with advisor concerning academics plans</p> <p>@SOCIAL Have informal or social contacts with advisor or other faculty members outside of classrooms and offices.</p> <p>@STDYGP Study groups outside of the classroom?</p> <p>@ASTCTR Participate in one or more student assistance centers/programs?</p> <p>@GO Go places with friends from school?</p> <p>@CLUBS Participate in school clubs?</p> <p>@EVENT Attend academic or career-related lectures, conventions, or field trips?</p> <p>@FINART Music, choir, drama, or other fine arts activities?</p> <p>@INTRAM Intramural or nonvarsity sports?</p> <p>@VARSP Varsity or intercollegiate sports?</p>	X		

CATI ITEM	FTB ONLY	UG	G/IP
<p>F_CLIINT</p> <p>Please tell me if you were satisfied with the following at [fill school].</p> <p>INTERVIEWER: 1=SATISFIED 2=DISSATISFIED</p> <p>The teaching ability of most of the instructors?</p> <p>Your social life?</p> <p>Your intellectual growth?</p> <p>The financial cost of attending?</p> <p>The prestige of the school?</p> <p>Overall campus climate regarding students of different racial or ethnic backgrounds?</p> <p>Class sizes?</p> <p>The availability of courses?</p>	X		
<p>F_SPCSRV</p> <p>Did you use any of the following services, or facilities during the 1994-95 school year while you were at [fill school].</p> <p>1=YES 2=NO</p> <p>@TUTOR Special tutoring or remedial instruction? Was it available? Were you satisfied with the services?</p> <p>@COUNSEL Counseling services, FOR ACADEMIC AID, FINANCIAL AID, OR PERSONAL ISSUES? Was it available? Were you satisfied with the services?</p> <p>@JOBPLC The job placement services? Was it available? Were you satisfied with the services?</p> <p>@CULTUR Cultural activities including music, art, and drama? Was it available? Were you satisfied with the services?</p> <p>@SPORTS The sports or recreational facilities? Was it available? Were you satisfied with the services?</p>	X		

CATI ITEM	FTB ONLY	UG	G/IP
<p>F_REMEDI</p> <p>You indicated that you had remedial instruction or tutoring. Did you have this instruction to improve your skills in...</p> <p>1=YES 2=NO</p> <p>reading? writing? math? study skills? English language skills?</p>	X		
<p>F_WORK</p> <p>Are the following general factors important, not important, somewhat important, or very important in determining your career?</p> <p>INTERVIEWER: 0=NOT IMPORTANT 1=IMPORTANT</p> <p>INTERVIEWER: 0=NOT IMPORTANT 1=SOMEWHAT IMPORTANT 2=VERY IMPORTANT</p> <p>@PRVEXP Previous experience in the field of work</p> <p>@IMPORT Work that seems important and interesting to you</p> <p>@FREEDM Freedom to make your own decisions</p> <p>@PRBLM Work where most problems are quite difficult and challenging</p> <p>@INCRSP Work with increasing responsibilities over time.</p>	X		

CATI ITEM	FTB ONLY	UG	G/IP
<p>F_INCENT</p> <p>Are the following incentive factors important, not important, somewhat important, or very important in determining your career?</p> <p>INTERVIEWER: 0=NOT IMPORTANT 1=IMPORTANT</p> <p>INTERVIEWER: 0=NOT IMPORTANT 1=SOMEWHAT IMPORTANT 2=VERY IMPORTANT</p> <p>@INCOM Good income to start</p> <p>@INCOV Good income over your career</p> <p>@SECURE Job security and permanence.</p> <p>@PROMOT Opportunities for promotion.</p> <p>@EDUTRN Education or training benefits.</p> <p>@HEALTH Employer-provided health insurance.</p> <p>@PENSION Employer-provided pension or retirement program</p> <p>@PTFRNG Other fringe benefits.</p>		X	
<p>F_CAREER</p> <p>What is your planned future occupation?</p> <p>INTERVIEWER: PLEASE ENTER THE OCCUPATION INFO ONLY IN THE FOLLOWING SCREENS OF THE USEREXIT</p> <p>1 = RE-ENTER THE USEREXIT 2 = SKIP OVER THE USEREXIT</p> <p>1 = ENTER THE USEREXIT</p>		X	

CATI ITEM	FTB ONLY	UG	G/IP
<p>F_PRSGLS</p> <p>Are the following personal goals [if exp eq &lt;1&gt;] important[else]not important, somewhat important, or very important [endif]to you?</p> <p>INTERVIEWER: 0=NOT IMPORTANT 1=IMPORTANT</p> <p>INTERVIEWER: 0=NOT IMPORTANT 1=SOMEWHAT IMPORTANT 2=VERY IMPORTANT</p> <p>@ATHRTY Becoming an authority in a field.</p> <p>@POLINF Influencing a political structure.</p> <p>@WELOFF Being very well off financially.</p> <p>@ENTREP Becoming successful in your own business.</p> <p>@CARSUC Being successful in a particular career.</p> <p>@LEADER Being a leader in the community.</p> <p>@VICREL Living close to your parents and relatives.</p> <p>@GETOUT Getting away from the area where you were raised.</p> <p>@LEISUR Having leisure time to enjoy personal interests.</p> <p>@FAMILY Raising a family.</p> <p>@BTROPP Being able to give your children better opportunities than you had.</p>	X		

## Section G: Student Demographics and Citizenship

CATI ITEM	FTB ONLY	UG	G/IP
<p>Next, I'd like to ask you a few questions about your background.</p> <p>G_GENDER</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?</p>		X	X
<p>G_US_CIT</p> <p>Are you a citizen of the United States?</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.</p>		X	X
<p>G_HISPAN @ HISPAN</p> <p>Are you of Hispanic origin?</p> <p>1 = YES 2 = NO</p>		X	X
<p>G_HISPAN@SPNDSC</p> <p>ONLY ASKED IF RESPONDENT IS HISPANIC.</p> <p>Are you...</p> <p>1 = Of Mexican, Mexican-American, or Chicano descent? 2 = Of Cuban descent? 3 = Of Puerto Rican descent? 4 = Of some other Hispanic origin?</p>		X	X

CATI ITEM	FTB ONLY	UG	G/IP
<p>G_RACE</p> <p>What is your race?</p> <p>1 = WHITE 2 = AFRICAN AMERICAN OR BLACK 3 = AMERICAN INDIAN OR ALASKAN NATIVE 4 = ASIAN OR PACIFIC ISLANDER 5 = OTHER</p>		X	X
<p>G_AMRNAT</p> <p>ONLY ASKED IF RESPONDENT IS AMERICAN INDIAN OR ALASKAN NATIVE.</p> <p>Are you enrolled in a state- or federally-recognized tribe?</p> <p>1 = YES 2 = NO</p>		X	X
<p>G_ASIAN</p> <p>ONLY ASKED IF RESPONDENT IS ASIAN OR PACIFIC ISLANDER.</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>		X	X



CAT/ITEM	FTB ONLY	UG	G/1P
<p>G_DISABL</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</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 EYEGASSES</p>		X	X
<p>G_VOTE</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>Have you ever voted in any national, state, or local election?</p> <p>IF 18 YEARS OF AGE AT TIME OF ELECTION  Did you vote in the 1992 presidential election?</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>G_POLACT</p> <p>In the last two years, did you...</p> <p>INTERVIEWER: 1=YES 2=NO</p> <p>@POLMTG ...Go to any political meetings, rallies, or dinners, (or things like that)? DON'T COUNT CAMPUS ELECTIONS.</p> <p>@VOTINF ..Talk to any people about why they should vote for a given political party or candidate(s)?</p> <p>@BUTTN ...Wear a campaign button or put a campaign sticker on your car?</p> <p>@POLDON ...Give any money or other financial support for the campaign of any political party or candidate?</p> <p>@TIME ...Give any time or money to community action groups or political action groups (PAC)?</p> <p>@LETTR ..Write letters to any public official to express your opinion?</p>		X	X
<p>G_COMSRV</p> <p>Did you do any community service or volunteer work, other than court-ordered service, at anytime between July 1, 1994 and June 30, 1995?</p> <p>1 = YES 2 = NO</p>		X	X

CAT/ITEM	FTB ONLY	UG	G/IP
<p>G_CMSRVT ONLY ASKED IF RESPONDENT PERFORMED COMMUNITY SERVICE BETWEEN JULY 1, 1994 AND JUNE 30, 1995.</p> <p>What did you do? (What was the community service or volunteer work?)</p> <p>1 = A YOUTH ORGANIZATION (LITTLE LEAGUE, GIRL SCOUTS) 2 = SERVICE ORGANIZATION (ROTARY CLUB, JAYCEES) 3 = POLITICAL CLUB OR ORGANIZATION 4 = CHURCH OR CHURCH-RELATED GROUP (NOT COUNTING WORSHIP SERVICES) 5 = COMMUNITY CENTER, NEIGHBORHOOD IMPROVEMENT, SOCIAL ACTION ASSO/GROUP 6 = ORGANIZED VOLUNTEER GROUP FOR A HOSPITAL, NURSING HOME, GROUP HOME 7 = EDUCATIONAL ORGANIZATIONS LIKE THE PTA 8 = OTHER (SPECIFY) 0 = EXIT THIS SCREEN</p>		X	X
<p>G_NPSRV2 ONLY ASKED IF RESPONDENT DID COMMUNITY SERVICE BETWEEN JULY 1, 1994 AND JUNE 30, 1995.</p> <p>@SRVREQ Was this required for your classes or graduation (1=YES 2=NO)? (COMMUNITY SERVICE OR VOLUNTEER WORK)</p> <p>@HRSSRV BETWEEN JULY 1, 1994 AND JUNE 30, 1995, about how many hours per week did you do this? PERFORM COMMUNITY SERVICE OR VOLUNTEER WORK)(1-80)?</p> <p>@CARREL Was any of this CURRENT VOLUNTEER OR COMMUNITY SERVICE WORK related to your future career (1=YES 2=NO)?</p>	X		

CATI ITEM	FTB ONLY	UG	G/1P
<p>G_SRVTIM</p> <p>Over the last two years, about how many hours would you say you worked in community service or as a volunteer?</p> <p>0-1000 =  1 = PER WEEK  2 = PER MONTH  3 = PER YEAR  4 = FOR 2 YEARS</p>		X	X
<p>G_SRVPLN</p> <p>In the next 12 months, do you plan to do any volunteer or community service work?</p> <p>1 = YES  2 = NO</p>		X	X
<p>G_CMPTR</p> <p>About how many hours per week would you estimate you use a personal computer?</p> <p>0-60 HOURS</p>		X	X

## Section H: Parental Characteristics

CAT ITEM	FTB ONLY	UG	G/P
<p>H_INTRO</p> <p>My next few questions are about your parents/guardians.</p> <p>THIS IS A NON-BPS CASE. WE ARE ALMOST AT THE END OF THE INTERVIEW.</p>		X	X
<p>H_AGE</p> <p>How old is your father/male guardian?</p> <p>PARENT AGE IS USED IN CALCULATING EXPECTED FAMILY CONTRIBUTION TOWARD RESPONDENT'S POSTSECONDARY EDUCATION.</p> <p>30-110 =</p> <p>How old is your mother/female guardian?</p> <p>PARENT AGE IS USED IN CALCULATING EXPECTED FAMILY CONTRIBUTION TOWARD RESPONDENT'S POSTSECONDARY EDUCATION.</p> <p>30-110 =</p>		X	X

CATI ITEM	FTB ONLY	UG	G/IP
<p>H_EDUC@ED1</p> <p>What is the highest grade or level of education your father/male guardian ever completed?</p> <p>1 = DID NOT COMPLETE HIGH SCHOOL  2 = COMPLETED HIGH SCHOOL 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</p>		X	X
<p>H_ASSOC@ASSC1</p> <p>IF RESPONDENT SAYS PARENT COMPLETED 2 OR MORE YEARS OF COLLEGE.</p> <p>Did he earn an associate's degree?</p> <p>1 = YES  2 = NO</p>		X	X

CATI ITEM	FTB ONLY	UG	G/IP
<p>H_EDUC@ED2</p> <p>What is the highest grade or level of education your mother/female guardian ever completed?</p> <p>1 = DID NOT COMPLETE HIGH SCHOOL 2 = COMPLETED HIGH SCHOOL EQUIVALENT</p> <p>POSTSECONDARY VOCATIONAL</p> <p>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</p> <p>POSTSECONDARY ACADEMIC</p> <p>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>		X	X
<p>H_ASSOC@ASSC2</p> <p>ONLY ASKED IF RESPONDENT SAYS PARENT COMPLETED 2 OR MORE YEARS OF COLLEGE.</p> <p>Did she earn an associate's degree?</p> <p>1 = YES 2 = NO</p>		X	X
<p>H_STATE1</p> <p>What is your parents'/guardians'state of legal residence?</p>		X	X

CATI ITEM	FTB ONLY	UG	G/P
<p>H_OCC</p> <p>What is your father's/male guardian's occupation?</p> <p>ENTER OCCUPATION FOR PRINCIPAL JOB.</p> <p>1 = ENTER OCCUPATION IN THE USEREXIT  2 = SKIP OVER THE USEREXIT  3 = RETIRED  4 = NOT EMPLOYED (INCLUDING DISABLED OR  HOMEMAKER)</p> <p>What is your mother's/female guardian's occupation?</p> <p>ENTER OCCUPATION FOR PRINCIPAL JOB.</p> <p>1 = ENTER OCCUPATION IN THE USEREXIT  2 = SKIP OVER THE USEREXIT  3 = RETIRED  4 = NOT EMPLOYED (INCLUDING DISABLED OR  HOMEMAKER)</p>		X	X
<p>H_RETIRE</p> <p>IF RESPONDENT REPORTS PARENT NOT EMPLOYED</p> <p>Is your father/male guardian retired?</p> <p>1 = YES  2 = NO</p> <p>Is your mother/female guardian retired?</p> <p>1 = YES  2 = NO</p>		X	X
<p>H_DISABL</p> <p>Does your father/male guardian have any type of disability or  limitation?</p> <p>1 = YES  2 = NO</p> <p>Does your mother/female guardian have any type of  disability or limitation?</p> <p>1 = YES  2 = NO</p>		X	X

CAT ITEM	FTB ONLY	UG	G/1P
H_INC94F@INC94_1  IF RESPONDENT IS DETERMINED TO BE FINANCIALLY DEPENDENT.  What is your estimate of your father's/male guardian's/parents' total yearly income, for 1994?  0-999999 =			X

CATI ITEM	FTB ONLY	UG	G/P
<p>H_INC94F@INC941E IF CAN NOT SPECIFY INCOME</p> <p>Would you estimate that (their/his) 1994 total income was about the same as, more than, or less than \$30,000?</p> <p>1 = LESS THAN \$29,999 2 = SAME AS \$30,000 3 = MORE THAN \$30,001</p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your father's/male guardian's/parents' income for 1994:</p> <p>1 = \$5,000 or less 2 = \$5,001 to \$10,000 3 = \$10,001 to \$20,000 4 = \$20,001 to under \$30,000</p> <p>1 = \$30,001 to \$40,000 2 = \$40,001 to \$50,000 3 = \$50,001 to \$60,000 4 = \$60,001 to \$70,000 5 = \$70,001 to \$80,000 6 = \$80,001 to \$90,000 7 = \$90,001 to \$100,000 8 = \$100,000 or more</p>		X	X
<p>H_INC93F@INC93_1 IF CAN NOT VERIFY INCOME</p> <p>What would you estimate it was for 1993?</p> <p>0-999999 =</p>		X	X

CAT ITEM	FTB ONLY	UG	G/IP
<p>H_INC93F@INC931E IF CAN NOT SPECIFY INCOME</p> <p>Would you estimate that his 1993 total income was about the same as, more than, or less than \$30,000?</p> <p>1 = LESS THAN \$29,999 2 = SAME AS \$30,000 3 = MORE THAN \$30,001</p> <p>I'm going to read you some dollar ranges. Please tell me the range that best estimates your father's/male guardian's/parents' income for 1993:</p> <p>1 = \$5,000 or less 2 = \$5,001 to \$10,000 3 = \$10,001 to \$20,000 4 = \$20,001 to under \$30,000</p> <p>1 = \$30,001 to \$40,000 2 = \$40,001 to \$50,000 3 = \$50,001 to \$60,000 4 = \$60,001 to \$70,000 5 = \$70,001 to \$80,000 6 = \$80,001 to \$90,000 7 = \$90,001 to under \$100,000 8 = \$100,000 or more</p>		X	X
<p>H_INC94M@INC94_2 IF PARENTS ARE NOT MARRIED.</p> <p>What is your estimate of your mother's/female guardian's total yearly income, for 1994?</p> <p>0-999999 =</p>		X	X

CATI ITEM	FTB ONLY	UG	G/IP
<p>H_INC94M@INC942E IF CAN NOT SPECIFY INCOME</p> <p>Would you estimate that her 1994 total income was about the same as, more than, or less than \$30,000?</p> <p>1 = LESS THAN \$29,999 2 = SAME AS \$30,000 3 = MORE THAN \$30,001</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 = \$5,000 or less 2 = \$5,001 to \$10,000 3 = \$10,001 to \$20,000 4 = \$20,001 to under \$30,000</p> <p>1 = \$30,001 to \$40,000 2 = \$40,001 to \$50,000 3 = \$50,001 to \$60,000 4 = \$60,001 to \$70,000 5 = \$70,001 to \$80,000 6 = \$80,001 to \$90,000 7 = \$90,001 to under \$100,000 8 = \$100,000 or more</p>		X	
<p>H_INC93M@INC93_2</p> <p>ONLY ASKED IF PARENTS ARE NOT MARRIED.</p> <p>What would you estimate it was for 1993?</p> <p>0-999999 =</p>		X	

CAT ITEM	FTB ONLY	UG	G/1P
<p>H_INC93M@INC932E  IF CAN NOT SPECIFY INCOME  ONLY USED TO ESTIMATE WHEN RESPONDENT  DOESN'T KNOW TOTAL INCOME.</p> <p>Would you estimate that her 1993 total income was about the same as, more than, or less than \$30,000?</p> <p>1 = LESS THAN \$29,999  2 = SAME AS \$30,000  3 = MORE THAN \$30,001</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 1993:</p> <p>1 = \$5,000 or less  2 = \$5,001 to \$10,000  3 = \$10,001 to \$20,000  4 = \$20,001 to under \$30,000</p> <p>1 = \$30,001 to \$40,000  2 = \$40,001 to \$50,000  3 = \$50,001 to \$60,000  4 = \$60,001 to \$70,000  5 = \$70,001 to \$80,000  6 = \$80,001 to \$90,000  7 = \$90,001 to \$100,000  8 = \$100,000 or more</p>		X	

CATI ITEM	FTB ONLY	UG	G/1P
<p>H_HHSUPF</p> <p>@HSSIZ1 How many people did your father's/male guardian's/parents' household support between July 1, 1994 and June 30, 1995?</p> <p>Please include anyone who received at least half of their support from your father/male guardian, and include yourself, your father/male guardian (and your mother/female guardian, if applicable). 0-20 =</p> <p>@PSE1 Of the people your father/male guardian/parents (was/were) supporting during that time, how many were in a postsecondary school at least half-time? 0-20 =</p> <p>@EVRPS1 How many were ever in a postsecondary school at least half-time? Please count everyone your father/male guardian has ever supported, even if they are no longer supported. 0-20 =</p> <p>@NVRPS1 How many over the age of 18 never attended a postsecondary school at least half-time? Please count everyone your father/male guardian has supported, even if they are no longer supported. 0-20=</p>		X	X

CATI ITEM	FTB ONLY	UG	G/1P
<p>H_HHSUPM IF PARENTS ARE NOT MARRIED.</p> <p>@HSSIZ2 How many people did your mother's/female guardian's household support between July 1, 1994 and June 30, 1995?</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).</p> <p>0-20 =</p> <p>@PSE2 Of the people your mother/female guardian was supporting during that time, how many were in a postsecondary school at least half-time?</p> <p>0-20 =</p> <p>@EVRPS2 How many were ever in a postsecondary school at least half-time? Please count everyone your mother/female guardian has ever supported, even if they are no longer supported.</p> <p>0-20 =</p> <p>@NVRPS2 How many over the age of 18 never attended a postsecondary school at least half-time? Please count everyone your mother/female guardian has supported, even if they are no longer supported.</p> <p>0-20=</p>		X	X
<p>H_WRKEXP IF RESPONDENT IS DETERMINED TO BE FINANCIALLY DEPENDENT.</p> <p>@WRKEXP Did your parents/guardians expect you to have a job for pay during the 1994-95 school year?</p> <p>1 = YES 2 = NO</p> <p>@HRSEXP How many hours did (he/she/they) expect you to work in an average week?</p> <p>1-100</p>		X	

## Section I: Financial Status

CAT/ITEM	FTB ONLY	UG	G/1P
I_FRSTYR In what year did you first receive federal aid for your education? 40-95=		x	x
I_FILE94 Did you file federal taxes for 1994? 1 = YES 2 = NO		x	x
I_FORM94 Which tax form did you use to file in 1994?  PROMPT RESPONDENT BY ASKING WHETHER HE/SHE USED THE SHORT OR LONG FORM. IF RESPONDENT PAID ESTIMATED TAXES, FIND OUT WHICH FORM -- SHORT OR LONG -- WAS USED. 1 = SHORT FORM -- 1040 EZ or 1040A 2 = LONG FORM -- 1040		x	x
I_DEP94 Did anyone claim you as an income tax exemption in 1994? NOTE THE ANSWER IS NO IF THE STUDENT CLAIMED HIM/HERSELF  1 = YES 2 = NO  Who claimed you as an exemption in 1994?  1 = PARENTS/GUARDIANS 2 = MOTHER/FEMALE GUARDIAN 3 = FATHER/MALE GUARDIAN 4 = SPOUSE 5 = ANOTHER INDIVIDUAL		x	x
I_TAX93 Were your 1993 federal taxes filed in the same way as they were in 1994?  1 = YES 2 = NO		x	x

CATI ITEM	FTB ONLY	UG	G/1P
<p>I_FILE93</p> <p>Did you file federal taxes for 1993?</p> <p>1 = YES 2 = NO</p>		x	x
<p>I_FORM93</p> <p>Which tax form did you use to file in 1993?</p> <p>PROMPT RESPONDENT BY ASKING WHETHER HE/SHE USED THE SHORT OR LONG FORM. IF RESPONDENT PAID ESTIMATED TAXES, FIND OUT WHICH FORM -- SHORT OR LONG -- WAS USED.</p> <p>1 = SHORT FORM -- 1040 EZ or 1040A 2 = LONG FORM -- 1040</p>		x	x
<p>I_DEP93</p> <p>Did your [fill d_fill2] or] anyone else claim you as an income tax exemption in the 1993 calendar or tax year?</p> <p>1 = YES 2 = NO</p> <p>Who claimed you as an exemption in 1993?</p> <p>1 = PARENTS/GUARDIANS 2 = MOTHER/FEMALE GUARDIAN 3 = FATHER/MALE GUARDIAN 4 = SPOUSE 5 = ANOTHER INDIVIDUAL</p>		x	x
<p>I_SWRK94</p> <p>IF RESPONDENT IS MARRIED.</p> <p>Was your spouse working for pay, at anytime in 1994? (EITHER FULL-TIME OR PART-TIME)</p> <p>1 = YES 2 = NO</p> <p>Did she/he work mainly full-time or part-time?</p> <p>1 = FULL-TIME 2 = PART-TIME</p>		x	x

CATI ITEM	FTB ONLY	UG	G/1P
<p>I_SWRK93 IF RESPONDENT IS MARRIED.</p> <p>Was she/he working for pay at anytime in 1993? (EITHER FULL-TIME OR PART-TIME)</p> <p>1 = YES 2 = NO 3 = NOT MARRIED IN 1993</p> <p>Did she/he work mainly full-time or part-time?</p> <p>1 = FULL-TIME 2 = PART-TIME</p>		x	x
<p>I_SP_PSE@SP_PSE IF RESPONDENT IS MARRIED.</p> <p>During the 1994-95 school year, was your spouse taking at least at least 6 credit hours at a postsecondary school? (ENROLLED AT LEAST HALF-TIME)</p> <p>1 = YES 2 = NO</p>		x	x
<p>I_SP_PSE@SP_AID IF RESPONDENT IS MARRIED.</p> <p>Did he/she receive any financial aid for his/her education that year?</p> <p>1 = YES 2 = NO</p>		x	x
<p>I_DEPEND</p> <p>As of July 1, 1994, did you have any children or any other dependents living with you or receiving at least 50 percent of their support from you?</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</p>		x	x

CATI ITEM	FTB ONLY	UG	G/1P
<p>I_AGE IF RESPONDENT HAS DEPENDENTS.</p> <p>How many of your dependents were (AS OF JULY 1, 1994)...</p> <p>...under the age of 5</p> <p>...between 5 and 13</p> <p>...between 14 and 17</p> <p>...between 18 and 23</p> <p>...between 24 and 64</p> <p>...65 years or older</p>		<p>x</p>	<p>x</p>
<p>I_DEP_SC IF RESPONDENT HAS DEPENDENTS.</p> <p>How many of these dependents were in...</p> <p>...daycare or pre-school?</p> <p>...a private elementary or secondary school?</p> <p>...postsecondary school?</p> <p>...dependent care facility?</p>		<p>x</p>	<p>x</p>
<p>I_DEPTUI IF RESPONDENT HAS DEPENDENTS.</p> <p>How much did you pay in tuition between July 1, 1994 and June 30, 1995 for the private elementary and secondary education of your dependent children?</p> <p>0-99999 =</p>		<p>x</p>	<p>x</p>
<p>I_TOTINC</p> <p>My next few questions have to do with your income from various sources for 1994 and 1993.</p>		<p>x</p>	<p>x</p>

CATI ITEM	FTB ONLY	UG	G/1P
<p>I_INC94</p> <p>ENTER 950,000 IF MORE THAN 950,000. IF 93 SAME AS 94 ENTER 1.</p> <p>In 1994 and 1993, what was your...</p> <p>...total income from all jobs (including work study &amp; assistantships)</p> <p>...spouse's total income from all jobs (including work study &amp; assistantships)</p> <p>...income from interest, dividends, and capital gains?</p> <p>...income from other sources like child support, social security, AFDC, etc?</p>		<p>x</p>	<p>x</p>
<p>I_INC94@INCVER</p> <p>So your total income for 1994 was \$[fill @inc94:], and for 1993 it was \$[fill @inc93:], is that about right (1=YES 2=NO)?</p> <p>What was your total income for 1994 and 1993?</p>		<p>x</p>	<p>x</p>

CATI ITEM	FTB ONLY	UG	G/1P
<p>I_INC94E IF RESPONDENT DOES NOT KNOW TOTAL INCOME.</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</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)</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</p>		<p>x</p>	<p>x</p>
<p>I_WS94</p> <p>About how much of your employment income for 1994 was from an assistantship? Would you say it was...</p> <p>1 = All 2 = Some or 3 = None</p>		<p>x</p>	<p>x</p>
<p>I_W593</p> <p>About how much of your 1993 employment income was from an assistantship? Would you say it was...</p> <p>1 = All 2 = Some, or 3 = None</p>		<p>x</p>	<p>x</p>

CATI ITEM	FTB ONLY	UG	G/1P
<p>I_SAID94 IF RESPONDENT IS MARRIED.</p> <p>How much, if any, of your spouse's income in 1994 came from work-study or an assistantship?</p> <p>1 = All 2 = Some, or 3 = None</p>		x	x
<p>I_SAID93 IF RESPONDENT IS MARRIED.</p> <p>How much, if any, of your spouse's income in 1993 came from work-study or an assistantship?</p> <p>1 = All 2 = Some, or 3 = None</p>		x	x
<p>I_FOODST</p> <p>At any time since January, 1993, have you or your parents received food stamps?</p> <p>1 = YES, RESPONDENT ONLY 2 = YES, PARENTS OR GUARDIANS ONLY 3 = YES, BOTH RESPONDENT AND PARENTS</p>		x	x
<p>I_ASSETS</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 cash, savings, and checking accounts?</p> <p>0-950000</p> <p>Is it over \$1,000?</p> <p>1 = YES 2 = NO</p>		x	x

CAT ITEM	FTB ONLY	UG	G/1P
<p>I_DEPAST IF RESPONDENT IS DETERMINED TO BE DEPENDENT.</p> <p>Do/Does your parents/parent own...</p> <p>...a home? ...a business? ...a farm? ...any other real estate?</p>		x	
<p>I_OWN IF RESPONDENT IS DETERMINED TO BE INDEPENDENT.</p> <p>Do you [fill i_fill1] own a home, business, farm or any other real estate?</p> <p>1 = YES 2 = NO</p>		x	x
<p>I_HOME IF RESPONDENT IS DETERMINED TO BE INDEPENDENT AND ANSWERED YES TO I_OWN.</p> <p>Do you [fill i_fill1] own your home or are you paying a mortgage on your home (1=YES 2=NO)?</p> <p>Currently, what is the total worth of your home (0-950,000)?</p> <p>Is it over \$100,000 (1=YES 2=NO)?</p> <p>How much do you owe on your house (0-950,000)?</p> <p>Is it over \$50,000 (1=YES 2=NO)?</p>		x	x
<p>I_BUSIN IF RESPONDENT IS DETERMINED TO BE INDEPENDENT AND ANSWERED YES TO I_OWN.</p> <p>Do you own a business (1=YES 2=NO)?</p> <p>Currently, what is the total worth of your business (0-950,000)?</p> <p>Is it over \$10,000 (1=YES 2=NO)?</p> <p>How much do you currently owe on your business (0-950,000)?</p> <p>Is it over \$10,000 (1=YES 2=NO)?</p>		x	x

CATI ITEM	FTB ONLY	UG	G/1P
<p>I_FARM IF RESPONDENT IS DETERMINED TO BE INDEPENDENT AND ANSWERED YES TO I_OWN.</p> <p>Do you own a farm (1=YES 2=NO)?</p> <p>Currently, what is the total worth of your farm (0-950,000)?</p> <p>Is it over \$10,000 (1=YES 2=NO)?</p> <p>How much do you currently owe on your farm (0-950,000)?</p> <p>Is it over \$10,000 (1=YES 2=NO)?</p>		<p>x</p>	<p>x</p>
<p>I_RLES IF RESPONDENT IS DETERMINED TO BE INDEPENDENT AND ANSWERED YES TO I_OWN.</p> <p>Do you own any other real estate (1=YES 2=NO)?</p> <p>Currently, what is the total worth of your other real estate (0-950,000)?</p> <p>Is it over \$10,000 (1=YES 2=NO)?</p> <p>How much do you currently owe on this real estate (0-950,000)?</p> <p>Is it over \$10,000 (1=YES 2=NO)?</p>		<p>x</p>	<p>x</p>

## Section J: Locating

CATI ITEM	FTB ONLY	UG	G/1P
<p>J_INTRO</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>	X		
<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</p> <p>What is this person's relationship to you?</p> <p>1 = MOTHER/FEMALE GUARDIAN 2 = FATHER/MALE GUARDIAN 3 = SISTER/BROTHER 4 = SPOUSE 5 = OTHER RELATIVE 6 = FRIEND 7 = OTHER SPECIFY</p> <p>SPECIFY RELATIONSHIP OF CONTACT.</p>	X		
<p>J_SPOUSE</p> <p>ONLY ASKED IF RESPONDENT IS MARRIED.</p> <p>What is your spouse's full name (including maiden name)?</p>	X		
<p>J_VERPRM</p> <p>We'd also like to verify your permanent address. Is it same or similar to:</p> <p>1 = PERMANENT ADDRESS FROM CADE 2 = PARENT ADDRESS FROM CADE 3 = ADDRESS FROM CURRENT ROSTER LINE 9 = DIFFERENT FROM ABOVE</p>	X		

CATI ITEM	FTB ONLY	UG	G/1P
<p>J_VERLOC</p> <p>And is your local address same or similar to:</p> <p>1 = PERMANENT ADDRESS FROM PRMADD  2 = LOCAL ADDRESS FROM CADE  3 = ADDRESS FROM CURRENT ROSTER LINE  9 = DIFFERENT FROM ABOVE</p>	X		
<p>J_NICK</p> <p>Do your parents, relatives, or friends know you by any other name other than [fill student]?</p> <p>1 = YES  2 = NO</p> <p>What is that other name?.</p>	X		
<p>J_DRVLIC</p> <p>To help us in locating you later, please tell me in what state your driver's license was issued.</p> <p>May I have your driver's license number?</p> <p>1 = YES  2 = NO</p>	X		
<p>J_FTRCTY</p> <p>In what city and state do you expect to be living two years from now?</p> <p>CITY:  STATE:</p>	X		
<p>J_SOCSEC</p> <p>ONLY ASKED IF WE DON'T ALREADY HAVE RESPONDENT'S SOCIAL SECURITY NUMBER.</p> <p>Can you tell me your social security number (1=YES 2=NO)?</p> <p>What is your Social Security number?</p> <p>Is your student ID number the same as your Social Security number (1=YES 2=NO)?</p> <p>Can you tell me your student ID number (1=YES 2=NO)?</p> <p>What is your student ID number?</p>	X	X	X

CAT ITEM	FTB ONLY	UG	G/1P
<p>J_PARCON</p> <p>We might like to get some information from your [fill d_fill2] concerning [fill d_fill9] role in financing your education after high school.</p> <p>Will you give me your [fill h_fill1]'s name, address and phone number in case we need to contact him.</p> <p>1 = YES 2 = NO</p> <p>Will you give me your [fill h_fill2]'s name, address and phone number in case we need to contact her.</p> <p>1 = YES 2 = NO</p>	X		

## FACSIMILE PARENT INTERVIEW

### Section L: Parental Support

#### CAT ITEM

#### L\_INTRO

First I need to know your relationship to [fill student]?

#### PROBE AS NEEDED

- 1 = MOTHER
- 2 = STEP MOTHER
- 3 = OTHER FEMALE RELATIVE OR GUARDIAN
- 4 = FATHER
- 5 = STEP FATHER
- 6 = OTHER MALE RELATIVE OR GUARDIAN

#### L\_MARITAL

I would like to ask some questions about your role in financing [fill STUDENT]'s expenses for the 1994-95 school year.

But before we begin, I need to ask your marital status so that I can determine the questions to ask you later in the interview.

What is your marital status?

- 1 = SINGLE, NEVER MARRIED
- 2 = MARRIED
- 3 = SEPARATED
- 4 = DIVORCED
- 5 = WIDOWED

#### L\_CONTSC

Have YOU paid money directly to [fill STUDENT]'s school for [fill his\_her] educational expenses for the 1994-95 school year? (By contribute, we mean only money that you do not expect to be paid back.)

(Please include only expenses that are paid directly to the school.)

- 1 = YES
- 2 = NO

#### L\_2CONTRI

INTERVIEWER: 1=YES 2=NO

Was that money for  
 ...tuition and fees?  
 ...for housing?  
 ...for meals?

## CATI ITEM

## L\_CONTST

How much did you give directly to [fill STUDENT] for [his\_her] 1994-95 educational expenses? 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.

0 = NONE  
1-80,000 = DOLLARS

Was that

1 = per year  
2 = per month  
3 = per week  
4 = per term

How many months/weeks/terms?

## L3CONTRI

INTERVIEWER:

1= YES  
2=NO

Was that money intended for...

....tuition and fees?  
....housing or rent?  
....food or board?  
....books?  
...transportation expenses?  
....other expenses?

## L\_LOANST1

How much money have you loaned [fill STUDENT] for the 1994-95 school year?

BY LOAN, WE MEAN MONEY THAT YOU EXPECT [FILL STUDENT] TO PAY BACK.

0=NONE  
1-80,000=DOLLARS

## L\_LOANST

Would you estimate your loan to [fill STUDENT] was...

1 = ...less than \$1,000 dollars  
2 = ...at least \$1,000 but less than \$5,000  
3 = ...at least \$5,000 but less than \$10,000  
4 = ...at least \$10,000 but less than \$20,000  
5 = ...or, \$20,000 or more

## CAT ITEM

Was the loan money to be used for...

- ...tuition and fees?
- ...housing?
- ...meals?
- ...books?
- ...transportation expenses?
- ...other personal expenses?

## L\_AYOP

In order to contribute or lend money for your 1994-95 school year expenses, did [fill PMR3] use money from...

INTERVIEWER: 1=YES 2=NO

- ...Savings accounts, money market accounts, or certificates of deposits?
- ...Series EE Bonds from the US Savings Bond Program?
- ...Other stocks, bonds or mutual funds?
- ...Funds previously set aside for retirement?
- ...Life insurance policies?
- ...A trust fund?
- ...Personal loans including home equity loan or a line of credit?
- ...A second mortgage on real estate?
- ...Real estate investments [r]other than your home[n]?
- ...Money from [r]relatives, friends, or a former spouse[n]?
- ...Any other sources?

## L\_ADDJOB

Did you start working, take an additional job, or increase the number of hours worked per week in order to contribute to [fill student]'s educational expenses?

- 1 = YES
- 2 = NO

How many hours do you typically work per week?

INCLUDE ALL HOURS, EVEN IF THEY WERE NOT PAID FOR THOSE HOURS (0-80)

How many hours does your spouse typically work per week?

INCLUDE ALL HOURS, EVEN IF THEY WERE NOT PAID FOR THOSE HOURS (0-80)

## CATI ITEM

## L\_LONSRC

You said you took out personal loans to help with [fill student]'s school expenses.  
What kind of loans did you get ...READ LIST AS A PROMPT. ENTER ALL THAT APPLY ENTER 0  
TO EXIT

- 1 = A PLUS LOAN
- 2 = A STATE SPONSORED PARENT LOAN
- 3 = A SCHOOL SPONSORED PARENT LOAN
- 4 = A SIGNATURE LOAN?
- 5 = A HOME EQUITY LOAN?
- 6 = A LINE OF CREDIT LOAN?
- 7 = A LOAN AGAINST A LIFE INSURANCE POLICY
- 8 = A COMMERCIAL LOAN?
- 9 = A LOAN FROM A NON-PROFIT UNDERWRITER
- 10 = A FAMILY EDUCATION LOAN FROM SALLIE MAE
- 11 = A LOAN AGAINST A RETIREMENT FUND
- 12 = A PERSONAL LOAN OR LOANS FROM A FORMER SPOUSE, OTHER RELATIVE, OR  
FRIEND
- 13 = Loans from any other sources

## L\_PREPAY

To what extent did you rely on a tuition prepayment plan to pay [fill STUDENT]'s education expenses...

1=none

2=some

3=very much

Approximately, how much did you spend on the prepayment plan (1-50,000)?

Were these accounts or certificates set aside specifically for [fill student]'s education (1=YES 2=NO)?

Were these accounts in YOUR name, [fill student]'s name, or both parent and student's name?

- 1 = PARENT'S NAME
- 2 = STUDENT'S NAME
- 3 = BOTH

## L\_SPONSO

Who was the sponsor of the tuition prepayment plan used?  
Was it.....

- 1 = State sponsored
- 2 = School sponsored
- 3 = or a private plan?
- 4 = OTHER (SPECIFY)

## CAT ITEM

## L\_STARTS

What grade was [fill STUDENT] in when [fill PMR3] [r]first[n] began to save for [fill his/her] postsecondary education?

- 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

## L\_OTHER

Has [fill STUDENT] taken out any loans to pay for his/her educational expenses during the 94-95 school year?

- 1 = YES
- 2 = NO

## L\_PARPAY

To what extent have or will you help repay the money that [fill student] has or will have borrowed for his/her education?

Will you help with...

- 1 = all of it
- 2 = some of it, or
- 3 = none of it?
- 4 = HASN'T AND WON'T BORROW ANY MONEY

## L\_STPAY

To what extent has or will [fill STUDENT] help repay the money you borrowed for [fill his/her] 1994-95 school year expenses?

Will [fill STUDENT] help with...

- 1 = all of it
- 2 = some of it, or
- 3 = none of it?

## Section M: Dependents

CAT/ITEM
<p><b>M_INTRO</b></p> <p>Was [fill STUDENT] your dependent between July 1, 1994 and June 30, 1995. (A DEPENDENT IS SOMEONE WHO RECEIVES MORE THAN HALF OF HIS OR HER SUPPORT FROM YOU).</p> <p>1 = YES 2 = NO</p>
<p><b>M_OTHERS</b></p> <p>How many people did you support between July 1, 1994 and June 30, 1995? INCLUDE IN YOUR ANSWER ALL OF YOUR DEPENDENT CHILDREN INCLUDING [fill STUDENT]. ALSO INCLUDE YOUR PARENTS IF THEY RECEIVED MORE THAN HALF OF THEIR SUPPORT FROM YOU.</p> <p>0-20 = DEPENDENTS</p>
<p><b>M_EDUCAT</b></p> <p>How many of your dependents, including [fill STUDENT] were in college or other postsecondary school at least half time during the 1994-95 school year?</p> <p>INCLUDE YOURSELF IF APPLICABLE.</p> <p>0 = NO DEPENDENTS IN POSTSECONDARY SCHOOL HALF TIME 1-20 = DEPENDENTS IN POSTSECONDARY SCHOOL HALF TIME</p>
<p><b>M_AMTPD</b></p> <p>Including the money you contributed or loaned to help meet [fill STUDENT]'s expenses for the 1994-95 school year what was the total amount that you paid for the 1994-95 (college/postsecondary) expenses for all dependents, including yourself?</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</p>
<p><b>M_PSENUM</b></p> <p>How many of your children, over the age of 18, including [fill STUDENT] have ever attended a postsecondary school?</p> <p>1-20 = DEPENDENTS</p> <p>How many of [fill PMR2] children over the age of 18 have never attended a postsecondary school?</p> <p>0-20 = DEPENDENTS</p>

## CAT ITEM

M\_ELSEC4

Now I want to ask about any elementary and secondary educational expenses you may have had.

During the 94-95 school year, did [fill PMR1] pay tuition for any of your dependents to attend an elementary or secondary school?

1 = YES

2 = NO

How many (1-20)?

How much was the total tuition and fees that you paid IN THE 1994-95 SCHOOL YEAR FOR THOSE ATTENDING ELEMENTARY OR SECONDARY SCHOOLS (1-80000)?

M\_ELSEC5

Did you pay elementary or secondary tuition during the 1993-94 school year?

1 = YES

2 = NO

How many (1-20)?

How much did you pay for (ELEMENTARY OR SECONDARY SCHOOL) tuition and fees that year (1-80,000)?

## Section N: Employment and Financial Condition

CAT/ITEM
<p>N_EMPLYR</p> <p>My next few questions have to do with you and your spouse's employment.</p> <p>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</p>
<p>N_DISR</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</p>
<p>N_OCRSPC</p> <p>Please give me your [fill n_fill1] occupation.</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>1 = ENTER THE USEREXIT</p>
<p>N_EMPL4R</p> <p>@EMPL4R</p> <p>Were you employed at any time during the 1994 calendar year?</p> <p>WE ARE SPECIFICALLY INTERESTED IN WORK FOR PAY, NOT VOLUNTEER WORK.</p> <p>1 = YES 2 = NO</p> <p>@NOTEMR</p> <p>Were you unemployed in 1994? (COLLECT NUMBER OF WEEKS, IF NONE ENTER 0) (0-52)</p>

## CAUTION

N\_STDEMR  
IF UNEMPLOYED FOR SOME PERIOD OF TIME IN 1994

Overall, would you say you've been steadily employed over the last five years? (EXCLUDE VACATIONS, PLANNED LEAVES OF ABSENCE, AND ANY PERIODS OF RETIREMENT)

- 1 = YES  
2 = NO

N\_UNPEMR  
IF RESPONDENT DOES NOT HAVE A JOB FOR PAY

Over the last five years, have you worked primarily at home, providing unpaid services for your family members, rather than working for pay?

- 1 = YES  
2 = NO

N\_PUBASR  
IF RESPONDENT DOES NOT HAVE A JOB FOR PAY

For the last five years, were you primarily dependent on public assistance or on the income of another family member?

- 1 = YES  
2 = NO

Are you still receiving that assistance or income?

- 1 = YES  
2 = NO

N\_UNDEMR  
Does your current job require the level of education you have completed?

"UNDEREMPLOYMENT" OCCURS WHEN AN INDIVIDUAL IS QUALIFIED BY EDUCATION AND/OR EXPERIENCE TO ASSUME EMPLOYMENT OF A HIGHER DEGREE OF RESPONSIBILITY, COMPLEXITY, AND INCOME.

- 1 = YES  
2 = NO

N\_OBTAIN  
IF NOT EMPLOYED

Are you currently looking for a job?

- 1 = YES  
2 = NO

CAT ITEM
<p>Are you having trouble finding a job?</p> <p>1 = YES 2 = NO</p>
<p>N_EMPLY5 IF RESPONDENT IS MARRIED</p> <p>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</p>
<p>N_OCRSP5</p> <p>Please give me your spouse's occupation.</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>1 = ENTER THE USEREXIT</p>
<p>N_EMPL45</p> <p>@EMPL4R</p> <p>Was he/she employed at any time during the 1994 calendar year?</p> <p>1 = YES 2 = NO</p> <p>@NOTEMR</p> <p>How many weeks was he/she unemployed in 1994? (0-52)</p>
<p>N_STDEMS</p> <p>IF SPOUSE NOT EMPLOYED AT SOME TIME IN 1994</p> <p>Overall, would you say he/she has been steadily employed over the last five years, excluding vacations, planned leaves of absence, and any periods of retirement?</p> <p>1 = YES 2 = NO</p>

CAT/ITEM
<p>N_UNPEMS IF SPOUSE NOT EMPLOYED</p> <p>Over the last five years, has he/she worked primarily at home, providing unpaid services for your family members, rather than working outside the home?</p> <p>1 = YES 2 = NO</p>
<p>N_OBTAIS IF SPOUSE IS NOT EMPLOYED</p> <p>Is he/she currently looking for a job?</p> <p>1 = YES 2 = NO</p> <p>Is he/she having difficulty finding employment?</p> <p>1 = YES 2 = NO</p>
<p>N_DISABL</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</p>
<p>N_INCOME</p> <p>My next few questions refer to your 1993 and 1994 income.</p> <p>N_INC94</p> <p>What was your total income for ....?</p> <p>TOTAL 94= (0-950000) TOTAL 93= (0-950000)</p>

## CATITEM

N\_INC94

How much of that was from

@RWAG

Your job?

94 WAGES/SALARY

(0-950000)

93 WAGES/SALARY

(0-950000)

@SWAG

Your spouse's job?

IF SAME AS 94 ENTER 1

94 WAGES/SALARY

(0-950000)

93 WAGES/SALARY

(0-950000)

@UNER

Income from interest, dividends, and capital gains?

94 UNEARNED INCOME

(0-950000)

93 UNEARNED INCOME

(0-950000)

@UNTAX

Income from social security, child support, or government welfare programs?

94 UNTAXED INCOME

(0-950000)

93 UNTAXED INCOME

(0-950000)

## CATITEM

N\_INC94E

IF RESPONDENT DOES NOT KNOW TOTAL INCOME

@INC94E

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

@LESST

Please tell me if your employment income for 1994 was.

IF INCOME ESTIMATED TO BE LESS THAN \$30,000

- 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)

@MORET

I'm going to read you some dollar ranges. Please tell me the range that best estimates your employment income for 1994.

IF INCOME ESTIMATED TO BE MORE THAN \$30,000

- 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

N\_ASSETS

@CASH

As of May, 1994, was the total worth of your cash, savings, and checking accounts more than \$10,000?

- 1 = Yes
- 2 = No

@RTACCT1

As of May 1994, was the total worth of [fill PMR2] retirement and/or pension accounts worth more than \$50,000?

- 1 = Yes
- 2 = No

## CATITEM

## N\_HMEOWN

## @HOMEOWN

On May 1, 1994, did you own your home?

INTERVIEWER: IF THE PARENT IS PAYING MORTGAGE, CODE IT AS YES...

- 1 = YES, WE OWNED THE HOME OR WERE PAYING MORTGAGE  
 2 = NO, WE WERE RENTING OR LIVING SOMEWHERE ELSE

## @HMEVAL1

As of May, 1994, what was the total worth of your home?

1-9500000 = Dollars

## @HMEVAL2

IF TOTAL WORTH UNKNOWN

As of May, 1994, would you estimate [fill PMR2] home was worth...

- 1 = less than \$25,000  
 2 = 25 to 49 thousand (LESS THAN \$ 50,000)  
 3 = 50 to 99 thousand (LESS THAN \$100,000)  
 4 = 100 to 249 thousand (LESS THAN \$250,000)  
 5 = or, \$250,000 or more

## N\_HMEOWE

How much was still owed as of May, 1994?

0 = NONE

1-9500000 = Dollars

## N\_BUSNES

As of May, 1994, was the equity in [fill PMR2] business, including farms, over \$50,000?

THE BUSINESS OR FARM MUST BE OWNED BY THE RESPONDENT OR SPOUSE

- 1 = YES  
 2 = NO - ENTER NO IF NO BUSINESS IS OWNED

## N\_INVEST

Not including your primary residence, was the total worth of [fill PMR2] real estate, and investments such as stocks and bonds more than \$50,000 as of May, 1994?

- 1 = YES  
 2 = NO

## N\_DEBTS

Now I want to talk about money [fill PMR1] may have borrowed for the postsecondary education of any household member excluding any money you may have borrowed for [fill student]'s education.

## CATITEM

N\_PSELON

Have you ever borrowed any money for either yourself, or any of your other children's postsecondary education?

1 = YES

2 = NO

N\_PSESEL

@SELF

Was any of the money you borrowed for postsecondary education expenses for yourself?

1 = YES

2 = NO

@SELFAM

What is the total amount you have ever borrowed for the postsecondary education for yourself?

1-90000 = DOLLARS

N\_PSEOTH

@OTHERS

Was any of the money you borrowed for the postsecondary education expenses of your children other than [fill STUDENT]?

1 = YES

2 = NO

@OTHERSA

What is the total amount you have ever borrowed for the postsecondary education for these other children?

1-90000 = DOLLARS

N\_PSESUB

@SUBJ

Was any of this money for [fill STUDENT]'s postsecondary education expenses?

1 = YES

2 = NO

@SUBJAM

What is the total amount you have ever borrowed for the postsecondary education for fill STUDENT], including the \$[fill I\_sum2] borrowed for [fill STUDENT]'s education in 1994-1995?

1-90000 = DOLLARS

## CAT ITEM

N\_BORROWT

Including the \${fill I\_sum2} borrowed for [fill STUDENT]'s education in 1994-1995, what is the total amount you have borrowed for postsecondary education for all members of your household?

Include yourself, your spouse, [fill STUDENT], and any other children.

WE ARE INTERESTED IN THE TOTAL AMOUNT EVER BORROWED, INCLUDING AMOUNTS FOR PEOPLE WHO ARE NO LONGER HOUSEHOLD MEMBERS.

0-990000 = DOLLARS

N\_BORTOT@BORROWA

What is the total amount you have borrowed for postsecondary education for all members of your household?

Include yourself, your spouse, [fill STUDENT], and any other children.

WE ARE INTERESTED IN THE TOTAL AMOUNT EVER BORROWED, INCLUDING AMOUNTS FOR PEOPLE WHO ARE NO LONGER HOUSEHOLD MEMBERS.

0-990000 = DOLLARS

N\_BORTOT@OWE

Of the \${fill @BORROWT} amount, how much do you currently owe?

0 = NONE

1-90000 = Dollars

## Section P: Parent Demographics

CATI ITEM
<p>P_INTRO</p> <p>Before we end the interview, I have a few questions about your background and education.</p>
<p>P_SEX</p> <p>ASK IF NOT OBVIOUS. Are you...</p> <p>1 = Male or 2 = Female</p>
<p>P_HISPNC</p> <p>Are you of Hispanic origin?</p> <p>1 = YES 2 = NO</p> <p>Are you...</p> <p>1 = Of Mexican, Mexican-American, or Chicano descent? 2 = Of Cuban descent? 3 = Of Puerto Rican descent? 4 = Of some other Hispanic origin?</p>
<p>P_RACE</p> <p>What is your race?</p> <p>1 = WHITE, 2 = AFRICAN AMERICAN, BLACK, 3 = AMERICAN INDIAN, ALASKA NATIVE, 4 = ASIAN OR PACIFIC ISLANDER? 5 = OTHER</p>
<p>P_AMRNAT</p> <p>Are you enrolled in a state- or federally-recognized tribe?</p> <p>1 = YES 2 = NO</p>

CATI ITEM

P\_ASIAN

Are you...

- 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\_EDUC

What year were you born?  
00-78

## CATI ITEM

P\_EDUCR

What is the highest level of education you have completed?

- 1 = DID NOT FINISH HIGH SCHOOL
- 2 = FINISHED HIGH SCHOOL 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

P\_YOBS

IF RESPONDENT IS MARRIED

What year was your spouse born?  
00-78

P\_EDUCS

IF RESPONDENT IS MARRIED

What is the highest level of education your spouse has completed?

- 1 = DID NOT FINISH HIGH SCHOOL
- 2 = FINISHED HIGH SCHOOL 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

P\_STLGL

What is your state of legal residence?

CATI ITEM

P\_FINISH

INTERVIEWER: WHO COMPLETED THE MAJORITY OF THE QUESTIONNAIRE?

- 1 = MOTHER / FEMALE GUARDIAN / STEPMOTHER
- 2 = FATHER / MALE GUARDIAN / STEPFATHER

## Section Q: Reasons for Not Seeking Financial Aid

## CAT ITEM

Q\_intro

IF THERE IS NO EVIDENCE FROM CADE OF AID RECEIVED

Has [fill STUDENT] ever applied for financial aid for his/her education beyond high school?  
(FINANCIAL AID INCLUDES GRANTS, SCHOLARSHIPS, FELLOWSHIPS, LOAN OR WORK STUDY PROGRAM)

- 1 = YES  
2 = NO

Q\_WHYNOT

Why did your family not apply for  
financial aid for [fill STUDENT]?

ENTER ALL THE CODES IN THE ORDER MENTIONED BY THE RESPONDENT.  
ENTER 0 TO EXIT

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

## Section R: Choice of NPSAS School

CATI ITEM
<p>R_CONSDR</p> <p>In deciding to attend [fill school], did you and [fill STUDENT] consider...</p> <p>INTERVIEWER:</p> <p>1 = YES</p> <p>2 = NO</p> <p>...the graduation rate of the school?</p> <p>...the crime rate at the school?</p> <p>...the job placement rate of the school?</p>
<p>R_SELECT</p> <p>Did you help [fill STUDENT] select [fill school]?</p> <p>1 = YES</p> <p>2 = NO</p>
<p>R_SELHOW</p> <p>How did you help?</p> <p>INTERVIEWER: CODE ALL THAT APPLY</p> <p>1 = ...VISIT THE CAMPUS.</p> <p>2 = ...SOLICIT LETTERS OF RECOMMENDATION.</p> <p>3 = ...PAY FOR STUDENT'S TRIPS TO VISIT CAMPUSES.</p> <p>4 = ...PURCHASE OR REVIEW REFERENCE GUIDES ABOUT SCHOOLS.</p> <p>5 = ...WRITE TO SCHOOLS FOR INFORMATION.</p> <p>6 = ...ASKED INFORMATION/QUESTIONS OF OTHERS WHO HAVE ATTENDED,</p> <p>7 = ...OTHER (PLEASE SPECIFY)</p>

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# Appendix D

## Abbreviated Student Interview

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# NATIONAL POSTSECONDARY STUDENT AID STUDY

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## SELF-ADMINISTERED INTERVIEW

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*Instructions for completing this interview:* 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 in the interview is the school shown on the label on this page. The study period of interest is the 1994-95 school year (between May 1, 1994 and June 30, 1995). 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.

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### A. YOUR ENROLLMENT AT THE NPSAS SCHOOL

1. Were you enrolled at the NPSAS school sometime between May 1, 1994 and June 30, 1995? *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 May 1, 1994 and June 30, 1995, were you enrolled in a program or taking courses leading to a degree or certificate?

- 1 Yes  
 2 No

3. At anytime between May 1, 1994 and June 30, 1995, 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. When did you graduate or complete your high school requirements? If you did not complete high school, when were you last enrolled in high school?

\_\_\_\_\_/\_\_\_\_\_  
month      year

6. Were you completing high school requirements for the entire time you were at the NPSAS school between May 1, 1994 and June 30, 1995?

- 1 Yes  
 2 No

PLEASE CONTINUE →

**B. YOUR BACKGROUND**

7. What is your birth date? \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
month day year

8. Are you Hispanic?

- 1 Yes
- 2 No

9. What is your race?

- 1 American Indian or Alaskan native
- 2 Asian or Pacific Islander
- 3 Black
- 4 White
- 5 Other (Please specify) \_\_\_\_\_

10. What is your current marital status?

- 1 Single, never married → GO TO QUESTION 12
- 2 Married
- 3 Separated
- 4 Divorced
- 5 Widowed

11. What was your marital status on July 1, 1994?

- 1 Single, never married
- 2 Married
- 3 Separated
- 4 Divorced
- 5 Widowed

12. As of July 1, 1994, how many children or other dependents 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. ....

13. Are you currently in the reserves or on active duty in the U.S. military?

- 1 Yes
- 2 No

14. Are you a veteran of the U.S. military?

- 1 Yes
- 2 No

15. During the 1994-95 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. Between July 1, 1994 and June 30, 1995, how many hours of community service or volunteer work did you perform over the year, other than court-ordered service? Enter 0 if none. ....

**C. YOUR ENROLLMENT AFTER HIGH SCHOOL**

17. When did you first enroll in any postsecondary school after high school? ..... \_\_\_\_\_ / \_\_\_\_\_  
month year

18. In addition to the NPSAS school, how many postsecondary schools did you attend between July 1, 1994 and June 30, 1995? If the NPSAS school was the only school you attended during that time period, enter 0. ....

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 1994-95 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 graduate 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 1994-95 school year?

Major: \_\_\_\_\_  
\_\_\_\_\_

23. During the first term you were enrolled at the NPSAS school in the 1994-95 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 1994-95 school year?

EXPENSES IN 1994-95	AMOUNT
Tuition and fees at all schools attended in the year, prior to any discounts or waivers	\$
Rent and food or room and board if in school-owned housing	\$
Books	\$
Equipment (e.g., computers, microscopes, tools, or instruments)	\$
Commuting to class, including bus fare and gasoline	\$
Other educational expenses (e.g., transportation to your permanent home, dependent care while attending class)	\$

25. During the 1994-95 school year, did you receive any financial aid, such as grants, loans, scholarships, tuition waivers, assistantships, employer tuition reimbursement, and so on.

- 1 Yes
- 2 No → GO TO QUESTION 27

26. Please list the types, sources, and amounts of aid you received to attend all schools during the 1994-95 school year.

SOURCE/TYPE	AMOUNT
<b>EXAMPLES:</b>	
Federal Pell Grant	\$2000
Federal Stafford Loan	\$2500
Institutional Research Assistantship	\$2500
	\$
	\$
	\$
	\$
	\$
	\$
	\$
	\$

27. Did you receive any loans from parents, relatives, banks, credit unions or from any sources other than the federal government, state government, your employer, or your school, for the 1994-95 school year?

- 1 Yes
- 2 No → GO TO QUESTION 29

28. How much did you receive?

SOURCE	AMOUNT
Parents/Guardians	\$
Other relatives or friends	\$
Bank, savings and loan, or credit union	\$
Other loan source: <i>(Please specify)</i>	\$

29. Excluding any loans, how much money did you receive per month from your parents/guardians, relatives, and friends for your 1994-95 school expenses?

SOURCE	AMOUNT
Parents/Guardians	\$
Other relatives and friends	\$

30. What is the total amount you have ever borrowed for your education since you left high school, including federal student loans and loans from all other sources? How much do you still owe? Enter 0, as applicable, to indicate no money borrowed or no money owed for your postsecondary education.

BORROWING FOR YOUR EDUCATION	AMOUNT
Total amount EVER borrowed	\$
Amount borrowed in federal student loans	\$
Total amount currently owed	\$
Amount owed on federal student loans	\$

**E. EMPLOYMENT AND INCOME**

31. Did you work for pay at anytime between July 1, 1994 and June 30, 1995?

- 1 Yes
- 2 No → GO TO QUESTION 35

32. What was your principal job for pay 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: \_\_\_\_\_

33. Did you work for pay at the same time you were enrolled in school?

- 1 Yes If yes, how many hours per week did you work on average? \_\_\_\_\_ How much did you earn per hour? ..... \$ \_\_\_\_\_
- 2 No

34. What was your total income from all jobs held between July 1, 1994 and June 30, 1995? ..... \$

35. During the 1994-95 school year, did you participate in any of the following? (Check all that apply)

- 1 A College Work Study Program
- 2 An internship or practicum
- 3 An apprenticeship program
- 4 A cooperative education program
- 5 A teaching assistantship
- 6 A research assistantship

36. Please complete the following income matrix for the 1993 and 1994 calendar years (January 1 to December 31).

INCOME SOURCE	AMOUNT	
	1993	1994
Your jobs, including work study and assistantships	\$	\$
Your spouse's jobs, including work study and assistantships	\$	\$
Interest, dividends, and capital gains	\$	\$
Other sources such as child support, Social Security, AFDC, etc.	\$	\$

**F. PARENT/GUARDIAN INFORMATION**

37. What was your parents'/legal guardians' marital status on July 1, 1994?

- 1 Married to each other
- 2 Divorced
- 3 Separated
- 4 Never married
- 5 One or both deceased
- 6 Never knew parents; no legal guardians → SKIP QUESTION 38
- 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 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

**THANK YOU!!** for completing this important interview. Please return it in the enclosed, postage-paid envelope. Your participation is essential to the success of this study.

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# Appendix E

## Reliability Reinterview

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## RELIABILITY REINTERVIEW

### INTRODUCTION

Hello, my name is [interviewer name]. I'm calling from Research Triangle Institute for the U.S. Department of Education. Recently, when you completed a telephone interview as part of the National Postsecondary Student Aid Study, you volunteered to participate in a [r]brief[n] reinterview. I'd like to conduct the 10 or 15 minute reinterview now. You can stop at anytime.

Let's begin...

First, I'd like to make sure our records are correct. You were enrolled in [fill NPSAS school] at some time between May 1, 1994 and June 30, 1995. Is that right?

- <1> YES
- <2> NO

What is your date of birth?

Month  
Day  
Year

### A\_DIPLOM

Did you receive...

- 1 = a high school diploma,
- 2 = pass a General Educational Development (GED) test,
- 3 = or receive a certificate of high school completion granted by your state?
- 4 = DID NOT COMPLETE HIGH SCHOOL OR HIGH SCHOOL EQUIVALENCY PROGRAM

### A\_HSDATE

When did you receive your [high school diploma/certificate]?

YEAR: (30-95)

**A\_FSTSCH**

After high school, was [fill school]  
the first school you enrolled in to take courses?

- 1 = YES
- 2 = NO

**FRSTNAM**

[If A\_FSTSCH NE 1]

What was the first school you ever enrolled in to take courses, after  
high school?

**A\_SCHSTR**

When did you first attend [fill FRSTNAM] after high school?

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.

MONTH \ YEAR (20-95)

**A\_FSTPRG**

What type of degree program were you enrolled in  
during the [R]first[N] term at [fill school]  
that began in [fill a\_fill4],[fill a\_fill14]?

- 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-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-MATRICULATED)

**A\_FSTLVU**

During the first term you were enrolled at  
[fill school]

in the 1994-1995 school year, what was your level in the program?

**UNDERGRADUATE:**

- 1 = FIRST YEAR/FRESHMAN
- 2 = SECOND YEAR/SOPHOMORE
- 3 = THIRD YEAR/JUNIOR
- 4 = FOURTH YEAR/SENIOR
- 5 = FIFTH YEAR OR HIGHER UNDERGRADUATE

[Respondents in less than 2-year schools will skip this item.]

**A\_FSTLVG**

During the first term you were enrolled at  
[fill school]

in the 1994-1995 school year, what was your level in the program?

**GRADUATE:**

- 6 = FIRST YEAR
- 7 = SECOND YEAR
- 8 = THIRD YEAR
- 9 = FOURTH YEAR
- 10 = FIFTH YEAR
- 11 = SIXTH YEAR
- 12 = SEVENTH YEAR
- 13 = EIGHTH YEAR
- 14 = NINTH YEAR
- 15 = BEYOND NINTH YEAR

**B\_ED\_EXP**

For the 94-95 school year, how much did you spend for... [r]ANNUAL COSTS[n]

INTERVIEWER: IF THE ITEM WAS PAID FOR BY A SCHOLARSHIP ETC ASK FOR AN  
ESTIMATE OF IT'S VALUE

**COMMUT**

...commuting to class, such as bus fare and gasoline?  
(Do not include the cost of car insurance and maintenance.) (0-5000) \

**TRHOME**

...other educational expenses, (such as transportation to your permanent home or dependent care while attending classes)? (0-20000) \

**B\_LIVEXP**

Between July 1, 1994 and June 30, 1995,  
how much were your average [r]monthly[n] expenses for...

**FOOD**

...Food, including meals in restaurants [if b\_meals@ans ne <1>] and meal plans?[endif]  
(0-2000) \

**TRANS**

...Car loans, car maintenance, and insurance?  
(Please exclude costs for commuting to school.) (0-5000) \

**PRSEXP**

...Personal expenses such as clothing, dry cleaning, recreation?  
(0-5000) \

**OTEXP**

...Other expenses, such as telephone bills, child support, life or health insurance, or repayment of other loans? (0-5000) \

**I\_DEPEND\_VARIATION**

As of July 1, 1994, how many children or other dependents were living with you or receiving at least 50 percent of their support from you?

Please include children and any other people, \  
{0-20}

**C\_OTHLON**

Not including any loans you may have received from the federal government, state government, your school, or your employer, did you receive any [r]loans[n] from parents, relatives, banks, credit unions or other sources for the 94-95 school year (INTERVIEWER: READ SOURCES FROM BELOW. [R] 1=YES 2=NO)?[N] @ANS  
INTERVIEWER: IF YES, ASK, Where did you get the [r]loan[n] and how much did you receive?

- 1 = PARENTS OR GUARDIANS (0-999,999)?
- 2 = OTHER RELATIVES OR FRIENDS (0-999,999)
- 3 = PERSONAL LOANS SECURED THROUGH YOUR BANK, SAVINGS AND LOAN, CREDIT UNION
- 4 = OTHER LOAN
- 5 = OTHER LOAN [R]0 FOR NO OTHERS[N]

**E\_EVRWRK@WRKNPS**

Did you have a job for pay at anytime between [NPSAS year fill]?

- <1> YES
- <2> NO

**JOBHRS**

About how many hours per week did you work in your principal job while you were attending classes during the 94-95 school year?

{0-80}

PRINCIPAL JOB REPORTED PREVIOUSLY: [fill OCC/IND]

## E\_PROGRAM

During the 1994-95 school year, did you participate in...

INTERVIEWER: 1=YES 2=NO

CWS

...The College Work Study Program at  
[fill school]? \

TEACH

...A teaching assistantship? \

RSRCH

...A research assistantship? \

## G\_COMSRV

Did you do community service or volunteer work, other than court-ordered service, at  
anytime between July 1, 1994 and June 30, 1995?

<1> YES

<2> NO

**F\_PARTIC**

[BPS FTBs only.]

I am now going to read you a list of school-related activities that you may have participated in during the 1994-95 school year, while you attended [fill school].

Please indicate for each activity how often you participated in the activity

INTERVIEWER: ENTER A NUMBER 0 TO 9

**ADVSR**

Talk with faculty about academic matters outside of class time? \

**ACDMTG**

Meet with advisor concerning academics plans \

**SOCIAL**

Have informal or social contacts with advisor or other faculty members outside of classrooms and offices \

**STDYGP**

Participate in Study groups with other students outside of the classroom? \

**ASTCTR**

Participate in one or more student assistance centers/programs? \

**FRIEND**

Go places with friends from school?  
(e.g. concerts, movies, restaurants, sporting events) \

**CLUBS**

Participate in school clubs?  
(e.g. student government, religious clubs, service activities) \

**EVENT**

Attend academic or career-related lectures, conventions, or field trips? \

## **FOLLOW-UP**

### **RESP\_CAT**

In previous surveys, this last set of questions was asked a little differently. Rather than reporting "0 to 9 or more times" as you just did, students were asked to respond with "never, once, several times, and often." Would you prefer...

1=Reporting the number of times you participated in the activity, 0 to 9 or more,  
or

2=Reporting the frequency of participation in words such as "never, once,  
several times, and often"?

## **FEEDBACK**

In the first interview, were there any terms that you found difficult to understand or any questions that were particularly hard to answer? Also, were there any items you recommend deleting?

Please specify:

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# Appendix F

## CADE Verification Form

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**NPSAS:96 Computer Assisted Data Entry (CADE) Verification Form**  
**FIELD(37) (FIELD(38))**

(1) Student	(2) Enrollment Status During Fall (FIELD(1)) <sup>1</sup>	(3) Citizenship Status	(4) Total Tuition Cost (May 1 through April 30)	(5) Expected Family Contribution	(6) Total Aid Received
FIELD(2)	FIELD(4)	FIELD(5)	FIELD(6)	FIELD(7)	FIELD(8)
FIELD(3)	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/>	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/>	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> Corrected Amount: _____	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> Corrected Amount: _____	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> Corrected Amount: _____
FIELD(9)	FIELD(11)	FIELD(12)	FIELD(13)	FIELD(14)	FIELD(15)
FIELD(10)	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/>	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/>	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> Corrected Amount: _____	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> Corrected Amount: _____	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> Corrected Amount: _____
FIELD(16)	FIELD(18)	FIELD(19)	FIELD(20)	FIELD(21)	FIELD(22)
FIELD(17)	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/>	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/>	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> Corrected Amount: _____	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> Corrected Amount: _____	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> Corrected Amount: _____
FIELD(23)	FIELD(25)	FIELD(26)	FIELD(27)	FIELD(28)	FIELD(29)
FIELD(24)	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/>	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/>	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> Corrected Amount: _____	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> Corrected Amount: _____	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> Corrected Amount: _____
FIELD(30)	FIELD(32)	FIELD(33)	FIELD(34)	FIELD(35)	FIELD(36)
FIELD(31)	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/>	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/>	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> Corrected Amount: _____	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> Corrected Amount: _____	Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> Corrected Amount: _____

**Instructions:** Please examine the information in columns (2) through (6), and indicate by checking (✓) the appropriate box whether in information in BOLD print is "correct" or "incorrect" according to your records. If the value appearing in columns (4), (5), or (6) is incorrect, please provide the corrected amount. Remember that the data on this sheet is for the 1994-95 school year. The number above the student's name is the ID number that you provided us.

<sup>1</sup>We selected a term from your list of terms that most closely fit the descriptions of "Fall". The exact name term as entered in CADE was FIELD(39) with beginning and ending dates of FIELD(4). This term was chosen because FIELD(40).

### Listing of NCES Working Papers to Date

<u>Number</u>	<u>Title</u>	<u>Contact</u>
94-01 (July)	Schools and Staffing Survey (SASS) Papers Presented at Meetings of the American Statistical Association	Dan Kasprzyk
94-02 (July)	Generalized Variance Estimate for Schools and Staffing Survey (SASS)	Dan Kasprzyk
94-03 (July)	1991 Schools and Staffing Survey (SASS) Reinterview Response Variance Report	Dan Kasprzyk
94-04 (July)	The Accuracy of Teachers' Self-reports on their Postsecondary Education: Teacher Transcript Study, Schools and Staffing Survey	Dan Kasprzyk
94-05 (July)	Cost-of-Education Differentials Across the States	William Fowler
94-06 (July)	Six Papers on Teachers from the 1990-91 Schools and Staffing Survey and Other Related Surveys	Dan Kasprzyk
94-07 (Nov.)	Data Comparability and Public Policy: New Interest in Public Library Data Papers Presented at Meetings of the American Statistical Association	Carrol Kindel
95-01 (Jan.)	Schools and Staffing Survey: 1994 Papers Presented at the 1994 Meeting of the American Statistical Association	Dan Kasprzyk
95-02 (Jan.)	QED Estimates of the 1990-91 Schools and Staffing Survey: Deriving and Comparing QED School Estimates with CCD Estimates	Dan Kasprzyk
95-03 (Jan.)	Schools and Staffing Survey: 1990-91 SASS Cross-Questionnaire Analysis	Dan Kasprzyk
95-04 (Jan.)	National Education Longitudinal Study of 1988: Second Follow-up Questionnaire Content Areas and Research Issues	Jeffrey Owings
95-05 (Jan.)	National Education Longitudinal Study of 1988: Conducting Trend Analyses of NLS-72, HS&B, and NELS:88 Seniors	Jeffrey Owings
95-06 (Jan.)	National Education Longitudinal Study of 1988: Conducting Cross-Cohort Comparisons Using HS&B, NAEP, and NELS:88 Academic Transcript Data	Jeffrey Owings

### Listing of NCES Working Papers to Date--Continued

<u>Number</u>	<u>Title</u>	<u>Contact</u>
95-07 (Jan.)	National Education Longitudinal Study of 1988: Conducting Trend Analyses HS&B and NELS:88 Sophomore Cohort Dropouts	Jeffrey Owings
95-08 (Feb.)	CCD Adjustment to the 1990-91 SASS: A Comparison of Estimates	Dan Kasprzyk
95-09 (Feb.)	The Results of the 1993 Teacher List Validation Study (TLVS)	Dan Kasprzyk
95-10 (Feb.)	The Results of the 1991-92 Teacher Follow-up Survey (TFS) Reinterview and Extensive Reconciliation	Dan Kasprzyk
95-11 (Mar.)	Measuring Instruction, Curriculum Content, and Instructional Resources: The Status of Recent Work	Sharon Bobbitt & John Ralph
95-12 (Mar.)	Rural Education Data User's Guide	Samuel Peng
95-13 (Mar.)	Assessing Students with Disabilities and Limited English Proficiency	James Houser
95-14 (Mar.)	Empirical Evaluation of Social, Psychological, & Educational Construct Variables Used in NCES Surveys	Samuel Peng
95-15 (Apr.)	Classroom Instructional Processes: A Review of Existing Measurement Approaches and Their Applicability for the Teacher Follow-up Survey	Sharon Bobbitt
95-16 (Apr.)	Intersurvey Consistency in NCES Private School Surveys	Steven Kaufman
95-17 (May)	Estimates of Expenditures for Private K-12 Schools	Steve Broughman
95-18 (Nov.)	An Agenda for Research on Teachers and Schools: Revisiting NCES' Schools and Staffing Survey	Dan Kasprzyk
96-01 (Jan.)	Methodological Issues in the Study of Teachers' Careers: Critical Features of a Truly Longitudinal Study	Dan Kasprzyk
96-02 (Feb.)	Schools and Staffing Survey (SASS): 1995 Selected papers presented at the 1995 Meeting of the American Statistical Association	Dan Kasprzyk
96-03 (Feb.)	National Education Longitudinal Study of 1988 (NELS:88) Research Framework and Issues	Jeffrey Owings

### Listing of NCES Working Papers to Date--Continued

<u>Number</u>	<u>Title</u>	<u>Contact</u>
96-04 (Feb.)	Census Mapping Project/School District Data Book	Tai Phan
96-05 (Feb.)	Cognitive Research on the Teacher Listing Form for the Schools and Staffing Survey	Dan Kasprzyk
96-06 (Mar.)	The Schools and Staffing Survey (SASS) for 1998-99: Design Recommendations to Inform Broad Education Policy	Dan Kasprzyk
96-07 (Mar.)	Should SASS Measure Instructional Processes and Teacher Effectiveness?	Dan Kasprzyk
96-08 (Apr.)	How Accurate are Teacher Judgments of Students' Academic Performance?	Jerry West
96-09 (Apr.)	Making Data Relevant for Policy Discussions: Redesigning the School Administrator Questionnaire for the 1998-99 SASS	Dan Kasprzyk
96-10 (Apr.)	1998-99 Schools and Staffing Survey: Issues Related to Survey Depth	Dan Kasprzyk
96-11 (June)	Towards an Organizational Database on America's Schools: A Proposal for the Future of SASS, with comments on School Reform, Governance, and Finance	Dan Kasprzyk
96-12 (June)	Predictors of Retention, Transfer, and Attrition of Special and General Education Teachers: Data from the 1989 Teacher Followup Survey	Dan Kasprzyk
96-13 (June)	Estimation of Response Bias in the NHES:95 Adult Education Survey	Steven Kaufman
96-14 (June)	The 1995 National Household Education Survey: Reinterview Results for the Adult Education Component	Steven Kaufman
96-15 (June)	Nested Structures: District-Level Data in the Schools and Staffing Survey	Dan Kasprzyk
96-16 (June)	Strategies for Collecting Finance Data from Private Schools	Stephen Broughman
96-17 (July)	National Postsecondary Student Aid Study: 1996 Field Test Methodology Report	Andrew G. Malizio