NATIONAL CENTER FOR EDUCATION STATISTICS

User's Manual

April 1992

National Household Education Survey

Adult and Course Data Files User's Manual



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CONTENTS

Chapter			Page
1	INTE	RODUCTION	1
	1.1	Background of Study	1
	1.2 1.3	Components of NHES:91 Overview of Design	1 3
2	DES	CRIPTION OF DATA COLLECTION INSTRUMENTS	7
	2.1	The NHES:91 Screener	7
	2.2	Adult Education Interview	9
3	SAM	IPLE DESIGN AND IMPLEMENTATION	13
	3.1 3.2	Sampling HouseholdsSampling Within Households for the Adult Education	13
		Survey	17
	3.3	Weighting Procedures	20
	3.4	Computing Sampling Errors	23
	3.5	Imputation	25
4	DAT	A COLLECTION METHODS AND RESPONSE RATES	27
	4.1	Data Collection Procedures.	27
		4.1.1 CATI System Applications	27
		4.1.2 Interviewer Training	28
		4.1.3 Interviewing Procedures	28
		4.1.4 Data Collection Quality Control	30
	4.2	Response Rates	31
		4.2.1 Screener Response Rate	31

TABLE OF CONTENTS - Continued

Chapter				Page
		4.2.2	Extended Interview Response Rate	32
	4.3	Item R	esponse in the Adult Education Interview	36
5	DAT	A PREPA	ARATION	41
	5.1	Coding	g and Editing Specifications	41
		5.1.1 5.1.2 5.1.3	Range Specifications Consistency Checks Structural Edits	41 42 42
6	GUII	DE TO TI	HE DATA FILES AND CODEBOOKS	43
	6.1 6.2		t and Organization of the Data Filesles	43 43
		6.2.1 6.2.2	Names, Labels, and File Layout Positions	44 44
	6.3	Compo	osite Variables	45
		6.3.1 6.3.2 6.3.3	Missing Values for the Composite Variables Composite Variables on the Adult File Composite Variables on both the Adult File and	45 46
			the Course File	52
	6.4 6.5		to the Codebooksd SPSS-X Control Card Listings for	53
			reation	53

TABLE OF CONTENTS - Continued

Chapter		Page
7	DATA ANOMALIES	55
	7.1 Courses Taken in the Past 12 months	55
	7.2 Barriers to AE Participation	55
	7.3 Labor Force Status for Retired Adults	56
Appendices		
A	Questionnaire	A-1
В	Variable Lists	B-1
	Adult File Variables	B-3
	Course File Variables	B-13
C	Control Cards	C-1
	Adult File SAS Control Cards	C-3
	Course File SAS Control Cards	C-37
	Adult File SPSS-X Control Cards	C-57
	Course File SPSS-X Control Cards	C-117
D	Guidelines for Using SAS and SPSS-X	D-1
E	SAS Code For Composite Variables	E-1
F	Codebooks	F-1
	Adult File Codebook	F-3
	Course File Codebook	F-91

TABLE OF CONTENTS--Continued

LIST OF TABLES

	Page
Control totals for adult education raking	22
Number of telephone numbers dialed, residential status, and screener response rate	33
Number of telephone numbers dialed in the Screener, by response status and response rate	34
Number of enumerated and completed interviews, completion rates, and response rates	35
Number of sampled adults by response rate	38
Item response rates for the adult education interview	39
LIST OF FIGURES	
Flow of NHES:91 Interviews	6
Flow of NHES:91 Screener	8
NHES:91 Adult Education Interview	10
Example of the Codebook Format	54
	Number of telephone numbers dialed, residential status, and screener response rate Number of telephone numbers dialed in the Screener, by response status and response rate. Number of enumerated and completed interviews, completion rates, and response rates Number of sampled adults by response rate. Item response rates for the adult education interview. LIST OF FIGURES Flow of NHES:91 Interviews. Flow of NHES:91 Screener. NHES:91 Adult Education Interview.

1. INTRODUCTION

This manual provides documentation and guidance for users of the public release data files for the Adult Education (AE) component of the 1991 National Household Education Survey (NHES:91). Information about the purpose of the study, the data collection instruments, the sample design, and data collection and data processing procedures is contained in this manual. More detailed discussions of these topics can be found in *National Household Education Survey: 1991, Methodology Report.*

The NHES:91 was a random digit dial, telephone survey developed by the National Center for Education Statistics (NCES) and conducted by Westat, Inc. The survey was field tested in 1989 and data for the full-scale study were collected between late January and early May of 1991.

1.1 Background of Study

The National Household Education Survey is the first major attempt by NCES to go beyond its traditional, school-based data collection systems to a household survey. The Center's legislative mandate is to collect and report information on the condition of education in the United States. Historically, NCES has primarily collected data from teachers, students, schools, school districts, and state education agencies in fulfillment of this mandate. The collection of data directly from noninstitutional samples of individuals, particularly household-based data collections, has been limited.

The NHES represents a new initiative for NCES, and holds the promise of greatly enhancing the scope of issues covered by the data collection activities of the Center. A household survey has the potential to provide data needed to address many current issues in education, such as dropping out of school, preschool education, access to postsecondary education, adult and continuing education, the status of former teachers, extra-school learning, and home-based education.

1.2 Components of NHES:91

There were two general components of the NHES:91. The first of these was the Early Childhood Education (ECE) component, concerned with the experiences of 3- to 8-year-old children. The second component was a large-scale field test which concerned participation

in adult education among persons 16 years of age and older. The following sections provide overviews of each of these two components.

Early Childhood Education Survey

The early childhood experiences of children have been shown to have a strong influence on their later academic achievement and persistence, but limited national information was available on these experiences. The NHES:91 ECE component provides nationally representative data on these early experiences. In addition, the survey provides data that will help in tracking progress towards meeting the National Goals for Education, one of which is that "by the year 2000, all children in America will start school ready to learn." Repeated administrations of the ECE component will permit observation of changes in early childhood experiences.

The ECE component of the NHES:91 takes a broad approach. This component was designed to collect information on children's experiences in a wide range of settings, including their homes, child care arrangements, early childhood education programs, and schools. In addition, the range of experiences covered in the survey is broad, and includes cognitive activities (e.g., reading, learning letters, words, and numbers), developmental activities (e.g., singing songs, arts and crafts), and entertainment activities (e.g., games and sports, television viewing, attendance at movies, plays, concerts). This broad approach permits analysis of the variety of experiences that children have as well as the types of experiences, both of which may be important determinants of school readiness and success.

The NCES:91 ECE survey is a source of information on the following topics:

- Child care and early childhood program experiences;
- Kindergarten and elementary school entry;
- Retention in early grades;
- Parental involvement in center-based programs and school;
- The educational environment in the home; and
- Household and family characteristics.

Adult Education Survey

The second component of the NHES:91 was designed to measure participation in adult education activities, to describe these activities, to provide data on the characteristics of participants and nonparticipants, and to determine why some adults participate while others do not. Another of the National Goals for Education is that "by the year 2000, every adult American will be literate and possess the knowledge and skills necessary to compete in a global economy." The Adult Education (AE) component provides much information relevant to this goal.

The AE component of the NHES:91 incorporated and expanded upon the kinds of data that were collected in previous surveys on adult education designed by NCES and conducted by the Bureau of the Census. A broad definition of adult education was used. It included persons enrolled full-time or part-time in a college, or vocational or occupational program, those taking continuing education or non-credit courses, correspondence courses, and tutoring, as well as those taking courses or participating in other educational activities provided by employers, community groups, and other providers. The AE survey covered the following topics:

- Participation in adult education activities in the past year, the past three years, and ever;
- Characteristics of adult education courses or activities, including: course title, basic skills and training content, degree requirement fulfillment, sponsor, employer involvement, payment source, and others;
- Perceived benefits to participation in adult education of both participants and nonparticipants;
- Perceived barriers to participation in adult education of both part-time participants and nonparticipants;
- Background characteristics of participants and nonparticipants.

1.3 Overview of Design

The NHES:91 was developed to provide reliable estimates for each of the two different sectors of education policy interest described above. The inclusion of two survey topics

made the overall survey more cost effective, thus allowing for larger sample sizes that lead to more precise estimates. This strategy was key to the NHES design. By including more than one topic within the framework of a single survey, the screening of households to find those eligible for the study could be partitioned over the component surveys.

Another general feature of the NHES was developed in response to concerns about the demands placed upon the respondents to surveys. With the introduction of multiple surveys within a single framework came the possibility of increasing the response burden on the members of the sampled households. It was possible that the same household member could be sampled for more than one interview and/or that more than one household member could be sampled. In the NHES:91, parents of children could respond for more than one child and could also be sampled for the AE survey. To help alleviate this response burden and to improve the response rate for the component surveys, additional sampling was used for the AE component. Households with 2- to 9-year-old children, selected with certainty for the ECE survey, were given a smaller chance of being selected for the AE survey. The objective was to reduce the chance of multiple interviews within a household and still obtain the required information in a cost effective manner.

Even though sampling methods were used to reduce the chances of selecting the same household for more than one survey, the administration time of the interview was considered to be a critical factor in obtaining high response rates and reliable estimates. The number of items included in the NHES:91 was limited in order to help improve response rates and reduce the demands made on survey respondents.

Because of these requirements and the need to produce estimates of high quality in a timely manner, the NHES:91 was conducted using computer assisted telephone interviewing (CATI) technology. Some of the advantages of CATI for the NHES:91 included improved project administration, on-line sampling and eligibility checks, scheduling of interviews according to a priority scheme to improve response rates, and managing data quality by controlling skip patterns and checking items for logic on-line.

Three different interviews were included in the NHES:91. These instruments were the Screener, the Early Childhood Education (ECE) interview, and the Adult Education (AE) interview. The three instruments were programmed so that the appropriate items appeared on the interviewer's computer screen depending upon the respondent's answer to each query. The Screener and AE instruments are discussed in detail in Chapter 2. A separate Data User's Manual has been prepared for the ECE component.

Flow of the Interviews

Figure 1-1 shows the flow of the NHES:91 interviews. Each household contact began with a Screener. In this interview, basic household information was obtained and sampling of members for extended interviews was conducted.

If the household contained any members between 2 and 9 years old, then an extended ECE interview was conducted with the parent or guardian most knowledgeable about each child's care and education. ECE interviews were scheduled for each child in the household who was in the eligible age range; whenever possible, all interviews with household members were conducted in the same call as the Screener, starting with any extended interviews with the Screener respondent.

The sampling of households for AE Screening and individual adults for interviews was accomplished using the information collected in the Screener. If any adult was sampled, then an extended AE interview was scheduled for that person. The interview could be conducted with the sampled adult only; no other person could respond for the sampled person. It was possible that more than one adult could be selected for an extended AE interview within a given household.

Contents of Manual

The chapters that follow provide additional information about the survey instruments (Chapter 2), the sample design and estimation procedures (Chapter 3), data collection (Chapter 4), data preparation (Chapter 5), and the use of the AE data files and code book (Chapter 6). Anomalies identified in the data are highlighted in Chapter 7. The appendices provide copies of the questionnaire, listings of variables, listings of SAS and SPSS-X control cards, a guide to using SAS and SPSS-X, the SAS code for composite variables, and the codebooks for the AE data files.

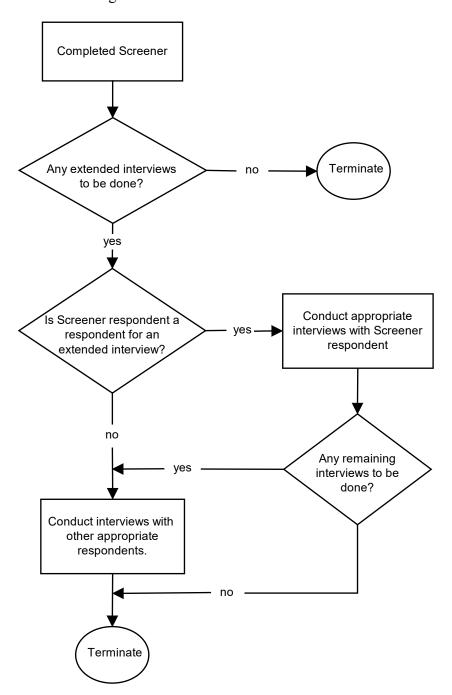


Figure 1-1. Flow of NHES:91 interviews

2. DESCRIPTION OF DATA COLLECTION INSTRUMENTS

The sections that follow describe the instruments used to collect data for the Adult Education (AE) component of the NHES:91. Included are descriptions of the Screener and AE Interview. Appendix A contains copies of the questionnaires.

2.1 The NHES:91 Screener

The purposes of the NHES:91 Screener were to identify those households that were eligible for the survey; to collect information required for sampling adult household members for the AE survey in those households sampled for the AE component; and to collect a limited set of household characteristics. The Screener was designed to accomplish these tasks efficiently, placing minimum burden on the respondent (Figure 2-1).

The Screener questionnaire was designed to flow smoothly through the following steps:

- Explain the purpose of the call;
- Verify that the phone number was dialed correctly and that the number reached was used for residential, or both residential and business purposes;
- Verify that the Screener respondent was an adult member of the household at least 16 years old;
- Obtain basic identifying information about each 2- to 9- year-old in the household;
- Obtain the identifying information and educational participation information for persons 16 and older (in about one-third of all households); and
- Obtain basic information about all eligible households. ¹

Additional information on each of these sections of the NHES:91 Screener follows.

¹An eligible household is a household with at least one resident who was selected for an extended interview.

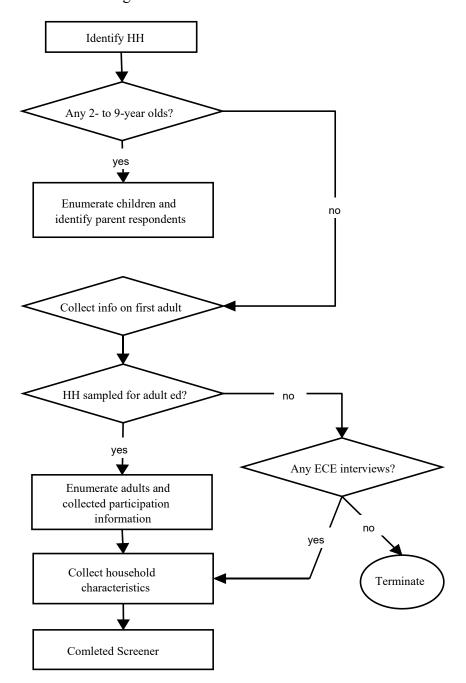


Figure 2-1. Flow of NHES-91 screener

The first series of questions in the Screener was used to determine that the correct telephone number was reached, that it belonged to a household, and that the person on the telephone was eligible to answer the questions. If the correct number was not reached, or was used for business only, the call was terminated. Numbers used for household use only, or for business and household use, continued with the survey. If the person who answered the telephone was not a household member or was a household member under 16 years of age, an appropriate Screener respondent was requested.

Early Childhood Screening. The next series of Screener items concerned children in the household. First, a screening question to determine whether any 2- to 9-year-old children lived in the household was asked. If so, the childhood section of the Screener continued. The items asked about each 2- to 9-year-old were kept to a minimum, and included age, gender, name, race/ethnicity, and the name and relationship of the knowledgeable parent or guardian. The broader age range was used to ensure that children of the appropriate age were captured despite some expected reporting error among some Screener respondents. If there were no children in the eligible age range, and the household was not sampled for AE screening, the Screener interview was terminated at this point.

Adult Education Screening. A sample of households was selected for AE screening. The AE screening questions were also kept to a minimum, in order to keep the response burden as low as possible. For each adult in the household, a small set of characteristics was collected (age, gender, race/ethnicity). Then, a series of questions was used to determine the current adult education participation status of each adult. For those sampled adults who were living away at school, contact information was requested. This permitted calls to sampled students at their school telephone numbers for extended AE interviews.

Household Characteristics. The final section of the Screener collected data on a variety of household characteristics including the number of persons living in the household, county, home type, household income, and the presence of additional telephone numbers. These were collected only from households in which at least one child or adult was sampled for an extended interview.

2.2 Adult Education Interview

The NHES:91 AE interview was designed to collect information about adult education activities from both participants and nonparticipants who were 16 years old or older (Figure 2-2). First, information was collected to determine enrollment status and adult education

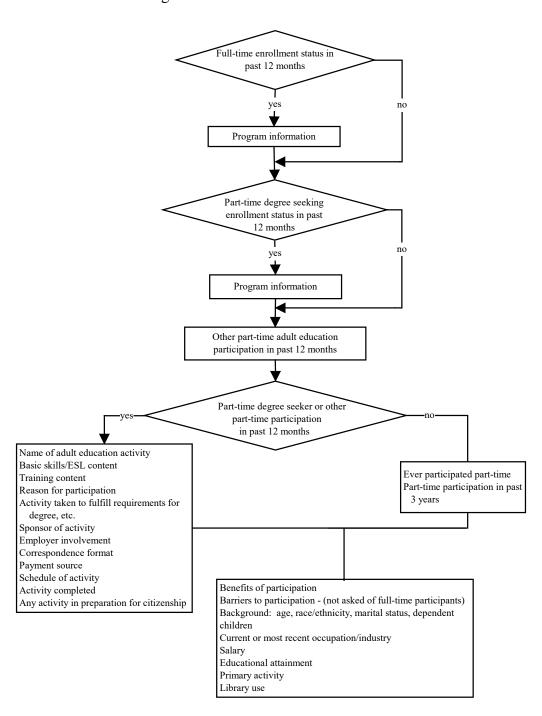


Figure 2-2. Adult education interview

participation in the past 12 months and to classify respondents as participants or nonparticipants. From participants, information about the number of courses taken in the past year and the details of these courses were collected. From nonparticipants, information on lifetime part-time participation and the reasons for nonparticipation were collected. Perceived benefits to participation were collected from both participants and nonparticipants. Perceived barriers to participation were collected from part-time participants and nonparticipants. Finally, some background information was collected.

The following sections describe the AE questionnaire items.

Full-time/Part-time Enrollment Status in the Past 12 Months. These items were asked of all respondents. The series included items parallel to those in the Screener and was used to determine the respondent's enrollment status. Full-time students and part-time degree-seeking students were asked about their degree plans, programs of study, and numbers of courses. If the AE interview respondent was also the Screener respondent, the items he/she already answered in the Screener were not asked again; the CATI system skipped them automatically.

Adult Education Participation in the Past 12 Months. These items were also asked of all respondents. They included questions about participation in what are widely considered to be conventional adult education activities, and the total number of courses of this type taken. Both full-time and part-time items were required to determine respondents' intensity of involvement.

Details of Four Most Recent Adult Education Courses. These items were asked of persons who participated in adult education activities on a part-time basis in the 12 months prior to the interview. They were used to address questions of the basic skills/English as Second Language/training content of adult education courses or activities; the reason for participation (e.g., to fulfill degree requirement, obtain a license, or in preparation for citizenship); employer involvement in activities; and activity schedule and completion.

Participation Ever and in Past Three Years. This series was asked of persons who had not participated in part-time adult education activities in the previous 12 months. The series was used to determine how many adults participated in part-time adult education at some time, and how recent that participation was.

Benefits to Participation. These questions were asked of both persons who had participated in adult education activities in the previous 12 months and those who had not participated. The series also includes an item about possible job or career benefits to taking (or

taking additional) adult education, possible basic skills benefits, and possible use of adult education to obtain or renew a license.

Barriers to Participation. A single item was asked of all but full-time participants about barriers to their participation in adult education (or additional adult education). Subparts asked if work schedule, meeting times of classes, cost of classes, location of classes, lack of transportation to classes, lack of child care, other family responsibilities, lack of information about available classes, classes of interest are not offered, or some other reason, had kept them from participating in any or additional adult education activities.

Background. This series collected basic demographic information including birth month and year, marital status, race, ethnicity, sex, and presence of dependent children in the home. It also included items necessary to categorize respondents by labor force participation and current or most recent industry and occupation according to the CPS and Department of Labor definitions. The highest grade or year of school completed was also collected. If the highest grade was "vocational/technical school after high school" or "some college," an additional question was asked to determine whether the respondent received a high school diploma or equivalent. Finally, a single item was asked of all respondents to determine how adults with multiple roles choose to define themselves, as students, workers, or as something else.

3. SAMPLE DESIGN AND IMPLEMENTATION

This chapter describes the sample design for the NHES:91, including a number of special features of the design. Also presented are the procedures for weighting to national estimates, imputation for missing values on selected variables, and variance estimation.

3.1 Sampling Households

The NHES:91 was designed to provide reliable estimates of the number and characteristics of the early childhood education experiences of 3- to 8-year-olds and the number and characteristics of the educational experiences of adults. These component surveys of the NHES:91 were conducted entirely by sampling, contacting, and interviewing persons by telephone.

The method of sampling used in the NHES:91 is one type of the class of methods called random digit dialing (RDD). The basic concept of RDD procedures is that every residential telephone number has a chance of being sampled through a random sampling mechanism. Mitofsky and Waksberg² developed a RDD sampling procedure that yielded a sample in which each household had an approximately equal probability of selection and which significantly reduced the number of telephone calls that had to be made relative to previously used RDD procedures. A variant of the basic Mitofsky-Waksberg procedure was used in the NHES:91. The modification will be described after the Mitofsky-Waksberg method is presented.

The basic method of sampling for RDD is quite simple. A list or frame of all existing telephone area codes and prefix numbers (the first three digits of the telephone number) in the 50 States and the District of Columbia was determined based on data tapes obtained from AT&T in November of 1990. All possible two-digit numbers were added to these numbers to form a complete list of all the possible first 8 digits of the 10 digits of phone numbers in the U.S. These eight-digit numbers were treated as Primary Sampling Units (PSU's) or clusters.

A random selection was made from the list of PSU's and a random two-digit number was added to the sampled number to create a full 10 digit telephone number. This 10 digit number is called a prime number. The prime number was then dialed to determine if it was residential. If the number was residential, then the PSU was retained in the sample and other

¹Waksberg, J. "Sampling Methods for Random Digit Dialing," Journal of the American Statistical Association, March 1978.

sample numbers were generated from the cluster. If the prime number was not residential, then the PSU was rejected and no further calls were made within that PSU.

The sampling procedure was repeated until a sample of m residential PSU's were obtained. For the NHES:91, an oversampling method was used so that the probability of selection for the PSU's was not exactly as described above. The oversampling method and its implications are discussed below.

The next step of the sampling procedure was the sampling of additional telephone numbers from the retained residential PSU's. The additional telephone numbers were generated by adding random two-digit numbers to the eight-digit PSU number. In the basic Mitofsky-Waksberg procedure, as many additional telephone numbers are generated as needed to achieve the desired number of completed interviews (k+1) within each PSU. Thus, the total number of completed interviews is m(k+1). This procedure results in a sample which is approximately self-weighting.

The sample is clustered within PSU's in order to effect a significant cost savings. Waksberg showed that the number of telephone numbers that need to be dialed is less than 50 percent of the number that would be needed if all numbers were dialed at random.

The basic Mitofsky-Waksberg procedure is sequential. It is not possible to determine in advance how many telephone numbers are needed in each cluster to achieve a sample of k+1 households. A new determination must be made after each telephone call to the PSU. This procedure can be awkward to implement, especially when the survey must be conducted within a limited amount of time, as was the case with the NHES:91.

An alternative RDD sampling method was used in the NHES:91 to help avoid these difficult operational issues. The variant of the Mitofsky-Waksberg procedure used in the NHES:91 required the use of a fixed number (k+1) of telephone numbers per cluster rather than a fixed number of completed interviews. The modified method produces a probability sample, but it is not self-weighting. The statistical properties of the modified Waksberg method are described in detail by Brick and Waksberg³.

The number of households with completed screening interviews targeted for the NHES:91 was 60,000 (m(k+1)). This sample size was determined by the sample size requirements of the ECE component of NHES:91 which had the sample size requirements for the

²Brick, J.M. and Waksberg, J. "Avoiding Sequential Sampling with Random Digit Dialing," Survey Methodology, June 1991.

rarest population in the study. A sample of 4,000 clusters (m) of telephone numbers were selected, so that approximately 15 completed Screeners (k+1) were planned per cluster.

Since not every telephone number within a sampled cluster yields a household and not every household is willing to participate in the study, a sample of 120,000 telephone numbers were generated for NHES:91 with 30 numbers selected randomly from each sample cluster. The 120,000 numbers were selected based on assumptions of a within cluster residency rate of 60 to 65 percent and an 80 percent participation rate (the participation rate is the percent of households willing to answer the data items for the Screener). Therefore, the targeted number of completed Screeners was 60,000 ($120,000 \times .625 \times .80$).

These assumptions proved to be very reliable. The achieved within cluster residency rate was 60 percent and the participation rate was 81 percent. The number of participating residential households was 60,314. The specific outcomes from the survey operations are given in detail in a later section.

The next step in the sampling process was the selection of members of the sampled households for extended ECE interviews and AE interviews. Before describing the sampling of adults for the AE survey, the oversampling of clusters is discussed.

Oversampling Households for Blacks and Hispanics

One of the goals of the NHES:91 was to produce reliable estimates of the characteristics of children's early educational experiences and adults' educational activities for totals and for subdomains defined by race and ethnicity. In a sample of 60,000 households in which every person has the same probability of being included, the sample size is not be large enough to produce reliable estimates of some characteristics of blacks or Hispanics. Therefore, blacks and Hispanics must be oversampled to increase the reliability of estimates for these domains.

In the 1989 Field Test the use of a particular method of oversampling blacks and Hispanics was examined. This method was successful in reducing the variances of the estimates of blacks and Hispanics by approximately 20 to 30 percent over the range of statistics examined. The decrease in precision for estimates of the groups that were not oversampled and for estimates of totals were modest, about 5 to 15 percent. Because of the success of the Field Test methodology, the same basic procedure was used for the NHES:91.

A data tape containing the 1980 census characteristics for telephone exchanges and updates of the census items was purchased from the Donnelley Marketing Information Services

in the summer of 1990. The most current list of all telephone exchanges was obtained from AT&T in November 1990, as discussed above. A sample of 40,000 clusters was selected randomly from the AT&T tape and matched against the clusters on the Donnelley file. The sample was drawn to avoid the computational costs associated with matching the entire AT&T file. The results of this matching operation are given below, where high concentration minority is defined as having more than 10 percent of the population black or more than 10 percent Hispanic:

Not found on Donnelley	6,128
Classified as low minority concentration	21,695
Classified as high minority concentration	12,177
Total	40,000

Those clusters not found on the Donnelley tape were classified as low minority concentration for sampling purposes.

Telephone exchanges with high minority concentrations were then oversampled at a rate of 2 to 1. The definition of high minority concentration and the oversampling rate were established based on research which looked at seven possible sampling schemes using 10 percent and 20 percent cutoffs for high minority concentrations and oversampling rates of two and three times the basic rate. The research balanced the increases in the sample size for blacks and Hispanics, against the losses in precision associated with the use of differential sampling rates.⁴

A sample of 1,867 high minority residential clusters and 2,133 low minority residential clusters was targeted. Using a sampling rate for the high minority concentration clusters that was twice the rate of the other clusters, 9,335 high minority clusters and 12,065 low minority clusters were randomly selected from the 40,000 clusters sampled from the AT&T tape. Of the 9,335 high minority clusters, 2,638 were identified as residential (28 percent). Of the 12,065 low minority clusters, 2,155 were identified as residential (18 percent). The sample clusters were then randomly selected from the clusters identified as residential to achieve the targeted numbers.

The oversampling for the procedures was done by exchange or cluster rather than being restricted to black and Hispanic households, i.e., the sampling rate within a cluster was constant. It would have been possible to subsample nonblack and nonHispanic households in high minority clusters to create a self-weighting sample for persons who are not black or Hispanic. This procedure would not have been efficient for the ECE component, because it

³See National Household Education Survey:1991, Methodology Report for more information.

would have involved dropping screened households and the screening to find households with 3-to 8-year-olds was the largest component of the data collection costs.

For the AE component, it was feasible to make the sampling rate dependent upon the race and ethnicity of the household. This procedure was efficient here because only a sample of the 60,000 households was needed to achieve the targeted sample size. The subsampling of the 60,000 households was done differentially in the oversampled clusters in order to reduce the adverse effects of the oversampling of nonblack and nonHispanic persons. In essence, the use of this subsampling procedure reduced the variability in the probabilities of selection for people with the same race and ethnicity that is introduced by oversampling clusters at different rates.

The subsampling for the AE screening worked as follows. In the low minority concentration areas two subsampling rates were used. If the household respondent was not black or Hispanic, then the subsampling rate was .6, but if the household respondent was black or Hispanic then the household was included with certainty. Two subsampling rates were also used in the high minority clusters. If the household respondent was not black or Hispanic the subsampling rate was .3; if the household respondent was black or Hispanic the subsampling rate was .6.

3.2 Sampling Within Households for the Adult Education Survey

In the AE survey, there were several stages of sampling implemented with the goals of obtaining the desired sample size by type of adult, reducing the amount of time required for any one household to respond to the entire data collection effort, and reducing some of the adverse effects on the variance of estimates due to the oversampling of areas (i.e., exchanges) with high concentrations of blacks and Hispanics. In addition, some of the specific sampling rates used in the AE component were modified during the course of the study. The explanation and rationale for these changes are given after the original plans are discussed.

The original target sample sizes for the AE survey were 8,750 completed interviews with adults (age 16 years or older) who participated in at least one adult education course or activity during the past 12 months (including full-time degree-seeking students) and 2,800 interviews with persons who had not participated in the past 12 months. Over 110,000 adults would have been included in the survey if all adults in each of the 60,000 participating sampled households had been scheduled for interview.

Assuming that there are 1.9 adults per household (from the 1988 CPS estimates), a sample of 31,000 participating households was estimated to be able to provide a sample of 50,000 eligible participating adults if the response rate to the extended interview was 85 percent

(31,000 x 1.9 x .85). If 15 percent of the adults were adult education participants (excluding only the full-time degree-seeking participants) based on the May 1984 CPS Adult Education Supplement, and all of these adults were sampled for extended interviews, then the sample was expected to yield 7,500 completed AE interviews with adult education participants excluding those enrolled full-time seeking a degree. Assuming 5 percent of the adults were enrolled as full-time degree-seeking students and these participants were subsampled at a rate of 50 percent, then the sample was expected to yield 1,250 such participants. Thus, the sample yield for both types of participants was expected to be 8,750. Subsampling the nonparticipants (the remaining 80 percent of the population of adults) with a sampling rate of 7 percent, was expected to produce about 2,800 completed nonparticipant interviews.

Given these expectations, the sampling procedure for subsampling the 60,000 households screened for the ECE survey to 31,000 households required for the AE survey was established. The first goal was to eliminate the differential sampling for nonblack and nonHispanics in clusters that were oversampled. This was accomplished using the procedures described in the oversampling section, above. The second goal was reduce the number of interviews that one household was required to complete. This was accomplished by applying a subsampling rate of 50 percent for households with any children. In other words, if the household had children between the ages of 2 and 9 years, then the chances of the household being sampled for the AE component were reduced by a factor of 2.

Within the households sampled for AE, each adult over the age of 15 was enumerated (including those living away from home in school housing) and an adult household member was asked a series of items about each adult's educational participation over the past 12 months. Adults currently enrolled as a high school student were not sampled (they were ineligible for the survey by definition). Participants in adult education, excluding full-time degree-seeking students, were included with certainty. Full-time degree-seeking students were sampled at a rate of 1 in 2, and nonparticipants were sampled at a rate of 7 percent.

When the results of the first month of data collection were analyzed, it was clear that some of the design parameters used in planning the study were not appropriate. The major sampling and yield concern was the percent of adults identified as being adult education participants. The data from the first month revealed that about 28 percent of all adults indicated that they had participated in adult education activities over the past 12 months (excluding full-time degree-seeking students), rather than the 15 percent assumed based on the 1984 CPS. If this rate persisted and no changes were made to the sampling plan, then the number of completed interviews would have doubled and the number of nonparticipant interviews would have decreased by about 20 percent.

Based on these early results, changes were made in the sampling rates for screening households for the AE component. The number of sampled households screened for the AE component was reduced by excluding the screening in 30 percent of the telephone numbers in each cluster. The 30 telephone numbers in each cluster had been originally randomly sorted and placed into 30 waves corresponding to an assigned rank in the cluster. The waves were released as work was required to accommodate the telephone center interviewers. Since the numbers were assigned to waves randomly, the subsampling was achieved by not doing the AE screening in 9 of the 30 clusters which had not yet be released for interviewing at the time of the decision to change the sampling rate. In addition, the sampling rate for nonparticipants was increased from 7 percent to 12 percent to try to offset the yield loss in this category.

Under the revised sampling procedure, we had hoped to achieve a sample of 11,900 AE participants and nearly the originally planned number of 3,000 nonparticipants. However, the plan numbers were not completely achieved for two reasons. First, when the revised sampling plans were specified the impact of the subsampling in households with children was not included, thus the number of households sampled for adult education screening was lower than the plan assumed. Second, the percent of adults participating in adult education observed in first month was about 2 percent higher than the final percent. This variation in participation status also reduced the number of interviews below the projected totals.

Altogether, 18,463 households were screened for the AE component. In these households, 35,578 adults (16 years of age and older not enrolled full-time in elementary or secondary school) were enumerated for an average of 1.9 adults per household.

At the screener, 11,584 of these adults were determined to be adult education participants (excluding full-time, degree-seeking students) and were scheduled for extended interviews. Twenty-eight others were enumerated and sampled, but later found to be ineligible. Eight hundred and eighty of the 1,794 full-time degree-seeking students were scheduled for extended interviews. Finally, 1,730 of 22,172 adults (4 of which were later found to be ineligible) determined to be nonparticipants were scheduled for extended interviews.

The total number of completed AE interviews was 12,568, which included 9,774 participant interviews and 2,794 nonparticipant interviews. The classification for these interviews is based on the data collected in the extended AE interview. The participation status of the adult as determined from the Screener was used for sampling purposes only. Once the adult was sampled for an extended interview, the interview was conducted based on the responses of the adult, irrespective of the participation status established in the Screener.

3.3 Weighting Procedures

The objective of the NHES:91 is to make inferences about the entire civilian, noninstitutionalized population for the domains of interest. The estimates derived from the sample of telephone households were adjusted to totals which include both telephone and nontelephone households to support this goal.

The estimation or weighting procedures are described in steps. The first step was the weighting associated with the sample of telephone numbers. This weight was basically the inverse of the probability of selecting the household by the RDD method used in this study. The subsequent steps were person-level weighting, i.e., weighting to adjust to the required person-level totals. These methods included the adjustment of the estimates to independent totals from the March 1991 Current Population Survey (CPS).

The household weight was developed to account for the RDD sampling of telephone numbers, including the sampling rate differences by minority concentration strata. The weight was also adjusted for households that had more than one telephone number, and hence had more than one chance of being in the sample. For the AE survey, the basic household weight was also adjusted to reflect the subsampling of households for the enumeration of adults.

Person Weights for Adults in the Military

The NHES:91 inference population is the noninstitutionalized, civilian population of the United States. The sample did include some members of the armed services who were living in their own homes outside of military living quarters (n=135). These adults were not assigned weights, since they are not included in the population of interest.

Person Weights for Adults 20 years of age and Older

In sampling for the AE component of the NHES:91, adults were sampled from within households differentially depending on their adult education participation status. The base person weight assigned to each sampled adult was the household weight multiplied by the inverse of the probability of selecting the adult for the extended interview. The sampling rates for adults differed by the participation status of the adult in education activities over the last 12 months. Information from the Screener on the adult education participation of all adult household members was used to set the sampling rates for the extended interviews.

The final weight for each completed interview with an adult over the age of 20 years was computed by adjusting this base person weight to known totals using a raking procedure. The main purposes of raking were to adjust for nonresponse and the undercoverage due to sampling only telephone households. The control totals were formed by taking the control totals used for the March 1991 CPS and allocating them based upon the characteristics estimated from the October 1990 CPS. The control totals were defined by home type (i.e., owned or rented) crossed with region, race/ethnicity crossed with income, and category of age. The raked weights were formed by iteratively modifying the person weights so that they corresponded to the control totals. The control totals for each of these dimensions are given in Table 3-1. For adults aged 20 years and older, the sum of the weights is 175,772,592 and the variance is 972 x 10⁶.

Person Weights for Adults under 20 Years Old

The weighting scheme for adults under 20 years old was different from that used for older adults. A substantial proportion of adults between 16 and 19 years old were currently enrolled in elementary or secondary school and thus ineligible for the survey. Therefore, the weights for this domain were handled separately.

A two step weighting procedure was used. The first step involved poststratifying all the enumerated adults between 16 and 19 years old in the sampled households to the CPS control totals by race/ethnicity and household income (see Table 3-1). This adjustment was made prior to introducing the within household sampling weights, since the adjustments were made to all enumerated adults, not the sampled adults.

This procedure adjusted the weights for undercoverage but not for extended interview nonresponse. The second step was to apply adjustments to the weights for sampling adults within households and for extended interview nonresponse. Since the participants and the nonparticipants had significantly different completion rates, the adjustment for each group was the inverse of the completion rate in that group. For persons under age 20, the sum of the weights is 6,202,616 and the variances is 185×10^6 .

Table 3-1. Control totals for adult education raking

Dimension 1 for raking adults 20 years and older

Home type	Census region	Control total
owned or other	Northeast	25,694,908
owned or other	Midwest	31,673,234
owned or other	South	43,229,581
owned or other	West	23,351,769
rented	Northeast	11,167,416
rented	Midwest	10,695,691
rented	South	16,865,190
rented	West	13,094,804
Total		175,772,59

Dimension 2 for raking adults 20 years and older

Race/ethnicity	Household income	Control total
NonHispanic/ nonBlack	Less than \$	10,000 18,079,107
NonHispanic/ nonBlack	\$10,000-24	,999 35,893,024
NonHispanic/ nonBlack	\$25,000 or	more 89,667,320
Hispanic	Less than \$	10,000 2,873,083
Hispanic	\$10,000-24	,999 4,612,733
Hispanic	\$25,000 or	more 5,580,541
Black/nonHispanic	Less than \$	10,000 5,710,357
Black/nonHispanic	\$10,000-24	,999 5,887,765
Black/nonHispanic	\$25,000 or	more 7,468,662
Total		175,772,592
Dimension 3 fo	or raking adults 20 years and older	
Age		Control total
20 to 29 years		38,263,822
30 to 49 years		74,509,229
50 years and older		62,999,541
Total		175,772,592
Dimension for 1	6- to 19-year-old poststratification	I
Race/ethnicity	Tenure	Control total
NonHispanic/ nonBlack	owned or o	ther 7,635,172
NonHispanic/ nonBlack	rented	2,356,867
Hispanic	owned or o	ther 630,514
Hispanic	rented	786,222
Black/nonHispanic	owned or o	ther 1,074,33
Black/nonHispanic	rented	987,298
Total		13,470,405

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), Spring, 1991.

3.4 Computing Sampling Errors

Even though the NHES:91 was an RDD survey, the direct estimates of sampling errors for the estimates cannot be based on the assumptions of simple random sampling. Various factors, including sampling adults in a household with different probabilities, oversampling to improve estimates of blacks and Hispanics, clustering of sampled persons within households, the use of the modified Waksberg approach, and nonlinear estimation procedures, all contribute to deviations from simple random sampling.

The method used for computing sampling errors to reflect these aspects of the sample design and the estimation procedures is called jackknife replication. In this method, the sample is divided into groups of replicates based upon the original sample of phone numbers. A replicate weight is developed for each replicate sample using the same procedures used for the full sample. This procedure is repeated for each replicate.

Estimates are then produced for each replicate using the replicate weights and compared to the full sample estimate in order to estimate the sampling error of the statistic. The computation of the replicate estimates, comparison to the full sample estimate, and the computation of the estimated sampling error for the statistic was done using the SAS software WESVAR using the JK1 option.

Replicate weights were created for the raked weights for the AE survey. A total of 50 replicate weights were created. All of the steps used in creating the full sample weights were done for each replicate weight, including the final stage of raking. In order to support the estimation of sampling errors using Taylor series methods, a stratum and PSU variable were created and assigned to the completed interviews. The stratum and PSU variables were based on the sample as selected.

Approximate Sampling Errors

The sampling errors of estimates from the NHES:91 can be directly computed using either of the techniques described above. For many applications, a simple approximation of the sampling errors can be used instead of these more computationally expensive methods.

The approximation is based upon the actual computation of variances of estimates from the AE. The estimates and the variances of the estimates were computed for a large number of statistics (over 2,500 estimates were computed). The statistics used in these computations were estimates of the percent of adults participating in various types of adult

education activities or courses and the percents of adult education participants who had various characteristics.

When a sample is drawn using simple random sampling, the variance of an estimated percent can be expressed as the estimated percent (p) times its complement (100-p) divided by the sample size. The ratio of the variance computed using the jackknife replicate estimates to the variance using the simple random sampling formula is called the design effect.

The design effect for most complex sample designs, like the NHES:91, is greater than unity because the use of clustering and differential sampling fractions tends to increase the variances of the estimates. In the NHES:91, both of these factors contributed to a general increase in the variance over what would be expected under simple random sampling.

The average design effect for the estimates evaluated in the AE were very different depending who was included in the estimate. In particular, estimates of all adults which include both participants (including all persons who took any courses or activities, even full-time degree seeking students) and nonparticipants have a much larger design effect than estimates of characteristics of participants. This difference is due to the very different sampling rates used for participants and nonparticipants.

The average design effect for estimates of characteristics of participants was 2.3. This average is larger than might be expected from an RDD survey in which all eligible persons are included in the survey (e.g., the average design effect for the ECE component of NHES:91 was only about 1.3). The inflation of the design effect is primarily due to the fact that some adults were sampled at the lower nonparticipant rate, but turned out to be participants when interviewed. For estimates that included all adults, the average design effect was 4.5. As noted above, the size of this design effect is due to the differential sampling rates applied by participation status of the adults.

If the estimate is a characteristic of nonparticipants, then the average design effect of 2.8 should be used. Within subgroups defined by race and ethnicity the average design effects also vary somewhat. For estimates of blacks the average design effect is 3.8, for Hispanic estimates it is 3.2, for nonHispanic whites it is 2.8, and for other races it is 2.4. The mean design effects for these subdomains were computed from 54 statistics.

The average design effect can be used to quickly approximate the standard error for an estimate, but some precautions are required. If the estimate is a characteristic of all adults (e.g., the percent of all adults who participated in adult education in the last 3 years), then the average design effect of 4.5 should be used. On the other hand, if it is a characteristic of

participants (e.g., the percent of participants who were employed), then the average design effect of 2.3 should be used.

Another precaution is that the average design effects have been computed over a variety of different situations and the average may not be appropriate for some parts of the population. In particular, the averages may be less useful if the denominator of the estimated percent is composed of a subgroup that is not similar to those used in computing the average design effects.

For example, suppose the estimate was the percent of males in the group of all adults who <u>ever</u> participated in adult education. The denominator of this percent is based on the group which probably contains more current participants than the population of adults and less than the population of participants. The appropriate average design effect for this type of estimate is probably somewhere between 2.3 and 4.5. In such cases, it is wise to compute the variance of the estimate using the jackknife method described in Section 3.4.

For estimates for which the average design effect is appropriate, the methods of estimating the variances for estimates are simple. For example, suppose it is estimated that 30 percent of all adults participated in adult education in the last 12 months. The simple random sampling variance for an estimate of 30 percent from a sample of 12,500 is 0.17 percent (30 x 70/12,500). The simple random sample standard error is the square root of this, or about 0.4 percent.

The approximate variance of the estimate from the NHES:91 is the simple random sample variance multiplied by the average design effect, which for this statistic is 4.5. The estimated variance would be .8 percent $(4.5 \times 0.4 \text{ percent})$. The standard error for the estimate could be approximated by the square root of this, 0.9 percent.

The approximate variance for other types of statistics, like quantitative data on the number of courses taken as a full-time student in the past 12 months, can also be computed using this approach. First, the simple random sample variance is estimated using a standard statistical package, like SAS and SPSS. Second, this variance is multiplied by the average design effect to approximate the variance under the NHES:91 design.

3.5 Imputation

In the NHES:91 as in most surveys, the responses to some data items were not obtained for all interviews. There are numerous reasons for item nonresponse. Some respondents do not know the answer for the item or do not wish to respond for other reasons.

Some item nonresponse arises when an interview is interrupted and not continued later, leaving items at the end of the interview blank. Item nonresponse may also be encountered because responses provided by the respondent are not internally consistent and this is inconsistency is not discovered until after the interview is completed.

For most of the data items collected in the NHES:91, the item response rate was very high. In other words, if a respondent was supposed to answer a specific item, then they actually provided a valid response in over 95 percent of the cases for most items in the survey.

Despite the high item response rate, some data items were imputed. The imputations were done for two reasons. First, certain variables were used in developing the national estimates and complete responses were needed for this purpose. These included the variables used for raking and other variables, such as the number of residential phones, which are not included in the data file. Second, some data items were planned to be used for many of the publications from the survey and complete item responses helped improve these presentations.

A nearest-neighbor, hot-deck procedure was used to impute missing responses. In this approach, the entire file was placed into a specified sort order which varied depending on the data item to be imputed. The sort order was determined by attempting to group respondents into those most likely to have the same response for the data item to be imputed. An example of an imputed variable is HSDIPLOMA, receiving a high school diploma or equivalent. The sort variables were highest grade or year of school completed, the respondent's age, and full-time enrollment status. The use of these in combination assured that the donor and recipient were similar on all of these characteristics.

Whenever a case with a missing value was encountered, the value of the data item from the preceding complete case is imputed for the missing item. The method is called a nearest-neighbor, hot-deck approach because the value from the closest record (the nearest-neighbor) in the current data set (hot-deck) is used to replace the missing item.

For each data item which was imputed, an imputation flag variable was created. If the response for this item was imputed, then the imputation flag was set equal to one, otherwise it was missing. The flag was created to enable users to identify imputed values. Users can use the imputation flags to delete the imputed values, use alternative imputation procedures, or account for the imputation in computation of the reliability of the estimates produced from the data set.

4. DATA COLLECTION METHODS AND RESPONSE RATES

4.1 Data Collection Procedures

The following sections discuss the procedures used in the data collection phase of the NHES:91, including the use of computer assisted telephone interviewing (CATI), staff training, interviewer assignments and contact procedures, and quality control.

4.1.1 CATI System Applications

The use of a CATI system for the NHES:91 included a number of applications that facilitated the implementation of the NHES:91 survey procedures. Briefly, the most salient features of the CATI system for the NHES:91 were as follows:

- **Project Administration:** The CATI system reduces substantially the amount of paper recordkeeping ordinarily required for a telephone survey, such as contact records, and provides up-to-date reports on the status of cases, numbers and types of contacts, sizes of standing work queues, and interviewer productivity and response rates.
- Eligibility and Sampling: CATI automatically identified households and persons eligible for the NHES:91 survey topics. It also selected appropriate households for the adult education sampling and individuals for extended interviews.
- Scheduling: CATI fed telephone numbers to the interviewers, maintained a schedule of callback appointments, and rescheduled unsuccessful contact attempts to the appropriate day and time according to the protocol for the study.
- **Skip Patterns:** The CATI system automatically guided interviewers through the complex skip patterns in the questionnaire, reducing the potential for interviewer error. This is particularly important for a survey in which repeated series of questions are asked about a particular subject, such as child care.
- **Receipt Control:** The CATI system provided automatic receipt control in a flexible manner which was used to produce a variety of status reports.

The use of CATI for the NHES:91 was critical because of the complexity of collecting information on the child care, educational, and home activities of children and the educational activities of adults. (More detailed information on the AE Interview can be found in section 2.2.) Without CATI, these would have been difficult surveys to administer, especially by telephone. The use of CATI was also helpful in the sampling of households and household members as required based on information collected during the survey.

4.1.2 Interviewer Training

Interviewer training was conducted over a 3-week period in late January and early February 1991. More than 300 interviewers were trained for the study, in groups of about 30. Each group received 20 hours of training related to the conduct of the NHES:91 in addition to basic training in general interviewing techniques and the use of the CATI system. This was followed by a scheduled 4-hour "live" session that was closely monitored by training staff and telephone interviewing supervisors.

Interviewer training was conducted using the CATI system throughout. In this way, the trainees actually entered information in the CATI system during training scripts and lectures, providing them with "hands-on" experience prior to beginning data collection. The topics covered in the training session included an introduction to the study, interactive lectures concerning each of the survey questionnaires, survey procedures, refusal avoidance, and practice role-play scripts.

The survey staff included 18 bilingual interviewers. These interviewers received the same training as all other interviewers, worked on the study conducting interviews in English for 3 weeks, and were then trained to conduct the interviews in Spanish.

4.1.3 Interviewing Procedures

The NHES:91 interviewers made at least seven attempts to screen households in order to determine the presence of eligible household members; that is, an eligible child or sampled adult. These seven calls were staggered on different days of the week and at different times of the day over a 3-week period, and included at least two day calls, three evening calls and two weekend calls. Once a household was identified as eligible for an extended interview, the maximum number of calls was raised to 20. When repeated attempts to contact the respondent proved unsuccessful, the case was referred to a telephone supervisor to discuss appropriate methods of completing an interview (e.g., holding a case for some time and releasing

it for additional attempts later in the data collection period). This schedule was constant over the entire survey period.

The CATI system scheduled cases automatically based on an algorithm that was customized for the NHES:91 survey. The system assigned cases in the following order of priority:

- Cases that had specific appointments;
- Cases that had unspecified appointment/general callback times;
- Cases that were busy signals came up 15 minutes later for another attempt;
- Cases that had been attempted with no contact were tried during other specific time frames; and
- Cases that were new and had never been worked.

When necessary, an interview was conducted in Spanish. Interviewers coded a case as a "language problem" when they encountered a non-English speaking respondent and there was no evidence of an English-speaking household member. An interview was conducted in Spanish if that was the respondent's language; all other languages received a final disposition of "language problem." A hard copy Spanish language translation of the survey instruments was provided to each Spanish-speaking interviewer, and responses were entered into the CATI system as the questions were asked. Upon completion of all interviews, the interviewers were asked to record whether the interview was completed in English or Spanish.

Refusal conversion efforts were used to obtain responses from households or individual respondents who had initially refused to complete an interview. However, if the interviewer indicated that the response was "hostile" (e.g., profane or abusive), the case was reviewed by a supervisor to determine whether another attempt should be made. One refusal conversion attempt was made for each Screener or extended interview refusal, with the exception of these "hostile" cases. A two-week hold was placed on initial refusals before a conversion attempt was made.

Because of concerns about the Screener response rate, an additional refusal conversion attempt was made for a subset of second Screener refusals. The cases included in this effort were those for which the interviewers indicated on both attempts that the refusal was "mild," and those for which the one refusal was rated "mild" and the other rated "firm, but not

hostile." No cases rated as "firm" on both refusals were selected for an additional attempt, nor were any cases rated as "hostile."

Another effort to increase Screener response was the re-release of maximum call cases--cases in which a person had answered on at least one of the 7 attempts. These cases were held for a period of time and released for additional attempts during the last 3 weeks of the data collection period. No maximum number of calls was set, and the cases continued to be worked until the data collection period was over. A similar approach was used for the "residential answering machine" cases that had received the maximum number of calls.

There were some numbers at which an answer was never received during the seven attempts made. A sample of these cases was selected, and telephone company business office checks were made to determine the working status and residential status of the numbers. The results of this effort were incorporated into the final allocation of cases for nonresponse computation.

4.1.4 Data Collection Quality Control

Data collection quality control efforts began during the CATI development period. As the CATI system was programmed, extensive testing of the system was conducted. This testing included review by project research staff, telephone interviewing center staff, the programmers themselves, and data preparation staff. The testing by staff members representing different aspects of the project was designed to ensure that the system was working properly from all of these perspectives. A live pretest was conducted in early December, with a sample of about 200 households, to "shake down" the CATI system as a further effort to ensure that the system was working properly.

Quality control activities continued during training and data collection. During interviewer training, interviewers were paired with one another and conducted role-play interviews on the telephone that were monitored by supervisors. Project staff monitored the role plays and provided feedback and additional training as necessary. When interviewers began actual data collection, they were monitored on an ongoing basis by telephone center supervisors. In addition, project research staff also monitored the interviewers occasionally. Data preparation staff also reviewed the cases from the CATI system as they were completed, and referred problems to the project staff for resolution. Interviewer memos were posted and distributed when any recurring problems were identified. Additional training was also provided as necessary.

At least once each week, the CATI management system produced computer generated reports that displayed response rates, refusal rates, and refusal conversion rates for each NHES:91 interviewer. These reports assisted telephone center supervisors in identifying interviewer performance problems that might not be detected through monitoring.

4.2 Response Rates

A response rate is the ratio of the number of units with completed interviews (the units could be telephone numbers, households, or persons) to the number of units sampled and eligible to complete the interview. In some cases, these rates are easily defined and implemented, while in other cases the numerators or denominators of the ratio must be estimated.

The term response rate is the percent of possible interviews completed, taking all survey stages into account, and the term completion rate is used to measure the ability to complete interviews for a specific component of the survey. For example, households members are identified for extended interviews in a two-stage process; first, Screener interviews are conducted to enumerate and sample household members, and then the sample members are interviewed using extended questionnaires. The failure to complete the first stage screener means that it is not possible to interview the members of the household. In this case, the completion rate for the second stage is the percent of sampled persons with completed interviews. The response rate is the product of the first and second stage completion rates.

Response rates and completion rates are identical for the first stage of the sampling and interviewing. For the NHES:91, the first stage is the Screener. The next section discusses the response rate (which is also the completion rate) for the Screener and provides a profile of the characteristics of the respondents. The response and completion rates for the extended interviews are given in the following sections.

4.2.1 Screener Response Rate

Table 4.1 gives the disposition of the 120,000 telephone numbers that were sampled for the NHES:91. The three major categories of response status are those identified as being numbers for residential households, those identified as nonresidential numbers (primarily not working and business telephone numbers), and those numbers which, despite numerous attempts could not be identified as residential or not. At the bottom of the table, the estimated response rate for the Screener of 81 percent is shown.

The numerator of the response rate is the number of telephone numbers in households which participated in the survey (60,322). The denominator is the sum of the number of residential telephone numbers and plus an estimate that about 40 percent of the numbers with unknown residential status are residential. The estimate of 40 percent was computed based on a check of a sample of numbers with telephone business offices.

Other estimates of the response rate could be developed based upon different allocation schemes. The second footnote in Table 4-1 describes the five schemes presented in the table. It is reasonable to say that the Screener response rate is between 78 and 84 percent and the best estimate is 81 percent. The variability in the estimates arises because it is not possible to identify the residency status for each telephone number.

The weighted Screener response rates varied somewhat by region of the country (based on the Census Region). In the Northeast and West regions the response rates are about 6 percent lower than those in the Midwest and South (the percents range from 76 percent to 84 percent). The response rates for metropolitan telephone numbers are about 6 percent higher than for nonmetropolitan numbers. The response rates for these variables are shown in Table 4.2.

4.2.2 Extended Interview Response Rate

Table 4.3 gives the number of enumerated, sampled and completed extended interviews for the AE component. The sampling was based upon the adult's participation in educational activities as reported by the Screener respondent. Adults currently enrolled in elementary or secondary school were not sampled. Of the enumerated and sampled adults, 32 were ineligible because in the extended interview they reported that they were currently enrolled in elementary or secondary school or were under 16 years old.

Interviews were completed for 12,568 of the adults for a weighted completion rate⁵ of 85 percent. The main reason for nonresponse in the AE survey was refusal by the sampled adult to participate. When the completion rate is multiplied by the Screener response rate, the overall weighted response rate for the AE is 69 percent. The number of completed interviews includes 135 completed interviews with persons who were active members of the armed services and, therefore, not members of the inference population. About 78 percent of the completed interviews were of adults who were participants in adult education in the past 12 months.

¹Completion rate is the number of people who were scheduled for questionnaires but did not complete it. Response rate takes into account the refusals at the screener level.

Table 4-1. Number of telephone numbers dialed, residential status, and screener response rate

Screener response category	Number	Percent of all numbers	Percent of residential numbers
Total Identified as residential ¹ Participating ¹ Not participating Identified as not residential Unknown residential status	120,000 72,123 60,322 11,801 42,386 5,499	100.0 60.1 50.3 9.8 35.3 4.6	100.0 83.6 16.4
Screener response rates ²		Rate	
Estimated response rate (using business office method Weighted response rate (using business office method)	81.1% 81.0%		
CASRO response rate Conservative response rate Liberal response rate	79.8% 77.7% 83.6%		

¹Includes 8 telephone numbes of households with more than one telephone number which were sampled twice in NHES.

²All the response rates (except the weighted method) use the number of participating households as the numerator. The denominators vary: for the estimated response rate using the business office method, the proportion of unknown residential status numbers included in the denominator was based upon the proportion identified in checks with telephone business office, for the CASRO response rate, the proportion of unknown residential status numbers included in the denominator was based upon the residency rate for the numbers with known residential status; for the conservative response rate, all of the unknown residential status numbers were included in the demoninator; for the liberal response rate, none of the unknown residential status numbers were included. The weighted response rates uses the same procedure as the business office check method, except the counts are adjusted by the probability of selection.

Table 4-2. Number of telephone numbers dialed in the Screener, by response status and response rate

	Total	Complete	Non- response	Non- residential	Not resolved	Weighted ¹ response rate
Total	120,000	60,314	11,801	42,386	5,499	81.0%
Census region						
Northeast	25,260	12,378	3,085	8,277	1,520	76.2%
Midwest	29,190	14,942	2,580	10,410	1,258	82.6%
South	39,660	20,477	3,332	14,272	1,579	84.0%
West	25,890	12,517	2,804	9,427	1,142	79.1%
Metropolitan status						
Metropolitan	95,417	47,454	10,140	33,627	4,196	86.0%
Nonmetropolitan	24,465	12,822	1,649	8,696	1,298	79.9%
Unknown status	118	38	12	63	5	70.6%

¹The response rate is the number of completed interviews divided by the sum of the number of completed interviews, nonresponses, and 40 percent of the not resolved telephone numbers, weighted by probability of selection.

Table 4-3. Number of enumerated and completed interviews, completion rates and response rates

Type of interview	Number	Weighted completion rate	Overall estimated response rate
Adult education interviews			
enumerated	37,605		
sampled	14,226		
ineligible ¹	32		
nonresponding	1,626		
complete ²	12,568	84.7%	68.6%
completed participant interviews	9,774		
completed nonparticipant interviews	2,794		

¹Includes those under 16 years old and those currently enrolled in high school based on data from the extended interview, but response rate excludes these persons.

²Includes completed interviews with 135 persons in the armed services, but response rate excludes these persons.

Table 4.4 gives the response status and completion rates by the household and individual characteristics of the adults sampled. For most of the characteristics, the completion rates were relatively constant. The completion rates were between 80 and 87 percent across categories of region, home type, Hispanic origin, and household income. Even for categories of age and race, the variation in completion rates was not very pronounced. Older adults (50 years or more) had the lowest completion rate at 81 percent. The completion rate for Asian or Pacific Islander was only 67 percent, but this was based on only 321 sampled adults. Response rates cannot be calculated for interviews conducted in Spanish because interviewers did not know the household was Spanish speaking until they had them on the phone. However, Spanish speaking households had as much opportunity as English speaking households to respond. If the household was contacted by a bilingual interviewer, the interview was conducted in Spanish. If the household was contacted by an English speaking interviewer, the case was coded language/communication problem and referred to a Spanish speaking interviewer. Of the completed interviews, 1.4 percent (182 of 12,568) were conducted in Spanish. Of the 130 cases coded as language problem or communication problem, 56 were completed in Spanish and 27 were completed in English.

The main source of variation in completion rates was the education status of the adult (as identified in the Screener). The completion rate was 80 percent for full-time college degree seeking students, 82 percent for nonparticipants, and 90 percent for participants (adults who are taking any courses or activities other than full-time degree seekers). The full-time student completion rate was lower partially because persons living away at college had to be traced in order to complete the interview.

4.3 Item Response in the Adult Education Interview

This section discusses the item response rates in the NHES:91 AE interview. The items included in this analysis were selected to represent key participation, course or activity, and sociodemographic characteristics, over the range of item response rates, and to examine any differences in response rates of items appearing early in the interview versus those appearing later.

With only a few exceptions, items in the AE interview had high response rates. Most had response rates of more than 99 percent, and few had response rates of less than 95 percent. Table 4.5 shows item response rates for a representative group of items from the interview. The number of cases for which each item was attempted and the percent of all cases for which a valid response was obtained are shown.

For nearly all items, virtually complete response was obtained. In some cases the number of missing values is less than 0.1 percent. For these items, the response rate is shown as 99.9 to indicate that there were a few missing cases, although technically most of the items would round up to 100 percent response.

The items for which somewhat lower, but still near complete, item response was obtained included items which required recall of events (such as whether they ever participated in adult education), items which required respondents to make value judgements about hypothetical situations (such as possible job, licensure, or basic skills benefits to them of adult education), and those items that came toward the end of the interview (such as questions on highest grade attended, and main activity last year). In addition, the series of job search items asked of the subgroup of 2,334 respondents who were not currently employed or for whom employment information was not determined, registered the lowest item response rate of the AE interview, just over 80 percent.

Table 4-4. Number of sampled adults, by response rate

	Total	Complete	Non- response	Weighted completion rate
Total	14,194	12,568	1,626	84.7%
Census region				
Northeast	3,058	2,653	405	82.9%
Midwest	3,723	3,383	340	86.9%
South	4,247	3,797	450	86.8%
West	3,166	2,735	431	80.0%
Home type				
Rent	3,735	3,369	366	83.9%
Own, or other	10,469	9,199	1,260	86.6%
Hispanic origin Hispanic	1,210	1,061	149	86.1%
Not Hispanic	12,984	11,507	1,477	84.5%
110t Hispanie	12,704	11,507	1,777	04.570
Race				
White	11,652	10,398	1,254	85.4%
Black	1,567	1,354	213	83.0%
American Indian or Alaskan Native	84	73	11	85.6%
Asian or Pacific Islander	321	250	71	67.0%
Other	570	493	77	82.5%
Age (from Screener)				
16 to 19 years	706	592	114	85.4%
20 to 29 years	3,758	3,291	467	86.6%
30 to 49 years	6,653	6,012	641	86.3%
50 years or more	3,077	2,673	404	81.3%
Household Income				
\$10,000 or less	962	852	110	85.1%
\$10,001 - 20,000	1,577	1,419	158	86.5%
\$20,001 - 30,000	2,494	2,232	262	84.5%
\$30,001 - 50,000	4,479	4,038	441	86.7%
over \$50,000	4,682	4,027	655	81.5%
Sampled participation status				
High school student	0			
Participants	11,584	10,443	1,141	90.2%
Fulltime student	880	706	174	80.2%
Nonparticpant	1,730	1,419	311	82.0%

NOTE: Sampled persons who were ineligible because of age or high school enrollment are not included. The counts include the 135 persons in the armed services who completed interviews. The completion rate is the weighted number of completed interviews divided by the sum of the weighted number of the complete and nonresponse interviews.

Table 4.5 Item response rates for the adult education interview

Item	Number attempted	Percent response
Participation items		
Full-time school in past 12 months	12,568	99.9
Part-time college in past 12 months	12,568	99.9
Continuing education in past 12 months	12,568	99.9
Other adult education in past 12 months	12,568	99.9
Ever participated in adult education	4,075	97.5
Any job benefit to adult education	12,568	96.3
Any basic skills benefit to adult education	12,568	96.7
Use for adult education to obtain license	12,568	96.5
Course or activity items		
Main reason for taking	17,638	98.7
Any management training component	13,028	99.2
Any other training component	13,028	99.1
Required for diploma or degree	14,181	98.5
Provider of instruction	17,638	97.7
Provider was also employer	12,568	97.7
Sociodemographic items		
Race*	12,568	99.4
Hispanic origin*	12,568	99.8
Worked last week	12,054	99.2
Occupation in current or most recent job*	12,054	98.5
Industry in current or most recent job*	12,054	98.0
Looking for work	2,334	80.6
Highest grade attended*	12,568	95.6
Main activity in past year*	12,568	95.4
Household income*	12,568	85.1

^{*}Items for which missing values were imputed.

NOTE: The percent response is reported as 99.9 when the number of missing values is less than 0.1 percent, rather than rounding these values to 100 percent. This designation is to distinguish such variables (which usually have less than 10 missing cases) from those those have no missing cases.

SOURCE: U.S. Department of Education, National Household Education Survey (NHES), Spring, 1991

5. DATA PREPARATION

5.1 Coding and Editing Specifications

Most of the coding of the interview data was accomplished by the NHES:91 CATI system. As the interviewers entered the number of the response option selected by the respondent, this number was written to the data file. However, some additional coding was required. When the respondent selected an "other" response, the interviewer entered text into a "specify" overlay which appeared on the screen. The "specify" responses were reviewed by the data preparation staff, and, where appropriate, coded into one of the existing categories of response. New response categories were developed for some of the "other, specify" response, based on the number of responses. Also, for each industry and occupation written to the data file Standard Occupational and Industrial codes were assigned for each response.

5.1.1. Range Specifications

The ranges of most items in a CATI survey are determined by the codes for the available responses, since they are close-ended. The system will not accept an out-of range code. However, some items such as ages, dates, and numbers of courses, do not have a set of responses with specific codes, but require the interviewer to enter a value.

The range checks include both "soft" and "hard" ranges. A soft range is one that represents the reasonable expected range of values, but does not include all possible values. Responses outside the soft range are confirmed with the respondent to be sure that they are correct. For example, the number of courses taken as a full-time student (A2) has a soft range of 1 through 10, because it was expected that nearly all responses would fall into this range (i.e., few people would have taken more than 10 courses in the past 12 months). A value outside the soft range (but inside the hard range) may be entered if confirmed as correct by the interviewer.

Hard ranges are those that set finite parameters for the values that can be entered into the CATI system. Values outside the range are unacceptable. For example, looking at month respondent left employment (A51), the hard range is 1 through 12, because the question pertains to months in a year. Any other response is impossible, since the only months in a year are 1 through 12. When a response was entered by an interviewer that was outside the hard range, a message appeared stating that the response was invalid. The interviewer then cleared the messages by pressing the carriage return key. If the out-of-range value was the actual response the respondent had given (and not a keystroke error), the interviewer entered a text comment

with a stated value and a "don't know" response for the item. The comments were later reviewed by data prep staff and updated as necessary.

5.1.2 Consistency Checks

Consistency or logic checks examine the relationships between responses to be sure that they do not conflict with one another, or that the response to one item does not make the response to another unlikely. Many of the logic specifications for the NHES:91 interviews were contained within the CATI system. For example, skip patterns were controlled by the CATI system so that inappropriate items were avoided. Additional consistency (logic) checks for the NHES:91 interviews were included in the CATI system. If the logic check was violated, a special CATI screen appeared that explained the discrepancy by reporting both of the inconsistent answers and allowed the interviewer to enter a correction. If the interviewer was asked to reverify information. After the second attempt, the inconsistent information was recorded.

5.1.3 Structural Edits

The complex interrelationships of the data contained in the NHES:91 database files were checked and maintained via frequency review, cross-tabulation review, and the execution of post-data collection structural edits. Structural edits check and report on any discrepancies between database items, and were designed to ensure that all required records were present and that all file records present were required.

6. GUIDE TO THE DATA FILES AND CODEBOOKS

6.1 Content and Organization of the Data Files

This section describes the public release data files that were constructed for the NHES:91 Adult Education (AE) component. Two AE public release files were prepared:

- Adult File⁶ This file contains responses from each completed AE participant and nonparticipant interview. There is one record for each completed AE interview; thus there are 12,568 records in this file.
- Course File¹ This file contains a record for each course reported by participants in the AE interview. The file is intended for analyses in which the course, rather than the individual is the unit of analysis (course information is also included in the Adult File as part of the record for each adult). There is one record for each course described by an adult respondent in a completed AE interview.

A core case identification number appears on each record which permits the linking of completed interviews from the same household. The core number is the first 7 digits of the PERSID. Both the Adult File and the Course File are available as rectangular files. The public use tape includes SAS and SPSS-X control cards for file creation. See Appendix C for control cards and Appendix D for guidelines for using SAS and SPSS-X.

6.2 Variables

A case identification number, the questionnaire items, imputation flags, composite items, and sampling weights make up the variables in these data files. The case identification number precedes the questionnaire items, which appear in order of occurrence in the questionnaire, followed by flag variables, composite variables, and finally the weight variables.

⁶¹Military members were included in the surveys and are flagged (MILFLG) for the convenience of analysts who wish to exclude them.

6.2.1 Names, Labels, and File Layout Positions

Shown in Appendix B are listings of the variables contained in each of the data files. The variable name column displays the unique identifier present in the SAS data file. The variable label column displays a short label associated with the variable as it appears in the SAS data file. The format column describes the format of the variable. A data format of "N" indicates a numeric variable and a data format of "A" represents a character variable. The length column indicates the length of the variable in terms of number of characters for a character variable and the number of digits for a numeric variable. The length descriptor also includes the number of digits found after the decimal point for non-integer numeric variables. The start column indicates the position in the data file where the variable begins and the end column indicates where the variable ends.

6.2.2 Missing Values for Variables

In these data files, certain codes termed "missing values" have been reserved to represent certain situations. These missing values and their interpretation are:

- -1 Inapplicable: The value for this item is legitimately missing. In other words, responses to previous questions caused the flow of the survey to skip around this item.
- -7 Refused: The respondent refused to answer this question.
- -8 Don't Know: The respondent did not know the answer to this question.
- -9 Not Ascertained: The respondent should have been asked and should have responded to the question based upon voluntary information gathered later in the survey or after completing the survey. However, based on the value of the original filter information given, the questions was skipped. In some cases the respondent broke off the interview after completing most of it, and the remaining items were never completed.

6.3 Composite Variables

Composite variables deemed useful for analysis of the data were constructed from two or more questionnaire items. In most cases, composite variables were derived from several original variables. For example, the majority of composite variables on the Adult file combine information from questions concerning courses into a variable describing participation in certain categories of adult education and/or for particular outcomes. In addition, there are four variables created for both the Adult file and the Class file. These designate general attributes applicable to individual courses.

Some original variables used to create the composite variables described below, as well as certain constructed variables on the Adult file, include the course segment number (n) to distinguish information given by a single respondent about more than one course. On the Class file, the analogous variable does not have that designation because each course is a separate record. The composite variables that are on both the Adult and Class files are identified as such in the descriptions below, and the name of the variable on both files is given.

The code used to create each composite variable is given in full in Appendix E. The composite variables are described in section 6.3.2 and 6.3.3 in alphabetical order. The number in parenthesis following the original variable name used in the construction of the composite variable refers to the question number. Questionnaires can be found in Appendix A.

6.3.1 Missing Values for Composite Variables

All missing values on the original variables used to create the composite, legitimate skips as well as "don't know" or "no answer," were handled as missing. Cases labeled missing on the composite variable (designated by . in the codebook) have missing values on every variable that comprises the composite or are missing on a variable essential to its definition. Missing cases for one key variable, AELABOR, were imputed using a hot deck method. None of the other composite variables was imputed, but some of the original variables used to construct them were. See Section 3.7 for more information on imputation.

6.3.2 Composite Variables on the Adult File

AEBASLIT designates participation in any part-time adult education to improve basic skills or literacy. It was created from responses to OTBASIC (A8), BASIC (A15), and TAKEREA(n) (A13) coded for basic skills or literacy.

The values for AEBASLIT are:

$$1 = Yes$$
$$0 = No$$

AEDEGREQ, signifying part-time participation in adult education for a degree, is drawn from PTENROLL (A4), TAKEREA(n) (A13) coded to meet a requirement for a diploma, degree, or certificate of completion, and REQUIRE(n) (A18).

The values for AEDEGREQ are:

$$1 = Yes$$
$$0 = No$$

AEEMPREA captures participation in any part-time adult education for a jobrelated reason. This variable was derived from TAKEREA(n) (A13) coded for current job reasons or to train for a new job and EMPLREA(n) (A14).

The values for AEEMPREA are:

$$1 = Yes$$
$$0 = No$$

AEEMPREQ, which designates participation in any part-time adult education that was required by an employer, uses EMPLREQ(n) (A25a) as well as EMPLTIM(n) (A23a) to capture courses taken during employment and required by one's employer.

The values for AEEMPREQ are:

- 1 = Yes
- 2 = Not employed when taking any courses
- 3 = No

AEESL signifies participation in any part-time adult education for English as a Second Language. OTENGL (A8) and ENGLISH (A16) were used to create this variable.

The values for AEESL are:

- 1 = Yes
- 0 = No

AEEVER captures current participation in part-time adult education as well as participation over time. It was derived from AECOURSE (A36), AEPAST3 (A37), and AEPRTIME (composite) for respondents who have a value of 1 (yes) on AEPRTIME.

The values for AEEVER are:

- 0 = Never
- 1 = In the past 12 months
- 2 = In the past three years, not in the past 12 months
- 3 = Sometime before the past three years

AELABOR designates labor force participation. It was created from the responses to WORKWEEK (A45a) or VACATION (A46) and LOOKWORK (A54) in combination with LOOKPUBL, LOOKPRIV, LOOKEMPL, LOOKFRND, or LOOKADS (A55). These variables were linked to include only respondents looking for work through appropriate means. For this variable, missing cases were imputed using a hot deck method.

The values for AELABOR are:

- 1 =Employed in labor force
- 2 = Unemployed in labor force
- 3 = Not in labor force

AELICNS, constructed from LICENSE(n) (A20) or PTDEGREE (A5) coded to obtain a license, indicates participation in any part-time adult education to obtain a license or certification.

The values for AELICNS are:

1 = Yes

0 = No

AENUMCSE is the total number of part-time adult education courses taken in the past 12 months. It is the sum of PTNUM (A6) and OTNUM (A9).

The value of AENUMCSE is the number of courses; the range for this variable is 0 to 40.

AEPARANY, created from responses to FTASSOC, FTBACHLR, FTVOCA, FTBASIC, FTENGLSH, FTOTHER, FTGED, FTCERT (A1A), PTENROLL (A4), and OTCLASS (composite), identifies participants in any adult education program including full-time, degree programs.

The values for AEPARANY are:

1 = Yes

0 = No

AEPARTIC, drawn from a positive response to FTVOCA, FTBASIC, FTENGLSH, FTOTHER, FTGED (A1A), PTENROLL (A4), or OTCLASS (composite), is participation in adult education excluding full-time degree programs. Included are full-time participation in vocational training, adult literacy, English as a Second Language, GED, and professional certification as well as part-time degree programs and other part-time adult education activities.

The values for AEPARTIC are:

1 = Yes

0 = NO

AEPRTIME is participation in adult education excluding any full-time program. Only PTENROLL (A4,) participation in part-time degree programs, and OTCLASS (composite), part-time participation in other adult education activities, were used in the creation of this variable.

The values for AEPRTIME are:

$$1 = Yes$$
$$0 = No$$

AETRAIN encompasses participation in any course that had a training component as indicated by TRNMGMT(n), TRNSUPR(n), TRNPROF(n), TRNTECH(n), TRNCS(n), TRNHLTH(n), TRNQC(n), TRNSALE(n), or TRNEMPL(n) (A17). Descriptions of training specified as "other" were recoded into the training categories during data preparation or excluded because they did not meet the definition of training.

The values for AETRAIN are:

$$1 = Yes$$
$$0 = No$$

FTBASESL is full-time study of basic skills or English as a second language. It was derived from FTBASIC and FTENGLSH (A1A).

The values for FTBASESL are:

$$1 = Yes$$
$$0 = No$$

FTDEGREE, indicating participation in a full-time associate's, bachelor's, or more advanced degree program, was constructed from FTASSOC, FTBACHLR, and FTCERT (A1A), full-time professional certification or recertification.

The values for FTDEGREE are:

$$1 = Yes$$
$$0 = No$$

FTNONDEG is participation in full-time programs excluding any courses for a degree. It is derived from FTVOCA, FTBASIC, FTENGLSH, FTOTHER, or FTGED (A1A).

The values for FTNONDEG are:

```
1 = Yes0 = No
```

HIDEGREE categorizes respondents according to their educational credential, the highest degree/credential obtained. It is principally a recode of HIGHGRAD (A59). In cases in which the respondent indicated that his or her highest level of schooling was vocational/technical after high school or 1 to 2 years of college, HSDIPLMA (A60) is used to ascertain that the respondent obtained a high school diploma.

The values for HIDEGREE are:

- 1 = Less than high school diploma
- 2 = High school diploma or equivalent
- 3 = Associate's degree
- 4 = Bachelor's degree or higher

INCLEVEL, a recode of INCOMRNG (S22), specifies nine levels of household income.

The values for INCLEVEL are:

```
1 = $10,000 \text{ or less}
```

2 = \$10,001 to \$15,0003 = \$15,001 to \$20,000

4 = \$20,001 to \$25,000

4 = \$20,001 to \$25,0005 = \$25,001 to \$30,000

6 = \$30,001 to \$40,000

7 = \$40,001 to \$50,000

8 = \$50,001 to \$75,000

9 = More than \$75,000

OTCLASS was created by the CATI system just following item A8. It is an abbreviated indication of whether the respondent participated in any part-time adult education other than in an associate's, bachelor's, master's or doctoral degree program. Studying part time to obtain a GED was included. It was created from OTNONCR, OTCORRS, OTPRIV, OTGROUP, OTBASIC, OTENGL, OTOTHER, OTGED, and OTCOMP (A8).

The values for OTCLASS are:

1 = Yes

2 = No

RACEETHN is a composite of the variables RACEVER (A42a) and HISPVER (A42a1). Analogous variables, RACE and HISPANIC (S5), were contained on the screener. If race and ethnicity were obtained from the screener respondent, they were automatically copied into RACEVER and HISPVER. If not, race and ethnicity were collected from the respondent to the adult questionnaire. If the respondent designated ethnicity as Hispanic, RACEETHN is Hispanic regardless of whether race was identified as white or black.

The values for RACEETHN are:

- 1 = White, non-Hispanic
- 2 = Black, non-Hispanic
- 3 = Hispanic
- 4 = All other races (e.g., American Indian or Alaskan Native, Asian or Pacific slander), nonHispanic

SALARY is the annual salary (rounded to the nearest dollar) that the respondent is currently earning or earned in his or her most recent job. It was created from EARNAMT and EARNRATE (A53).

The values of SALARY range from \$1,000 to \$75,000.

SCHOOLNG, an additional education variable, designates years of schooling completed. It was created through a recoding of HIGHGRAD (A59).

The values for SCHOOLNG are:

- 1 = Up to 8th grade
- 2 = 9th to 11th grade
- 3 = 12th grade
- 4 = Vocational school after high school
- 5 = Some college (1 to 4 years, no associate's degree)
- 6 = Associate's degree
- 7 = Bachelor's degree or higher

6.3.3 Composite Variables on both the Adult File and the Course File

CEMPREA(n) on the Adult file and **CEMPREAS** on the Course file indicate that a reason for taking the course was job related. They were derived from TAKEREA(n) (A13) coded for current job reasons (2) or to train for a new job (3) or EMPLREA(n) (A14).

The values for CEMPREA(n) and CEMPREAS are:

- 1 = Yes
- $0 = N_0$

CNUMWKS(n) on the Adult file and **CNUMWKS** on the Course file are the number of weeks that the course was scheduled to run. They were calculated using the variable CLASNUM (A32) and a multiple of CLASUNIT (A32) to produce a uniform unit of time.

The value for CNUMWKS(n) and CNUMWKS is the number of weeks. The range for CNUMWKS is 1 to 624. Most courses (about 98 percent) are in the range of 1 to 52.

CREQUIR(n) on the Adult file and **CREQUIRE** on the Course file specify whether the course was required for a degree or certificate of completion. They were constructed from TAKEREA(n) (A13) coded to meet a requirement for a diploma, degree, or certificate of completion (5), REQUIRE(n) (A18) or CRDEGREE (A11).

The values for CREQUIR(n) and CREQUIRE are:

1 = Yes0 = No

CTRAIN(n) on the Adult file and **CTRAIN** on the Course file signify any training component in the course. They were created from TRNMGMT(n), TRNSUPR(n), TRNPROF(n) TRNTECH(n), TRNCS(n) TRNHLTH(n), TRNQC(n), TRNSALE(n), and TRNEMPL(n) (A17).

The values for CTRAIN(n), and CTRAIN are:

1 = Yes0 = No

6.4 Guide to the Codebooks

The codebooks, shown in Appendix F, contain complete descriptions of the contents of the data files on the tape. There is a codebook for the Adult file and a codebook for the Course file. The codebooks contain questionnaire items, composite variables, flag variables, and weight variables. The codebooks provide all the pertinent information for the variables in the files, including the variable name, the question wording, the position and format of the variable in the raw file, and the responses to the item. The unweighted frequency, unweighted percent, and weighted percent are provided along with each response. Figure 6-1 provides a description of each of the items appearing in the codebook.

6.5 SAS and SPSS-X Control Card Listings for File Creation

Appendix C contains listings of the SAS or SPSS-X control cards which will create SAS and SPSS-X files from the raw data files. The label statements contain the labels associated with each of the variables.

Figure 6-1. Example of the Codebook Format

(1) EVERMARI = (2) A43 EVER MARRIED

(3) A43 Have you ever been married?

(4) POSITION: 181-182(5) FORMAT: N2

(6) RESPONSE	(7) CODES	(8) FREQ	UNWGTD (9) PERCENT	WGTD (10) PCT
YES	1	9165	72.9	70.0
NO	2	3403	27.1	30.0
TOTALS:		12568	100.0%	100.0%

DESCRIPTIONS:

- (1) Variable name: This is the variable name associated with each item. This is the unique identifier present in the SAS data file and in the SPSS-X data definition cards on tape.
- (2) Variable label: A short label which is associated with each of the variables is presented here. This label is that which appears in the SAS data file and SPSS-X data definition cards on tape. Labels contain the item numbers at the beginning for questionnaire items. Some labels begin with the letter "S" to indicate a screener item and the letter "D" indicate a composite variable.
- (3) Question wording: This is the exact question wording as it appeared in the questionnaire.
- (4) Position: This provides the starting and ending position of the variable in the raw data file on tape.
- (5) Format: This provides the variable type, its width, and the number of positions after the decimal point, if necessary. A data type of "A" represents alphanumeric variables and data type of "N" represents numeric variables. In this example, EVERMARI is a numeric variable with a length of 2.
- (6) Response categories: This column provides the response categories for the variable.
- (7) Response codes: This column provides the actual numeric/alphanumeric codes present in the data files on the tape.
- (8) Unweighted frequency counts: This column displays the unweighted frequency counts for this variable. The counts for missing values will also be included.
- (9) Unweighted percentages: This column displays the unweighted frequency counts from the previous column as percentages. This column will also contain percentages for missing values.
- (10) Weighted percentages: This column displays the percentages of frequency counts weighted up to the population. This column will not include percentages for missing values.

7. DATA ANOMALIES

The purpose of this section is to bring to the user's attention certain anomalies in the NHES:91 AE survey data, to describe the nature of these anomalies, and to suggest possible means of taking them into account when analyzing the AE data.

7.1 Courses Taken in the Past 12 Months

The NHES:91 AE questionnaire collected several pieces of information about the number courses taken by respondents in the past 12 months: total number of full-time courses is the variable FTNUM (A2), total number of part-time degree-seeking courses is the variable PTNUM (A6), and total number of other AE courses is the variable OTNUM (A9).

Users should be cautioned that FTNUM was asked only of persons reporting full-time enrollment in an associate's degree program, a bachelor's or more advanced degree program or a vocational or occupational program. It was not asked for those adults whose only full-time enrollment in the past 12 months was reported as high school, adult literacy, English as a second language, or other full-time. Yet there were people reporting full-time enrollment in more than one kind of activity. While item A2 was meant to capture only courses taken toward an associate's, bachelor's, or more advanced degree, or a vocational or occupational program, the question did not limit the response to these types. Rather, the question stem at A2 was "Not counting high school courses, how many total courses did you take as a full time student in the past 12 months?" It did not limit the respondent to the activities of interest. For example, a person may have reported full-time enrollment in both a basic skills program and an associate's degree program. The associate's degree response would trigger the asking of question A2, and the respondent would have included all of their full-time courses for both programs. Caution should be taken for these kinds of analyses.

7.2 Barriers to AE Participation

The barriers to adult education questions were not asked of adults who reported they were enrolled in full-time school in the past 12 months (except for high school). The assumption here was that those attending school full time were not prevented from pursuing education. Variables affected are: PREVJOB, PREVTIME, PREVCOST, PREVLOCA, PREVTRAN, PREVCHIL, PREVFAM, PREVINFO, PREVINT, PREVOTHR, PREVOLD, PREVSICK, PREVDSIR, PREVMOTV, PREVTIRD, PREVBUSY (all components of A41).

7.3 Labor Force Status for Retired Adults

Respondents could report that they were retired at A45a (WORKWEEK), which would skip them out of the labor force series of the questionnaire (the assumption being that they were neither employed nor looking for work, i.e., they were not in the labor force). Others who may have been retired, but who did not report this at A45a were asked the labor force series (A56), and their status was determined from their answers to these questions. The last question in the labor force series gives retired adults another chance to report their status as retired. For adults who reported being retired at either opportunity the result was the same, they were classified as "not in the labor force."

APPENDIX A QUESTIONNAIRE

NHES Screener

Hello, this is (NAME). I'm calling on behalf of the U.S. Department of Education. We are conducting a study based on the President's goals for improving education for children and adults. These questions usually take about 5 minutes.

your

S1.	Before we begin, I'd like to be sure that I've dialed correctly. Is this (T	ELEPHONE NUMBER)?			
	YES	(CONTINUE) (GO TO S1A)			
S1A.	Thank you very much. It seems that the number has been dialed inconnumber may be called at a later time. [REDIAL]	rrectly. It is possible that			
S2.	Is this phone number for				
	Home use only	(GO TO S3) (GO TO S3) (STERM1)			
STERM1.	Thank you very much, but we are only interviewing private residences	i.			
S3.	Are you a member of this household at least 16 years old?				
	YES	(GO TO S4) (GO TO S3A)			
S3A.	May I please speak with a household member who is 16 or older?				
	AVAILABLE	(GO TO S3D) (SCHEDULE CALLBACK) (GO TO S3B)			
S3B.	May I please speak with the male or female head of this household?				
	PERSON ON PHONE	(CONTINUE) (GO TO S3C) (SCHEDULE CALLBACK)			
S3C.	[READ INTRO] Are you the male or female head-of-household?				
	YES	(GO TO S4) (GO TO S3A)			
S3D.	[READ INTRO] Are you a household member at least 16 years old?				
	YES	(GO TO S4) (GO TO S3A)			

NOTE: Response categories shown in mixed cases (upper and lower) were read to the respondent by the interviewer. Those shown in all upper case were not read. Those shown in italics were added during data cleaning (additional codes were created from among the "specify" responses).

NOTE: Unless otherwise noted, responses of "refused" and "don't know" followed the skip pattern for "no."

Early Childhood Education Screening Items

We'd first like to ask a few questions about your household. S4. The Department of Education is very interested in the early educational experiences of children. Are there any children who live in your household who are between 2 and 9 years old? YES......1 NO 2 (AINTRO) S5. Please tell me the ages of the children in your household who are 2 to 9 years old. [ENTER IN MATRIX: INCLUDE CHILDREN 2 TO 9 YEARS OF AGE ONLY.] Is this child Is this child Is (he/she) of What is AGE male or female? Hispanic origin? (his/her) **[READ RACES** [2-9] [M-F] BELOW] [(Y=1/N=2)]first name? CODES FOR RACE: 1=White, 2=Black, 3=American Indian or Alaskan Native, 4=Asian or Pacific Islander, 91=Another race CREATE HHRACE VARIABLE FROM INFOR ON FIRST CHILD: IF CHILD IS BLACK OR HISPANIC. THEN HHRACE = 1: ELSE HHRACE = 2ASK S6 AND S7 FOR THE FIRST CHILD S6. Who is the parent or guardian in this household who knows the most about (CHILD'S) care and education? NAME _____ S7. What is (NAME'S) relationship to (CHILD)? NATURAL OR ADOPTIVE MOTHER1 STEPMOTHER/OTHER FEMALE GUARDIAN......2 NATURAL OR ADOPTIVE FATHER3 STEPFATHER/OTHER MALE GUARDIAN4 GRANDPARENT5 BROTHER/SISTER......6 OTHER RELATIVE.......7

NONRELATIVE8

ASK S8, S8A, AND S9 FOR ADDITIONAL CHILD

S8.	Who is the parent or guardian in this household who known education?	ws the m	ost about (CHILD'S) care and
	NAME			
S9.	What is (NAME'S) relationship to (CHILD)?			
	NATURAL OR ADOPTIVE MOTHER			
	STEPMOTHER/OTHER FEMALE GUARDIAN	2		
	NATURAL OR ADOPTIVE FATHER	3		
	STEPFATHER/OTHER MALE GUARDIAN	4		
	GRANDPARENT	5		
	BROTHER/SISTER	6		
	OTHER RELATIVE	7		
	NONRELATIVE			
S8A.	[ASK IF NOT OBVIOUS] Is this the same parent or guardian who ke care and education?	nows abou	ut (PREVIOUS CHILD/0	CHILDREN'S)
	YES	1	(go то \$9)	
	NO	2	(GO TO S8)	

GO TO S8 FOR NEXT CHILD OR IF HH IS SAMPLED, GO TO AINTRO AFTER LAST CHILD; IF HH IS NOT SAMPLED GO TO ADDPERS1

Adult Education Screening Items

AINTRO. We are also interested in knowing about the educational activities of people 16 years old and older.

	IF S4 = 1, GO TO S10A, ELSE ASK A10AA
S10AA.	First, are there any people who normally live in your household who are under the age of 70?
	YES
S10A.	What is your age?
AGE	AGE
S10B.	Are you
	White
S10C.	Are you of Hispanic origin?
	YES
IF H	IF RESPONDENT IS BLACK OR HISPANIC, HHRACE = 1; ELSE HHRACE = 2 OUSEHOLD IS SAMPLED FOR ADULT EDUCATION COMPONENT, ASK S10D AND COPY INFORMATION ON RESPONDENT INTO THE MATRIX IF HOUSEHOLD IS NOT SAMPLED FOR ADULT EDUCATION, AND HAS CHILDREN, GO TO S17 IF HOUSEHOLD IS NOT SAMPLED AND HAS NO CHILDREN, GO TO STERM2
S10D.	What is your first name?
	NAME
S10E.	[IF NOT KNOWN] Are you
	Male, or

S11.	Please tell me the ages of the (other) people in your household who are 16 or older, including anyone
	who is living in student housing.

AGE [16-110]	Is this adult male or female? [M-F]	Is this adult [READ RACES BELOW]	Is (he/she) of Hispanic origin? [(Y=1/N=2]	What is (his/her) first name?
AGE				

CODES FOR RACE: 1=White, 2=Black, 3=American Indian or Alaskan Native, 4=Asian or Pacific Islander, 91=Another race

ASK S12INTRO THROUGH S14 FOR EACH ADULT

Now I am going to ask you some questions about ((NAME/AGE/SEX'S)/YOUR) participation in three kinds of educational activities over the past year: full-time school, part-time school, and all other kinds of adult education.

S12INTRO. First, (has (NAME)/have you) been enrolled as a <u>full-time</u> student in any kind of school, training program, or other educational program in the past 12 months, that is since (INTERVIEW MONTH), 1990?

YES	۶.	 					 	 				 		 		 		 						 		 	 		. '	1	
NO		 					 	 				 		 		 		 						 				 	. 2	2	

IF S12=1 THEN ASK S12A, OTHERWISE SKIP TO S13

S12A. In which of the following types of full-time educational programs (was (NAME/AGE/SEX)/were you) enrolled?

(VERIFY: PAST 12 MONTHS ONLY)

	YES	NO
a.	An elementary school, junior high school,	
	or high school program?1	2
b.	A program leading to an associate's degree?1	2
C.	A program leading to a bachelor's or	
	more advanced degree?1	2
d.	A vocational or occupational training program	
	after completing or leaving high school?1	2
e.	An adult literacy or basic skills program1	2
f.	An English as a Second Language (ESL)	
	program1	2
g.	Some other program	
_	(SPECIFY)1	2

	IF S12A-CATEGORY A=1 THEN ASK S12B, OTHERWISE SKIP TO S13
S12B.	(Is (NAME/AGE/SEX)/Are you) currently enrolled as a full-time student in an elementary school, junior high school, or high school program?
	YES
	IF S12B=1 THEN DISCONTINUE SERIES
S13.	[In addition to (his/her/your) full-time studies] (Has (NAME/AGE/SEX)/Have you) been enrolled as a <u>part-time</u> student at a college or university in an associate's, bachelor's, or graduate degree program, in the past 12 months?
	YES
S14.	Now I'm going to read you a short list of other kinds of adult education. [Not counting (full-time school) (or) (part-time courses taken for credit toward a degree)] Please tell me whether ((NAME/AGE/SEX) has/you have) been involved in any of these in the past 12 months.
	YES NO
ADDPERS	a. Continuing education courses or noncredit courses?
	YES
	IF HH WAS NOT SAMPLED, GO TO S17

	YES			
IF HOUSEHOLD HAS SAMPLED ADULTS, ASK S15 AND S16 FOR ALL ADULTS WHO ARE NOT THE SCREENER RESPONDENT.				
S15.	Is (NAME) living there, in student housing, or somewhere else?			
LIVENOW	HERE	(до то \$17)		
	by the school.]	(GO TO S16) (INELIGIBLE)		
	MILITARY BARRACKS, GROUP FOSTER CARE4	(INELIGIBLE)		
S16.	Would you please give me (his/her) last name and telephone number stalk about (his/her) educational experiences?	so that we can call (him/her) to		
	LAST NAME			
	PHONE			

ADDPERS2. I have listed (NUMBER) adults. Is this information correct?

Household Characteristics

Now I have a few questions about your household.

S17.	What is the total number of people living in your household, including all children and adults?				
NUMPERS	NUMBER				
S18.	In what county do you live?				
	COUNTY				
S19.	What kind of home do you live in? Is it				
HOMETYPE	A single family house or townhouse				
S20.	Do you				
OWNHOME	Own your home				
S21.	In addition to (NUMBER CALLED), do you have other phone numbers in your household?				
	YES				
S21A.	How many of these other phone numbers are used at least in part for home use?				
	NUMBER				
S22.	In studies like this, households are sometimes grouped according to income. Can you tell me which group best describes an estimate of the total income of all persons in your household over the past year. Please include income from all sources, such as salaries or other earnings, interest, retirement, and so on for all household members. Is your household income				
	\$25,000 or less, or				
S22A	(Was it/Which of the following ranges includes your household income?)				
	[SET 1]				
INCOMRNG	\$5,000 or less				

[SET 2]

\$25,001 to \$30,000	6
\$30,001 to \$40,000	
\$40,001 to \$50,000	
\$50,001 to \$75,000	
over \$75,000	

IF EXTENDED INTERVIEWS ARE TO BE DONE: INTERVIEWER IDENTIFIES RESPONDENT ON "SID" SCREEN; GO TO HHSELECT TO SELECT AVAILABLE RESPONDENT FOR INTERVIEW

IF HH HAS NO CHILDREN AND WAS NOT SAMPLED FOR ADULT ED, OR IF HH HAS NO CHILDREN AND <u>WAS</u> SAMPLED FOR ADULT ED BUT NO EXTENDEDS, READ STERM2.

STERM2. Those are all the questions I have about your household. Thank you very much for your assistance.

¹HHSELECT is a CATI screen used to identify interviews to be completed in a given household and the respondent for each interview

NHES Adult Education Interview

IF ADULT IS ALSO THE SCREENER RESPONDENT THEN READ MODIFIED VERSION OF THE INTRODUCTION AND SKIP TO THE BOX AFTER A1B

Hello, my name is (INTERVIEWER). I am calling on behalf of the U.S. Department of Education. We are conducting a voluntary and confidential national study about the educational activities of adults, and would like to ask you a couple of questions about your participation in three kinds of educational activities over the past year: full-time school, part-time school, and all other kinds of adult education. Keep in mind that we are interested not only in classes taken for a degree or certificate, but also in educational activities that are job related, and those taken for personal enjoyment or recreation.

A1INTRO.	First, have you been enrolled as a <u>full-time</u> student in any kind of school, training program, or othe educational program in the past 12 months, that is since (INTERVIEW MONTH) 1, 1990?
FTANY	YES

IF A1INTRO=1 THEN ASK A1A, OTHERWISE SKIP TO A4

A1A. In which of the following types of full-time educational programs were you enrolled? (VERIFY: PAST 12 MONTHS ONLY)

	YES	NO
a.	An elementary school, junior high school, or high school program?1	2
b.	A program leading to an associate's	
		2
C.		_
		2
d.		
	high school?1	2
e.	An adult literacy or basic skills program1	2
f.	An English as a Second Language	
	(ESL) program1	2
g.	Some other program	
	(specify)1	2
h.	<u>GED</u> 1	2
i.	Professional certification/recertification1	2
	b.c.d.e.f.g.	or high school program?

IF A1A-CATEGORY A=1 THEN ASK A1B, OTHERWISE SKIP TO THE BOX AFTER A1B

NOTE: Response categories shown in mixed case (upper and lower) were read to the respondent by the interviewer. Those shown in all upper case were not read. Those shown in italics were added during data cleaning (additional codes were created from among the "specify" responses).

NOTE: Unless otherwise noted, responses of "refused" and "don't know" followed the skip pattern for "no."

A1B.	Are you currently enrolled as a full-time student in an elementary school, junior high school, or high school program?
CURENROL	YES
	IF A1B=1 THEN TERMINATE K A2 AND A3 IF ENROLLED IN A FULL-TIME ASSOCIATE'S, BACHELOR'S OR MORE ADVANCED DEGREE AM, OR A VOCATIONAL OR OCCUPATIONAL TRAINING PROGRAM, OTHERWISE SKIP TO THE BOX AFTER A3
A2.	[Not counting high school courses] How many total courses did you take as a <u>full-time</u> student in the past 12 months?
FTNUM	NUMBER OF COURSES
A3.	What is or was your most recent program of study as a <u>full-time</u> student?
	PROGRAM OF STUDY
	IF ADULT IS ALSO THE SCREENER RESPONDENT, SKIP TO THE BOX AFTER A4
A4.	[In addition to your full-time studies] Have you been enrolled as a <u>part-time</u> student at a college or university in an associate's, bachelor's, or graduate degree program, in the past 12 months?
PTENROLL	YES
	ASK A5, A6, AND A7 IF ENROLLED AS A PART-TIME STUDENT, OTHERWISE SKIP TO BOX AFTER A7
A5.	What degree are or were you seeking as a part-time college student?
PTDEGREE	ASSOCIATE'S
A6.	How many courses did you take as a <u>part-time</u> student for credit toward your degree in the past 12 months, including any that you did not complete?
PTNUM	NUMBER OF COURSES
A7.	What is or was your most recent program of study as a <u>part-time</u> student?
	PROGRAM OF STUDY

	IF ADULT	IS ALSO THE SCREENER RESPONDENT, SKIP TO THE BOX A	FTER A8	
A8.	Now I'm going to read you a short list of other kinds of adult education. [Not counting (full-time school) (or) (part-time courses taken for credit toward a degree)] Please tell me whether you have been involved in any of these in the past 12 months.			
		YES	NO	
OTNONCR	a.	Continuing education courses or		
		noncredit courses?1	2	
OTCORRS	b.	Courses by mail, television, radio		
		or newspaper?1	2	
OTPRIV	C.	Private instruction or tutoring?1	2	
OTGROUP	d.	Educational or training activities given by		
		an employer, labor organization, neighborhood		
		center, church, or community group?1	2	
OTBASIC	e.	Instruction in basic skills such as math,		
		or reading and writing English?1	2	
OTENGL	f.	Instruction in English as a Second		
		Language?1	2	
OTOTHER	g.	Or, any other organized educational activity?		
	•	Please describe:1	2	
OTGED	h.	<u>GED</u> 1	2	
OTCOMP	i.	Computers (unspecified)1	2	
		IF ANY A8a - A8i = 1, OTCLASS = 1, ELSE OTCLASS = 2		
IF NO	OT ENROLLED IN A PA	RT-TIME PROGRAM OR IN OTHER NON-FULL-TIME ADULT E	DUCATION, SKIP TO A36	
<u> </u>				
A9.	[Not counting (full-time school) (or) (part-time classes for credit toward a degree)] How many separate adult education activities have you participated in during the past 12 months, including any that you did not complete?			
OTNUM	NU	MBER OF COURSES		

(Not counting full-time school) (but) (including part-time classes for credit toward a degree)) can you tell me the name(s) of the (four most recent) adult education activit(y/ies) or course(s). (VERIFY:

NAME 1
NAME 2
NAME 3

NAME 4

A10.

OTNAME1 OTNAME2 OTNAME3

OTNAME4

PAST 12 MONTHS ONLY)

ASK A11 FOR PART-TIME DEGREE SEEKERS WHOSE COURSE TOTAL IN A6 IS GREATER THAN OR EQUAL TO THE TOTAL NUMBER OF COURSES MENTIONED IN A10

A11.	Are all of the cou	rses you just mentioned for credit toward you	r degree?
CRDEGREE			
	CYCLE THE	ROUGH A12 TO A34A FOR EACH COURSE OR ACT	IVITY MENTIONED
A12.	In what general s	ubject matter area was (NAME 1)?	
	SUB	JECT MATTER	
A13.		eason for taking (NAME 1):	
	, <u>—</u>	3 (
TAKEREA(n)*	A po	ersonal, family, or social reason	1
	To i	mprove, advance, or keep up to date	
	(on your current job	2
		rain for a new job or a new career	
	To i	mprove your basic reading, writing,	
		or math skills	4
		neet a requirement for a diploma,	
		degree, or certificate of completion, or	5
		Did you have some other main reason	
		SPECIFY)	91
		,	
AS	K A14 IF MAIN REAS	ON WAS NOT JOB RELATED. IF MAIN REASON WA	S JOB RELATED, SKIP TO A17
A14.	Did you also have	e any employment- or career-related reasons	for taking (NAME 1)?
EMPLREA(n)			
	NO .		2
ASK A	17 IF A REASON FOR	TAKING COURSE FROM A13 OR A14 WAS JOB RI	ELATED, OTHERWISE SKIP TO A18
A17.	Did (NAME 1) inclu	ide any of the following types of employment	- or career-related training:
, , , , ,	Did (iviliz i) illoid	ad any or the renorming types or employment	YES NO
TRNMGMT(n)	a.	Executive or management development	120 110
Tratalion (II)	u.	training	1 2
TRNSUPR(n)	b.	Supervisory training	
TRNPROF(n)	C.	Professional development training	
TRNTECH(n)	d.	Technical or skilled worker training	
TRNCS(n)	e.	Word processing or computer	
114100(11)	O.	software training	1 2
TRNHLTH(n)	f.	Job health and safety training	
TRNQC(n)	g.	Training in areas such as quality	
	9.	control or statistical process control	1 2
TRNSALE(n)	h.	Sales and marketing training	
TRNEMPL(n)	i.	Training as a new employee, or	
=\/	• • • • • • • • • • • • • • • • • • •	,,,,,,,,, -	

(SPECIFY) _

j.

TRNOTHE(n)

2

Some other kind of training

^{*}Variables with the designation (n) end in the course record number on the Adult file.

IF MAIN REASON FOR COURSE FROM A13 WAS TO SATISFY REQUIREMENT FOR DIPLOMA OR DEGREE, SKIP TO A19, IF ALL COURSES ARE TOWARD PART-TIME DEGREE, SKIP TO A20

A18.	Did you take (NAME 1) to meet a requirement for obtaining a certificate of completion, a diploma, or a degree?
REQUIRE(n)	YES
	IF A18 EQUALS 2, SKIP TO A20, OTHERWISE ASK A19
A19.	What type of certificate, diploma, or degree will (NAME 1) fulfill a requirement for?
DEGREE(n)	8TH GRADE CERTIFICATE OF COMPLETION 1 HIGH SCHOOL DIPLOMA (INCLUDING 2 EQUIVALENCY CERTIFICATE 2 VOCATIONAL DIPLOMA OR CERTIFICATE 3 (BEYOND HIGH SCHOOL) 3 2-YEAR DEGREE FROM A COLLEGE OR 4 TECHNICAL INSTITUTE (ASSOCIATE'S DEGREE) 4 4-YEAR DEGREE FROM A COLLEGE OR 5 UNIVERSITY 5 GRADUATE OR PROFESSIONAL DEGREE 6 OR CERTIFICATION 6 COLLEGE CERTIFICATE 7 LICENSE 8 INELIGIBLE TYPE REPORTED 0 OTHER (SPECIFY) 91
A20.	Did you take (NAME 1) to meet a requirement for obtaining or renewing a license or certification in a trade or profession as required by law or regulation?
LICENSE(n)	YES
	ASK A200V IF A20 EQUALS 1, OTHERWISE SKIP TO A21
A200V.	Was it to obtain or renew a license or certification?
OBTAIN(n)	OBTAIN LICENSE OR CERTIFICATION
We are interclass. In pa	rested in knowing who offered the instruction for (NAME 1), as opposed to who sponsored or taught the rticular
A21.	What school, organization, business, or person provided the instruction for (NAME 1)?
	PROVIDER

A22.	Would that be: [READ LIKELY ANSWER]
SPONTYP(n)	An elementary school, junior high school or high school
A23.	Was this provider also your employer?
EMPLPRO(n)	YES
	IF PROVIDER WAS EMPLOYER SKIP TO A24, OTHERWISE ASK A23A
A23a.	Were you employed at the time?
EMPLTIM(n)	YES
	IF PROVIDER WAS EMPLOYER ASK A24, OTHERWISE SKIP TO BOX ABOVE A25
A24.	Was participation in (NAME 1) limited to employees only?
EMPLONL(n)	YES
	F PROVIDER WAS EMPLOYER OR IF EMPLOYED AT THE TIME, ASK A25, OTHERWISE SKIP TO A27
A25.	Was (NAME 1) given at your place of work?
ATWORK(n)	YES

NOTE: PROCEDURE FOR A 22 WILL RECEIVE STRONG EMPHASIS AT INTERVIEWER TRAINING.

A25a.	Did your employer	require you to take (NAME 1)?			
EMPLREQ(n)	. =	1			
A26.	Were you given tir	ne off from work to attend (NAME 1), (either with or w	vithout pay)?		
TIMEOFF(n)	YES				
		IF GIVEN AT PLACE OF WORK, SKIP TO A28			
A27.	Was (NAME 1) a co	prrespondence course?			
CORRESP(n)	YES				
IF A CORRESPONDENCE COURSE, ASK A28, OTHERWISE SKIP TO A29					
A28.	Was instruction pr	ovided			
MAILTV(n)	Through the mail, or				
A29.	Who paid for you to take (NAME 1)? Was it [CODE ALL THAT APPLY]				
PAIDFAM(n) PAIDFED(n)	a. b.	YES You or your family (including loans)1 The Federal government (including military)	NO 2 2		
PAIDSTA(n)	C.	A State, county, or local government, including public schools	2		
PAIDBUS(n)	d.	A business or industry1	2		
PAIDPRI(n)	e.	A private organization, such as a	•		
		church or professional association, or1	2		
PAIDOTH(n),	f.	Was it someone else (SPECIFY)1	2		
PAIDFRE(n)	g.	In other words, there was no charge (SPECIFY)1	2		
PAIDUNI(n)	h.	University or other postsecondary institution1	2		

IF SELF OR FAMILY ONLY SOURCE MENTIONED IN A29, OR IF NOT EMPLOYED AT TIME OF COURSE, SKIP TO A31 IF THERE WAS NO CHARGE FOR THE COURSE (A29G=1) THEN SKIP TO A32

A30.	Was your employer one of the sources you just mentioned?
PAIDEMP(n)	YES
	IF SELF OR FAMILY NOT MENTIONED AS SOURCE, SKIP TO A32
A31.	How much did you and your family pay for tuition and required fees for (NAME 1)?
TUITION(n)	AMOUNT\$
	ASK A31A IF A VALID AMOUNT WAS REPORTED IN A31, OTHERWISE SKIP TO A32
A31a.	Was this amount for more than one course?
TUITONE(n)	YES
	IF YES TO A31A, ASK A31B, OTHERWISE SKIP TO A32
A31b.	How many courses did this payment cover?
TUITNUM(n)	NUMBER OF COURSES
NOTE: FOR Q ONLY.	UESTIONS A 32 AND A 33 THE SECOND DISPLAY OPTION SHOWN WILL BE USED FOR CORRESPONDENCE COURSES
A32.	How many weeks (was (NAME 1) scheduled to run/did (NAME 1) take to complete)?
CLASNUM(n)	NUMBER
CLASUNI(n)	UNITS WEEKS 1 MONTHS 2 SEMESTERS 3 QUARTERS 4 YEARS 5

A33.	How many hours per week (were you scheduled to attend/did you work on) (NAME 1)?
CLASHRS(n)	HOURS PER WEEK
A34.	Did you complete (NAME 1)?
COMPLET(n)	YES
	ASK A34A IF A34 EQUALS 2, OTHERWISE SKIP TO A35
A34a.	Are you still taking (NAME 1) or did you drop it before finishing?
TAKING(n)	STILL TAKING COURSE (INCLUDES "INCOMPLETES")1 DROPPED COURSE
	CURRENT PARTICIPANTS ANSWER (A4 = 1 OR ANY A8 = 1) A15-A35 ONCE
	ASK A15 IF NO MAIN REASON FROM A13 WAS BASIC SKILLS, OTHERWISE SKIP TO A16
A15.	Did you take any course in the past 12 months that involved training in basic skills such as math, and reading and writing English?
BASIC	YES
A16.	Did you take any course in the past 12 months that involved instruction in English as a Second Language?
ENGLISH	YES
A35.	Did you take any course in the past 12 months to prepare for naturalization as an American citizen?
CITIZEN	YES
	CURRENT PARTICIPANTS (A4 = 1 OR ANY A8 = 1) SKIP TO A38

A36.		ime school, have you ever taken any adult education courses or participated in any ducation activities?
AECOURSE		1 2
		ASK A37 IF YES TO A36, OTHERWISE SKIP TO A38
		ACKACI II 120 TO ACC, CITIERWICE CIKII TO ACC
A37.	Was this in the pa	st three years (since spring 1988)?
AEPAST3		1 2
A38.		elf, can you see any benefit to your job or career in taking (additional) adult education pating in adult education activities?
AEJOB		1 2
A39.	Can you see any l skills?	penefit of (additional) adult education for your basic reading, writing, or mathematics
AEBASIC		1 2
A40.		ny use for (additional) adult education courses or activities to help you to obtain or r certification in a trade or profession?
AELICENS		1
ASK /	441 IF NOT A FULL-TI	ME STUDENT IN THE PAST 12 MONTHS (OTHER THAN ELEMENTARY/SECONDARY), OTHERWISE SKIP TO A42
A41.	Have any of the f	ollowing things kept you from participating in (additional) adult education? YES NO
PREVJOB	a.	Your work schedule
PREVTIME	b.	The meeting times of classes 1 2
PREVCOST	C.	The cost of classes 1 2
PREVLOCA	d.	The location of classes 1 2
PREVTRAN	e.	Lack of transportation to classes
PREVCHIL	f.	Lack of child care1 2
PREVFAM	g.	Other family responsibilities 1 2
PREVINFO	h.	Lack of information about
		available classes 1 2
PREVINT	i.	Classes of interest are not offered, or
PREVOTHR	j.	Was there anything else that might have kept
		you from participating (SPECIFY)1 2
PREVOLD	k.	<u>Old age</u> 1 2
PREVSICK	l.	<u>Sickness</u> 1 2
PREVDSIR	m.	No interest/desire1 2
PREVMOTV	n.	<u>Motivation</u> 1 2
PREVTIRD	0.	<u>Tired/exhausted</u> 1 2
PREVBUSY	p.	General time problem/busy1 2

A36INTRO Now I have a few questions about your background.

Finally, I ha	ve some questions about your background.
A42.	In what month and year were you born?
	MONTH
	IF RACE WAS DETERMINED IN THE SCREENER, SKIP TO BOX AFTER A42A
A42a.	What is your race?
RACEVER	White
	IF HISPANIC ORIGIN WAS DETERMINED IN THE SCREENER, SKIP TO BOX AFTER A42A1
A42a1.	Are you of Hispanic origin?
HISPVER	YES
	IF GENDER WAS DETERMINED IN THE SCREENER, SKIP TO A43
A42b.	(ASK ONLY IF NOT OBVIOUS) Are you male or female?
SEXVER	MALE
A43.	Have you ever been married?
EVERMARI	YES
	IF NEVER MARRIED, SKIP TO A45
A44.	Are you currently: [CODE ONLY ONE]
MARISTAT	Married 1 Separated 2 Divorced, or 3 Widowed 4

IF A23 = 1 OR IF A23A = 1 (WHICH INDICATES THAT THEY WERE AT ONE TIME EMPLOYED) THEN SKIP TO A45A A45. Have you ever worked at a job for pay? YES......1 **WORKPAY** IF EVER WORKED AT A JOB FOR PAY (A45=1 OR -1), ASK A45A, OTHERWISE SKIP TO A54 A45a. During the past week did you work at a job for pay? YES......1 WORKWEEK RETIRED.....3 IF WORKED LAST WEEK OR RETIRED, SKIP TO A47 A46. Were you on leave or vacation from a job? YES......1 **VACATION** NO2 For whom (do/did) you work (when you last worked)? [PROBE: NAME OF THE COMPANY, BUSINESS, A47. ORGANIZATION, OR OTHER EMPLOYER. IF MORE THAN ONE CURRENT JOB, ASK ABOUT THE ONE AT WHICH RESPONDENT SPENDS THE MOST TIME.] SPECIFY _ A48. What kind of business or industry (is/was) this? [PROBE: FOR EXAMPLE -- TV AND RADIO MFG., RETAIL SHOE STORE, STATE LABOR DEPT., FARM.] SPECIFY _____ A49. What kind of work (are/were) you doing? [PROBE: FOR EXAMPLE -- ELECTRICAL ENGINEER, STOCK CLERK, TYPIST, FARMER] What (are/were) your most important activities or duties at this job? [PROBE: FOR EXAMPLE -- TYPING. A50. KEEPING ACCOUNT BOOKS, FILING, SELLING CARS, OPERATING PRINTING PRESS, FINISHING CONCRETE.]

ASK A51 IF NOT CURRENTLY EMPLOYED OR ON LEAVE OR VACATION FROM A JOB, OTHERWISE SKIP TO A52

SPECIFY ____

A51.	In what month and year did you leave this job?
LEAVEMM LEAVEYY	MONTH
A52.	About how many total hours per week (do/did) you usually work for pay? [IF HOURS VARY, PROBE FOR ESTIMATE OR AVERAGE PER WEEK. INCLUDE IN COUNT THE TOTAL HOURS AT ALL JOBS.]
WORKHRS	WEEKLY HOURS
A53.	About how much (do/did) you earn per hour, before taxes and other deductions? [IF DOES NOT KNOW HOURLY, PROBE FOR WEEKLY, ETC. IF MORE THAN ONE CURRENT JOB, ASK ABOUT THE ONE AT WHICH RESPONDENT SPENDS THE MOST TIME.]
SALARY*	AMOUNT \$\
	IF WORKED LAST WEEK, ON LEAVE OR VACATION FROM A JOB, OR RETIRED, SKIP TO A57
A54.	Have you been actively looking for work in the past 4 weeks?
LOOKWORK	YES
	IF ACTIVELY LOOKING FOR WORK, ASK A55, OTHERWISE SKIP TO A56

^{*}Data from A53 used to calculate annual salary.

YES NO 2 LOOKPUBL CHECKED WITH PUBLIC EMPLOYMENT AGENCY.......1 CHECKED WITH PRIVATE EMPLOYMENT AGENCY......1 2 **LOOKPRIV** b. 2 CHECKED WITH EMPLOYER DIRECTLY1 LOOKEMPL C. 2 d. CHECKED WITH FRIENDS OR RELATIVES......1 **LOOKFRND** 2 PLACED OR ANSWERED ADS1 LOOKADS e. 2 LOOKNOTH f. NOTHING THAT QUALIFIES......1 2 LOOKOTHR g. OTHER (SPECIFY) ______1 IF A55A-E=1 OR IF FULL-TIME STUDENT, SKIP TO A57 A56. What were you doing most of last week? LASTACTY KEEPING HOUSE/CARING FOR CHILDREN......1 GOING TO SCHOOL2 RETIRED.....3 UNABLE TO WORK4 OTHER (SPECIFY) ______91 A57. Do you have any children under 16 years of age who live with you? UNDER16 YES......1 NO2 ASK A58 IF YES TO A57 A58. How many do you have? NUMBER UNDER16N A59. What is the highest grade or year of school that you completed? **HIGHGRAD** UP TO EIGHTH GRADE......1 NINTH TO ELEVENTH GRADE......2 HIGH SCHOOL DIPLOMA OR EQUIVALENT3 VOCATIONAL/TECHNICAL AFTER HS4 ASSOCIATE'S DEGREE6 BACHELOR'S DEGREE8 GRADUATE OR PROFESSIONAL SCHOOL9

What have you been doing in the last 4 weeks to find work?

[CODE ALL THAT APPLY]

A55.

A-26

ASK A60 IF HIGHEST GRADE WAS VOCATIONAL/TECHNICAL AFTER HS OR SOME COLLEGE, OTHERWISE SKIP TO A61

A60.	Did you receive a high school diploma or its equivalent?
HSDIPLMA	YES
A61.	In general, which of the following would you consider your primary activity during the past 12 months Would it be
MAINACTY	Pursuing an education
MAINACOS	Something else (SPECIFY)
A62.	Have you used a public library or public library program in the past month?
LIBMO	YES
	ASK A63 IF NO TO A62, OTHERWISE TERMINATE
A63.	In the past <u>year</u> ?
LIBYR	YES1 NO2

APPENDIX B

VARIABLE LISTS:

ADULT FILE AND COURSE FILE

ADULT FILE VARIABLES

VARIABLE NAME	VARIABLE LABEL	FORMAT	LENGTH	START COLUMN	END COLUMN
PERSID	PERS KEY = BASEID 2-DIGIT PERSNUM	A	9	1	9
AGE	AGE AS OF JANUARY 1,1991	N	2	10	11
LIVENOW	S15 WHERE DOES PERSON LIVE NOW	N	2	12	13
NUMPERS	S17 TOTAL NUMBER OF PEOPLE LIVING IN HH	N	2	14	15
HOMETYPE	S19 TYPE OF HOME	N	2	16	17
OWNHOME	S20 OWN HOME	N	2	18	19
INCOMRNG	S22A TOTAL HOUSEHOLD INCOME - RANGE	N	2	20	21
FTANY	Alintro enrolled as ft student past 12	N	2	22	23
FTSCHOOL	A1A FT ELEMENTARY OR HIGH SCHOOL	N	2	24	25
FTASSOC	A1B FT ASSOCIATE'S DEGREE PROGRAM	N	2	26	27
FTBACHLR	A1C FT BACHELOR'S DEGREE PROGRAM ++	N	2	28	29
FTVOCA	A1D FT VOCATIONAL/OCCUPATIONAL TRAINING	N	2	30	31
FTBASIC	A1E FT ADULT LITERACY/BASIC SKILLS PRGRM	1 N	2	32	33
FTENGLSH	A1F FT ENGLISH AS 2ND LANGUAGE PROGRAM	N	2	34	35
FTOTHER	A1G FT SOME OTHER PROGRAM	N	2	36	37
FTGED	A1H ENROLLED FT IN GED PROGRAM-RECODE	N	2	38	39
FTCERT	A1I ENROLLED FT-PROF CERTIFICATE-RECODE	N	2	40	41
CURENROL	Alj currently enrolled as full-time stud) N	2	42	43
FTNUM	A2 # CLASSES AS FT STUDENT PAST 12	N	2	44	45
PTENROLL	A4 ENROLLED AS PT STUDENT PAST 12	N	2	46	47
PTDEGREE	A5 SEEKING PART-TIME DEGREE	N	2	48	49
PTNUM	A6 # PART-TIME CLASSES FOR CREDIT	N	2	50	51
OTNONCR	A8A CONTINUING EDUCATION/NONCREDIT COURS	S N	2	52	53
OTCORRS	A8B COURSES BY MAIL, TV, RADIO, NEWSPAPER	N	2	54	55
OTPRIV	A8C PRIVATE INSTRUCTION OR TUTORING	N	2	56	57
OTGROUP	A8D ED ACTIVITY BY EMPLOYER, COMMUNITY	N	2	58	59
OTBASIC	A8E INSTRUCTION IN BASIC SKILLS	N	2	60	61
OTENGL	A8F INSTRUCTION IN ENGLISH AS 2ND LANGUA	N	2	62	63
OTOTHER	A8G OTHER ORGANIZED ED ACTIVITY	N	2	64	65
OTGED	A8H GED/HS COMPLETION-RECODE	N	2	66	67
OTCOMP	A8I COMPUTERS-RECODE	N	2	68	69
OTCLASS	A8 OTHER CLASSES TAKEN DURING PAST 12 MC) N	2	70	71
OTNUM	A9 # OTHER CLASSES TAKEN DURING PAST 12	N	2	72	73
OTNAME1	A10 MOST RECENT AE CLASS 1	A	40	74	113
OTNAME2	A10 MOST RECENT AE CLASS 2	A	40	114	153
OTNAME3	A10 MOST RECENT AE CLASS 3	A	40	154	193
OTNAME 4	A10 MOST RECENT AE CLASS 4	A	40	194	233
CRDEGREE	A11 A10 CLASSES FOR CREDIT TOWARD DEGREE		2	234	235
TAKEREA1	A13 MAIN REASON FOR TAKING A10 CL REC# 1		2	236	237
TAKEREA2	A13 MAIN REASON FOR TAKING A10 CL REC# 2		2	238	239
	A13 MAIN REASON FOR TAKING A10 CL REC# 3		2	240	241
TAKEREA4	A13 MAIN REASON FOR TAKING A10 CL REC# 4		2	242	243
EMPLREA1	A14 CAREER REASONS FOR TAKING A10 REC# 1		2	244	245
	A14 CAREER REASONS FOR TAKING A10 REC# 2		2	246	247
	A14 CAREER REASONS FOR TAKING A10 REC# 3		2	248	249
	A14 CAREER REASONS FOR TAKING A10 REC# 4		2	250	251
TRNMGMT1	A17A EXECUTIVE MGMT DEVELOPMENT T REC# 1		2	252	253
TRNMGMT2	A17A EXECUTIVE MGMT DEVELOPMENT T REC# 2		2	254	255
TRNMGMT3	A17A EXECUTIVE MGMT DEVELOPMENT T REC# 3		2	256	257
TRNMGMT4	A17A EXECUTIVE MGMT DEVELOPMENT T REC# 4 A17B SUPERVISORY TRAINING REC# 1		2	258	259
TRNSUPR1				260	261
TRNSUPR2	A17B SUPERVISORY TRAINING REC# 2		2 2	262	263
TRNSUPR3	A17B SUPERVISORY TRAINING REC# 3 A17B SUPERVISORY TRAINING REC# 4		2	264	265
TRNSUPR4	A17C PROFESSIONAL DEVELOPMENT TRA REC# 1		2	266 268	267 269
TRNPROF1 TRNPROF2	A17C PROFESSIONAL DEVELOPMENT TRA REC# 1		2	270	269
	A17C PROFESSIONAL DEVELOPMENT TRA REC# 2		2	270	271
T 1/1/1 1/OT. 2	TITE THOUSOUTONAL DEVELORMENT THA REC# 3	, 1/1	۷	212	213

VARIABLE NAME	VARIABLE LABEL		FORMAT	LENGTH	START COLUMN	END COLUMN
TRNPROF4	A17C PROFESSIONAL DEVELOPMENT TRA	REC#	4 N	2	274	275
TRNTECH1	A17D TECHNICAL/SKILLED WORKER TRA	REC#	1 N	2	276	277
TRNTECH2	A17D TECHNICAL/SKILLED WORKER TRA	REC#	2 N	2	278	279
TRNTECH3	A17D TECHNICAL/SKILLED WORKER TRA	REC#	3 N	2	280	281
TRNTECH4	A17D TECHNICAL/SKILLED WORKER TRA	REC#	4 N	2	282	283
TRNCS1	A17E WORD PROCESSING/COMPUTER SOF	REC#	1 N	2	284	285
TRNCS2	A17E WORD PROCESSING/COMPUTER SOF	REC#	2 N	2	286	287
TRNCS3	A17E WORD PROCESSING/COMPUTER SOF	REC#	3 N	2	288	289
TRNCS4	A17E WORD PROCESSING/COMPUTER SOF	REC#	4 N	2	290	291
TRNHLTH1	A17F JOB HEALTH AND SAFETY TRAINI	REC#	1 N	2	292	293
TRNHLTH2	A17F JOB HEALTH AND SAFETY TRAINI	REC#	2 N	2	294	295
TRNHLTH3	A17F JOB HEALTH AND SAFETY TRAINI	REC#	3 N	2	296	297
TRNHLTH4	A17F JOB HEALTH AND SAFETY TRAINI	REC#	4 N	2	298	299
TRNQC1	A17G QUALITY CONTROL/STATISTICAL	REC#	1 N	2	300	301
TRNQC2	A17G QUALITY CONTROL/STATISTICAL	REC#	2 N	2	302	303
TRNQC3	A17G QUALITY CONTROL/STATISTICAL	REC#	3 N	2	304	305
TRNQC4	A17G QUALITY CONTROL/STATISTICAL	REC#	4 N	2	306	307
TRNSALE1	A17H SALES AND MARKETING TRAINING		1 N	2	308	309
TRNSALE2	A17H SALES AND MARKETING TRAINING		2 N	2	310	311
TRNSALE3	A17H SALES AND MARKETING TRAINING		3 N	2	312	313
TRNSALE4	A17H SALES AND MARKETING TRAINING		4 N	2	314	315
TRNEMPL1	A17I NEW EMPLOYEE TRAINING	REC#	1 N	2	316	317
TRNEMPL2	A171 NEW EMPLOYEE TRAINING	REC#	2 N	2	318	319
TRNEMPL3	A17I NEW EMPLOYEE TRAINING	REC#	3 N	2	320	321
TRNEMPL4	A171 NEW EMPLOYEE TRAINING	REC#	4 N	2	322	323
TRNOTHE1		REC#	1 N	2	324	325
TRNOTHE2	A17J SOME OTHER KIND OF TRAINING	REC#	2 N	2	326	327
TRNOTHE3	A17J SOME OTHER KIND OF TRAINING		3 N	2	328	329
TRNOTHE4	A17J SOME OTHER KIND OF TRAINING	REC#		2	330	331
REQUIRE1	A18 TAKE A10 CLASS TO MEET REQUIR		1 N	2	332	333
REQUIRE2	A18 TAKE A10 CLASS TO MEET REQUIR			2	334	335
REQUIRE3	A18 TAKE A10 CLASS TO MEET REQUIR		3 N 4 N	2 2	336	337
REQUIRE4 DEGREE1	A18 TAKE A10 CLASS TO MEET REQUIR		4 N	2	338 340	339 341
DEGREE2	A19 A10 CLASS FULFILLS TYPE REQUI A19 A10 CLASS FULFILLS TYPE REQUI		2 N	2	342	343
DEGREE3	A19 A10 CLASS FULFILLS TYPE REQUI		2 N	2	344	345
DEGREE4	A19 A10 CLASS FULFILLS TYPE REQUI		4 N	2	346	347
LICENSE1	A20 A10 CLASS TO OBTAIN/RENEW LIC		1 N	2	348	349
LICENSE2	A20 A10 CLASS TO OBTAIN/RENEW LIC		2 N	2	350	351
LICENSE3	A20 A10 CLASS TO OBTAIN/RENEW LIC		3 N	2	352	353
LICENSE4	A20 A10 CLASS TO OBTAIN/RENEW LIC			2	354	355
OBTAIN1	A200V OBTAIN OR RENEW LICENSE/CER			2	356	357
	A200V OBTAIN OR RENEW LICENSE/CER			2	358	359
	A200V OBTAIN OR RENEW LICENSE/CER			2	360	361
OBTAIN4	A200V OBTAIN OR RENEW LICENSE/CER			2	362	363
SPONTYP1	A22 A10 CLASS SPONSORED BY TYPE O	REC#	1 N	2	364	365
SPONTYP2	A22 A10 CLASS SPONSORED BY TYPE O	REC#	2 N	2	366	367
SPONTYP3	A22 A10 CLASS SPONSORED BY TYPE O	REC#	3 N	2	368	369
SPONTYP4	A22 A10 CLASS SPONSORED BY TYPE O	REC#	4 N	2	370	371
EMPLPRO1	A23 A10 CLASS SPONSOR IS EMPLOYER	REC#	1 N	2	372	373
EMPLPRO2	A23 A10 CLASS SPONSOR IS EMPLOYER	REC#	2 N	2	374	375
EMPLPRO3	A23 A10 CLASS SPONSOR IS EMPLOYER	REC#	3 N	2	376	377
EMPLPRO4	A23 A10 CLASS SPONSOR IS EMPLOYER	REC#	4 N	2	378	379
EMPLTIM1	A23A EMPLOYED AT TIME A10 CLASS T	REC#	1 N	2	380	381
EMPLTIM2	A23A EMPLOYED AT TIME A10 CLASS T	REC#	2 N	2	382	383
EMPLTIM3	A23A EMPLOYED AT TIME A10 CLASS T	REC#	3 N	2	384	385
EMPLTIM4	A23A EMPLOYED AT TIME A10 CLASS T	REC#	4 N	2	386	387

VARIABLE					START	END
NAME	VARIABLE LABEL		FORMAT	LENGTH	COLUMN	COLUMN
EMDI ONI 1	204 210 OLDGO DERMINER TO THE COLUMN	DE ~ "	1	^	200	200
	A24 A10 CLASS PARTICIPATN-EMPLOYE A24 A10 CLASS PARTICIPATN-EMPLOYE			2	388 390	389 391
EMPLONL2 EMPLONL3	A24 A10 CLASS PARTICIPATN-EMPLOYE			2	390	393
EMPLONL3				2	394	395
ATWORK1	A25 A10 CLASS GIVEN AT WORK	REC#		2	396	397
ATWORK2	A25 A10 CLASS GIVEN AT WORK	REC#		2	398	399
ATWORK3	A25 A10 CLASS GIVEN AT WORK	REC#	3 N	2	400	401
ATWORK4	A25 A10 CLASS GIVEN AT WORK	REC#	4 N	2	402	403
EMPLREQ1	A25A EMPLOYER REQUIRED A10 CLASS	REC#	1 N	2	404	405
EMPLREQ2	A25A EMPLOYER REQUIRED A10 CLASS	REC#	2 N	2	406	407
EMPLREQ3	A25A EMPLOYER REQUIRED A10 CLASS	REC#	3 N	2	408	409
EMPLREQ4	A25A EMPLOYER REQUIRED A10 CLASS	REC#	4 N	2	410	411
TIMEOFF1	A26 GIVEN TIME OFF TO TAKE A10 CL			2	412	413
TIMEOFF2	A26 GIVEN TIME OFF TO TAKE A10 CL			2	414	415
TIMEOFF3	A26 GIVEN TIME OFF TO TAKE A10 CL			2	416	417
TIMEOFF4	A26 GIVEN TIME OFF TO TAKE A10 CL			2	418	419
CORRESP1 CORRESP2	A27 A10 CLASS A CORRESPONDENCE CO A27 A10 CLASS A CORRESPONDENCE CO			2	420 422	421 423
CORRESP3	A27 A10 CLASS A CORRESPONDENCE CO			2	424	425
CORRESP4	A27 A10 CLASS A CORRESPONDENCE CO			2	426	427
MAILTV1	A28 A10 CORR COURSE - TYPE INSTRU			2	428	429
MAILTV2	A28 A10 CORR COURSE - TYPE INSTRU			2	430	431
MAILTV3	A28 A10 CORR COURSE - TYPE INSTRU	REC#	3 N	2	432	433
MAILTV4	A28 A10 CORR COURSE - TYPE INSTRU	REC#	4 N	2	434	435
PAIDFAM1	A29A YOU OR FAMILY PAID	REC#	1 N	2	436	437
PAIDFAM2	A29A YOU OR FAMILY PAID	REC#	2 N	2	438	439
PAIDFAM3	A29A YOU OR FAMILY PAID	REC#	3 N	2	440	441
PAIDFAM4		REC#		2	442	443
PAIDFED1	A29B FEDERAL GOVERNMENT PAID	REC#		2	444	445
PAIDFED2	A29B FEDERAL GOVERNMENT PAID	REC#		2	446	447
PAIDFED3		REC#		2	448	449
PAIDFED4 PAIDSTA1	A29B FEDERAL GOVERNMENT PAID A29C STATE/COUNTY/LOCAL GOVERNMEN	REC#		2	450 452	451 453
PAIDSTA1	A29C STATE/COUNTY/LOCAL GOVERNMEN			2	454	455
PAIDSTA3	A29C STATE/COUNTY/LOCAL GOVERNMEN			2	456	457
PAIDSTA4	A29C STATE/COUNTY/LOCAL GOVERNMEN			2	458	459
PAIDBUS1	A29D BUSINESS OR INDUSTRY PAID	REC#		2	460	461
PAIDBUS2	A29D BUSINESS OR INDUSTRY PAID	REC#	2 N	2	462	463
PAIDBUS3	A29D BUSINESS OR INDUSTRY PAID	REC#	3 N	2	464	465
PAIDBUS4	A29D BUSINESS OR INDUSTRY PAID	REC#	4 N	2	466	467
PAIDPRI1	A29E PRIVATE ORGANIZATION PAID	REC#	1 N	2	468	469
PAIDPRI2	A29E PRIVATE ORGANIZATION PAID	REC#	2 N	2	470	471
		REC#		2	472	473
	A29E PRIVATE ORGANIZATION PAID			2	474	475
		REC#		2	476	477
		REC#	_	2	478	479
		REC#		2	480	481
		REC#		2	482 484	483 485
		REC#		2	486	487
		REC#		2	488	489
		REC#		2	490	491
	A29H POST SEC INST PAID-RECODE REC		N	2	492	493
	A29H POST SEC INST PAID-RECODE REC		N	2	494	495
PAIDUNI3	A29H POST SEC INST PAID-RECODE REC	#3	N	2	496	497
PAIDUNI4	A29H POST SEC INST PAID-RECODE REC	#4	N	2	498	499
PAIDEMP1	A30 EMPLOYER WAS SOURCE OF PAYMEN	REC#	1 N	2	500	501

VARIABLE NAME	VARIABLE LABEL		FORMAT	LENGTH	START COLUMN	END COLUMN
PAIDEMP2	A30 EMPLOYER WAS SOURCE OF PAYMEN REC	¥ 1	2 N	2	502	503
PAIDEMP3	A30 EMPLOYER WAS SOURCE OF PAYMEN REC		_	2	504	505
PAIDEMP4	A30 EMPLOYER WAS SOURCE OF PAYMEN REC			2	506	507
TUITION1	A31 AMOUNT PAID FOR TUITION & FEE REC			8.2	508	515
TUITION2	A31 AMOUNT PAID FOR TUITION & FEE REC			8.2	516	523
TUITION3	A31 AMOUNT PAID FOR TUITION & FEE REC			8.2	524	531
TUITION4	A31 AMOUNT PAID FOR TUITION & FEE REC			8.2	532	539
TUITONE1	A31A TUITION FOR MORE THAN ONE CO REC			2	540	541
TUITONE2	A31A TUITION FOR MORE THAN ONE CO REC			2	542	543
TUITONE3	A31A TUITION FOR MORE THAN ONE CO REC			2	544	545
TUITONE4	A31A TUITION FOR MORE THAN ONE CO REC	‡ 4	4 N	2	546	547
TUITNUM1	A31B NUMBER OF COURSES TUITION CO REC		1 N	2	548	549
TUITNUM2	A31B NUMBER OF COURSES TUITION CO REC			2	550	551
TUITNUM3	A31B NUMBER OF COURSES TUITION CO REC		3 N	2	552	553
TUITNUM4	A31B NUMBER OF COURSES TUITION CO REC		4 N	2	554	555
CLASNUM1	A32 # WEEKS A10 CLASS SCHEDULED T REC		1 N	2	556	557
CLASNUM2	A32 # WEEKS A10 CLASS SCHEDULED T REC			2	558	559
CLASNUM3	A32 # WEEKS A10 CLASS SCHEDULED T REC			2	560	561
CLASNUM4	A32 # WEEKS A10 CLASS SCHEDULED T REC#		4 N	2	562	563
CLASUNI1	A32 UNITS A10 CLASS SCHEDULED TO REC	# 1	1 N	2	564	565
CLASUNI2	A32 UNITS A10 CLASS SCHEDULED TO REC		2 N	2	566	567
CLASUNI3	A32 UNITS A10 CLASS SCHEDULED TO REC	‡ 3	3 N	2	568	569
CLASUNI4	A32 UNITS A10 CLASS SCHEDULED TO REC	‡ 4	4 N	2	570	571
CLASHRS1	A33 # HOURS PER WEEK A10 CLASS SC REC	# :	1 N	2	572	573
CLASHRS2	A33 # HOURS PER WEEK A10 CLASS SC REC	‡ 2	2 N	2	574	575
CLASHRS3	A33 # HOURS PER WEEK A10 CLASS SC REC	‡ 3	3 N	2	576	577
CLASHRS4	A33 # HOURS PER WEEK A10 CLASS SC REC	# 4	4 N	2	578	579
COMPLET1	A34 COMPLETED A10 CLASS REC	# 1	1 N	2	580	581
COMPLET2	A34 COMPLETED A10 CLASS REC#	# 2	2 N	2	582	583
COMPLET3	A34 COMPLETED A10 CLASS REC#	# 3	3 N	2	584	585
COMPLET4	A34 COMPLETED A10 CLASS REC	# 4	4 N	2	586	587
TAKING1	A34A STILL TAKING COURSE OR DROPP REC	# :	1 N	2	588	589
TAKING2	A34A STILL TAKING COURSE OR DROPP REC	# 2	2 N	2	590	591
TAKING3	A34A STILL TAKING COURSE OR DROPP REC	# 3	3 N	2	592	593
TAKING4	A34A STILL TAKING COURSE OR DROPP REC	‡ 4	4 N	2	594	595
BASIC	A15 AE COURSES INCL BASIC SKILLS TR		N	2	596	597
ENGLISH	A16 AE COURSES FOR ENG AS 2ND LANG		N	2	598	599
CITIZEN	A35 AE COURSES FOR NATURALIZATION		N	2	600	601
AECOURSE	A36 TAKEN ANY AE COURSES (EXCL FT)		N	2	602	603
AEPAST3	A37 TAKEN AE COURSES IN PAST 3 YRS		N	2	604	605
AEJOB	A38 AE COURSES BENEFIT CAREER		N	2	606	607
AEBASIC	A39 AE COURSES BENEFIT BASIC SKILLS		N	2	608	609
AELICENS	A40 AE COURSES HELP OBTAIN/RENEW LICEN	ISI	E N	2	610	611
PREVJOB	A41A PREVENT AE-YOUR WORK SCHEDULE		N	2	612	613
PREVTIME	A41B PREVENT AE-MEETING TIMES OF CLASS	SES	S N	2	614	615
PREVCOST	A41C PREVENT AE-COST OF CLASSES		N	2	616	617
PREVLOCA	A41D PREVENT AE-LOCATION OF CLASSES		N	2	618	619
PREVTRAN	A41E PREVENT AE-LACK OF TRANSPORTATION	1	N	2	620	621
PREVCHIL	A41F PREVENT AE-LACK OF CHILD CARE		N	2	622	623
PREVFAM	A41G PREVENT AE-OTH FAMILY RESPONSIBI	LIC	T N	2	624	625
PREVINFO	A41H PREVENT AE-LACK OF INFO AB CLASSE	ΞS	N	2	626	627
PREVINT	A411 PREVENT AE-NO INTERESTING CLASSES	3	N	2	628	629
PREVOTHR	A41J PREVENT AE-SOME OTHER REASON		N	2	630	631
PREVOLD	A41K OLD AGE-RECODE		N	2	632	633
PREVSICK	A41L SICKNESS-RECODE		N	2	634	635
PREVDSIR	A41M NO INTEREST/DESIRE-RECODE		N	2	636	637
PREVMOTV	A41N MOTIVATION-RECODE		N	2	638	639

VARIABLE NAME	VARIABLE LABEL	FORMAT	LENGTH	START COLUMN	END COLUMN
PREVTIRD	A410 TIRED/EXHAUSTED-RECODE	N	2	640	641
PREVBUSY	A41P GENERAL TIME PROBLEM/BUSY-RECODE	N	2	642	643
RACEVER	A42A RACE VERIFICATION	N	2	644	645
HISPVER	A42A1 RESPONDENT OF HISPANIC ORIGIN	N	2	646	647
SEXVER	A42B S42B GENDER VERIFICATION	N	2	648	649
EVERMARI	A43 EVER MARRIED	N	2	650	651
MARISTAT	A44 CURRENTLY MARRIED	N	2	652	653
WORKPAY	A45 EVER WORKED AT A JOB FOR PAY	N	2	654	655
WORKWEEK	A45A WORKED AT A JOB FOR PAY LAST WEEK	N	2	656	657
VACATION	A46 ON LEAVE OR VACATION FROM A JOB	N	2	658	659
LEAVEMM	A51 MNTH RESPONDENT LEFT MOST RECENT JOE		2	660	661
LEAVEYY WORKHRS	A51 YEAR RESPONDENT LEFT MOST RECENT JOE A52 HOURS PER WEEK WORK FOR PAY	3 N N	2	662 664	663 666
LOOKWORK	A54 LOOKING FOR WORK ON PAST 4 WEEKS	N	2	667	668
LOOKPUBL	A55A CHECKED W/PUBLIC EMPLOYMENT AGENCY	N	2	669	670
LOOKPRIV	A55B CHECKED W/PRIVATE EMPLOYMENT AGENCY		2	671	672
LOOKEMPL	A55C CHECKED WITH EMPLOYER DIRECTLY	N	2	673	674
LOOKFRND	A55D CHECKED WITH FRIENDS OR RELATIVES	N	2	675	676
LOOKADS	A55E PLACED OR ANSWERED ADS	N	2	677	678
LOOKNOTH	A55F DID NTHING TO FIND WORK	N	2	679	680
LOOKOTHR	A55G DID SOMETHING ELSE TO FIND WORK	N	2	681	682
LASTACTY	A56 MAIN ACTIVITY LAST WEEK	N	2	683	684
UNDER16	A57 HAVE ANY KIDS < 16 WHO LIVE W/YOU	N	2	685	686
UNDER16N	A58 # OF KIDS < 16 WHO LIVE W/ YOU	N	2	687	688
HIGHGRAD	A59 HIGHEST GRADE COMPLETED	N	2	689	690
HSDIPLMA	A60 RECEIVE HIGH SCHOOL DIPLOMA OR EQUIV	7 N	2	691	692
MAINACTY	A61 MAIN ACTIVITY IN PAST 12 MONTHS	N	2	693	694
LIBMO	A62 USED PUBLIC LIBRARY IN PAST MONTH?	N	2	695	696
LIBYR	A63 USED PUBLIC LIBRARY IN PAST YEAR?	N	2	697	698
CENSUSDV	CENSUS DIVISION	N	2	699	700
CENSUSRG	CENSUS REGION	N	2	701	702
MAINRSLT	RESULT FOR THIS RESPONDENT	Α	2	703	704
MILFLG	MILITARY FLAG	N	2	705	706
PSU	FOR TAYLOR SERIES VARIANCE DEPARTMENT OF EDUCATION REGION	A	2 2	707	708
REGION SAMPSTAT	PARTICIPATION STATUS AT SAMPLING	N	2	709 711	710 712
SIC	INDUSTRY CODE	N A	4	711	716
SOC	OCCUPATION CODE	A	4	717	720
URBAN	URBANICITY	N	2	721	722
VSTRAT	FOR TAYLOR SERIES VARIANCE	A	2	723	724
AEBASLIT	D-ADULT EDUCATION TO IMPROVE SKILLS	N	2	725	726
	D-ADULT EDUCATION REQUIRED F/DEGREE	N	2	727	728
AEEMPREA	D-ADULT EDUCATION F/JOB-RELATED REASON	N	2	729	730
AEEMPREQ	D-ADULT EDUCATION REQUIRED BY EMPLOYER	N	2	731	732
AEESL	D-ADULT EDUCATION F/ENGLISH AS 2ND LANG	N	2	733	734
AEEVER	D-EVER PARTICIPATED IN ADULT EDUCATION	N	2	735	736
AELABOR	D-LABOR FORCE STATUS	N	2	737	738
AELICNS	D-ADULT EDUCATION F/LICENSE/CERTIFICATE	N	2	739	740
AENUMCSE	D-TOTAL # AE COURSES TAKEN IN PAST 12M	N	2	741	742
AEPARANY	D-ADULT EDUC INCLUDING F/T DEGREE PROG	N	2	743	744
AEPARTIC	D-ADULT EDUC EXCLUDING F/T DEGREE PGMS	N	2	745	746
AEPRTIME	D-ADULT EDUC. EXCLUDING F/T PROGRAM	N	2	747	748
AETRAIN	D-ADULT EDUCATION W/TRAINING COMPONENT	N	2	749	750
CEMPREA1	D-REASON F/TAKING COURSE-1 JOB RELATED	N	2	751	752
CEMPREA2	D-REASON F/TAKING COURSE-2 JOB RELATED	N	2	753 755	754 756
CEMPREA3	D-REASON F/TAKING COURSE-3 JOB RELATED	N	2	755 757	756 750
CEMPREA4	D-REASON F/TAKING COURSE-4 JOB RELATED	N	2	757	758

VARIABLE NAME	VARIABLE LABEL	FORMAT	LENGTH	START COLUMN	END COLUMN
CNUMWKS1	D-#WEEKS COURSE-1 SCHEDULED TO RUN	N	3	759	761
CNUMWKS2 CNUMWKS3	D-#WEEKS COURSE-2 SCHEDULED TO RUN D-#WEEKS COURSE-3 SCHEDULED TO RUN	N N	3 3	762 765	764 767
CNUMWKS4	D-#WEEKS COURSE-4 SCHEDULED TO RUN	N	3	768	770
CREQUIR1	D-CRSE-1 REQ F/CERT OF COMPLETION/DIPL	N	2	771	772
CREQUIR2	D-CRSE-2 REQ F/CERT OF COMPLETION/DIPL	N	2	773	774
CREQUIR3	D-CRSE-3 REQ F/CERT OF COMPLETION/DIPL	N	2	775	776
CREQUIR4	D-CRSE-4 REQ F/CERT OF COMPLETION/DIPL	N	2	777	778
CTRAIN1	D-ANY TRAINING COMPONENT COURSE-1	N	2	779	780
CTRAIN2	D-ANY TRAINING COMPONENT COURSE-2	N	2	781	782
CTRAIN3	D-ANY TRAINING COMPONENT COURSE-3	N	2	783	784
CTRAIN4	D-ANY TRAINING COMPONENT COURSE-4	N	2	785	786
FTBASESL	D-F/T BASIC SKILLS/ESL COURSE	N	2	787	788
FTDEGREE	D-FULLTIME ASSOC/BACH DEGREE PROGRAM	N	2	789	790
FTNONDEG	D-F/T NONDEG PGM D-HIGHEST DEGREE ATTAINED	N	2	791 793	792 794
HIDEGREE INCLEVEL	D-LEVEL OF INCOME	N N	2	795	796
RACEETHN	D-RACE-ETHNICITY	N	2	797	798
SALARY	D-ANNUAL SALARY/CURRENT OR MOST RCNT JOE		5	799	803
SCHOOLNG	D-YEARS OF SCHOOL COMPLETED	N	2	804	805
AELABF	IMPUTATION FLAG FOR LABOR FORCE STATUS	N	2	806	807
AGEF	IMPUTATION FLAG FOR AGE	N	2	808	809
EVERMARF	IMPUTATION FLAG FOR EVERMARI	N	2	810	811
HIGHGRAF	IMPUTATION FLAG FOR HIGHGRAD	N	2	812	813
HISPVERF	IMPUTATION FLAG FOR HISPVER	N	2	814	815
HSDIPLMF	IMPUTATION FLAG FOR HSDIPLMA	N	2	816	817
INCOMRNF	INCOMRNG IMPUTED FLAG	N	2	818	819
MARISTAF	IMPUTATION FLAG FOR MARISTAT	N	2	820	821
NUMPERSF	NUMPERS IMPUTED FLAG	N	2	822	823
OWNHOMEF RACEVERF	OWNHOME IMPUTED FLAG IMPUTATION FLAG FOR RACEVER	N N	2 2	824 826	825 827
SALARYF	IMPUTATION FLAG FOR SALARY	N	2	828	829
SICF	IMPUTATION FLAG FOR SIC	N	2	830	831
SOCF	IMPUTATION FLAG FOR SOC	N	2	832	833
UNDER16F	IMPUTATION FLAG FOR UNDER16	N	2	834	835
AEWT	FINAL ADULT WEIGHT	N	10.3	836	845
AEREPL1	REPLICATE WEIGHT	N	10.3	846	855
AEREPL2	REPLICATE WEIGHT	N	10.3	856	865
AEREPL3	REPLICATE WEIGHT	N	10.3	866	875
AEREPL4	REPLICATE WEIGHT	N	10.3	876	885
	REPLICATE WEIGHT	N	10.3	886	895
AEREPL6	REPLICATE WEIGHT	N	10.3	896	905
	REPLICATE WEIGHT	N	10.3		915
AEREPL8	REPLICATE WEIGHT REPLICATE WEIGHT	N	10.3	916 926	925 935
AEREPL9	REPLICATE WEIGHT	N N	10.3	936	945
AEREPL11		N	10.3	946	955
	REPLICATE WEIGHT	N	10.3	956	965
AEREPL13	REPLICATE WEIGHT	N	10.3	966	975
	REPLICATE WEIGHT	N	10.3	976	985
AEREPL15	REPLICATE WEIGHT	N	10.3	986	995
AEREPL16	REPLICATE WEIGHT	N	10.3	996	1005
AEREPL17	REPLICATE WEIGHT	N	10.3	1006	1015
AEREPL18	REPLICATE WEIGHT	N	10.3	1016	1025
	REPLICATE WEIGHT	N	10.3	1026	1035
AEREPL20	REPLICATE WEIGHT	N	10.3	1036	1045
AEREPL21	REPLICATE WEIGHT	N	10.3	1046	1055

VARIABLE NAME	VARIABLE 1	LABEL	FORMAT	LENGTH	START	END COLUMN
AEREPL22	REPLICATE	WEIGHT	N	10.3	1056	1065
AEREPL23	REPLICATE	WEIGHT	N	10.3	1066	1075
AEREPL24	REPLICATE	WEIGHT	N	10.3	1076	1085
AEREPL25	REPLICATE	WEIGHT	N	10.3	1086	1095
AEREPL26	REPLICATE	WEIGHT	N	10.3	1096	1105
AEREPL27	REPLICATE	WEIGHT	N	10.3	1106	1115
AEREPL28	REPLICATE	WEIGHT	N	10.3	1116	1125
AEREPL29	REPLICATE	WEIGHT	N	10.3	1126	1135
AEREPL30	REPLICATE	WEIGHT	N	10.3	1136	1145
AEREPL31	REPLICATE	WEIGHT	N	10.3	1146	1155
AEREPL32	REPLICATE	WEIGHT	N	10.3	1156	1165
AEREPL33	REPLICATE	WEIGHT	N	10.3	1166	1175
AEREPL34	REPLICATE	WEIGHT	N	10.3	1176	1185
AEREPL35	REPLICATE	WEIGHT	N	10.3	1186	1195
AEREPL36	REPLICATE	WEIGHT	N	10.3	1196	1205
AEREPL37	REPLICATE	WEIGHT	N	10.3	1206	1215
AEREPL38	REPLICATE	WEIGHT	N	10.3	1216	1225
AEREPL39	REPLICATE	WEIGHT	N	10.3	1226	1235
AEREPL40	REPLICATE	WEIGHT	N	10.3	1236	1245
AEREPL41	REPLICATE	WEIGHT	N	10.3	1246	1255
AEREPL42	REPLICATE	WEIGHT	N	10.3	1256	1265
AEREPL43	REPLICATE	WEIGHT	N	10.3	1266	1275
AEREPL44	REPLICATE	WEIGHT	N	10.3	1276	1285
AEREPL45	REPLICATE	WEIGHT	N	10.3	1286	1295
AEREPL46	REPLICATE	WEIGHT	N	10.3	1296	1305
AEREPL47	REPLICATE	WEIGHT	N	10.3	1306	1315
AEREPL48	REPLICATE	WEIGHT	N	10.3	1316	1325
AEREPL49	REPLICATE	WEIGHT	N	10.3	1326	1335
AEREPL50	REPLICATE	WEIGHT	N	10.3	1336	1345

COURSE FILE VARIABLES

VARIABLE NAME	VARIABLE LABEL	FORMAT	LENGTH	START COLUMN	END COLUMN
CLASID	CLAS KEY = ADLTID 2-DIGIT SEQUENTIAL#	A	11	1	11
PERSID	PERS KEY = BASEID 2-DIGIT PERSNUM	A	9	12	20
AGE	AGE AS OF JANUARY 1,1991	N	2	21	22
INCOMRNG	S22A TOTAL HOUSEHOLD INCOME - RANGE	N	2	23	24
FTSCHOOL		N	2	25	26
CURENROL	A1J CURRENTLY ENROLLED AS FULL-TIME STUD		2	27	28
OTNUM	A9 # OTHER CLASSES TAKEN DURING PAST 12	N	2	29	30
OTNAME	A10 MOST RECENT AE CLAS (FR ADLT.OTNAME#		40	31	70
CRDEGREE TAKEREAS	A11 A10 CLASSES FOR CREDIT TOWARD DEGREE A13 MAIN REASON FOR TAKING A10 CLASS	: N N	2	71 73	72 74
EMPLREAS	A13 MAIN REASON FOR TAKING A10 CLASS A14 CAREER REASONS FOR TAKING A10 CLASS	N	2	75	76
TRNMGMT	A17A EXECUTIVE MGMT DEVELOPMENT TRAINING		2	77	78
TRNSUPR	A17B SUPERVISORY TRAINING	N	2	79	80
TRNPROF	A17C PROFESSIONAL DEVELOPMENT TRAINING	N	2	81	82
TRNTECH	A17D TECHNICAL/SKILLED WORKER TRAINING	N	2	83	84
TRNCS	A17E WORD PROCESSING/COMPUTER SOFTWARE	N	2	85	86
TRNHLTH	A17F JOB HEALTH AND SAFETY TRAINING	N	2	87	88
TRNQC	A17G QUALITY CONTROL/STATISTICAL PROCESS	S N	2	89	90
TRNSALES	A17H SALES AND MARKETING TRAINING	N	2	91	92
TRNEMPL	A17I NEW EMPLOYEE TRAINING	N	2	93	94
	A17J SOME OTHER KIND OF TRAINING	N	2	95	96
REQUIRE	A18 TAKE A10 CLASS TO MEET REQUIREMENT	N	2	97	98
DEGREE	A19 A10 CLASS FULFILLS TYPE REQUIREMENT	N	2	99	100
LICENSE	A20 A10 CLASS TO OBTAIN/RENEW LICENSE A200V OBTAIN OR RENEW LICENSE/CERTIFICAT	N 'N	2	101 103	102 104
OBTAIN SPONTYPE		. N	2	105	104
	A23 A10 CLASS SPONSOR IS EMPLOYER	N	2	107	108
EMPLTIME	A23A EMPLOYED AT TIME A10 CLASS TAKEN	N	2	109	110
EMPLONLY	A24 A10 CLASS PARTICIPATN-EMPLOYEES ONLY		2	111	112
ATWORK	A25 A10 CLASS GIVEN AT WORK	N	2	113	114
EMPLREQ	A25A EMPLOYER REQUIRED A10 CLASS	N	2	115	116
TIMEOFF	A26 GIVEN TIME OFF TO TAKE A10 CLASS	N	2	117	118
CORRESPN	A27 A10 CLASS A CORRESPONDENCE COURSE	N	2	119	120
MAILTV	A28 A10 CORR COURSE - TYPE INSTRUCTION	N	2	121	122
PAIDFAM	A29A YOU OR FAMILY PAID	N	2	123	124
PAIDFED	A29B FEDERAL GOVERNMENT PAID	N	2	125	126
PAIDSTAT	A29C STATE/COUNTY/LOCAL GOVERNMENT PAID A29D BUSINESS OR INDUSTRY PAID	N	2	127 129	128 130
PAIDBUSI	A29E PRIVATE ORGANIZATION PAID	N N	2	131	130
PAIDOTHR	A29F SOMEONE ELSE PAID	N	2	133	134
	A29G THERE WAS NO CHARGE	N	2	135	136
	A29H POST-SEC INST PAID-RECODE	N	2		
PAIDEMPL	A30 EMPLOYER WAS SOURCE OF PAYMENT	N	2	139	140
	A31 AMOUNT PAID FOR TUITION & FEES A10		8.2	141	148
	A31A TUITION FOR MORE THAN ONCE COURSE?		2	149	150
TUITNUM	A31B NUMBER OF COURSES TUITION COVERS	N	2	151	152
	A32 # WEEKS A10 CLASS SCHEDULED TO RUN	N	2	153	154
	A32 UNITS A10 CLASS SCHEDULED TO RUN	N	2	155	156
	A33 # HOURS PER WEEK A10 CLASS SCHEDULED		2		
	A34 COMPLETED A10 CLASS	N	2		
	A34A STILL TAKING COURSE OR DROPPED COUR		2	161	162
	A42A RACE VERIFICATION A42A1 RESPONDENT OF HISPANIC ORIGIN	N N	2		
	A42B S42B GENDER VERIFICATION	N	2	167	168
	A44 CURRENTLY MARRIED	N	2	169	
		N	2		172
	A59 HIGHEST GRADE COMPLETED	N	2	173	174

VARIABLE				START	END
NAME	VARIABLE LABEL	FORMAT	LENGTH		
147 17 177	***************************************	LOIGHT	201,0111	COLUMN	COTOLIN
HSDIPLMA	A60 RECEIVE HIGH SCHOOL DIPLOMA OR EQUIV	N	2	175	176
CENSUSDV	CENSUS DIVISION	N	2	177	178
CENSUSRG	CENSUS REGION	N	2	179	180
MILFLG	MILITARY FLAG	N	2	181	182
PSU	FOR TAYLOR SERIES VARIANCE	A	2	183	184
REGION	DEPARTMENT OF EDUCATION REGION	N	2	185	186
SAMPSTAT	PARTICIPATION STATUS AT SAMPLING	N	2	187	188
SIC	INDUSTRY CODE	A	4	189	192
SOC	OCCUPATION CODE	A	4	193	196
URBAN	URBANICITY	N	2	197	198
VSTRAT	FOR TAYLOR SERIES VARIANCE	A	2	199	200
	D-ADULT EDUCATION TO IMPROVE SKILLS	N	2	201	202
	D-ADULT EDUCATION REQUIRED F/DEGREE	N	2	203	204
	D-ADULT EDUCATION F/JOB-RELATED REASON		2	205	206
	D-ADULT EDUCATION REQUIRED BY EMPLOYER	N	2	207	208
AEESL	D-ADULT EDUCATION F/ENGLISH AS 2ND LANG	N	2	209	210
	D-LABOR FORCE STATUS	N	2	211	212
	D-ADULT EDUCATION F/LICENSE/CERTIFICATE D-TOTAL # AE COURSES TAKEN IN PAST 12M	N	2	213	214
	D-ADULT EDUCATION W/TRAINING COMPONENT	N N	2	215 217	216 218
	D-JOB RELATED REASON FOR TAKING COURSE	N N	2	217	218
CNUMWKS		N	3	221	223
	D-REORD FOR CERTIF OF COMPLETION/DIPLOMA		2	221	
CTRAIN	D-ANY TRAINING COMPONENT IN COURSE	N N	2	224	227
	D-F/T BASIC SKILLS/ESL COURSE	N	2	228	229
	D-FULLTIME ASSOC/BACH DEGREE PROGRAM	N	2	230	
	D-F/T NONDEG PGM	N	2	232	233
	D-HIGHEST DEGREE ATTAINED	N	2	234	235
	D-LEVEL OF INCOME	N	2	236	237
RACEETHN	D-RACE-ETHNICITY	N	2	238	239
SALARY	D-ANNUAL SALARY/CURRENT OR MOST RCNT JOB	8 N	5	240	244
SCHOOLNG	D-YEARS OF SCHOOL COMPLETED	N	2	245	246
AELABF	IMPUTATION FLAG FOR LABOR FORCE STATUS	N	2	247	248
AGEF	IMPUTATION FLAG FOR AGE	N	2	249	250
HIGHGRAF	IMPUTATION FLAG FOR HIGHGRAD	N	2	251	252
HISPVERF	IMPUTATION FLAG FOR HISPVER	N	2	253	254
HSDIPLMF	IMPUTATION FLAG FOR HSDIPLMA	N	2	255	256
INCOMRNF	INCOMRNG IMPUTED FLAG	N	2	257	258
MARISTAF	IMPUTATION FLAG FOR MARISTAT	N	2	259	260
RACEVERF	IMPUTATION FLAG FOR RACEVER	N	2	261	262
	IMPUTATION FLAG FOR SALARY	N	2	263	
SICF	IMPUTATION FLAG FOR SIC	N	2		266
SOCF	IMPUTATION FLAG FOR SOC	N	2		
	IMPUTATION FLAG FOR UNDER16	N	2	269	270
AEWT	FINAL ADULT WEIGHT	N	10.3	271	280
	REPLICATE WEIGHT	N	10.3	281	290
	REPLICATE WEIGHT	N	10.3	291	300
	REPLICATE WEIGHT	N	10.3	301	310
	REPLICATE WEIGHT	N	10.3	311	320
	REPLICATE WEIGHT	N	10.3	321	330
	REPLICATE WEIGHT	N	10.3	331	340
	REPLICATE WEIGHT	N	10.3	341	350
	REPLICATE WEIGHT	N	10.3		360
	REPLICATE WEIGHT	N	10.3	361 371	370 380
	REPLICATE WEIGHT REPLICATE WEIGHT	N	10.3	371 381	380 390
	REPLICATE WEIGHT	N N	10.3	391	400
VEVELPIZ	VELTICATE METGUI	IN	10.3	SST	400

VARIABLE					START	END
NAME	VARIABLE 1	LABEL	FORMAT	LENGTH	COLUMN	COLUMN
AEREPL13	REPLICATE	WEIGHT	N	10.3	401	410
AEREPL14	REPLICATE	WEIGHT	N	10.3	411	420
AEREPL15	REPLICATE	WEIGHT	N	10.3	421	430
AEREPL16	REPLICATE	WEIGHT	N	10.3	431	440
AEREPL17	REPLICATE	WEIGHT	N	10.3	441	450
AEREPL18	REPLICATE	WEIGHT	N	10.3	451	460
AEREPL19	REPLICATE	WEIGHT	N	10.3	461	470
AEREPL20	REPLICATE	WEIGHT	N	10.3	471	480
AEREPL21	REPLICATE	WEIGHT	N	10.3	481	490
AEREPL22	REPLICATE	WEIGHT	N	10.3	491	500
AEREPL23	REPLICATE	WEIGHT	N	10.3	501	510
AEREPL24	REPLICATE	WEIGHT	N	10.3	511	520
AEREPL25	REPLICATE	WEIGHT	N	10.3	521	530
AEREPL26	REPLICATE	WEIGHT	N	10.3	531	540
AEREPL27	REPLICATE	WEIGHT	N	10.3	541	550
AEREPL28	REPLICATE	WEIGHT	N	10.3	551	560
AEREPL29	REPLICATE	WEIGHT	N	10.3	561	570
AEREPL30	REPLICATE	WEIGHT	N	10.3	571	580
AEREPL31	REPLICATE	WEIGHT	N	10.3	581	590
AEREPL32	REPLICATE	WEIGHT	N	10.3	591	600
AEREPL33	REPLICATE	WEIGHT	N	10.3	601	610
AEREPL34	REPLICATE	WEIGHT	N	10.3	611	620
AEREPL35	REPLICATE	WEIGHT	N	10.3	621	630
AEREPL36	REPLICATE	WEIGHT	N	10.3	631	640
AEREPL37	REPLICATE	WEIGHT	N	10.3	641	650
AEREPL38	REPLICATE	WEIGHT	N	10.3	651	660
AEREPL39	REPLICATE	WEIGHT	N	10.3	661	670
AEREPL40	REPLICATE	WEIGHT	N	10.3	671	680
AEREPL41	REPLICATE	WEIGHT	N	10.3	681	690
AEREPL42	REPLICATE	WEIGHT	N	10.3	691	700
AEREPL43	REPLICATE	WEIGHT	N	10.3	701	710
AEREPL44	REPLICATE	WEIGHT	N	10.3	711	720
AEREPL45	REPLICATE	WEIGHT	N	10.3	721	730
AEREPL46	REPLICATE	WEIGHT	N	10.3	731	740
AEREPL47	REPLICATE	WEIGHT	N	10.3	741	750
AEREPL48	REPLICATE	WEIGHT	N	10.3	751	760
AEREPL49	REPLICATE	WEIGHT	N	10.3	761	770
AEREPL50	REPLICATE	WEIGHT	N	10.3	771	780

APPENDIX C CONTROL CARDS

ADULT FILE SAS CONTROL CARDS

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//READFILE JOB (account info), 'programmer name'
        EXEC XSAS, REGION=4096K
    //SASLIB DD DSN=FORMAT.LIBRARY,DISP=SHR
//LIBRARY DD SPACE=(TRK, (50,50,60))
//WORK DD UNIT=SYSDA, SPACE=(24322, (1850, 1000),,, ROUND)
//IN1
        DD DSN=ADULT.DATA, DISP=SHR,
         UNIT=3400-6, VOL=SER=WV1919, LABEL=(1, SL),
//
//
          DCB=(RECFM=FB, LRECL=1345, BLKSIZE=13450)
//SYSIN
        DD *
************
** This is a SAS program which will read in the raw data **
** file into a SAS data file. The JCL is a generic one **
** for an IBM SYSTEM/370. Each IBM facility will have **
** its own site specific commands and conventions. These **
** conventions must be implemented by the programmer.
**
*******************
DATA ADULT;
  INFILE IN1 MISSOVER;
  INPUT
   @1
         PERSID
                 $9.
        AGE
   @10
                   2.
   @12
        LIVENOW
                   2.
   @14
        NUMPERS
                   2.
   @16
        HOMETYPE
                   2.
   @18
        OWNHOME
                   2.
   @20
        INCOMRNG
                  2.
        FTANY
   @22
   @24
        FTSCHOOL
                   2.
   @26
        FTASSOC
                   2.
        FTBACHLR
   @28
                   2.
        FTVOCA
   @30
                   2.
   @32
        FTBASIC
                   2.
   @34
        FTENGLSH
                   2.
        FTOTHER
                   2.
   @36
        FTGED
   @38
                   2.
   @40
        FTCERT
                   2.
   @42
        CURENROL 2.
   @44
        FTNUM
                   2.
        PTENROLL
   @46
                   2.
   @48
        PTDEGREE
   @50
        PTNUM
                   2.
   0.52
        OTNONCR
                   2.
   @54
        OTCORRS
                   2.
   @56
        OTPRIV
                   2.
        OTGROUP
   @58
                   2.
        OTBASIC
   060
                   2.
   @62
        OTENGL
                   2.
   @64
        OTOTHER
                   2.
   @66
        OTGED
   068
                  2.
        OTCOMP
```

@70	OTCLASS	2.
@72	OTNUM	2.
@74	OTNAME1	\$40.
	OTNAME2	\$40.
_		\$40.
-		\$40.
	CRDEGREE	2.
	TAKEREA1	2.
	TAKEREA2	2.
@240	TAKEREA3	2.
@242	TAKEREA4	2.
@244	EMPLREA1	2.
_	EMPLREA2	2.
_	EMPLREA3	2.
		2.
	EMPLREA4	
	TRNMGMT1	2.
	TRNMGMT2	2.
	TRNMGMT3	2.
@258	TRNMGMT4	2.
@260	TRNSUPR1	2.
@262	TRNSUPR2	2.
	TRNSUPR3	2.
	TRNSUPR4	2.
	TRNPROF1	2.
	TRNPROF2	2.
	TRNPROF3	2.
	TRNPROF4	2.
@276	TRNTECH1	2.
@278	TRNTECH2	2.
@280	TRNTECH3	2.
@282	TRNTECH4	2.
	TRNCS1	2.
	TRNCS2	2.
	TRNCS3	2.
	TRNCS4	2.
	TRNHLTH1	2.
	TRNHLTH2	2.
@296	TRNHLTH3	2.
@298	TRNHLTH4	2.
@300	TRNQC1	2.
@302	TRNQC2	2.
@304	TRNQC3	2.
@306	TRNQC4	2.
@308	TRNSALE1	2.
_		2.
0310	TRNSALE2	
@312	TRNSALE3	2.
@314	TRNSALE4	2.
@316	TRNEMPL1	2.
@318	TRNEMPL2	2.
@320	TRNEMPL3	2.
@322	TRNEMPL4	2.
@324	TRNOTHE1	2.
0326	TRNOTHE2	2.
@328	TRNOTHE3	2.
G J Z U	11/11/01/11/10	۷.

@330	TRNOTHE4	2.
@332	REQUIRE1	2.
0334	REQUIRE2	2.
@336	REQUIRE3	2.
@338	REQUIRE4	2.
@340	DEGREE1	2.
@342	DEGREE2	2.
0344	DEGREE3	2.
@346	DEGREE4	2.
@348	LICENSE1	2.
@350	LICENSE2	2.
@352	LICENSE3	2.
@354	LICENSE4	2.
@356	OBTAIN1	2.
@358	OBTAIN2	2.
@360	OBTAIN3	2.
@362	OBTAIN4	2.
@364	SPONTYP1	2.
@366	SPONTYP2	2.
@368	SPONTYP3	2.
@370	SPONTYP4	2.
@372	EMPLPRO1	2.
@374	EMPLPRO1 EMPLPRO2	2.
@374 @376	EMPLPRO2 EMPLPRO3	2.
@378	EMPLPRO3	2.
@378 @380		2.
@382	EMPLTIM1 EMPLTIM2	2.
@384		2.
	EMPLTIM3	2.
0386	EMPLTIM4	2.
0388	EMPLONL1	2.
0390	EMPLONL2	
@392 @394	EMPLONL3 EMPLONL4	2. 2.
0396	ATWORK1	2. 2.
	ATWORK2 ATWORK3	2.
		2.
0402	ATWORK4	- •
0404	EMPLREQ1	2.
0406	EMPLREQ2	2.
0408	EMPLREQ3	2.
0410	EMPLREQ4	2.
0412	TIMEOFF1	2.
0414	TIMEOFF2	2.
0416	TIMEOFF3	2.
@418	TIMEOFF4	2.
@420	CORRESP1	2.
0422	CORRESP2	2.
0424	CORRESP3	2.
0426	CORRESP4	2.
0428	MAILTV1	2.
0430	MAILTV2	2.
0432	MAILTV3	2.
0434	MAILTV4	2.
@436	PAIDFAM1	2.

@438	PAIDFAM2	2.
@440	PAIDFAM3	2.
@442	PAIDFAM4	2.
@444	PAIDFED1	2.
0446	PAIDFED2	2.
0448	PAIDFED3	2.
@450	PAIDFED4	2.
0452	PAIDSTA1	2.
0454	PAIDSTA2	2.
0456	PAIDSTA3	2.
@458	PAIDSTA4	2.
@460	PAIDBUS1	2.
@462	PAIDBUS2	2.
@464	PAIDBUS3	2.
@466	PAIDBUS4	2.
@468	PAIDPRI1	2.
@470	PAIDPRI2	2.
@472	PAIDPRI3	2.
@474	PAIDPRI4	2.
@476	PAIDOTH1	2.
@478	PAIDOTH2	2.
0480	PAIDOTH3	2.
@482		2.
	PAIDOTH4	
0484	PAIDFRE1	2.
0486	PAIDFRE2	2.
@488	PAIDFRE3	2.
@490	PAIDFRE4	2.
@492	PAIDUNI1	2.
@494	PAIDUNI2	2.
@496	PAIDUNI3	2.
@498	PAIDUNI4	2.
@500	PAIDEMP1	2.
@502	PAIDEMP2	2.
@504	PAIDEMP3	2.
@506	PAIDEMP4	2.
@508	TUITION1	8.2
@516	TUITION2	8.2
@524	TUITION3	8.2
@532	TUITION4	8.2
@540	TUITONE1	2.
		2.
@542	TUITONE2	
0544	TUITONE3	2.
0546	TUITONE 4	2.
@548	TUITNUM1	2.
@550	TUITNUM2	2.
@552	TUITNUM3	2.
@554	TUITNUM4	2.
@556	CLASNUM1	2.
@558	CLASNUM2	2.
@560	CLASNUM3	2.
@562	CLASNUM4	2.
@564	CLASUNI1	2.
@566	CLASUNI2	2.
@568	CLASUNI3	2.
		_ •

@570	CLASUNI4	2.
@572	CLASHRS1	2.
@574	CLASHRS2	2.
@576	CLASHRS3	2.
@578	CLASHRS4	2.
@580	COMPLET1	2.
@582	COMPLET2	2.
@584	COMPLET3	2.
@586	COMPLET4	2.
@588	TAKING1	2.
@590	TAKING2	2.
@592	TAKING3	2.
@594	TAKING4	2.
@596	BASIC	2.
@598	ENGLISH	2.
	CITIZEN	2.
@602	AECOURSE	2.
@604	AEPAST3	2.
0606	AEJOB	2.
@608	AEBASIC	2.
@610	AELICENS	2.
@612	PREVJOB	2.
@614	PREVTIME	2.
0616	PREVCOST	2.
@618	PREVLOCA	2.
@620	PREVTRAN	2.
@622	PREVCHIL	2.
@624	PREVFAM	2.
@626	PREVINFO	2.
@628	PREVINT	2.
@630	PREVOTHR	2.
@632	PREVOLD	2.
@634	PREVSICK	2.
@636	PREVDSIR	2.
@638	PREVMOTV	2.
@640	PREVTIRD	2.
0642	PREVBUSY	2.
0644	RACEVER	2.
0646	HISPVER	2
@648	SEXVER	2. 2.
@650	EVERMARI	2
@652	MARISTAT	2. 2.
@654	WORKPAY	2.
@656	WORKWEEK	2.
@658	VACATION	2. 2. 2.
@660	LEAVEMM	2.
@662	LEAVEYY	2.
@664	WORKHRS	۷.
@667	LOOKWORK	3. 2.
@669	LOOKPUBL	2.
@671	LOOKPOBL	2.
@673	LOOKEMPL	2.
@675	LOOKEMPL	2.
@677	LOOKERND	2.
GO / /	TOOVADO	∠ .

@679	LOOKNOTH	2.
@681	LOOKOTHR	2.
@683	LASTACTY	2.
@685	UNDER16	2.
@687	UNDER16N	2.
@689	HIGHGRAD	2.
@691	HSDIPLMA	2.
		2.
0693	MAINACTY	2.
@695	LIBMO	2.
@697	LIBYR	2.
@699	CENSUSDV	2.
@701	CENSUSRG	2.
@703	MAINRSLT	\$2.
@705	MILFLG	2.
@707	PSU	\$2.
@709	REGION	2.
@711	SAMPSTAT	2.
@713	SIC	\$4
@717	SOC	\$4
@721	URBAN	2.
		۷٠
@723	VSTRAT	\$2
@725	AEBASLIT	2.
@727	AEDEGREQ	2.
@729	AEEMPREA	2.
@731	AEEMPREQ	2.
@733	AEESL	2.
@735	AEEVER	2.
@737	AELABOR	2.
@739	AELICNS	2.
@741	AENUMCSE	2.
@743	AEPARANY	2.
@745	AEPARTIC	2.
@747	AEPRTIME	2.
@749	AETRAIN	2.
@7 4 5	CEMPREA1	2.
		2.
@753	CEMPREA2	۷.
@755	CEMPREA3	2.
0757	CEMPREA4	2.
@759	CNUMWKS1	3.
@762	CNUMWKS2	3.
@765	CNUMWKS3	3.
@768	CNUMWKS4	3.
0771	CREQUIR1	2.
@773	CREQUIR2	2.
@775	CREQUIR3	2.
@777	CREQUIR4	2.
@779	CTRAIN1	2.
@781	CTRAIN2	2.
@783	CTRAIN2 CTRAIN3	2.
		2.
@785	CTRAIN4	2.
@787	FTBASESL	2.
0789	FTDEGREE	2.
@791	FTNONDEG	2.
@793	HIDEGREE	2.

		_
@795	INCLEVEL	2.
@797	RACEETHN	2.
@799	SALARY	5.
	SCHOOLNG	2.
@806	AELABF	2.
0808	AGEF	2.
	EVERMARF	2.
		2.
	HIGHGRAF	
	HISPVERF	2.
	HSDIPLMF	2.
	INCOMRNF	2.
@820	MARISTAF	2.
@822	NUMPERSF	2.
0824	OWNHOMEF	2.
@826	RACEVERF	2.
	SALARYF	2.
	SICF	2.
	SOCF	2.
	UNDER16F	2.
	AEWT	10.3
	AEREPL1	10.3
	AEREPL2	10.3
@866	AEREPL3	10.3
@876	AEREPL4	10.3
0886	AEREPL5	10.3
0896	AEREPL6	10.3
	AEREPL7	10.3
	AEREPL8	10.3
	AEREPL9	10.3
	AEREPL10	10.3
	AEREPL11	10.3
	AEREPL12	10.3
	AEREPL13	10.3
@976	AEREPL14	10.3
@986	AEREPL15	10.3
@996	AEREPL16	10.3
@1006	AEREPL17	10.3
@1016	AEREPL18	10.3
@1026	AEREPL19	10.3
@1036	AEREPL20	10.3
@1046	AEREPL21	10.3
01056	AEREPL22	10.3
@1066	AEREPL23	10.3
@1076	AEREPL24	10.3
@1086	AEREPL25	10.3
@1096	AEREPL26	10.3
@1106	AEREPL27	10.3
@1116	AEREPL28	10.3
@1126	AEREPL29	10.3
01136	AEREPL30	10.3
@1146	AEREPL31	10.3
@1146 @1156	AEREPL32	10.3
01166	AEREPL33	10.3
@1176	AEREPL34	10.3

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@1186
       AEREPL35
                  10.3
 @1196 AEREPL36
                   10.3
@1206 AEREPL37
                   10.3
@1216 AEREPL38
                   10.3
@1226 AEREPL39
                   10.3
                   10.3
@1236 AEREPL40
@1246 AEREPL41
                  10.3
@1256 AEREPL42
                  10.3
@1266 AEREPL43
                   10.3
@1276 AEREPL44
                   10.3
@1286 AEREPL45
                   10.3
@1296 AEREPL46
                   10.3
@1306 AEREPL47
                   10.3
@1316 AEREPL48 10.3
@1326 AEREPL49 10.3
@1336 AEREPL50 10.3
LABEL
  PERSID = "PERS KEY = BASEID | 2-DIGIT PERSNUM"
          = "AGE AS OF JANUARY 1,1991"
  LIVENOW = "S15 WHERE DOES PERSON LIVE NOW"
  NUMPERS = "S17 TOTAL NUMBER OF PEOPLE LIVING IN HH"
  HOMETYPE = "S19 TYPE OF HOME"
  OWNHOME = "S20 OWN HOME"
  INCOMRNG = "S22A TOTAL HOUSEHOLD INCOME - RANGE"
  FTANY = "A1INTRO ENROLLED AS FT STUDENT PAST 12"
  FTSCHOOL = "Ala FT ELEMENTARY OR HIGH SCHOOL"
  FTASSOC = "A1b FT ASSOCIATE'S DEGREE PROGRAM"
  FTBACHLR = "A1c FT BACHELOR'S DEGREE PROGRAM"
  FTVOCA = "Ald FT VOCATIONAL/OCCUPATIONAL TRAINING"
  FTBASIC = "Ale FT ADULT LITERACY/BASIC SKILLS PRGRM"
  FTENGLSH = "A1f FT ENGLISH AS 2ND LANGUAGE PROGRAM"
  FTOTHER = "Alg FT SOME OTHER PROGRAM"
          = "A1h ENROLLED FT IN GED PROGRAM-RECODE"
  FTGED
  FTCERT = "A1i ENROLLED FT-PROF CERTIFICATE-RECODE"
  CURENROL = "A1B CURRENTLY ENROLLED AS FULL-TIME STND"
         = "A2 # CLASSES AS FT STUDENT PAST 12"
  PTENROLL = "A4 ENROLLED AS PT STUDENT PAST 12"
  PTDEGREE = "A5 SEEKING PART-TIME DEGREE"
        = "A6 # PART-TIME CLASSES FOR CREDIT"
  OTNONCR = "A8A CONTINUING EDUCATION/NONCREDIT COURS"
  OTCORRS = "A8B COURSES BY MAIL, TV, RADIO, NEWSPAPER"
  OTPRIV = "A8C PRIVATE INSTRUCTION OR TUTORING"
  OTGROUP = "A8D ED ACTIVITY BY EMPLOYER, COMMUNITY"
  OTBASIC = "A8E INSTRUCTION IN BASIC SKILLS"
  OTENGL = "A8F INSTRUCTION IN ENGLISH AS 2ND LANGUA"
  OTOTHER = "A8G OTHER ORGANIZED ED ACTIVITY"
          = "A8H GED/HS COMPLETION-RECODE"
  OTGED
  OTCOMP
          = "A8I COMPUTERS-RECODE"
  OTCLASS = "D-OTHER CLASSES TAKEN DURING PAST 12 MO"
  OTNUM = "A9 # OTHER CLASSES TAKEN DURING PAST 12"
  OTNAME1 = "A10 MOST RECENT AE CLASS 1"
  OTNAME2 = "A10 MOST RECENT AE CLASS 2"
```

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OTNAME3 = "A10 MOST RECENT AE CLASS 3"
OTNAME4 = "A10 MOST RECENT AE CLASS 4"
CRDEGREE = "A11 CLASSES FOR CREDIT TOWARD DEGREE"
TAKEREA1 = "A13 MAIN REASON FOR TAKING A10 CL REC# 1"
TAKEREA2 = "A13 MAIN REASON FOR TAKING A10 CL REC# 2"
TAKEREA3 = "A13 MAIN REASON FOR TAKING A10 CL REC# 3"
TAKEREA4 = "A13 MAIN REASON FOR TAKING A10 CL REC# 4"
EMPLREA1 = "A14 CAREER REASONS FOR TAKING A10 REC# 1"
EMPLREA2 = "A14 CAREER REASONS FOR TAKING A10 REC# 2"
EMPLREA3 = "A14 CAREER REASONS FOR TAKING A10 REC# 3"
EMPLREA4 = "A14 CAREER REASONS FOR TAKING A10 REC# 4"
TRNMGMT1 = "A17A EXECUTIVE MGMT DEVELOPMENT T REC# 1"
TRNMGMT2 = "A17A EXECUTIVE MGMT DEVELOPMENT T REC# 2"
TRNMGMT3 = "A17A EXECUTIVE MGMT DEVELOPMENT T REC# 3"
TRNMGMT4 = "A17A EXECUTIVE MGMT DEVELOPMENT T REC# 4"
TRNSUPR1 = "A17B SUPERVISORY TRAINING
                                             REC# 1"
TRNSUPR2 = "A17B SUPERVISORY TRAINING
                                             REC# 2"
TRNSUPR3 = "A17B SUPERVISORY TRAINING
                                             REC# 3"
TRNSUPR4 = "A17B SUPERVISORY TRAINING
                                            REC# 4"
TRNPROF1 = "A17C PROFESSIONAL DEVELOPMENT TRA REC# 1"
TRNPROF2 = "A17C PROFESSIONAL DEVELOPMENT TRA REC# 2"
TRNPROF3 = "A17C PROFESSIONAL DEVELOPMENT TRA REC# 3"
TRNPROF4 = "A17C PROFESSIONAL DEVELOPMENT TRA REC# 4"
TRNTECH1 = "A17D TECHNICAL/SKILLED WORKER TRA REC# 1"
TRNTECH2 = "A17D TECHNICAL/SKILLED WORKER TRA REC# 2"
TRNTECH3 = "A17D TECHNICAL/SKILLED WORKER TRA REC# 3"
TRNTECH4 = "A17D TECHNICAL/SKILLED WORKER TRA REC# 4"
TRNCS1 = "A17E WORD PROCESSING/COMPUTER SOF REC# 1"
TRNCS2 = "A17E WORD PROCESSING/COMPUTER SOF REC# 2"
TRNCS3 = "A17E WORD PROCESSING/COMPUTER SOF REC# 3"
TRNCS4 = "A17E WORD PROCESSING/COMPUTER SOF REC# 4"
TRNHLTH1 = "A17F JOB HEALTH AND SAFETY TRAINI REC# 1"
TRNHLTH2 = "A17F JOB HEALTH AND SAFETY TRAINI REC# 2"
TRNHLTH3 = "A17F JOB HEALTH AND SAFETY TRAINI REC# 3"
TRNHLTH4 = "A17F JOB HEALTH AND SAFETY TRAINI REC# 4"
TRNQC1 = "A17G QUALITY CONTROL/STATISTICAL REC# 1"
TRNQC2 = "A17G QUALITY CONTROL/STATISTICAL REC# 2"
       = "A17G QUALITY CONTROL/STATISTICAL REC# 3"
TRNQC3
TRNQC4 = "A17G QUALITY CONTROL/STATISTICAL REC# 4"
TRNSALE1 = "A17H SALES AND MARKETING TRAINING REC# 1"
TRNSALE2 = "A17H SALES AND MARKETING TRAINING REC# 2"
TRNSALE3 = "A17H SALES AND MARKETING TRAINING REC# 3"
TRNSALE4 = "A17H SALES AND MARKETING TRAINING REC# 4"
TRNEMPL1 = "A171 NEW EMPLOYEE TRAINING REC# 1"
TRNEMPL2 = "A17I NEW EMPLOYEE TRAINING
                                             REC# 2"
TRNEMPL3 = "A171 NEW EMPLOYEE TRAINING
                                             REC# 3"
TRNEMPL4 = "A171 NEW EMPLOYEE TRAINING
                                            REC# 4"
TRNOTHE1 = "A17J SOME OTHER KIND OF TRAINING REC# 1"
TRNOTHE2 = "A17J SOME OTHER KIND OF TRAINING REC# 2"
TRNOTHE3 = "A17J SOME OTHER KIND OF TRAINING REC# 3"
TRNOTHE4 = "A17J SOME OTHER KIND OF TRAINING REC# 4"
REQUIRE1 = "A18 TAKE A10 CLASS TO MEET REQUIR REC# 1"
REQUIRE2 = "A18 TAKE A10 CLASS TO MEET REQUIR REC# 2"
REQUIRE3 = "A18 TAKE A10 CLASS TO MEET REQUIR REC# 3"
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REQUIRE4 = "A18 TAKE A10 CLASS TO MEET REQUIR REC# 4"
DEGREE1 = "A19 A10 CLASS FULFILLS TYPE REOUI REC# 1"
DEGREE2 = "A19 A10 CLASS FULFILLS TYPE REQUI REC# 2"
DEGREE3 = "A19 A10 CLASS FULFILLS TYPE REQUI REC# 3"
DEGREE4 = "A19 A10 CLASS FULFILLS TYPE REQUI REC# 4"
LICENSE1 = "A20 A10 CLASS TO OBTAIN/RENEW LIC REC# 1"
LICENSE2 = "A20 A10 CLASS TO OBTAIN/RENEW LIC REC# 2"
LICENSE3 = "A20 A10 CLASS TO OBTAIN/RENEW LIC REC# 3"
LICENSE4 = "A20 A10 CLASS TO OBTAIN/RENEW LIC REC# 4"
OBTAIN1 = "A200V OBTAIN OR RENEW LICENSE/CER REC# 1"
OBTAIN2 = "A200V OBTAIN OR RENEW LICENSE/CER REC# 2"
OBTAIN3 = "A200V OBTAIN OR RENEW LICENSE/CER REC# 3"
OBTAIN4 = "A200V OBTAIN OR RENEW LICENSE/CER REC# 4"
SPONTYP1 = "A22 A10 CLASS SPONSORED BY TYPE O REC# 1"
SPONTYP2 = "A22 A10 CLASS SPONSORED BY TYPE O REC# 2"
SPONTYP3 = "A22 A10 CLASS SPONSORED BY TYPE O REC# 3"
SPONTYP4 = "A22 A10 CLASS SPONSORED BY TYPE O REC# 4"
EMPLPRO1 = "A23 A10 CLASS SPONSOR IS EMPLOYER REC# 1"
EMPLPRO2 = "A23 A10 CLASS SPONSOR IS EMPLOYER REC# 2"
EMPLPRO3 = "A23 A10 CLASS SPONSOR IS EMPLOYER REC# 3"
EMPLPRO4 = "A23 A10 CLASS SPONSOR IS EMPLOYER REC# 4"
EMPLTIM1 = "A23A EMPLOYED AT TIME A10 CLASS T REC# 1"
EMPLTIM2 = "A23A EMPLOYED AT TIME A10 CLASS T REC# 2"
EMPLTIM3 = "A23A EMPLOYED AT TIME A10 CLASS T REC# 3"
EMPLTIM4 = "A23A EMPLOYED AT TIME A10 CLASS T REC# 4"
EMPLONL1 = "A24 A10 CLASS PARTICIPATN-EMPLOYE REC# 1"
EMPLONL2 = "A24 A10 CLASS PARTICIPATN-EMPLOYE REC# 2"
EMPLONL3 = "A24 A10 CLASS PARTICIPATN-EMPLOYE REC# 3"
EMPLONL4 = "A24 A10 CLASS PARTICIPATN-EMPLOYE REC# 4"
ATWORK1 = "A25 A10 CLASS GIVEN AT WORK
                                            REC# 1"
ATWORK2 = "A25 A10 CLASS GIVEN AT WORK
                                            REC# 2"
ATWORK3 = "A25 A10 CLASS GIVEN AT WORK
                                            REC# 3"
ATWORK4 = "A25 A10 CLASS GIVEN AT WORK
                                            REC# 4"
EMPLREQ1 = "A25A EMPLOYER REQUIRED A10 CLASS REC# 1"
EMPLREQ2 = "A25A EMPLOYER REQUIRED A10 CLASS REC# 2"
EMPLREQ3 = "A25A EMPLOYER REQUIRED A10 CLASS REC# 3"
EMPLREQ4 = "A25A EMPLOYER REQUIRED A10 CLASS REC# 4"
TIMEOFF1 = "A26 GIVEN TIME OFF TO TAKE A10 CL REC# 1"
TIMEOFF2 = "A26 GIVEN TIME OFF TO TAKE A10 CL REC# 2"
TIMEOFF3 = "A26 GIVEN TIME OFF TO TAKE A10 CL REC# 3"
TIMEOFF4 = "A26 GIVEN TIME OFF TO TAKE A10 CL REC# 4"
CORRESP1 = "A27 A10 CLASS A CORRESPONDENCE CO REC# 1"
CORRESP2 = "A27 A10 CLASS A CORRESPONDENCE CO REC# 2"
CORRESP3 = "A27 A10 CLASS A CORRESPONDENCE CO REC# 3"
CORRESP4 = "A27 A10 CLASS A CORRESPONDENCE CO REC# 4"
MAILTV1 = "A28 A10 CORR COURSE - TYPE INSTRU REC# 1"
MAILTV2 = "A28 A10 CORR COURSE - TYPE INSTRU REC# 2"
MAILTV3 = "A28 A10 CORR COURSE - TYPE INSTRU REC# 3"
MAILTV4 = "A28 A10 CORR COURSE - TYPE INSTRU REC# 4"
PAIDFAM1 = "A29A YOU OR FAMILY PAID
                                            REC# 1"
PAIDFAM2 = "A29A YOU OR FAMILY PAID
                                            REC# 2"
PAIDFAM3 = "A29A YOU OR FAMILY PAID
                                            REC# 3"
                                            REC# 4"
PAIDFAM4 = "A29A YOU OR FAMILY PAID
                                            REC# 1"
PAIDFED1 = "A29B FEDERAL GOVERNMENT PAID
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PAIDFED2 = "A29B FEDERAL GOVERNMENT PAID
PAIDFED3 = "A29B FEDERAL GOVERNMENT PAID
                                             REC# 3"
PAIDFED4 = "A29B FEDERAL GOVERNMENT PAID
                                            REC# 4"
PAIDSTA1 = "A29C STATE/COUNTY/LOCAL GOVERNMEN REC# 1"
PAIDSTA2 = "A29C STATE/COUNTY/LOCAL GOVERNMEN REC# 2"
PAIDSTA3 = "A29C STATE/COUNTY/LOCAL GOVERNMEN REC# 3"
PAIDSTA4 = "A29C STATE/COUNTY/LOCAL GOVERNMEN REC# 4"
PAIDBUS1 = "A29D BUSINESS OR INDUSTRY PAID
                                           REC# 1"
PAIDBUS2 = "A29D BUSINESS OR INDUSTRY PAID
                                             REC# 2"
PAIDBUS3 = "A29D BUSINESS OR INDUSTRY PAID
                                             REC# 3"
PAIDBUS4 = "A29D BUSINESS OR INDUSTRY PAID
                                            REC# 4"
PAIDPRI1 = "A29E PRIVATE ORGANIZATION PAID
                                             REC# 1"
PAIDPRI2 = "A29E PRIVATE ORGANIZATION PAID
                                             REC# 2"
PAIDPRI3 = "A29E PRIVATE ORGANIZATION PAID
                                            REC# 3"
PAIDPRI4 = "A29E PRIVATE ORGANIZATION PAID
                                            REC# 4"
PAIDOTH1 = "A29F SOMEONE ELSE PAID
                                             REC# 1"
PAIDOTH2 = "A29F SOMEONE ELSE PAID
                                            REC# 2"
PAIDOTH3 = "A29F SOMEONE ELSE PAID
                                            REC# 3"
PAIDOTH4 = "A29F SOMEONE ELSE PAID
                                            REC# 4"
PAIDFRE1 = "A29G THERE WAS NO CHARGE
                                            REC# 1"
PAIDFRE2 = "A29G THERE WAS NO CHARGE
                                            REC# 2"
PAIDFRE3 = "A29G THERE WAS NO CHARGE
                                            REC# 3"
PAIDFRE4 = "A29G THERE WAS NO CHARGE
                                     REC# 4"
PAIDUNI1 = "A29H POST SEC INST PAID-RECODE REC #1"
PAIDUNI2 = "A29H POST SEC INST PAID-RECODE REC #2"
PAIDUNI3 = "A29H POST SEC INST PAID-RECODE REC #3"
PAIDUNI4 = "A29H POST SEC INST PAID-RECODE REC #4"
PAIDEMP1 = "A30 EMPLOYER WAS SOURCE OF PAYMEN REC# 1"
PAIDEMP2 = "A30 EMPLOYER WAS SOURCE OF PAYMEN REC# 2"
PAIDEMP3 = "A30 EMPLOYER WAS SOURCE OF PAYMEN REC# 3"
PAIDEMP4 = "A30 EMPLOYER WAS SOURCE OF PAYMEN REC# 4"
TUITION1 = 'A31 AMOUNT PAID FOR TUITION & FEE REC# 1'
TUITION2 = 'A31 AMOUNT PAID FOR TUITION & FEE REC# 2'
TUITION3 = 'A31 AMOUNT PAID FOR TUITION & FEE REC# 3'
TUITION4 = 'A31 AMOUNT PAID FOR TUITION & FEE REC# 4'
TUITONE1 = "A31A TUITION FOR MORE THAN ONE CO REC# 1"
TUITONE2 = "A31A TUITION FOR MORE THAN ONE CO REC# 2"
TUITONE3 = "A31A TUITION FOR MORE THAN ONE CO REC# 3"
TUITONE4 = "A31A TUITION FOR MORE THAN ONE CO REC# 4"
TUITNUM1 = "A31B NUMBER OF COURSES TUITION CO REC# 1"
TUITNUM2 = "A31B NUMBER OF COURSES TUITION CO REC# 2"
TUITNUM3 = "A31B NUMBER OF COURSES TUITION CO REC# 3"
TUITNUM4 = "A31B NUMBER OF COURSES TUITION CO REC# 4"
CLASNUM1 = "A32 # WEEKS A10 CLASS SCHEDULED T REC# 1"
CLASNUM2 = "A32 # WEEKS A10 CLASS SCHEDULED T REC# 2"
CLASNUM3 = "A32 # WEEKS A10 CLASS SCHEDULED T REC# 3"
CLASNUM4 = "A32 # WEEKS A10 CLASS SCHEDULED T REC# 4"
CLASUNI1 = "A32 UNITS A10 CLASS SCHEDULED TO REC# 1"
CLASUNI2 = "A32 UNITS A10 CLASS SCHEDULED TO REC# 2"
CLASUNI3 = "A32 UNITS A10 CLASS SCHEDULED TO REC# 3"
CLASUNI4 = "A32 UNITS A10 CLASS SCHEDULED TO REC# 4"
CLASHRS1 = "A33 # HOURS PER WEEK A10 CLASS SC REC# 1"
CLASHRS2 = "A33 # HOURS PER WEEK A10 CLASS SC REC# 2"
CLASHRS3 = "A33 # HOURS PER WEEK A10 CLASS SC REC# 3"
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CLASHRS4 = "A33 # HOURS PER WEEK A10 CLASS SC REC# 4"
COMPLET1 = "A34 COMPLETED A10 CLASS
                                             REC# 1"
COMPLET2 = "A34 COMPLETED A10 CLASS
                                             REC# 2"
COMPLET3 = "A34 COMPLETED A10 CLASS
                                             REC# 3"
COMPLET4 = "A34 COMPLETED A10 CLASS
                                             REC# 4"
TAKING1 = "A34A STILL TAKING COURSE OR DROPP REC# 1"
TAKING2 = "A34A STILL TAKING COURSE OR DROPP REC# 2"
TAKING3 = "A34A STILL TAKING COURSE OR DROPP REC# 3"
TAKING4 = "A34A STILL TAKING COURSE OR DROPP REC# 4"
BASIC = "A15 AE COURSES INCL BASIC SKILLS TR"
ENGLISH = "A16 AE COURSES FOR ENG AS 2ND LANG"
CITIZEN = "A35 AE COURSES FOR NATURALIZATION"
AECOURSE = "A36 TAKEN ANY AE COURSES (EXCL FT)"
AEPAST3 = "A37 TAKEN AE COURSES IN PAST 3 YRS"
      = "A38 AE COURSES BENEFIT CAREER"
AEBASIC = "A39 AE COURSES BENEFIT BASIC SKILLS"
AELICENS = "A40 AE COURSES HELP OBTAIN/RENEW LICENSE"
PREVJOB = "A41A PREVENT AE-YOUR WORK SCHEDULE"
PREVTIME = "A41B PREVENT AE-MEETING TIMES OF CLASSES"
PREVCOST = "A41C PREVENT AE-COST OF CLASSES"
PREVLOCA = "A41D PREVENT AE-LOCATION OF CLASSES"
PREVTRAN = "A41E PREVENT AE-LACK OF TRANSPORTATION"
PREVCHIL = "A41F PREVENT AE-LACK OF CHILD CARE"
PREVFAM = "A41G PREVENT AE-OTH FAMILY RESPONSIBILIT"
PREVINFO = "A41H PREVENT AE-LACK OF INFO AB CLASSES"
PREVINT = "A411 PREVENT AE-NO INTERESTING CLASSES"
PREVOTHR = "A41J PREVENT AE-SOME OTHER REASON"
PREVOLD = "A41K OLD AGE-RECODE"
PREVSICK = "A41L SICKNESS-RECODE"
PREVDSIR = "A41M NO INTEREST/DESIRE-RECODE"
PREVMOTV = "A41N MOTIVATION-RECODE"
PREVTIRD = "A410 TIRED/EXHAUSTED-RECODE"
PREVBUSY = "A41P GENERAL TIME PROBLEM/BUSY-RECODE"
RACEVER = "A42A RACE VERIFICATION"
HISPVER = "A42A1 RESPONDENT OF HISPANIC ORIGIN"
SEXVER = "A42B S10E GENDER VERIFICATION"
EVERMARI = "A43 EVER MARRIED"
MARISTAT = "A44 CURRENTLY MARRIED"
WORKPAY = "A45 EVER WORKED AT A JOB FOR PAY"
WORKWEEK = "A45A WORKED AT A JOB FOR PAY LAST WEEK"
VACATION = "A46 ON LEAVE OR VACATION FROM A JOB"
LEAVEMM = "A51 MNTH RESPONDENT LEFT MOST RECENT JOB"
LEAVEYY = "A51 YEAR RESPONDENT LEFT MOST RECENT JOB"
WORKHRS = "A52 HOURS PER WEEK WORK FOR PAY"
LOOKWORK = "A54 LOOKING FOR WORK ON PAST 4 WEEKS"
LOOKPUBL = "A55A CHECKED W/PUBLIC EMPLOYMENT AGENCY"
LOOKPRIV = "A55B CHECKED W/PRIVATE EMPLOYMENT AGENCY"
LOOKEMPL = "A55C CHECKED WITH EMPLOYER DIRECTLY"
LOOKFRND = "A55D CHECKED WITH FRIENDS OR RELATIVES"
LOOKADS = "A55E PLACED OR ANSWERED ADS"
LOOKNOTH = "A55F DID NTHING TO FIND WORK"
LOOKOTHR = "A55G DID SOMETHING ELSE TO FIND WORK"
LASTACTY = "A56 MAIN ACTIVITY LAST WEEK"
UNDER16 = "A57 HAVE ANY KIDS < 16 WHO LIVE W/YOU"
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UNDER16N = "A58 # OF KIDS < 16 WHO LIVE W/ YOU"
HIGHGRAD = "A59 HIGHEST GRADE COMPLETED"
HSDIPLMA = "A60 RECEIVE HIGH SCHOOL DIPLOMA OR EQUIV"
MAINACTY = "A61 MAIN ACTIVITY IN PAST 12 MONTHS"
        = "A62 USED PUBLIC LIBRARY IN PAST MONTH?"
LIBMO
LIBYR
        = "A63 USED PUBLIC LIBRARY IN PAST YEAR?"
CENSUSDV = "CENSUS DIVISION"
CENSUSRG = "CENSUS REGION"
MAINRSLT = "RESULT FOR THIS RESPONDENT"
MILFLG = "MILITARY FLAG"
        = "FOR TAYLOR SERIES VARIANCE"
REGION = "DEPARTMENT OF EDUCATION REGION"
SAMPSTAT = "PARTICIPATION STATUS AT SAMPLING"
SIC = "INDUSTRY CODE"
SOC
       = "OCCUPATION CODE"
        = "URBANICITY"
URBAN
VSTRAT = "FOR TAYLOR SERIES VARIANCE"
AEBASLIT = "D-ADULT EDUCATION TO IMPROVE SKILLS"
AEDEGREQ = "D-ADULT EDUCATION REQUIRED F/DEGREE"
AEEMPREA = "D-ADULT EDUCATION F/JOB-RELATED REASON"
AEEMPREQ = "D-ADULT EDUCATION REQUIRED BY EMPLOYER"
AEESL = "D-ADULT EDUCATION F/ENGLISH AS 2ND LANG"
AEEVER = "D-EVER PARTICIPATED IN ADULT EDUCATION"
AELABOR = "D-LABOR FORCE STATUS"
AELICNS = "D-ADULT EDUCATION F/LICENSE/CERTIFICATE"
AENUMCSE = "D-TOTAL # AE COURSES TAKEN IN PAST 12M"
AEPARANY = "D-ADULT EDUC INCLUDING F/T DEGREE PROG"
AEPARTIC = "D-ADULT EDUC EXCLUDING F/T DEGREE PGMS"
AEPRTIME = "D-ADULT EDUC. EXCLUDING F/T PROGRAM"
AETRAIN = "D-ADULT EDUCATION W/TRAINING COMPONENT"
CEMPREA1 = "D-REASON F/TAKING COURSE-1 JOB RELATED"
CEMPREA2 = "D-REASON F/TAKING COURSE-2 JOB RELATED"
CEMPREA3 = "D-REASON F/TAKING COURSE-3 JOB RELATED"
CEMPREA4 = "D-REASON F/TAKING COURSE-4 JOB RELATED"
CNUMWKS1 = "D-#WEEKS COURSE-1 SCHEDULED TO RUN"
CNUMWKS2 = "D-#WEEKS COURSE-2 SCHEDULED TO RUN"
CNUMWKS3 = "D-#WEEKS COURSE-3 SCHEDULED TO RUN"
CNUMWKS4 = "D-#WEEKS COURSE-4 SCHEDULED TO RUN"
CREQUIR1 = "D-CRSE-1 REQ F/CERT OF COMPLETION/DIPL"
CREQUIR2 = "D-CRSE-2 REQ F/CERT OF COMPLETION/DIPL"
CREQUIR3 = "D-CRSE-3 REQ F/CERT OF COMPLETION/DIPL"
CREQUIR4 = "D-CRSE-4 REQ F/CERT OF COMPLETION/DIPL"
CTRAIN1 = "D-ANY TRAINING COMPONENT COURSE-1"
CTRAIN2 = "D-ANY TRAINING COMPONENT COURSE-2"
CTRAIN3 = "D-ANY TRAINING COMPONENT COURSE-3"
CTRAIN4 = "D-ANY TRAINING COMPONENT COURSE-4"
FTBASESL = "D-F/T BASIC SKILLS/ESL COURSE"
FTDEGREE = "D-FULLTIME ASSOC/BACH DEGREE PROGRAM"
FTNONDEG = "D-F/T NONDEG PGM"
HIDEGREE = "D-HIGHEST DEGREE ATTAINED"
INCLEVEL = "D-LEVEL OF INCOME"
RACEETHN = "D-RACE-ETHNICITY"
SALARY = "D-ANNUAL SALARY/CURRENT OR MOST RCNT JOB"
SCHOOLNG = "D-YEARS OF SCHOOL COMPLETED"
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AELABF = "IMPUTATION FLAG FOR LABOR FORCE STATUS"
AGEF = "IMPUTATION FLAG FOR AGE"
EVERMARF = "IMPUTATION FLAG FOR EVERMARI"
HIGHGRAF = "IMPUTATION FLAG FOR HIGHGRAD"
HISPVERF = "IMPUTATION FLAG FOR HISPVER"
HSDIPLMF = "IMPUTATION FLAG FOR HSDIPLMA"
INCOMRNF = "INCOMRNG IMPUTED FLAG"
MARISTAF = "IMPUTATION FLAG FOR MARISTAT"
NUMPERSF = "NUMPERS IMPUTED FLAG"
OWNHOMEF = "OWNHOME IMPUTED FLAG"
RACEVERF = "IMPUTATION FLAG FOR RACEVER"
SALARYF = "IMPUTATION FLAG FOR SALARY"
       = "IMPUTATION FLAG FOR SIC"
SICF
       = "IMPUTATION FLAG FOR SOC"
SOCF
UNDER16F = "IMPUTATION FLAG FOR UNDER16"
AEWT = "FINAL ADULT WEIGHT"
AEREPL1 = "REPLICATE WEIGHT"
AEREPL2 = "REPLICATE WEIGHT"
AEREPL3 = "REPLICATE WEIGHT"
AEREPL4 = "REPLICATE WEIGHT"
AEREPL5 = "REPLICATE WEIGHT"
AEREPL6 = "REPLICATE WEIGHT"
AEREPL7 = "REPLICATE WEIGHT"
AEREPL8 = "REPLICATE WEIGHT"
AEREPL9 = "REPLICATE WEIGHT"
AEREPL10 = "REPLICATE WEIGHT"
AEREPL11 = "REPLICATE WEIGHT"
AEREPL12 = "REPLICATE WEIGHT"
AEREPL13 = "REPLICATE WEIGHT"
AEREPL14 = "REPLICATE WEIGHT"
AEREPL15 = "REPLICATE WEIGHT"
AEREPL16 = "REPLICATE WEIGHT"
AEREPL17 = "REPLICATE WEIGHT"
AEREPL18 = "REPLICATE WEIGHT"
AEREPL19 = "REPLICATE WEIGHT"
AEREPL20 = "REPLICATE WEIGHT"
AEREPL21 = "REPLICATE WEIGHT"
AEREPL22 = "REPLICATE WEIGHT"
AEREPL23 = "REPLICATE WEIGHT"
AEREPL24 = "REPLICATE WEIGHT"
AEREPL25 = "REPLICATE WEIGHT"
AEREPL26 = "REPLICATE WEIGHT"
AEREPL27 = "REPLICATE WEIGHT"
AEREPL28 = "REPLICATE WEIGHT"
AEREPL29 = "REPLICATE WEIGHT"
AEREPL30 = "REPLICATE WEIGHT"
AEREPL31 = "REPLICATE WEIGHT"
AEREPL32 = "REPLICATE WEIGHT"
AEREPL33 = "REPLICATE WEIGHT"
AEREPL34 = "REPLICATE WEIGHT"
AEREPL35 = "REPLICATE WEIGHT"
AEREPL36 = "REPLICATE WEIGHT"
AEREPL37 = "REPLICATE WEIGHT"
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AEREPL38 = "REPLICATE WEIGHT"

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AEREPL39 = "REPLICATE WEIGHT"
  AEREPL40 = "REPLICATE WEIGHT"
  AEREPL41 = "REPLICATE WEIGHT"
  AEREPL42 = "REPLICATE WEIGHT"
  AEREPL43 = "REPLICATE WEIGHT"
  AEREPL44 = "REPLICATE WEIGHT"
  AEREPL45 = "REPLICATE WEIGHT"
  AEREPL46 = "REPLICATE WEIGHT"
  AEREPL47 = "REPLICATE WEIGHT"
  AEREPL48 = "REPLICATE WEIGHT"
  AEREPL49 = "REPLICATE WEIGHT"
  AEREPL50 = "REPLICATE WEIGHT"
RUN;
PROC FORMAT;
 VALUE AGE
       -1 = 'INAPPLICABLE'
        -7 = 'REFUSED'
        -8 = 'DK'
       -9 = 'NOT ASCERTAINED'
   16 - 80 = "ADULT'S AGE"
     2 - 9 = "CHILD'S AGE"
 VALUE LIVENOW
       -1 = 'INAPPLICABLE'
        -7 = 'REFUSED'
        -8 = 'DK'
        -9 = 'NOT ASCERTAINED'
        1 = 'HERE'
         2 = 'STUDENT HOUSING'
         3 = 'OTHER PRIVATE HOME OR APARTMENT'
         4 = 'INSTITUTUIN OR GROUP QUARTERS'
 VALUE NUMPERS
        -1 = 'INAPPLICABLE'
        -7 = 'REFUSED'
        -8 = 'DK'
        -9 = 'NOT ASCERTAINED'
        0 = 'BLANKS ALLOWED'
    1 - 15 = 'NUMBER OF PEOPLE'
 VALUE HOMETYPE
        -1 = 'INAPPLICABLE'
        -7 = 'REFUSED'
        -8 = 'DK'
        -9 = 'NOT ASCERTAINED'
        0 = 'BLANKS ALLOWED'
         2 = 'APARTMENT'
         3 = 'SOME OTHER TYPE OF HOME'
```

```
VALUE OWNHOME
       -1 = 'INAPPLICABLE'
       -7 = 'REFUSED'
       -8 = 'DK'
       -9 = 'NOT ASCERTAINED'
        0 = 'BLANKS ALLOWED'
        1 = 'OWN YOUR HOME'
        2 = 'RENT YOUR HOME'
        3 = 'HAVE SOME OTHER ARRANGEMENT'
VALUE INCOMRNG
       -1 = 'INAPPLICABLE'
       -7 = 'REFUSED'
       -8 = 'DK'
       -9 = 'NOT ASCERTAINED'
        0 = 'BLANKS ALLOWED'
        1 = '$5,000 \text{ OR LESS'}
       10 = 'OVER $75,000'
        2 = $^{$5,001} \text{ TO } $10,000'
        3 = '$10,001 \text{ TO } $15,000'
        4 = '$15,001 \text{ TO } $20,000'
        5 = '$20,001 \text{ TO } $25,000'
        6 = '$25,001 \text{ TO } $30,000'
        7 = '$30,001 \text{ TO } $40,000'
        8 = '$40,001 \text{ TO } $50,000'
        9 = $^{$50,001} \text{ TO } $75,000
VALUE YESNO
       -1 = 'INAPPLICABLE'
       -7 = 'REFUSED'
       -8 = 'DK'
       -9 = 'NOT ASCERTAINED'
       1 = 'YES'
        2 = 'NO'
VALUE FTNUM
       -1 = 'INAPPLICABLE'
       -7 = 'REFUSED'
       -8 = 'DK'
       -9 = 'NOT ASCERTAINED'
  0 - 27 = 'NUMBER OF CLASSES'
```

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VALUE PTDEGREE
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
       0 = 'NOT ENROLLED/NOT DEGREE SEEKING'
       1 = "ASSOCIATE'S DEGREE"
       2 = "BACHELOR'S DEGREE"
       3 = "MASTER'S DEGREE"
       4 = 'DOCTORATE'
       5 = 'PROFESSIONAL (RE)CERTIFICATION'
      91 = 'OTHER DEGREE (SPECIFY)'
VALUE OTNUM
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
  0 - 40 = 'NUMBER OF OTHER COURSES'
VALUE TAKEREAS
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
       1 = 'PERSONAL, FAMILY, OR SOCIAL REASON'
       2 = 'TO IMPROVE, ADVANCE, KEEP UP CURRENT JOB'
       3 = 'TO TRAIN FOR A NEW JOB OR CAREER'
       4 = 'TO IMPROVE READING, WRITING, MATH SKILLS'
       5 = 'TO MEET REQUIREMENT FOR DIPLOMA/DEGREE'
      91 = 'OTHER REASON'
VALUE DEGREE
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
       0 = 'INELIGIBLE TYPE REPORTED'
       1 = '8TH GRADE CERTIFICATE OF COMPLETION'
       2 = 'HIGH SCHOOL DIPLOMA (INCL EQUIVALENCY)'
       3 = 'VOCATIONAL DIPLOMA OR CERTIFICATE'
       4 = '2-YEAR DEGREE FROM COLLEGE OR TECHNICAL'
       5 = '4-YEAR DEGREE FROM COLLEGE OR UNIVERSITY'
       6 = 'GRADUATE OR PROFESSIONAL DEGREE/CERTIF'
       7 = 'COLLEGE CERTIFICATE'
       8 = 'LICENSE'
      91 = 'OTHER (SPECIFY)'
```

```
VALUE OBTAIN
          -1 = 'INAPPLICABLE'
          -7 = 'REFUSED'
          -8 = 'DK'
          -9 = 'NOT ASCERTAINED'
           1 = 'OBTAIN LICENSE OR CERTIFICATION'
           2 = 'RENEW LICENSE OR CERTIFICATION'
   VALUE SPONTYPE
          -1 = 'INAPPLICABLE'
          -7 = 'REFUSED'
          -8 = 'DK'
          -9 = 'NOT ASCERTAINED'
          1 = 'ELEMENTARY/JUNIOR HIGH/HIGH SCHOOL'
          10 = 'PRIVATE COMMUNITY ORGANIZATION'
           2 = '2-YR COMMUNITY/JR COLLEGE/TECHNICAL INST'
           3 = '4-YR COLLEGE OR UNIVERSITY'
           4 = 'VOCA/TRADE/BUSINESS/HOSPITAL/FLIGHT SCHL'
           5 = 'TUTOR OR PRIVATE INSTRUCTOR'
           6 = 'BUSINESS OR INDUSTRY'
           7 = 'LABOR ORGANIZATION OR PROFESSIONAL ASSOC'
           8 = 'LIBRARY'
           9 = "FEDERAL/STATE/COUNTY/LOCAL GOV'T AGENCY"
          91 = 'SOMEONE ELSE'
   VALUE MAILTV
          -1 = 'INAPPLICABLE'
          -7 = 'REFUSED'
          -8 = 'DK'
          -9 = 'NOT ASCERTAINED'
           1 = 'THROUGH THE MAIL'
           2 = 'BY TELEVISION OR RADIO'
   VALUE PAIDFREE
          -1 = 'INAPPLICABLE'
          -7 = 'REFUSED'
          -9 = 'NOT ASCERTAINED'
           1 = 'NO CHARGE'
           2 = 'CHARGE'
   VALUE TUITION
          -1 = 'INAPPLICABLE'
          -7 = 'REFUSED'
          -8 = 'DK'
          -9 = 'NOT ASCERTAINED'
0.25 - 10000 = 'TUITION AMOUNT'
   VALUE CLASNUM
          -1 = 'INAPPLICABLE'
          -7 = 'REFUSED'
          -8 = 'DK'
          -9 = 'NOT ASCERTAINED'
      1 - 60 = 'NUMBER OF UNITS SCHEDULED TO RUN'
```

```
VALUE UNITS
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
       1 = 'WEEKS'
       2 = 'MONTHS'
       3 = 'SEMESTERS'
       4 = 'QUARTERS'
       5 = 'YEARS'
VALUE CLASHRS
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
  1 - 84 = 'HOURS PER WEEK'
VALUE TAKING
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
       1 = 'STILL TAKING COURSE'
       2 = 'DROPPED COURSE'
VALUE RACE
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
       1 = 'WHITE'
       2 = 'BLACK'
       3 = 'NATIVE AMERICAN OR ALASKAN NATIVE'
       4 = 'ASIAN OR PACIFIC ISLANDER'
      91 = 'SOME OTHER RACE'
VALUE SEXVER
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
       1 = 'MALE'
       2 = 'FEMALE'
```

```
VALUE MARISTAT
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
       -9 = 'NOT ASCERTAINED'
       1 = 'MARRIED'
       2 = 'SEPARATED'
       3 = 'DIVORCED'
       4 = 'WIDOWED'
VALUE WORKWEEK
      -1 = 'INAPPLICABLE'
       -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
       1 = 'YES'
       2 = 'NO'
       3 = 'RETIRED'
VALUE MONTH1X
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
  1 - 12 = 'MONTH'
VALUE LEAVEYY
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
 27 - 91 = 'YEAR LEFT JOB'
VALUE HOURS
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
 1 - 100 = 'HOURS WORKED PER WEEK'
VALUE LASTACTY
       -1 = 'INAPPLICABLE'
       -7 = 'REFUSED'
      -8 = 'DK'
       -9 = 'NOT ASCERTAINED'
       1 = 'KEEPING HOUSE/CARING FOR CHILDREN'
       2 = 'GOING TO SCHOOL'
       3 = 'RETIRED'
       4 = 'UNABLE TO WORK'
      91 = 'OTHER (SPECIFY)'
```

```
VALUE UNDER16N
       -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
  1 - 10 = 'NUMBER OF CHILDREN < 16'
VALUE HIGHGRAD
       -1 = 'INAPPLICABLE'
       -7 = 'REFUSED'
       -8 = 'DK'
       1 = 'UP TO EIGHTH GRADE'
        2 = 'NINTH TO ELEVENTH GRADE'
        3 = 'HIGH SCHOOL DIPLOMA OR EQUIVALENT'
        4 = 'VOCATIONAL/TECHNICAL AFTER HIGH SCHOOL'
        5 = '1-2 YEARS OF COLLEGE'
        6 = "ASSOCIATE'S DEGREE"
        7 = '3-4 \text{ YEARS OF COLLEGE'}
        8 = "BACHELOR'S DEGREE"
        9 = 'GRADUATE OR PROFESSIONAL SCHOOL'
VALUE MAINACTY
       -1 = 'INAPPLICABLE'
       -7 = 'REFUSED'
      -8 = 'DK'
       -9 = 'NOT ASCERTAINED'
       1 = 'PURSUING AN EDUCATION'
        2 = 'WORKING AT A JOB'
        3 = 'KEEPING HOUSE OR CARING FOR CHILDREN'
      91 = 'SOMETHING ELSE'
      92 = 'RETIRED'
       93 = 'SICK OR DISABLED'
VALUE CENSUSDV
       -1 = 'INAPPLICABLE'
        1 = 'NEW ENGLAND'
        2 = 'MIDDLE ATLANTIC'
        3 = 'EAST NORTH CENTRAL'
        4 = 'WEST NORTH CENTRAL'
        5 = 'SOUTH ATLANTIC'
        6 = 'EAST SOUTH CENTRAL'
        7 = 'WEST SOUTH CENTRAL'
        8 = 'MOUNTAIN'
        9 = 'PACIFIC'
VALUE CENSUSRG
       -1 = 'INAPPLICABLE'
       1 = 'NORTHEAST'
        2 = 'MIDWEST'
        3 = 'SOUTH'
        4 = 'WEST'
```

```
VALUE $SURVR
    '-1' = 'INAPPLICABLE'
    'CA' = 'ADULT ED PART'
    'CN' = 'ADULT ED NONPART'
VALUE REGIONED
      -1 = 'INAPPLICABLE'
      -9 = 'NOT ASCERTAINED'
       1 = 'NORTHEAST'
       2 = 'CENTRAL'
       3 = 'SOUTHEAST'
       4 = 'WEST'
VALUE SAMPSTAT
       1 = 'NONPARTICIPANT'
       2 = 'FULL-TIME DEGREE SEEKING'
       3 = 'OTHER (PART-TIME)'
VALUE $SIC
  '-1 ' = 'INAPPLICABLE'
  '-7 ' = 'REFUSED'
  '-8 ' = 'UNKNOWN'
  '-9 ' = 'UNACCERTAINED'
       ' = 'AGRICULTURE, FORESTRY, AND FISHING'
  'B
       ' = 'MINING'
  'C ' = 'CONSTRUCTION'
  'D
      ' = 'MANUFACTURING'
  'D35 ' = 'INDUSTRIAL MACHINERY AND EQUIPMENT'
  'D36 ' = 'ELECTRONIC AND OTHER ELECTRIC EQUIPMENT'
  'D37 ' = 'TRANSPORTATION EQUIPMENT'
       ' = 'TRANSPORTATION AND PUBLIC UTILITIES'
  'E41 ' = 'LOCAL AND INTERURBAN PASSENGER TRANSIT'
  'E42 ' = 'TRUCKING AND WAREHOUSING'
  'E43 ' = 'U.S. POSTAL SERVICE'
  'E48 ' = 'COMMUNICATIONS'
  'E49 ' = 'ELECTRIC, GAS, AND SANITARY SERVICES'
  'F ' = 'WHOLESALE TRADE'
  'G
       ' = 'RETAIL TRADE'
       ' = 'FINANCE, INSURANCE, AND REAL ESTATE'
  'Н
       ' = 'SERVICES'
  'I737' = 'COMPUTER AND DATA PROCESSING'
  'I80 ' = 'HEALTH SERVICES'
  'I81 ' = 'LEGAL SERVICES'
  '1821' = 'ELEMENTARY AND SECONDARY SCHOOLS'
  'I822' = 'COLLEGES AND UNIVERSITIES'
  'I824' = 'VOCATIONAL SCHOOL'
  '187 ' = 'ENGINEERING AND MANAGEMENT'
  'J ' = 'PUBLIC ADMINISTRATION'
  'J914' = 'FEDERAL GOVERNMENT'
  'J915' = 'STATE OR LOCAL GOVERNMENT'
  'J971' = 'NATIONAL SECURITY'
  'K ' = 'NONCLASSIFIABLE ESTABLISHMENTS'
```

```
VALUE $SOC
  '-1 ' = 'INAPPLICABLE'
  '-7 ' = 'REFUSED'
  '-8 ' = 'UNKNOWN'
  '-9 ' = 'UNACCERTAINED'
       ' = 'EXECUTIVE, ADMIN, MANAGERIAL OCCUPATIONS'
  ' A
  'B ' = 'ENGINEERS, SURVEYORS, AND ARCHITECTS'
  'C ' = 'NATURAL SCIENTISTS, AND MATHEMATICIANS'
  'C171' = 'COMPUTER SCIENTISTS'
  'D19 ' = 'SOCIAL SCIENTISTS, AND URBAN PLANNERS'
  'D20 ' = 'SOCIAL, RECREATION, AND RELIGIOUS WORKERS'
  'D21 ' = 'LAWYERS AND JUDGES'
  'E22 ' = 'TEACHERS; COLL., UNIV., POSTSECONDARY INST.'
  'E23 ' = 'TEACHERS, EXCEPT POSTSECONDARY INST.'
  'E24 ' = 'VOCATIONAL AND EDUCATIONAL COUNSELORS'
  'E25 ' = 'LIBRARIANS, ARCHIVISTS, AND CURATORS'
  'F26 ' = 'PHYSICIANS AND DENTISTS'
  'F27 ' = 'VETERINARIANS'
  'F28 ' = 'OTHER HEALTH DIAG/TREATING PRACTITIONERS'
  'G29 ' = 'REGISTERED NURSES'
  'G30 ' = "PHARM., DIET., THERAPISTS, PHYSICIAN'S ASST"
  'H ' = 'WRITERS, ARTISTS, ENTERTAINERS, ATHLETES'
       ' = 'HEALTH TECHNOLOGISTS AND TECHNICIANS'
  'J37 ' = 'ENGINEERING/TECHNOLOGISTS, TECHNICIANS'
  'J38 ' = 'SCIENCE TECHNOLOGISTS AND TECHNICIANS'
  'J39 ' = 'TECHNICIANS; EXCEPT HEALTH, ENG., SCIENCE'
      ' = 'MARKETING AND SALES OCCUPATIONS'
      ' = 'ADMINISTRATIVE SUPPORT, INCL CLERICAL'
  'M ' = 'SERVICE OCCUPATIONS'
     ' = 'AGRICULTURE, FORESTRY, FISHING OCCUPATIONS'
     ' = 'MECHANICS AND REPAIRERS'
  'O611' = 'VEHICLE, MOBILE EQUIP. MECHANICS/REPAIRER'
  '0615' = 'ELECTRIC, ELECTRONIC EQUIPMENT REPAIRERS'
      ' = 'CONSTUCTION AND EXTRACTIVE OCCUPATIONS'
       ' = 'PRECISION PRODUCTION OCCUPATIONS'
      ' = 'PRODUCTION WORKING OCCUPATIONS'
  'S ' = 'TRANSPORTATION, MATERIAL MOVING'
  'S821' = 'MOTOR VEHICLE OPERATORS'
      ' = 'HANDLERS, EQUIP. CLEANERS, HELPERS, LABORER'
  'U ' = 'MILITARY OCCUPATIONS'
  'V ' = 'MISCELLANEOUS OCCUPATIONS'
  ľΥ
     ' = 'HOUSEWIFE'
  ' Z
     ' = 'UNEMPL, RETIRED, DISABLED, UNCLASSIFIABLE'
VALUE URBAN
      -1 = 'INAPPLICABLE'
      -9 = 'NOT ASCERTAINED'
       0 = 'NON'
       1 = 'MSA'
       2 = 'NECMA'
```

```
VALUE DYESNO
       . = 'NA/MISSING'
       0 = 'NO'
       1 = 'YES'
VALUE AEEMPREQ
       . = 'NA/MISSING'
       0 = 'NO'
       1 = 'YES'
        2 = 'N/EMP WHEN TAKING'
VALUE AEEVER
       . = 'NA/MISSING'
       0 = 'NEVER'
       1 = 'PAST 12 MTHS'
        2 = 'PAST 3Y N/PAST 12M'
        3 = 'BEFORE PAST 3YRS'
VALUE AELABOR
       . = 'NA/MISSING'
       1 = 'EMPLOYED'
       2 = 'UNEMPLOYED'
       3 = 'NOT IN LABOR FORCE'
VALUE AENUMCSE
       . = 'NA/MISSING'
  0 - 40 = 'COURSES TAKEN'
VALUE CNUMWKS
      . = 'NA/MISSING'
 1 - 624 = 'WEEKS SCHEDULED'
VALUE HIDEGREE
       . = 'NA/MISSING'
       1 = 'LESS THAN H/S DIP'
       2 = 'H/S DIP/EQUIV'
       3 = 'ASSOCIATE DEG'
       4 = 'BACH DEG/HIGHER'
VALUE INCLEVEL
       . = 'NA/MISSING'
       1 = '$10,000 \text{ OR LESS'}
       2 = '$10,001-$15,000'
       3 = '$15,001-$20,000'
       4 = '$20,001-$25,000'
       5 = '$25,001-$30,000'
       6 = '$30,001-$40,000'
       7 = '$40,001-$50,000'
       8 = '$50,001-$75,000'
       9 = 'OVER $75,000'
```

```
VALUE RACEETHN
           . = 'NA/MISSING'
           1 = 'WHITE, NON-HISPANIC'
           2 = 'BLACK, NON-HISPANIC'
           3 = 'HISPANIC'
           4 = 'ALL OTHER RACES'
   VALUE SALARY
           . = 'NA/MISSING'
 1000 - 75000 = 'SALARY'
    VALUE SCHOOLNG
           . = 'NA/MISSING'
           1 = 'UP TO 8TH GRD'
           2 = '9-11 \text{ GRADE'}
           3 = '12TH GRADE'
           4 = 'VOC AFTER H/S'
           5 = 'SOME COLLEGE'
           6 = 'ASSOCIATE DEG'
           7 = 'BACH DEG/HIGHER'
    VALUE YES
          -1 = 'INAPPLICABLE'
           1 = 'IMPUTED VALUE'
RUN;
FORMAT
                      AGE.
     AGE
     LIVENOW
                  LIVENOW.
     NUMPERS
                  NUMPERS.
                 HOMETYPE.
     HOMETYPE
     OWNHOME
                  OWNHOME.
     INCOMRNG
                  INCOMRNG.
     FTANY
                     YESNO.
     FTSCHOOL
                     YESNO.
     FTASSOC
                     YESNO.
     FTBACHLR
                    YESNO.
     FTVOCA
                     YESNO.
     FTBASIC
                     YESNO.
     FTENGLSH
                     YESNO.
     FTOTHER
                     YESNO.
     FTGED
                     YESNO.
     FTCERT
                     YESNO.
     CURENROL
                    YESNO.
     FTNUM
                     FTNUM.
     PTENROLL
                     YESNO.
     PTDEGREE
                 PTDEGREE.
     PTNUM
                     FTNUM.
     OTNONCR
                     YESNO.
     OTCORRS
                     YESNO.
     OTPRIV
                     YESNO.
     OTGROUP
                     YESNO.
     OTBASIC
                    YESNO.
```

OTENGL	YESNO.
OTOTHER	YESNO.
OTGED	YESNO.
OTCOMP	YESNO.
OTCLASS	YESNO.
OTNUM	OTNUM.
CRDEGREE	YESNO.
TAKEREA1	TAKEREAS.
TAKEREA2	TAKEREAS.
TAKEREA3	TAKEREAS.
TAKEREA4	TAKEREAS.
EMPLREA1	YESNO.
EMPLREA2	YESNO.
EMPLREA3	YESNO.
EMPLREA4	YESNO.
TRNMGMT1	YESNO.
TRNMGMT2	YESNO.
TRNMGMT3	YESNO.
TRNMGMT4	YESNO.
TRNSUPR1	YESNO.
TRNSUPR2	YESNO.
TRNSUPR3	YESNO.
TRNSUPR4	YESNO.
TRNPROF1	YESNO.
TRNPROF2	YESNO.
TRNPROF3	YESNO.
TRNPROF4	YESNO.
TRNTECH1	YESNO.
TRNTECH2	YESNO.
TRNTECH3	YESNO.
TRNTECH4	YESNO.
TRNCS1	YESNO.
TRNCS2	YESNO.
TRNCS3	YESNO.
TRNCS4	YESNO.
TRNHLTH1	YESNO.
TRNHLTH2	YESNO.
TRNHLTH3	YESNO.
TRNHLTH4	YESNO.
TRNOC1	YESNO.
TRNOC2	YESNO.
TRNOC3	YESNO.
TRNOC4	YESNO.
TRNSALE1	YESNO.
TRNSALE2	YESNO.
TRNSALE3	YESNO.
TRNSALE4	YESNO.
TRNEMPL1	YESNO.
TRNEMPL2	YESNO.
TRNEMPL3	YESNO.
TRNEMPL4	YESNO.
TRNOTHE1	YESNO.
TRNOTHE2	YESNO.
TRNOTHE3	YESNO.

TRNOTHE4	YESNO.
REQUIRE1	YESNO.
REQUIRE2	YESNO.
REQUIRE3	YESNO.
REQUIRE4	YESNO.
DEGREE1	DEGREE.
DEGREE2	DEGREE.
DEGREE3	DEGREE.
DEGREE4	DEGREE.
LICENSE1	YESNO.
LICENSE2	YESNO.
LICENSE3	YESNO.
LICENSE4	YESNO.
OBTAIN1	OBTAIN.
OBTAIN2	OBTAIN.
OBTAIN3	OBTAIN.
OBTAIN4	OBTAIN.
SPONTYP1	SPONTYPE.
SPONTYP2	SPONTYPE.
SPONTYP3	SPONTYPE.
SPONTYP4	
-	SPONTYPE.
EMPLPRO1	YESNO.
EMPLPRO2	YESNO.
EMPLPRO3	YESNO.
EMPLPRO4	YESNO.
EMPLTIM1	YESNO.
EMPLTIM2	YESNO.
EMPLTIM3	YESNO.
EMPLTIM4	YESNO.
EMPLONL1	YESNO.
EMPLONL2	YESNO.
EMPLONL3	YESNO.
EMPLONL4	YESNO.
ATWORK1	YESNO.
ATWORK2	YESNO.
-	YESNO.
ATWORK3	
ATWORK4	YESNO.
EMPLREQ1	YESNO.
EMPLREQ2	YESNO.
EMPLREQ3	YESNO.
EMPLREQ4	YESNO.
TIMEOFF1	YESNO.
TIMEOFF2	YESNO.
TIMEOFF3	YESNO.
TIMEOFF4	YESNO.
CORRESP1	YESNO.
CORRESP2	YESNO.
CORRESP3	YESNO.
CORRESP4	YESNO.
MAILTV1	MAILTV.
MAILTV2	
	MAILTV.
MAILTV3	MAILTV.
MAILTV4	MAILTV.
PAIDFAM1	YESNO.

PAIDFAM2	YESNO.
PAIDFAM3	YESNO.
PAIDFAM4	YESNO.
PAIDFED1	YESNO.
PAIDFED2	YESNO.
PAIDFED3	YESNO.
PAIDFED4	YESNO.
PAIDSTA1	YESNO.
PAIDSTA2	YESNO.
PAIDSTA3	YESNO.
PAIDSTA4	YESNO.
PAIDBUS1	YESNO.
PAIDBUS2	YESNO.
PAIDBUS3	YESNO.
PAIDBUS4	YESNO.
PAIDPRI1	YESNO.
PAIDPRI2	YESNO.
PAIDPRI3	YESNO.
PAIDPRI4	YESNO.
PAIDOTH1	YESNO.
PAIDOTH2	YESNO.
PAIDOTH3	YESNO.
PAIDOTH4	YESNO.
PAIDFRE1	PAIDFREE.
PAIDFRE2	PAIDFREE.
PAIDFRE3	PAIDFREE.
PAIDFRE4	PAIDFREE.
PAIDUNI1	YESNO.
PAIDUNI2	YESNO.
PAIDUNI3	YESNO.
PAIDUNI4	YESNO.
PAIDEMP1	YESNO.
PAIDEMP2	YESNO.
PAIDEMP3	YESNO.
PAIDEMP4	YESNO.
TUITION1	TUITION.
TUITION2	TUITION.
TUITION3	TUITION.
TUITION4	TUITION.
TUITONE1	YESNO.
TUITONE2	YESNO.
TUITONE3	YESNO.
TUITONE4	YESNO.
TUITNUM1	FTNUM.
TUITNUM2	FTNUM.
TUITNUM3	FTNUM.
TUITNUM4	FTNUM.
CLASNUM1	CLASNUM.
CLASNUM2	CLASNUM.
CLASNUM3	CLASNUM.
CLASNUM4	CLASNUM.
CLASUNI1	UNITS.
CLASUNI2	UNITS.
CLASUNI3	UNITS.
CHMOONIO	ONIIS.

CLASUNI4	UNITS.
CLASHRS1	CLASHRS.
CLASHRS2	CLASHRS.
CLASHRS3	CLASHRS.
CLASHRS4	CLASHRS.
COMPLET1	YESNO.
COMPLET2	YESNO.
COMPLET3	YESNO.
COMPLET4	YESNO.
TAKING1	TAKING.
TAKING2	TAKING.
TAKING3	TAKING.
TAKING4	TAKING.
BASIC	YESNO.
ENGLISH	YESNO.
CITIZEN	YESNO.
AECOURSE	YESNO.
AEPAST3	YESNO.
AEJOB	YESNO.
AEBASIC	YESNO.
AELICENS	YESNO.
PREVJOB	YESNO.
PREVTIME	YESNO.
PREVCOST	YESNO.
PREVLOCA	YESNO.
PREVTRAN	YESNO.
PREVCHIL	YESNO.
PREVFAM	YESNO.
PREVINFO	YESNO.
PREVINT	YESNO.
PREVOTHR	YESNO.
PREVOLD	YESNO.
PREVSICK	YESNO.
PREVDSIR	YESNO.
PREVMOTV	YESNO.
PREVTIRD	YESNO.
PREVBUSY	YESNO.
RACEVER	RACE.
HISPVER	YESNO.
SEXVER	SEXVER.
EVERMARI	YESNO.
MARISTAT	MARISTAT.
WORKPAY	YESNO.
WORKWEEK	WORKWEEK.
VACATION	YESNO.
LEAVEMM	MONTH1X.
LEAVEYY	LEAVEYY.
WORKHRS	HOURS.
LOOKWORK	YESNO.
LOOKPUBL	YESNO.
LOOKPRIV	YESNO.
LOOKEMPL	YESNO.
LOOKFRND	YESNO.
LOOKADS	YESNO.

T 0012310 FF11	1150110
LOOKNOTH	YESNO.
LOOKOTHR	YESNO.
LASTACTY	LASTACTY.
UNDER16	YESNO.
UNDER16N	UNDER16N.
HIGHGRAD	HIGHGRAD.
HSDIPLMA	YESNO.
MAINACTY	MAINACTY.
LIBMO	YESNO.
LIBYR	YESNO.
CENSUSDV	CENSUSDV.
CENSUSRG	CENSUSRG.
MAINRSLT	\$SURVR.
MILFLG	YESNO.
REGION	REGIONED.
SAMPSTAT	SAMPSTAT.
SIC	\$SIC.
SOC	\$SOC.
URBAN	URBAN.
AEBASLIT	DYESNO.
AEDEGREQ	DYESNO.
AEEMPREA	DYESNO.
AEEMPREO	AEEMPREO.
AEESL	DYESNO.
AEEVER	AEEVER.
AELABOR	AELABOR.
AELICNS	DYESNO.
AENUMCSE	AENUMCSE.
AEPARANY	DYESNO.
AEPARTIC	DYESNO.
AEPRTIME	DYESNO.
AETRAIN	DYESNO.
CEMPREA1	
-	DYESNO.
CEMPREA2	DYESNO.
CEMPREA3	DYESNO.
CEMPREA4	DYESNO.
CNUMWKS1	CNUMWKS.
CNUMWKS2	CNUMWKS.
CNUMWKS3	CNUMWKS.
CNUMWKS4	CNUMWKS.
CREQUIR1	DYESNO.
CREQUIR2	DYESNO.
CREQUIR3	DYESNO.
CREQUIR4	DYESNO.
CTRAIN1	DYESNO.
CTRAIN2	DYESNO.
CTRAIN3	DYESNO.
CTRAIN4	DYESNO.
FTBASESL	DYESNO.
FTDEGREE	DYESNO.
FTNONDEG	DYESNO.
HIDEGREE	HIDEGREE.
INCLEVEL	INCLEVEL.
RACEETHN	RACEETHN.

```
SALARY SALARY.
SCHOOLNG SCHOOLNG.
   AELABF
                    YES.
   AGEF
                    YES.
   EVERMARF
                    YES.
   HIGHGRAF
                    YES.
   HISPVERF
                   YES.
   HSDIPLMF
                   YES.
                   YES.
   INCOMRNF
                    YES.
   MARISTAF
   NUMPERSF
                   YES.
   OWNHOMEF
                   YES.
   RACEVERF
                    YES.
   SALARYF
                    YES.
   SICF
                   YES.
   SOCF
                    YES.
   UNDER16F
                   YES.
RUN;
```

COURSE FILE SAS CONTROL CARDS

```
//READFILE JOB (account info), 'programmer name'
   EXEC XSAS, REGION=4096K
//SASLIB DD DSN=FORMAT.LIBRARY,DISP=SHR
//LIBRARY DD SPACE=(TRK, (50,50,60))
//WORK DD UNIT=SYSDA, SPACE=(24322, (1850, 1000),,, ROUND)
//IN1
        DD DSN=COURSE.DATA, DISP=SHR,
         UNIT=3400-6, VOL=SER=WV1919, LABEL=(2, SL),
//
//
         DCB=(RECFM=FB, LRECL=780, BLKSIZE=11700)
//SYSIN
        DD *
****************
** This is a SAS program which will read in the raw data **
** file into a SAS data file. The JCL is a generic one
** for an IBM SYSTEM/370. Each IBM facility will have **
** its own site specific commands and conventions. These **
** conventions must be implemented by the programmer.
**
*******************
DATA COURSE;
  INFILE IN1 MISSOVER;
  INPUT
   @1
         CLASID
                   $11.
   @12
        PERSID
                   $9.
   @21
        AGE
                   2.
   @23
         INCOMRNG
                   2.
        FTSCHOOL
   @25
                   2.
   @27
        CURENROL
                   2.
   @29
        OTNUM
                   2.
   @31
        OTNAME
                   $40.
   071
        CRDEGREE
                   2.
   @73
        TAKEREAS
                   2.
        EMPLREAS
   @75
                   2.
   a77
         TRNMGMT
                    2.
   @79
        TRNSUPR
                   2.
   @81
        TRNPROF
                   2.
        TRNTECH
                   2.
   083
   085
         TRNCS
                   2.
   @87
        TRNHLTH
                   2.
   089
        TRNOC
                   2.
        TRNSALES
   @91
                   2.
   @93
        TRNEMPL
                   2.
   @95
        TRNOTHER
                   2.
        REQUIRE
   @97
                   2.
   @99
         DEGREE
                    2.
   @101 LICENSE
                   2.
   @103 OBTAIN
                   2.
       SPONTYPE
   @105
                   2.
   @107
        EMPLPROV
                   2.
   @109 EMPLTIME
                   2.
   @111 EMPLONLY
                   2.
        ATWORK
   @113
   @115 EMPLREQ
```

@117	TIMEOFF	2.
@119	CORRESPN	2.
@121	MAILTV	2.
	PAIDFAM	
@125	PAIDFED	2.
	PAIDSTAT	
	PAIDBUSI	2.
	PAIDPRIV	
	PAIDOTHR	
	PAIDFREE	2.
	PAIDUNIV	
	PAIDEMPL	
	TUITION	
0141	TUITONE	0.2
	TUITONE	
	CLASNUM	
@155	CLASUNIT	2.
@157	CLASHRS	2.
@159	COMPLETE	
0161	TAKING	
@163	RACEVER	2.
@165	HISPVER SEXVER	2.
@167	SEXVER	2.
@169	MARISTAT	2.
@171	UNDER16	2.
@173	HIGHGRAD	2.
	HSDIPLMA	2.
	CENSUSDV	2.
@179	CENSUSRG	2.
@181	CENSUSRG MILFLG PSU	2.
@183	PSU	\$2.
@185	REGION	2.
@187	SAMPSTAT SIC SOC URBAN	2.
@189	STC	\$4.
0193	SOC	\$4.
@197	IIDBAN	2.
0199	VSTRAT	\$2.
@201	AEBASLIT	2.
0201		2.
	AEDEGREQ	
0205	AEEMPREA	2.
@207	AEEMPREQ	2.
@209	AEESL	2.
@211	AELABOR	2.
@213	AELICNS	2.
@215	AENUMCSE	2.
@217	AETRAIN	2.
@219	CEMPREAS	2.
@221	CNUMWKS	3.
@224	CREQUIRE	2.
@226	CTRAIN	2.
@228	FTBASESL	2.
@230	FTDEGREE	2.
@232	FTNONDEG	2.
@234	HIDEGREE	2.

@236	INCLEVEL	2.
@238	RACEETHN	2.
	SALARY	5.
0245		2.
	SCHOOLNG	
@247	AELABF	2.
0249	AGEF	2.
@251	HIGHGRAF	2.
@253	HISPVERF	2.
@255	HSDIPLMF	2.
@257	INCOMRNF	2.
	MARISTAF	2.
	RACEVERF	2.
	SALARYF	2.
	SICF	2.
@267	SOCF	2.
@269	UNDER16F	2.
	AEWT	10.3
	AEREPL1	10.3
	AEREPL2	10.3
	AEREPL3	10.3
	AEREPL4	10.3
@321	AEREPL5	10.3
@331	AEREPL6	10.3
0341	AEREPL7	10.3
	AEREPL8	10.3
	AEREPL9	10.3
	AEREPL10	10.3
	AEREPL11	10.3
	AEREPL12	10.3
@401	AEREPL13	10.3
@411	AEREPL14	10.3
@421	AEREPL15	10.3
	AEREPL16	10.3
	AEREPL17	10.3
	AEREPL18	10.3
	AEREPL19	10.3
	AEREPL20	10.3
@481	AEREPL21	10.3
@491	AEREPL22	10.3
@501	AEREPL23	10.3
@511	AEREPL24	10.3
0521	AEREPL25	10.3
@531	AEREPL26	10.3
0541	AEREPL27	10.3
@551	AEREPL28	10.3
@561	AEREPL29	10.3
@571	AEREPL30	10.3
@581	AEREPL31	10.3
0591	AEREPL32	10.3
0601	AEREPL33	10.3
0611	AEREPL34	10.3
		10.3
0621	AEREPL35	
0631	AEREPL36	10.3
@641	AEREPL37	10.3

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@651
       AEREPL38
                   10.3
 @661
       AEREPL39
                    10.3
 @671 AEREPL40
                   10.3
 @681 AEREPL41
                   10.3
       AEREPL42
 @691
                   10.3
      AEREPL43
 @701
                   10.3
 @711 AEREPL44
                   10.3
 @721 AEREPL45
                   10.3
       AEREPL46
 @731
                   10.3
      AEREPL47
 0741
                   10.3
 @751 AEREPL48
                   10.3
@761
      AEREPL49
                   10.3
@771
       AEREPL50
                   10.3
LABEL
  CLASID = "CLAS KEY = ADLTID || 2-DIGIT SEQUENTIAL#"
  PERSID = "PERS KEY = BASEID | 2-DIGIT PERSNUM"
          = "AGE AS OF JANUARY 1,1991"
  INCOMRNG = "S22A TOTAL HOUSEHOLD INCOME - RANGE"
  FTSCHOOL = "Ala FT ELEMENTARY OR HIGH SCHOOL"
  CURENROL = "A1B CURRENTLY ENROLLED AS FULL-TIME STND"
         = "A9 # OTHER CLASSES TAKEN DURING PAST 12"
  OTNUM
  OTNAME
          = "A10 MOST RECENT AE CLAS(FR ADLT.OTNAME#)"
  CRDEGREE = "All CLASSES FOR CREDIT TOWARD DEGREE"
  TAKEREAS = "A13 MAIN REASON FOR TAKING A10 CLASS"
  EMPLREAS = "A14 CAREER REASONS FOR TAKING A10 CLASS"
  TRNMGMT = "A17A EXECUTIVE MGMT DEVELOPMENT TRAINING"
  TRNSUPR = "A17B SUPERVISORY TRAINING"
  TRNPROF = "A17C PROFESSIONAL DEVELOPMENT TRAINING"
  TRNTECH = "A17D TECHNICAL/SKILLED WORKER TRAINING"
  TRNCS = "A17E WORD PROCESSING/COMPUTER SOFTWARE"
  TRNHLTH = "A17F JOB HEALTH AND SAFETY TRAINING"
  TRNQC = "A17G QUALITY CONTROL/STATISTICAL PROCESS"
  TRNSALES = "A17H SALES AND MARKETING TRAINING"
  TRNEMPL = "A17I NEW EMPLOYEE TRAINING"
  TRNOTHER = "A17J SOME OTHER KIND OF TRAINING"
  REQUIRE = "A18 TAKE A10 CLASS TO MEET REQUIREMENT"
  DEGREE = "A19 A10 CLASS FULFILLS TYPE REQUIREMENT"
  LICENSE = "A20 A10 CLASS TO OBTAIN/RENEW LICENSE"
  OBTAIN = "A200V OBTAIN OR RENEW LICENSE/CERTIFICAT"
  SPONTYPE = "A22 A10 CLASS SPONSORED BY TYPE ORG"
  EMPLPROV = "A23 A10 CLASS SPONSOR IS EMPLOYER"
  EMPLTIME = "A23A EMPLOYED AT TIME A10 CLASS TAKEN"
  EMPLONLY = "A24 A10 CLASS PARTICIPATN-EMPLOYEES ONLY"
  ATWORK = "A25 A10 CLASS GIVEN AT WORK"
  EMPLREQ = "A25A EMPLOYER REQUIRED A10 CLASS"
  TIMEOFF = "A26 GIVEN TIME OFF TO TAKE A10 CLASS"
  CORRESPN = "A27 A10 CLASS A CORRESPONDENCE COURSE"
  MAILTV = "A28 A10 CORR COURSE - TYPE INSTRUCTION"
  PAIDFAM = "A29A YOU OR FAMILY PAID"
  PAIDFED = "A29B FEDERAL GOVERNMENT PAID"
  PAIDSTAT = "A29C STATE/COUNTY/LOCAL GOVERNMENT PAID"
  PAIDBUSI = "A29D BUSINESS OR INDUSTRY PAID"
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PAIDPRIV = "A29E PRIVATE ORGANIZATION PAID" PAIDOTHR = "A29F SOMEONE ELSE PAID" PAIDFREE = "A29G THERE WAS NO CHARGE" PAIDUNIV = "A29H POST-SEC INST PAID-RECODE" PAIDEMPL = "A30 EMPLOYER WAS SOURCE OF PAYMENT" TUITION = 'A31 AMOUNT PAID FOR TUITION & FEES A10' TUITONE = "A31A TUITION FOR MORE THAN ONCE COURSE?" TUITNUM = "A31B NUMBER OF COURSES TUITION COVERS" CLASNUM = "A32 # WEEKS A10 CLASS SCHEDULED TO RUN" CLASUNIT = "A32 UNITS A10 CLASS SCHEDULED TO RUN" CLASHRS = "A33 # HOURS PER WEEK A10 CLASS SCHEDULED" COMPLETE = "A34 COMPLETED A10 CLASS" TAKING = "A34A STILL TAKING COURSE OR DROPPED COUR" RACEVER = "A42A RACE VERIFICATION" HISPVER = "A42A1 RESPONDENT OF HISPANIC ORIGIN" SEXVER = "A42B S42B GENDER VERIFICATION" MARISTAT = "A44 CURRENTLY MARRIED" UNDER16 = "A57 HAVE ANY KIDS < 16 WHO LIVE W/YOU" HIGHGRAD = "A59 HIGHEST GRADE COMPLETED" HSDIPLMA = "A60 RECEIVE HIGH SCHOOL DIPLOMA OR EQUIV" CENSUSDV = "CENSUS DIVISION" CENSUSRG = "CENSUS REGION" MILFLG = "MILITARY FLAG" = "FOR TAYLOR SERIES VARIANCE" REGION = "DEPARTMENT OF EDUCATION REGION" SAMPSTAT = "PARTICIPATION STATUS AT SAMPLING" = "INDUSTRY CODE" STC = "OCCUPATION CODE" SOC URBAN = "URBANICITY" VSTRAT = "FOR TAYLOR SERIES VARIANCE" AEBASLIT = "D-ADULT EDUCATION TO IMPROVE SKILLS" AEDEGREQ = "D-ADULT EDUCATION REQUIRED F/DEGREE" AEEMPREA = "D-ADULT EDUCATION F/JOB-RELATED REASON" AEEMPREQ = "D-ADULT EDUCATION REQUIRED BY EMPLOYER" AEESL = "D-ADULT EDUCATION F/ENGLISH AS 2ND LANG" AELABOR = "D-LABOR FORCE STATUS" AELICNS = "D-ADULT EDUCATION F/LICENSE/CERTIFICATE" AENUMCSE = "D-TOTAL # AE COURSES TAKEN IN PAST 12M" AETRAIN = "D-ADULT EDUCATION W/TRAINING COMPONENT" CEMPREAS = "D-JOB RELATED REASON FOR TAKING COURSE" CNUMWKS = "D-NUMBER OF WEEKS SCHEDULED TO RUN" CREQUIRE = "D-REQRD FOR CERTIF OF COMPLETION/DIPLOMA" CTRAIN = "D-ANY TRAINING COMPONENT IN COURSE" FTBASESL = "D-F/T BASIC SKILLS/ESL COURSE" FTDEGREE = "D-FULLTIME ASSOC/BACH DEGREE PROGRAM" FTNONDEG = "D-F/T NONDEG PGM" HIDEGREE = "D-HIGHEST DEGREE ATTAINED" INCLEVEL = "D-LEVEL OF INCOME" RACEETHN = "D-RACE-ETHNICITY" SALARY = "D-ANNUAL SALARY/CURRENT OR MOST RCNT JOB" SCHOOLNG = "D-YEARS OF SCHOOL COMPLETED" AELABF = "IMPUTATION FLAG FOR LABOR FORCE STATUS" AGEF = "IMPUTATION FLAG FOR AGE"

HIGHGRAF = "IMPUTATION FLAG FOR HIGHGRAD"

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HISPVERF = "IMPUTATION FLAG FOR HISPVER"
HSDIPLMF = "IMPUTATION FLAG FOR HSDIPLMA"
INCOMRNF = "INCOMRNG IMPUTED FLAG"
MARISTAF = "IMPUTATION FLAG FOR MARISTAT"
RACEVERF = "IMPUTATION FLAG FOR RACEVER"
SALARYF = "IMPUTATION FLAG FOR SALARY"
       = "IMPUTATION FLAG FOR SIC"
SICF
SOCF
       = "IMPUTATION FLAG FOR SOC"
UNDER16F = "IMPUTATION FLAG FOR UNDER16"
\Delta E W T
       = "FINAL ADULT WEIGHT"
AEREPL1 = "REPLICATE WEIGHT"
AEREPL2 = "REPLICATE WEIGHT"
AEREPL3 = "REPLICATE WEIGHT"
AEREPL4 = "REPLICATE WEIGHT"
AEREPL5 = "REPLICATE WEIGHT"
AEREPL6 = "REPLICATE WEIGHT"
AEREPL7 = "REPLICATE WEIGHT"
AEREPL8 = "REPLICATE WEIGHT"
AEREPL9 = "REPLICATE WEIGHT"
AEREPL10 = "REPLICATE WEIGHT"
AEREPL11 = "REPLICATE WEIGHT"
AEREPL12 = "REPLICATE WEIGHT"
AEREPL13 = "REPLICATE WEIGHT"
AEREPL14 = "REPLICATE WEIGHT"
AEREPL15 = "REPLICATE WEIGHT"
AEREPL16 = "REPLICATE WEIGHT"
AEREPL17 = "REPLICATE WEIGHT"
AEREPL18 = "REPLICATE WEIGHT"
AEREPL19 = "REPLICATE WEIGHT"
AEREPL20 = "REPLICATE WEIGHT"
AEREPL21 = "REPLICATE WEIGHT"
AEREPL22 = "REPLICATE WEIGHT"
AEREPL23 = "REPLICATE WEIGHT"
AEREPL24 = "REPLICATE WEIGHT"
AEREPL25 = "REPLICATE WEIGHT"
AEREPL26 = "REPLICATE WEIGHT"
AEREPL27 = "REPLICATE WEIGHT"
AEREPL28 = "REPLICATE WEIGHT"
AEREPL29 = "REPLICATE WEIGHT"
AEREPL30 = "REPLICATE WEIGHT"
AEREPL31 = "REPLICATE WEIGHT"
AEREPL32 = "REPLICATE WEIGHT"
AEREPL33 = "REPLICATE WEIGHT"
AEREPL34 = "REPLICATE WEIGHT"
AEREPL35 = "REPLICATE WEIGHT"
AEREPL36 = "REPLICATE WEIGHT"
AEREPL37 = "REPLICATE WEIGHT"
AEREPL38 = "REPLICATE WEIGHT"
AEREPL39 = "REPLICATE WEIGHT"
AEREPL40 = "REPLICATE WEIGHT"
AEREPL41 = "REPLICATE WEIGHT"
AEREPL42 = "REPLICATE WEIGHT"
AEREPL43 = "REPLICATE WEIGHT"
AEREPL44 = "REPLICATE WEIGHT"
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AEREPL45 = "REPLICATE WEIGHT"
   AEREPL46 = "REPLICATE WEIGHT"
   AEREPL47 = "REPLICATE WEIGHT"
   AEREPL48 = "REPLICATE WEIGHT"
   AEREPL49 = "REPLICATE WEIGHT"
   AEREPL50 = "REPLICATE WEIGHT"
PROC FORMAT;
  VALUE AGE
        -1 = 'INAPPLICABLE'
         -7 = 'REFUSED'
        -8 = 'DK'
        -9 = 'NOT ASCERTAINED'
   16 - 80 = "ADULT'S AGE"
     2 - 9 = "CHILD'S AGE"
 VALUE INCOMRNG
        -1 = 'INAPPLICABLE'
         -7 = 'REFUSED'
        -8 = 'DK'
         -9 = 'NOT ASCERTAINED'
         0 = 'BLANKS ALLOWED'
         1 = '$5,000 \text{ OR LESS'}
        10 = 'OVER $75,000'
          2 = $^{1}5,001 \text{ TO } $10,000
          3 = '$10,001 \text{ TO } $15,000'
          4 = '$15,001 \text{ TO } $20,000'
          5 = '$20,001 \text{ TO } $25,000'
          6 = '$25,001 \text{ TO } $30,000'
          7 = '$30,001 \text{ TO } $40,000'
          8 = '$40,001 \text{ TO } $50,000'
          9 = $^{$50,001} \text{ TO } $75,000
  VALUE YESNO
        -1 = 'INAPPLICABLE'
        -7 = 'REFUSED'
        -8 = 'DK'
         -9 = 'NOT ASCERTAINED'
         1 = 'YES'
         2 = 'NO'
  VALUE OTNUM
        -1 = 'INAPPLICABLE'
         -7 = 'REFUSED'
         -8 = 'DK'
        -9 = 'NOT ASCERTAINED'
    0 - 40 = 'NUMBER OF OTHER COURSES'
```

```
VALUE $OTNAME
   OTHER = 'COURSE NAME'
    ' ' = 'NA/MISSING'
    '-1' = 'INAPPLICABLE'
    '-7' = 'REFUSED'
    '-8' = 'DK'
    '-9' = 'NOT ASCERTAINED'
VALUE TAKEREAS
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
       1 = 'PERSONAL, FAMILY, OR SOCIAL REASON'
       2 = 'TO IMPROVE, ADVANCE, KEEP UP CURRENT JOB'
       3 = 'TO TRAIN FOR A NEW JOB OR CAREER'
       4 = 'TO IMPROVE READING, WRITING, MATH SKILLS'
       5 = 'TO MEET REQUIREMENT FOR DIPLOMA/DEGREE'
      91 = 'OTHER REASON'
VALUE DEGREE
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
       0 = 'INELIGIBLE TYPE REPORTED'
       1 = '8TH GRADE CERTIFICATE OF COMPLETION'
       2 = 'HIGH SCHOOL DIPLOMA (INCL EQUIVALENCY)'
       3 = 'VOCATIONAL DIPLOMA OR CERTIFICATE'
       4 = '2-YEAR DEGREE FROM COLLEGE OR TECHNICAL'
       5 = '4-YEAR DEGREE FROM COLLEGE OR UNIVERSITY'
       6 = 'GRADUATE OR PROFESSIONAL DEGREE/CERTIF'
       7 = 'COLLEGE CERTIFICATE'
       8 = 'LICENSE'
      91 = 'OTHER (SPECIFY)'
VALUE OBTAIN
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
       1 = 'OBTAIN LICENSE OR CERTIFICATION'
       2 = 'RENEW LICENSE OR CERTIFICATION'
```

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```
VALUE SPONTYPE
          -1 = 'INAPPLICABLE'
          -7 = 'REFUSED'
          -8 = 'DK'
          -9 = 'NOT ASCERTAINED'
           1 = 'ELEMENTARY/JUNIOR HIGH/HIGH SCHOOL'
          10 = 'PRIVATE COMMUNITY ORGANIZATION'
           2 = '2-YR COMMUNITY/JR COLLEGE/TECHNICAL INST'
           3 = '4-YR COLLEGE OR UNIVERSITY'
           4 = 'VOCA/TRADE/BUSINESS/HOSPITAL/FLIGHT SCHL'
           5 = 'TUTOR OR PRIVATE INSTRUCTOR'
           6 = 'BUSINESS OR INDUSTRY'
           7 = 'LABOR ORGANIZATION OR PROFESSIONAL ASSOC'
           8 = 'LIBRARY'
           9 = "FEDERAL/STATE/COUNTY/LOCAL GOV'T AGENCY"
          91 = 'SOMEONE ELSE'
   VALUE MAILTV
          -1 = 'INAPPLICABLE'
          -7 = 'REFUSED'
          -8 = 'DK'
          -9 = 'NOT ASCERTAINED'
           1 = 'THROUGH THE MAIL'
           2 = 'BY TELEVISION OR RADIO'
   VALUE PAIDFREE
          -1 = 'INAPPLICABLE'
          -7 = 'REFUSED'
          -8 = 'DK'
          -9 = 'NOT ASCERTAINED'
           1 = 'NO CHARGE'
           2 = 'CHARGE'
   VALUE TUITION
          -1 = 'INAPPLICABLE'
          -7 = 'REFUSED'
          -8 = 'DK'
          -9 = 'NOT ASCERTAINED'
 0.5 - 10000 = 'TUITION AMOUNT'
;
   VALUE FTNUM
          -1 = 'INAPPLICABLE'
          -7 = 'REFUSED'
          -8 = 'DK'
          -9 = 'NOT ASCERTAINED'
      2 - 27 = 'NUMBER OF CLASSES'
   VALUE CLASNUM
          -1 = 'INAPPLICABLE'
          -7 = 'REFUSED'
          -8 = 'DK'
          -9 = 'NOT ASCERTAINED'
      1 - 60 = 'NUMBER OF UNITS SCHEDULED TO RUN'
```

```
VALUE UNITS
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
       1 = 'WEEKS'
       2 = 'MONTHS'
       3 = 'SEMESTERS'
       4 = 'QUARTERS'
       5 = 'YEARS'
VALUE CLASHRS
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
  1 - 84 = 'HOURS PER WEEK'
VALUE TAKING
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
       1 = 'STILL TAKING COURSE'
       2 = 'DROPPED COURSE'
VALUE RACE
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
       1 = 'WHITE'
       2 = 'BLACK'
       3 = 'NATIVE AMERICAN OR ALASKAN NATIVE'
       4 = 'ASIAN OR PACIFIC ISLANDER'
      91 = 'SOME OTHER RACE'
VALUE SEXVER
      -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
      -9 = 'NOT ASCERTAINED'
       1 = 'MALE'
       2 = 'FEMALE'
```

```
VALUE MARISTAT
       -1 = 'INAPPLICABLE'
      -7 = 'REFUSED'
      -8 = 'DK'
       -9 = 'NOT ASCERTAINED'
       1 = 'MARRIED'
       2 = 'SEPARATED'
       3 = 'DIVORCED'
        4 = 'WIDOWED'
VALUE HIGHGRAD
      -1 = 'INAPPLICABLE'
       -7 = 'REFUSED'
       -8 = 'DK'
       -9 = 'NOT ASCERTAINED'
       1 = 'UP TO EIGHTH GRADE'
        2 = 'NINTH TO ELEVENTH GRADE'
        3 = 'HIGH SCHOOL DIPLOMA OR EQUIVALENT'
        4 = 'VOCATIONAL/TECHNICAL AFTER HIGH SCHOOL'
        5 = '1-2 YEARS OF COLLEGE'
        6 = "ASSOCIATE'S DEGREE"
        7 = '3-4 \text{ YEARS OF COLLEGE'}
        8 = "BACHELOR'S DEGREE"
        9 = 'GRADUATE OR PROFESSIONAL SCHOOL'
VALUE CENSUSDV
       -1 = 'INAPPLICABLE'
        1 = 'NEW ENGLAND'
        2 = 'MIDDLE ATLANTIC'
        3 = 'EAST NORTH CENTRAL'
        4 = 'WEST NORTH CENTRAL'
        5 = 'SOUTH ATLANTIC'
        6 = 'EAST SOUTH CENTRAL'
        7 = 'WEST SOUTH CENTRAL'
        8 = 'MOUNTAIN'
        9 = 'PACIFIC'
VALUE CENSUSRG
       -1 = 'INAPPLICABLE'
       1 = 'NORTHEAST'
        2 = 'MIDWEST'
        3 = 'SOUTH'
        4 = 'WEST'
VALUE YES
      -1 = 'INAPPLICABLE'
       1 = 'IMPUTED VALUE'
```

```
VALUE REGIONED
      -1 = 'INAPPLICABLE'
      -9 = 'NOT ASCERTAINED'
       1 = 'NORTHEAST'
       2 = 'CENTRAL'
       3 = 'SOUTHEAST'
       4 = 'WEST'
VALUE SAMPSTAT
       1 = 'NONPARTICIPANT'
       2 = 'FULL-TIME DEGREE SEEKING'
       3 = 'OTHER (PART-TIME)'
VALUE $SIC
  '-1 ' = 'INAPPLICABLE'
  '-7 ' = 'REFUSED'
  '-8
      ' = 'UNKNOWN'
  '-9 ' = 'UNACCERTAINED'
  'A
       ' = 'AGRICULTURE, FORESTRY, AND FISHING'
  'B
      ' = 'MINING'
  'C
       ' = 'CONSTRUCTION'
  'D ' = 'MANUFACTURING'
  'D35 ' = 'INDUSTRIAL MACHINERY AND EQUIPMENT'
  'D36 ' = 'ELECTRONIC AND OTHER ELECTRIC EQUIPMENT'
  'D37 ' = 'TRANSPORTATION EQUIPMENT'
       ' = 'TRANSPORTATION AND PUBLIC UTILITIES'
  'E41 ' = 'LOCAL AND INTERURBAN PASSENGER TRANSIT'
  'E42 ' = 'TRUCKING AND WAREHOUSING'
  'E43 ' = 'U.S. POSTAL SERVICE'
  'E48 ' = 'COMMUNICATIONS'
  'E49 ' = 'ELECTRIC, GAS, AND SANITARY SERVICES'
       ' = 'WHOLESALE TRADE'
       ' = 'RETAIL TRADE'
  'H ' = 'FINANCE, INSURANCE, AND REAL ESTATE'
      ' = 'SERVICES'
  'I737' = 'COMPUTER AND DATA PROCESSING'
  'I80 ' = 'HEALTH SERVICES'
  'I81 ' = 'LEGAL SERVICES'
  '1821' = 'ELEMENTARY AND SECONDARY SCHOOLS'
  '1822' = 'COLLEGES AND UNIVERSITIES'
  'I824' = 'VOCATIONAL SCHOOL'
  '187 ' = 'ENGINEERING AND MANAGEMENT'
  'J ' = 'PUBLIC ADMINISTRATION'
  'J914' = 'FEDERAL GOVERNMENT'
  'J915' = 'STATE OR LOCAL GOVERNMENT'
  'J971' = 'NATIONAL SECURITY'
  'K ' = 'NONCLASSIFIABLE ESTABLISHMENTS'
```

```
VALUE $SOC
  '-1 ' = 'INAPPLICABLE'
  '-7 ' = 'REFUSED'
  '-8 ' = 'UNKNOWN'
  '-9 ' = 'UNACCERTAINED'
  ' A
       ' = 'EXECUTIVE, ADMIN, MANAGERIAL OCCUPATIONS'
  'B ' = 'ENGINEERS, SURVEYORS, AND ARCHITECTS'
  'C ' = 'NATURAL SCIENTISTS, AND MATHEMATICIANS'
  'C171' = 'COMPUTER SCIENTISTS'
  'D19 ' = 'SOCIAL SCIENTISTS, AND URBAN PLANNERS'
  'D20 ' = 'SOCIAL, RECREATION, AND RELIGIOUS WORKERS'
  'D21 ' = 'LAWYERS AND JUDGES'
  'E22 ' = 'TEACHERS; COLL., UNIV., POSTSECONDARY INST.'
  'E23 ' = 'TEACHERS, EXCEPT POSTSECONDARY INST.'
  'E24 ' = 'VOCATIONAL AND EDUCATIONAL COUNSELORS'
  'E25 ' = 'LIBRARIANS, ARCHIVISTS, AND CURATORS'
  'F26 ' = 'PHYSICIANS AND DENTISTS'
  'F27 ' = 'VETERINARIANS'
  'F28 ' = 'OTHER HEALTH DIAG/TREATING PRACTITIONERS'
  'G29 ' = 'REGISTERED NURSES'
  'G30 ' = "PHARM., DIET., THERAPISTS, PHYSICIAN'S ASST"
  'H ' = 'WRITERS, ARTISTS, ENTERTAINERS, ATHLETES'
       ' = 'HEALTH TECHNOLOGISTS AND TECHNICIANS'
  'J37 ' = 'ENGINEERING/TECHNOLOGISTS, TECHNICIANS'
  'J38 ' = 'SCIENCE TECHNOLOGISTS AND TECHNICIANS'
  'J39 ' = 'TECHNICIANS; EXCEPT HEALTH, ENG., SCIENCE'
      ' = 'MARKETING AND SALES OCCUPATIONS'
      ' = 'ADMINISTRATIVE SUPPORT, INCL CLERICAL'
  'M ' = 'SERVICE OCCUPATIONS'
      ' = 'AGRICULTURE, FORESTRY, FISHING OCCUPATIONS'
     ' = 'MECHANICS AND REPAIRERS'
  '0611' = 'VEHICLE, MOBILE EQUIP. MECHANICS/REPAIRER'
  '0615' = 'ELECTRIC, ELECTRONIC EQUIPMENT REPAIRERS'
      ' = 'CONSTUCTION AND EXTRACTIVE OCCUPATIONS'
       ' = 'PRECISION PRODUCTION OCCUPATIONS'
      ' = 'PRODUCTION WORKING OCCUPATIONS'
  'S ' = 'TRANSPORTATION, MATERIAL MOVING'
  'S821' = 'MOTOR VEHICLE OPERATORS'
      ' = 'HANDLERS, EQUIP. CLEANERS, HELPERS, LABORER'
  'U ' = 'MILITARY OCCUPATIONS'
  'V ' = 'MISCELLANEOUS OCCUPATIONS'
  ľΥ
     ' = 'HOUSEWIFE'
     ' = 'UNEMPL, RETIRED, DISABLED, UNCLASSIFIABLE'
  ' Z
VALUE URBAN
      -1 = 'INAPPLICABLE'
      -9 = 'NOT ASCERTAINED'
       0 = 'NON'
       1 = 'MSA'
       2 = 'NECMA'
```

```
VALUE DYESNO
       . = 'NA/MISSING'
       0 = 'NO'
       1 = 'YES'
VALUE AEEMPREQ
       . = 'NA/MISSING'
       0 = 'NO'
       1 = 'YES'
       2 = 'N/EMP WHEN TAKING'
VALUE AELABOR
       . = 'NA/MISSING'
       1 = 'EMPLOYED'
       2 = 'UNEMPLOYED'
       3 = 'NOT IN LABOR FORCE'
VALUE AENUMCSE
       . = 'NA/MISSING'
  0 - 40 = 'COURSES TAKEN'
VALUE CNUMWKS
       . = 'NA/MISSING'
 1 - 624 = 'WEEKS SCHEDULED'
VALUE HIDEGREE
       . = 'NA/MISSING'
       1 = 'LESS THAN H/S DIP'
       2 = 'H/S DIP/EQUIV'
       3 = 'ASSOCIATE DEG'
       4 = 'BACH DEG/HIGHER'
VALUE INCLEVEL
       . = 'NA/MISSING'
       1 = '$10,000 \text{ OR LESS'}
       2 = '$10,001-$15,000'
       3 = '$15,001-$20,000'
       4 = '$20,001-$25,000'
       5 = '$25,001-$30,000'
       6 = '$30,001-$40,000'
       7 = '$40,001-$50,000'
       8 = '$50,001-$75,000'
       9 = 'OVER $75,000'
VALUE RACEETHN
       . = 'NA/MISSING'
       1 = 'WHITE, NON-HISPANIC'
       2 = 'BLACK, NON-HISPANIC'
       3 = 'HISPANIC'
       4 = 'ALL OTHER RACES'
```

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```
VALUE SALARY
            . = 'NA/MISSING'
1000 - 75000 = 'SALARY'
    VALUE SCHOOLNG
           . = 'NA/MISSING'
           1 = 'UP TO 8TH GRD'
           2 = '9-11 \text{ GRADE'}
           3 = '12TH GRADE'
           4 = 'VOC AFTER H/S'
           5 = 'SOME COLLEGE'
           6 = 'ASSOCIATE DEG'
           7 = 'BACH DEG/HIGHER'
    VALUE DYES
           -1 = 'INAPPLICABLE'
           . = 'NA/MISSING'
           1 = 'IMPUTED VALUE'
RUN;
FORMAT
                       AGE.
     AGE
     INCOMRNG
                  INCOMRNG.
     FTSCHOOL
                     YESNO.
     CURENROL
                     YESNO.
     OTNUM
                      OTNUM.
     OTNAME
                   $OTNAME.
     CRDEGREE
                     YESNO.
     TAKEREAS
                  TAKEREAS.
     EMPLREAS
                      YESNO.
     TRNMGMT
                      YESNO.
     TRNSUPR
                      YESNO.
     TRNPROF
                      YESNO.
     TRNTECH
                      YESNO.
     TRNCS
                      YESNO.
     TRNHLTH
                      YESNO.
     TRNQC
                      YESNO.
     TRNSALES
                      YESNO.
     TRNEMPL
                      YESNO.
     TRNOTHER
                     YESNO.
     REQUIRE
                      YESNO.
     DEGREE
                    DEGREE.
     LICENSE
                     YESNO.
     OBTAIN
                     OBTAIN.
      SPONTYPE
                  SPONTYPE.
     EMPLPROV
                      YESNO.
     EMPLTIME
                      YESNO.
     EMPLONLY
                      YESNO.
     ATWORK
                      YESNO.
     EMPLREQ
                      YESNO.
     TIMEOFF
                     YESNO.
                     YESNO.
     CORRESPN
     MAILTV
                    MAILTV.
```

	1150110
PAIDFAM	YESNO.
PAIDFED	YESNO.
PAIDSTAT	YESNO.
PAIDBUSI	YESNO.
PAIDPRIV	YESNO.
PAIDOTHR	YESNO.
PAIDFREE	PAIDFREE.
PAIDUNIV	YESNO.
PAIDEMPL	YESNO.
TUITION	TUITION.
TUITONE	YESNO.
TUITNUM	FTNUM.
CLASNUM	CLASNUM.
CLASUNIT	UNITS.
CLASHRS	CLASHRS.
COMPLETE	YESNO.
TAKING	TAKING.
RACEVER	RACE.
HISPVER	YESNO.
SEXVER	SEXVER.
MARISTAT	MARISTAT.
UNDER16	YESNO.
HIGHGRAD	HIGHGRAD.
HSDIPLMA	YESNO.
CENSUSDV	CENSUSDV.
CENSUSRG	CENSUSRG.
MILFLG	YES.
REGION	REGIONED.
SAMPSTAT	SAMPSTAT.
SIC	\$SIC.
SOC	\$SOC.
URBAN	URBAN.
AEBASLIT	DYESNO.
AEDEGREQ	DYESNO.
AEEMPREA	DYESNO.
AEEMPREQ	AEEMPREQ.
AEESL	DYESNO.
AELABOR	AELABOR.
AELICNS	DYESNO.
AENUMCSE	AENUMCSE.
AETRAIN	DYESNO.
CEMPREAS	DYESNO.
CNUMWKS	CNUMWKS.
	DYESNO.
CREQUIRE	
CTRAIN	DYESNO.
FTBASESL	DYESNO.
FTDEGREE	DYESNO.
FTNONDEG	DYESNO.
HIDEGREE	HIDEGREE.
INCLEVEL	INCLEVEL.
RACEETHN	RACEETHN.
SALARY	SALARY.
SCHOOLNG	SCHOOLNG.
AELABF	DYES.

```
AGEF
                     YES.
    HIGHGRAF
HISPVERF
                     YES.
                     YES.
     HSDIPLMF
                     YES.
     INCOMRNF
                     YES.
     MARISTAF
                     YES.
     RACEVERF
                     YES.
     SALARYF
                    DYES.
     SICF
                     YES.
     SOCF
                     YES.
     UNDER16F
                    YES.
RUN;
```

ADULT FILE SPSS-X CONTROL CARDS

```
//READFILE JOB (account info), 'programmer name'
         EXEC XSPSS, REGION=4096K
//LIBRARY DD SPACE=(TRK, (50,50,60))
//WORK DD UNIT=SYSDA, SPACE=(24322, (1850, 1000),,, ROUND)
        DD DSN=ADULT.DATA,DISP=SHR,
//IN1
//
             UNIT=3400-6, VOL=SER=WV1919, LABEL=(1, SL),
//
              DISP=(RECFM=FB, LRECL=1345, BLKSIZE=13450)
//SYSIN DD
*************
* *
** This is a SPSS program which will read in the raw data **
** file into a SPSS data file. The JCL is a generic one **
** for an IBM SYSTEM/370. Each IBM facility will have **
** its own site specific commands and conventions. These **
** conventions must be implemented by the programmer.
******************
DATA LIST FILE=IN1 FIXED /
   PERSID 1-9 (A)
             10-11
             12-13
   LIVENOW
   NUMPERS
             14-15
             16-17
   HOMETYPE
   OWNHOME
             18-19
   INCOMRNG
             20-21
   FTANY
             22-23
   FTSCHOOL
             24-25
   FTASSOC
             26-27
   FTBACHLR
             28-29
             30-31
   FTVOCA
   FTBASIC
             32-33
   FTENGLSH
             34-35
   FTOTHER
             36-37
             38-39
   FTGED
   FTCERT
             40-41
            42-43
   CURENROL
   FTNUM
             44-45
            46-47
   PTENROLL
   PTDEGREE 48-49
   PTNUM
             50-51
             52-53
   OTNONCR
   OTCORRS
             54-55
             56-57
   OTPRIV
   OTGROUP
             58-59
             60-61
   OTBASIC
   OTENGL
             62-63
   OTOTHER
             64-65
   OTGED
             66-67
   OTCOMP
             68-69
   OTCLASS
             70 - 71
             72-73
   OTNUM
   OTNAME1
             74-113 (A)
```

OTNAME2	114-153	(A)
OTNAME3	154-193	(A)
OTNAME4	194-233	
CRDEGREE	234-235	
TAKEREA1	236-237	
TAKEREA2	238-239	
TAKEREA3	240-241	
TAKEREA4	242-243	
EMPLREA1	244-245	
EMPLREA2	246-247	
EMPLREA3	248-249	
EMPLREA4	250-251	
TRNMGMT1	252-253	
TRNMGMT2	254-255	
TRNMGMT3	256-257	
TRNMGMT4	258-259	
TRNSUPR1	260-261	
TRNSUPR2	262-263	
TRNSUPR3	264-265	
TRNSUPR4	266-267	
TRNPROF1	268-269	
TRNPROF2	270-271	
TRNPROF3	272-273	
TRNPROF4	274-275	
TRNTECH1	276-277	
TRNTECH2	278-279	
TRNTECH3	280-281	
TRNTECH4	282-283	
TRNCS1	284-285	
TRNCS2	286-287	
TRNCS3	288-289	
TRNCS4	290-291	
TRNHLTH1	292-293	
TRNHLTH2	294-295	
TRNHLTH3	296-297	
TRNHLTH4	298-299	
TRNQC1	300-301	
TRNQC2	302-303	
TRNQC3	304-305	
TRNQC4	304-303	
TRNSALE1	308-309	
TRNSALE2	310-311	
TRNSALE3	312-313	
TRNSALE4	314-315	
TRNEMPL1	316-317	
TRNEMPL2	318-319	
TRNEMPL3	320-321	
TRNEMPL4	322-323	
TRNOTHE1	324-325	
TRNOTHE2	326-327	
TRNOTHE3	328-329	
TRNOTHE4	330-331	
REQUIRE1	332-333	
REQUIRE2	334-335	
~		

REQUIRE3	336-337
REQUIRE4	338-339
DEGREE1	340-341
DEGREE2	342-343
DEGREE3	344-345
DEGREE4	346-347
LICENSE1	348-349
LICENSE2	350-351
LICENSE3	352-353
LICENSE4	354-355
OBTAIN1	356-357
OBTAIN2	358-359
OBTAIN3	360-361
OBTAIN4	362-363
SPONTYP1	364-365
	366-367
SPONTYP2	
SPONTYP3	368-369
SPONTYP4	370-371
EMPLPRO1	372-373
EMPLPRO2	374-375
EMPLPRO3	376-377
EMPLPRO4	378-379
EMPLTIM1	380-381
EMPLTIM2	382-383
EMPLTIM3	384-385
EMPLTIM4	386-387
EMPLONL1	388-389
EMPLONL2	390-391
EMPLONL3	392-393
EMPLONL4	394-395
	396-397
ATWORK1	
ATWORK2	398-399
ATWORK3	400-401
ATWORK4	402-403
EMPLREQ1	404-405
EMPLREQ2	406-407
EMPLREQ3	408-409
EMPLREQ4	410-411
TIMEOFF1	412-413
TIMEOFF2	414-415
TIMEOFF3	416-417
TIMEOFF4	418-419
CORRESP1	420-421
CORRESP2	422-423
CORRESP3	424-425
CORRESP4	426-427
MAILTV1	428-429
MAILTV2	430-431
MAILTV3	432-433
MAILTV4	434-435
PAIDFAM1	436-437
PAIDFAM2	438-439
PAIDFAM3	440 - 441
PAIDFAM4	442-443

PAIDFED1	444-445
PAIDFED2	446-447
PAIDFED3	448-449
PAIDFED4	450-451
PAIDSTA1	452-453
PAIDSTA2	454-455
PAIDSTA3	456-457
PAIDSTA4	458-459
PAIDBUS1	460-461
	462-463
PAIDBUS2	
PAIDBUS3	464-465
PAIDBUS4	466-467
PAIDPRI1	468-469
PAIDPRI2	470-471
PAIDPRI3	472-473
PAIDPRI4	474-475
PAIDOTH1	476-477
PAIDOTH2	478-479
PAIDOTH3	480-481
PAIDOTH4	482-483
PAIDFRE1	484-485
PAIDFRE2	486-487
PAIDFRE3	488-489
	490-491
PAIDFRE4	490-491
PAIDUNI1	
PAIDUNI2	494-495
PAIDUNI3	496-497
PAIDUNI4	498-499
PAIDEMP1	500-501
PAIDEMP2	502-503
PAIDEMP3	504-505
PAIDEMP4	506-507
TUITION1	508-515
TUITION2	516-523
TUITION3	524-531
TUITION4	532-539
TUITONE1	540-541
TUITONE2	542-543
TUITONE3	544-545
TUITONE4	546-547
	548-549
TUITNUM1	550-551
TUITNUM2	
TUITNUM3	552-553
TUITNUM4	554-555
CLASNUM1	556-557
CLASNUM2	558-559
CLASNUM3	560-561
CLASNUM4	562-563
CLASUNI1	564-565
CLASUNI2	566-567
CLASUNI3	568-569
CLASUNI4	570-571
CLASHRS1	572-573
CLASHRS2	574-575
0111011102	5,15,15

CLASHRS3	576-577
CLASHRS4	578-579
COMPLET1	580-581
COMPLET2	582-583
COMPLET3	584-585
COMPLET4	586-587
	588-589
TAKING1	
TAKING2	590-591
TAKING3	592-593
TAKING4	594-595
BASIC	596-597
ENGLISH	598-599
CITIZEN	600-601
AECOURSE	602-603
AEPAST3	604-605
AEJOB	606-607
AEBASIC	608-609
AELICENS	610-611
PREVJOB	612-613
PREVTIME	614-615
PREVCOST	616-617
PREVLOCA	618-619
PREVTRAN	620-621
PREVCHIL	622-623
PREVFAM	624-625
PREVINFO	626-627
PREVINT	628-629
PREVOTHR	630-631
	632-633
PREVOLD	634-635
PREVSICK	
PREVDSIR	636-637
PREVMOTV	638-639
PREVTIRD	640-641
PREVBUSY	642-643
RACEVER	644-645
HISPVER	646-647
SEXVER	648-649
EVERMARI	650-651
MARISTAT	652-653
WORKPAY	654-655
WORKWEEK	656-657
VACATION	658-659
LEAVEMM	660-661
LEAVEYY	662-663
WORKHRS	664-666
LOOKWORK	667-668
LOOKPUBL	669-670
LOOKPRIV	671-672
LOOKEMPL	673-674
LOOKFRND	675-676
LOOKADS	677-678
LOOKNOTH	679-680
LOOKOTHR	681-682
LASTACTY	683-684
-	

UNDER16	685-686	
UNDER16N	687-688	
HIGHGRAD	689-690	
HSDIPLMA	691-692	
MAINACTY	693-694	
LIBMO	695-696	
LIBYR	697-698	
CENSUSDV	699-700	
CENSUSRG	701-702	
MAINRSLT	703-704	(A)
MILFLG	705-706	()
PSU	707-708	(A)
REGION	709-710	(11)
SAMPSTAT	711-712	
SIC	713-716	(<u>A</u>)
SOC	717-720	
URBAN	721-722	(A)
VSTRAT	723-724	(A)
AEBASLIT	725-724	(A)
AEDEGREQ	727-728	
AEEMPREA	729-730	
AEEMPREQ	731-732	
AEESL	733-734	
AEEVER	735-736	
AELABOR	737-738	
AELICNS	739-740	
AENUMCSE	741-742	
AEPARANY	743-744	
AEPARTIC	745-746	
AEPRTIME	747-748	
AETRAIN	749-750	
CEMPREA1	751-752	
CEMPREA2	753-754	
CEMPREA3	755-756	
CEMPREA4	757-758	
CNUMWKS1	759-761	
CNUMWKS2	762-764	
CNUMWKS3	765-767	
CNUMWKS4	768-770	
CREQUIR1	771-772	
CREQUIR2	773-774	
CREQUIR3	775-776	
CREQUIR4	777-778	
CTRAIN1	779-780	
CTRAIN2	781-782	
CTRAIN3	783-784	
CTRAIN4	785-786	
FTBASESL	787-788	
FTDEGREE	789-790	
FTNONDEG	791-792	
HIDEGREE	793-794	
INCLEVEL	795-796	
RACEETHN	797-798	
SALARY	799-803	

SCHOOLNG	804-805
AELABF	806-807
AGEF	808-809
EVERMARF	810-811
HIGHGRAF	812-813
HISPVERF	814-815
	816-817
HSDIPLMF	
INCOMRNF	818-819
MARISTAF	820-821
NUMPERSF	822-823
OWNHOMEF	824-825
RACEVERF	826-827
SALARYF	828-829
SICF	830-831
SOCF	832-833
UNDER16F	834-835
AEWT	836-845
AEREPL1	846-855
AEREPL2	856-865
AEREPL3	866-875
AEREPL4	876-885
AEREPL5	886-895
AEREPL6	896-905
AEREPL7	906-915
AEREPL8	916-925
AEREPL9	926-935
AEREPL10	936-945
AEREPL11	946-955
AEREPL12	956-965
AEREPL13	966-975
AEREPL14	976-985
AEREPL15	986-995
AEREPL16	996-1005
AEREPL17	1006-1015
AEREPL18	1016-1025
AEREPL19	1026-1035
AEREPL20	1036-1045
AEREPL21	1046-1055
AEREPL22	1056-1065
AEREPL23	1066-1075
AEREPL24	1076-1085
AEREPL25	1086-1095
AEREPL26	1096-1105
AEREPL27	1106-1115
	1116-1125
AEREPL28	
AEREPL29	1126-1135
AEREPL30	1136-1145
AEREPL31	1146-1155
AEREPL32	1156-1165
AEREPL33	1166-1175
AEREPL34	1176-1185
AEREPL35	1186-1195
AEREPL36	1196-1205
AEREPL37	1206-1215
	1200 1210

AEREPL38	1216-1225
AEREPL39	1226-1235
AEREPL40	1236-1245
AEREPL41	1246-1255
AEREPL42	1256-1265
AEREPL43	1266-1275
AEREPL44	1276-1285
AEREPL45	1286-1295
AEREPL46	1296-1305
AEREPL47	1306-1315
AEREPL48	1316-1325
AEREPL49	1326-1335
AEREPL50	1336-1345.

VARIABLE LABEL

PERSID	"PERS KEY = BASEID 2-DIGIT PERSNUM"
AGE	"AGE AS OF JANUARY 1,1991"
LIVENOW	"S15 WHERE DOES PERSON LIVE NOW"
NUMPERS	"S17 TOTAL NUMBER OF PEOPLE LIVING IN HH"
HOMETYPE	"S19 TYPE OF HOME"
OWNHOME	"S20 OWN HOME"
INCOMRNG	"S22A TOTAL HOUSEHOLD INCOME - RANGE"
FTANY	"Alintro enrolled as ft student past 12"
FTSCHOOL	"Ala FT ELEMENTARY OR HIGH SCHOOL"
FTASSOC	"Alb FT ASSOCIATE'S DEGREE PROGRAM"
FTBACHLR	"A1c FT BACHELOR'S DEGREE PROGRAM"
FTVOCA	"Ald FT VOCATIONAL/OCCUPATIONAL TRAINING"
FTBASIC	"Ale FT ADULT LITERACY/BASIC SKILLS PRGRM"
FTENGLSH	"Alf FT ENGLISH AS 2ND LANGUAGE PROGRAM"
FTOTHER	"Alg FT SOME OTHER PROGRAM"
FTGED	"Alh ENROLLED FT IN GED PROGRAM-RECODE"
FTCERT	"Ali ENROLLED FT-PROF CERTIFICATE-RECODE"
CURENROL	"A1B CURRENTLY ENROLLED AS FULL-TIME STND"
FTNUM	"A2 # CLASSES AS FT STUDENT PAST 12"
PTENROLL	"A4 ENROLLED AS PT STUDENT PAST 12"
PTDEGREE	"A5 SEEKING PART-TIME DEGREE"
PTNUM	"A6 # PART-TIME CLASSES FOR CREDIT"
OTNONCR	"A8A CONTINUING EDUCATION/NONCREDIT COURS"
OTCORRS	"A8B COURSES BY MAIL, TV, RADIO, NEWSPAPER"
OTPRIV	"A8C PRIVATE INSTRUCTION OR TUTORING"
OTGROUP	"A8D ED ACTIVITY BY EMPLOYER, COMMUNITY"
OTBASIC	"A8E INSTRUCTION IN BASIC SKILLS"
OTENGL	"A8F INSTRUCTION IN ENGLISH AS 2ND LANGUA"
OTOTHER	"A8G OTHER ORGANIZED ED ACTIVITY"
OTGED	"A8H GED/HS COMPLETION-RECODE"
OTCOMP	"A8I COMPUTERS-RECODE"
OTCLASS	"D-OTHER CLASSES TAKEN DURING PAST 12 MO"
OTNUM	"A9 # OTHER CLASSES TAKEN DURING PAST 12"
OTNAME1	"A10 MOST RECENT AE CLASS 1"
OTNAME2	"A10 MOST RECENT AE CLASS 2"
OTNAME3	"A10 MOST RECENT AE CLASS 3"
OTNAME4	"A10 MOST RECENT AE CLASS 4"
CRDEGREE	"A11 CLASSES FOR CREDIT TOWARD DEGREE"

```
"A13 MAIN REASON FOR TAKING A10 CL REC# 1"
TAKEREA1
TAKEREA2
          "A13 MAIN REASON FOR TAKING A10 CL REC# 2"
          "A13 MAIN REASON FOR TAKING A10 CL REC# 3"
TAKEREA3
TAKEREA4
          "A13 MAIN REASON FOR TAKING A10 CL REC# 4"
          "A14 CAREER REASONS FOR TAKING A10 REC# 1"
EMPLREA1
EMPLREA2
          "A14 CAREER REASONS FOR TAKING A10 REC# 2"
EMPLREA3 "A14 CAREER REASONS FOR TAKING A10 REC# 3"
          "A14 CAREER REASONS FOR TAKING A10 REC# 4"
EMPLREA4
          "A17A EXECUTIVE MGMT DEVELOPMENT T REC# 1"
TRNMGMT1
TRNMGMT2
          "A17A EXECUTIVE MGMT DEVELOPMENT T REC# 2"
TRNMGMT3
          "A17A EXECUTIVE MGMT DEVELOPMENT T REC# 3"
          "A17A EXECUTIVE MGMT DEVELOPMENT T REC# 4"
TRNMGMT4
          "A17B SUPERVISORY TRAINING
TRNSUPR1
                                             REC# 1"
TRNSUPR2
          "A17B SUPERVISORY TRAINING
                                             REC# 2"
TRNSUPR3 "A17B SUPERVISORY TRAINING
                                             REC# 3"
          "A17B SUPERVISORY TRAINING
TRNSUPR4
                                             REC# 4"
TRNPROF1
          "A17C PROFESSIONAL DEVELOPMENT TRA REC# 1"
          "A17C PROFESSIONAL DEVELOPMENT TRA REC# 2"
TRNPROF2
          "A17C PROFESSIONAL DEVELOPMENT TRA REC# 3"
TRNPROF3
          "A17C PROFESSIONAL DEVELOPMENT TRA REC# 4"
TRNPROF4
TRNTECH1
          "A17D TECHNICAL/SKILLED WORKER TRA REC# 1"
TRNTECH2 "A17D TECHNICAL/SKILLED WORKER TRA REC# 2"
          "A17D TECHNICAL/SKILLED WORKER TRA REC# 3"
TRNTECH3
TRNTECH4
          "A17D TECHNICAL/SKILLED WORKER TRA REC# 4"
          "A17E WORD PROCESSING/COMPUTER SOF REC# 1"
TRNCS1
TRNCS2
          "A17E WORD PROCESSING/COMPUTER SOF REC# 2"
TRNCS3
          "A17E WORD PROCESSING/COMPUTER SOF REC# 3"
TRNCS4
          "A17E WORD PROCESSING/COMPUTER SOF REC# 4"
          "A17F JOB HEALTH AND SAFETY TRAINI REC# 1"
TRNHLTH1
TRNHLTH2 "A17F JOB HEALTH AND SAFETY TRAINI REC# 2"
TRNHLTH3
          "A17F JOB HEALTH AND SAFETY TRAINI REC# 3"
TRNHLTH4
          "A17F JOB HEALTH AND SAFETY TRAINI REC# 4"
          "A17G QUALITY CONTROL/STATISTICAL REC# 1"
TRNQC1
          "A17G QUALITY CONTROL/STATISTICAL REC# 2"
TRNQC2
          "A17G QUALITY CONTROL/STATISTICAL REC# 3"
TRNOC3
TRNQC4
          "A17G QUALITY CONTROL/STATISTICAL REC# 4"
TRNSALE1 "A17H SALES AND MARKETING TRAINING REC# 1"
          "A17H SALES AND MARKETING TRAINING REC# 2"
TRNSALE2
TRNSALE3
          "A17H SALES AND MARKETING TRAINING REC# 3"
          "A17H SALES AND MARKETING TRAINING REC# 4"
TRNSALE4
TRNEMPL1
          "A17I NEW EMPLOYEE TRAINING
                                            REC# 1"
          "A17I NEW EMPLOYEE TRAINING
TRNEMPL2
                                             REC# 2"
TRNEMPL3
          "A17I NEW EMPLOYEE TRAINING
                                             REC# 3"
TRNEMPL4
          "A17I NEW EMPLOYEE TRAINING
          "A17J SOME OTHER KIND OF TRAINING REC# 1"
TRNOTHE1
TRNOTHE2
          "A17J SOME OTHER KIND OF TRAINING REC# 2"
          "A17J SOME OTHER KIND OF TRAINING REC# 3"
TRNOTHE3
TRNOTHE4
          "A17J SOME OTHER KIND OF TRAINING REC# 4"
          "A18 TAKE A10 CLASS TO MEET REQUIR REC# 1"
REQUIRE1
REQUIRE2
          "A18 TAKE A10 CLASS TO MEET REQUIR REC# 2"
REQUIRE3
          "A18 TAKE A10 CLASS TO MEET REQUIR REC# 3"
          "A18 TAKE A10 CLASS TO MEET REQUIR REC# 4"
REQUIRE4
DEGREE1
         "A19 A10 CLASS FULFILLS TYPE REQUI REC# 1"
DEGREE2
         "A19 A10 CLASS FULFILLS TYPE REQUI REC# 2"
```

```
"A19 A10 CLASS FULFILLS TYPE REQUI REC# 3"
DEGREE3
DEGREE 4
          "A19 A10 CLASS FULFILLS TYPE REOUI REC# 4"
          "A20 A10 CLASS TO OBTAIN/RENEW LIC REC# 1"
LICENSE1
LICENSE2
          "A20 A10 CLASS TO OBTAIN/RENEW LIC REC# 2"
          "A20 A10 CLASS TO OBTAIN/RENEW LIC REC# 3"
LICENSE3
          "A20 A10 CLASS TO OBTAIN/RENEW LIC REC# 4"
LICENSE4
          "A200V OBTAIN OR RENEW LICENSE/CER REC# 1"
OBTAIN1
         "A200V OBTAIN OR RENEW LICENSE/CER REC# 2"
OBTAIN2
         "A200V OBTAIN OR RENEW LICENSE/CER REC# 3"
OBTAIN3
OBTAIN4
          "A200V OBTAIN OR RENEW LICENSE/CER REC# 4"
SPONTYP1
          "A22 A10 CLASS SPONSORED BY TYPE O REC# 1"
          "A22 A10 CLASS SPONSORED BY TYPE O REC# 2"
SPONTYP2
          "A22 A10 CLASS SPONSORED BY TYPE O REC# 3"
SPONTYP3
          "A22 A10 CLASS SPONSORED BY TYPE O REC# 4"
SPONTYP4
EMPLPRO1 "A23 A10 CLASS SPONSOR IS EMPLOYER REC# 1"
          "A23 A10 CLASS SPONSOR IS EMPLOYER REC# 2"
EMPLPRO2
EMPLPRO3
          "A23 A10 CLASS SPONSOR IS EMPLOYER REC# 3"
          "A23 A10 CLASS SPONSOR IS EMPLOYER REC# 4"
EMPLPRO4
          "A23A EMPLOYED AT TIME A10 CLASS T REC# 1"
EMPLTIM1
         "A23A EMPLOYED AT TIME A10 CLASS T REC# 2"
EMPLTIM2
EMPLTIM3 "A23A EMPLOYED AT TIME A10 CLASS T REC# 3"
EMPLTIM4 "A23A EMPLOYED AT TIME A10 CLASS T REC# 4"
          "A24 A10 CLASS PARTICIPATN-EMPLOYE REC# 1"
EMPLONL1
          "A24 A10 CLASS PARTICIPATN-EMPLOYE REC# 2"
EMPLONL2
          "A24 A10 CLASS PARTICIPATN-EMPLOYE REC# 3"
EMPLONL3
EMPLONL4
          "A24 A10 CLASS PARTICIPATN-EMPLOYE REC# 4"
          "A25 A10 CLASS GIVEN AT WORK
                                             REC# 1"
ATWORK1
ATWORK2
          "A25 A10 CLASS GIVEN AT WORK
                                             REC# 2"
          "A25 A10 CLASS GIVEN AT WORK
                                             REC# 3"
ATWORK3
         "A25 A10 CLASS GIVEN AT WORK
                                             REC# 4"
ATWORK4
         "A25A EMPLOYER REQUIRED A10 CLASS REC# 1"
EMPLREQ1
EMPLREQ2
          "A25A EMPLOYER REQUIRED A10 CLASS REC# 2"
EMPLREQ3
          "A25A EMPLOYER REQUIRED A10 CLASS REC# 3"
          "A25A EMPLOYER REQUIRED A10 CLASS REC# 4"
EMPLREQ4
         "A26 GIVEN TIME OFF TO TAKE A10 CL REC# 1"
TIMEOFF1
TIMEOFF2 "A26 GIVEN TIME OFF TO TAKE A10 CL REC# 2"
TIMEOFF3 "A26 GIVEN TIME OFF TO TAKE A10 CL REC# 3"
          "A26 GIVEN TIME OFF TO TAKE A10 CL REC# 4"
TIMEOFF4
CORRESP1
          "A27 A10 CLASS A CORRESPONDENCE CO REC# 1"
          "A27 A10 CLASS A CORRESPONDENCE CO REC# 2"
CORRESP2
CORRESP3
          "A27 A10 CLASS A CORRESPONDENCE CO REC# 3"
          "A27 A10 CLASS A CORRESPONDENCE CO REC# 4"
CORRESP4
MAILTV1
          "A28 A10 CORR COURSE - TYPE INSTRU REC# 1"
          "A28 A10 CORR COURSE - TYPE INSTRU REC# 2"
MAILTV2
          "A28 A10 CORR COURSE - TYPE INSTRU REC# 3"
MAILTV3
MAILTV4
          "A28 A10 CORR COURSE - TYPE INSTRU REC# 4"
PAIDFAM1
          "A29A YOU OR FAMILY PAID
                                             REC# 1"
PAIDFAM2
          "A29A YOU OR FAMILY PAID
                                             REC# 2"
          "A29A YOU OR FAMILY PAID
                                             REC# 3"
PAIDFAM3
PAIDFAM4
          "A29A YOU OR FAMILY PAID
                                             REC# 4"
PAIDFED1
          "A29B FEDERAL GOVERNMENT PAID
                                             REC# 1"
         "A29B FEDERAL GOVERNMENT PAID
PAIDFED2
                                             REC# 2"
         "A29B FEDERAL GOVERNMENT PAID
PAIDFED3
                                             REC# 3"
PAIDFED4 "A29B FEDERAL GOVERNMENT PAID
                                             REC# 4"
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PAIDSTA1
          "A29C STATE/COUNTY/LOCAL GOVERNMEN REC# 1"
        "A29C STATE/COUNTY/LOCAL GOVERNMEN REC# 2"
PAIDSTA2
PAIDSTA3 "A29C STATE/COUNTY/LOCAL GOVERNMEN REC# 3"
PAIDSTA4 "A29C STATE/COUNTY/LOCAL GOVERNMEN REC# 4"
        "A29D BUSINESS OR INDUSTRY PAID REC# 1"
PAIDBUS1
PAIDBUS2 "A29D BUSINESS OR INDUSTRY PAID
                                           REC# 2"
PAIDBUS3 "A29D BUSINESS OR INDUSTRY PAID REC# 3"
PAIDBUS4 "A29D BUSINESS OR INDUSTRY PAID REC# 4"
         "A29E PRIVATE ORGANIZATION PAID REC# 1"
PAIDPRI1
PAIDPRI2 "A29E PRIVATE ORGANIZATION PAID REC# 2"
PAIDPRI3 "A29E PRIVATE ORGANIZATION PAID REC# 3"
PAIDPRI4 "A29E PRIVATE ORGANIZATION PAID REC# 4"
                                         REC# 1"
REC# 2"
REC# 3"
REC# 4"
PAIDOTH1 "A29F SOMEONE ELSE PAID
PAIDOTH2 "A29F SOMEONE ELSE PAID
PAIDOTH3 "A29F SOMEONE ELSE PAID
        "A29F SOMEONE ELSE PAID
PAIDOTH4
PAIDFRE1 "A29G THERE WAS NO CHARGE
                                          REC# 1"
PAIDFRE2 "A29G THERE WAS NO CHARGE
                                          REC# 2"
PAIDFRE3 "A29G THERE WAS NO CHARGE
                                          REC# 3"
         "A29G THERE WAS NO CHARGE
PAIDFRE4
                                          REC# 4"
PAIDUNI1 "A29H POST SEC INST PAID-RECODE REC #1"
PAIDUNI2 "A29H POST SEC INST PAID-RECODE REC #2"
PAIDUNI3 "A29H POST SEC INST PAID-RECODE REC #3"
        "A29H POST SEC INST PAID-RECODE REC #4"
PAIDUNI4
          "A30 EMPLOYER WAS SOURCE OF PAYMEN REC# 1"
PAIDEMP1
PAIDEMP2 "A30 EMPLOYER WAS SOURCE OF PAYMEN REC# 2"
         "A30 EMPLOYER WAS SOURCE OF PAYMEN REC# 3"
PAIDEMP3
PAIDEMP4 "A30 EMPLOYER WAS SOURCE OF PAYMEN REC# 4"
TUITION1 "A31 AMOUNT PAID FOR TUITION & FEE REC# 1"
TUITION2 "A31 AMOUNT PAID FOR TUITION & FEE REC# 2"
TUITION3 "A31 AMOUNT PAID FOR TUITION & FEE REC# 3"
TUITION4
          "A31 AMOUNT PAID FOR TUITION & FEE REC# 4"
TUITONE1 "A31A TUITION FOR MORE THAN ONE CO REC# 1"
TUITONE2 "A31A TUITION FOR MORE THAN ONE CO REC# 2"
TUITONE3 "A31A TUITION FOR MORE THAN ONE CO REC# 3"
TUITONE4 "A31A TUITION FOR MORE THAN ONE CO REC# 4"
TUITNUM1 "A31B NUMBER OF COURSES TUITION CO REC# 1"
        "A31B NUMBER OF COURSES TUITION CO REC# 2"
TUITNUM2
TUITNUM3 "A31B NUMBER OF COURSES TUITION CO REC# 3"
TUITNUM4 "A31B NUMBER OF COURSES TUITION CO REC# 4"
CLASNUM1 "A32 # WEEKS A10 CLASS SCHEDULED T REC# 1"
         "A32 # WEEKS A10 CLASS SCHEDULED T REC# 2"
CLASNUM2
CLASNUM3 "A32 # WEEKS A10 CLASS SCHEDULED T REC# 3"
CLASNUM4 "A32 # WEEKS A10 CLASS SCHEDULED T REC# 4"
CLASUNI1 "A32 UNITS A10 CLASS SCHEDULED TO REC# 1"
         "A32 UNITS A10 CLASS SCHEDULED TO REC# 2"
CLASUNI2
          "A32 UNITS A10 CLASS SCHEDULED TO REC# 3"
CLASUNI3
CLASUNI4
          "A32 UNITS A10 CLASS SCHEDULED TO REC# 4"
          "A33 # HOURS PER WEEK A10 CLASS SC REC# 1"
CLASHRS1
CLASHRS2 "A33 # HOURS PER WEEK A10 CLASS SC REC# 2"
CLASHRS3 "A33 # HOURS PER WEEK A10 CLASS SC REC# 3"
CLASHRS4 "A33 # HOURS PER WEEK A10 CLASS SC REC# 4"
         "A34 COMPLETED A10 CLASS
COMPLET1
                                         REC# 1"
                                          REC# 2"
COMPLET2 "A34 COMPLETED A10 CLASS
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"A34 COMPLETED A10 CLASS
COMPLET3
                                             REC# 3"
           "A34 COMPLETED A10 CLASS
COMPLET4
                                             REC# 4"
           "A34A STILL TAKING COURSE OR DROPP REC# 1"
TAKING1
TAKING2
           "A34A STILL TAKING COURSE OR DROPP REC# 2"
           "A34A STILL TAKING COURSE OR DROPP REC# 3"
TAKING3
TAKING4
           "A34A STILL TAKING COURSE OR DROPP REC# 4"
          "A15 AE COURSES INCL BASIC SKILLS TR"
BASIC
          "A16 AE COURSES FOR ENG AS 2ND LANG"
ENGLISH
CITIZEN
           "A35 AE COURSES FOR NATURALIZATION"
           "A36 TAKEN ANY AE COURSES (EXCL FT)"
AECOURSE
AEPAST3
           "A37 TAKEN AE COURSES IN PAST 3 YRS"
           "A38 AE COURSES BENEFIT CAREER"
AEJOB
           "A39 AE COURSES BENEFIT BASIC SKILLS"
AEBASIC
          "A40 AE COURSES HELP OBTAIN/RENEW LICENSE"
AELICENS
PREVJOB
          "A41A PREVENT AE-YOUR WORK SCHEDULE"
           "A41B PREVENT AE-MEETING TIMES OF CLASSES"
PREVTIME
PREVCOST
           "A41C PREVENT AE-COST OF CLASSES"
           "A41D PREVENT AE-LOCATION OF CLASSES"
PREVLOCA
           "A41E PREVENT AE-LACK OF TRANSPORTATION"
PREVTRAN
PREVCHIL
           "A41F PREVENT AE-LACK OF CHILD CARE"
PREVFAM
          "A41G PREVENT AE-OTH FAMILY RESPONSIBILIT"
PREVINFO "A41H PREVENT AE-LACK OF INFO AB CLASSES"
           "A411 PREVENT AE-NO INTERESTING CLASSES"
PREVINT
           "A41J PREVENT AE-SOME OTHER REASON"
PREVOTHR
          "A41K OLD AGE-RECODE"
PREVOLD
PREVSICK
           "A41L SICKNESS-RECODE"
           "A41M NO INTEREST/DESIRE-RECODE"
PREVDSIR
PREVMOTV
          "A41N MOTIVATION-RECODE"
PREVTIRD "A410 TIRED/EXHAUSTED-RECODE"
          "A41P GENERAL TIME PROBLEM/BUSY-RECODE"
PREVBUSY
RACEVER
           "A42A RACE VERIFICATION"
HISPVER
          "A42A1 RESPONDENT OF HISPANIC ORIGIN"
          "A42B S10E GENDER VERIFICATION"
SEXVER
           "A43 EVER MARRIED"
EVERMARI
          "A44 CURRENTLY MARRIED"
MARISTAT
WORKPAY
          "A45 EVER WORKED AT A JOB FOR PAY"
WORKWEEK "A45A WORKED AT A JOB FOR PAY LAST WEEK"
           "A46 ON LEAVE OR VACATION FROM A JOB"
VACATION
           "A51 MNTH RESPONDENT LEFT MOST RECENT JOB"
LEAVEMM
           "A51 YEAR RESPONDENT LEFT MOST RECENT JOB"
LEAVEYY
WORKHRS
           "A52 HOURS PER WEEK WORK FOR PAY"
LOOKWORK
           "A54 LOOKING FOR WORK ON PAST 4 WEEKS"
LOOKPUBL
          "A55A CHECKED W/PUBLIC EMPLOYMENT AGENCY"
LOOKPRIV "A55B CHECKED W/PRIVATE EMPLOYMENT AGENCY"
           "A55C CHECKED WITH EMPLOYER DIRECTLY"
LOOKEMPL
LOOKFRND
           "A55D CHECKED WITH FRIENDS OR RELATIVES"
LOOKADS
           "A55E PLACED OR ANSWERED ADS"
LOOKNOTH
           "A55F DID NTHING TO FIND WORK"
           "A55G DID SOMETHING ELSE TO FIND WORK"
LOOKOTHR
LASTACTY
           "A56 MAIN ACTIVITY LAST WEEK"
UNDER16
          "A57 HAVE ANY KIDS < 16 WHO LIVE W/YOU"
          "A58 # OF KIDS < 16 WHO LIVE W/ YOU"
UNDER16N
HIGHGRAD
           "A59 HIGHEST GRADE COMPLETED"
          "A60 RECEIVE HIGH SCHOOL DIPLOMA OR EQUIV"
HSDIPLMA
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"A61 MAIN ACTIVITY IN PAST 12 MONTHS" MAINACTY "A62 USED PUBLIC LIBRARY IN PAST MONTH?" LIBMO "A63 USED PUBLIC LIBRARY IN PAST YEAR?" LIBYR CENSUSDV "CENSUS DIVISION" "CENSUS REGION" CENSUSRG MAINRSLT "RESULT FOR THIS RESPONDENT" "MILITARY FLAG" MILFLG "FOR TAYLOR SERIES VARIANCE" PSU REGION "DEPARTMENT OF EDUCATION REGION" SAMPSTAT "PARTICIPATION STATUS AT SAMPLING" SIC "INDUSTRY CODE" SOC "OCCUPATION CODE" URBAN "URBANICITY" "FOR TAYLOR SERIES VARIANCE" VSTRAT AEBASLIT "D-ADULT EDUCATION TO IMPROVE SKILLS" "D-ADULT EDUCATION REQUIRED F/DEGREE" AEDEGREQ AEEMPREA "D-ADULT EDUCATION F/JOB-RELATED REASON" AEEMPREQ "D-ADULT EDUCATION REQUIRED BY EMPLOYER" "D-ADULT EDUCATION F/ENGLISH AS 2ND LANG" AEESL AEEVER "D-EVER PARTICIPATED IN ADULT EDUCATION" AELABOR "D-LABOR FORCE STATUS" "D-ADULT EDUCATION F/LICENSE/CERTIFICATE" AELICNS AENUMCSE "D-TOTAL # AE COURSES TAKEN IN PAST 12M" AEPARANY "D-ADULT EDUC INCLUDING F/T DEGREE PROG" "D-ADULT EDUC EXCLUDING F/T DEGREE PGMS" AEPARTIC AEPRTIME "D-ADULT EDUC. EXCLUDING F/T PROGRAM" "D-ADULT EDUCATION W/TRAINING COMPONENT" AETRAIN CEMPREA1 "D-REASON F/TAKING COURSE-1 JOB RELATED" CEMPREA2 "D-REASON F/TAKING COURSE-2 JOB RELATED" CEMPREA3 "D-REASON F/TAKING COURSE-3 JOB RELATED" CEMPREA4 "D-REASON F/TAKING COURSE-4 JOB RELATED" CNUMWKS1 "D-#WEEKS COURSE-1 SCHEDULED TO RUN" CNUMWKS2 "D-#WEEKS COURSE-2 SCHEDULED TO RUN" "D-#WEEKS COURSE-3 SCHEDULED TO RUN" CNUMWKS3 CNUMWKS4 "D-#WEEKS COURSE-4 SCHEDULED TO RUN" "D-CRSE-1 REQ F/CERT OF COMPLETION/DIPL" CREQUIR1 CREQUIR2 "D-CRSE-2 REQ F/CERT OF COMPLETION/DIPL" "D-CRSE-3 REQ F/CERT OF COMPLETION/DIPL" CREQUIR3 CREQUIR4 "D-CRSE-4 REQ F/CERT OF COMPLETION/DIPL" "D-ANY TRAINING COMPONENT COURSE-1" CTRAIN1 CTRAIN2 "D-ANY TRAINING COMPONENT COURSE-2" "D-ANY TRAINING COMPONENT COURSE-3" CTRAIN3 CTRAIN4 "D-ANY TRAINING COMPONENT COURSE-4" FTBASESL "D-F/T BASIC SKILLS/ESL COURSE" "D-FULLTIME ASSOC/BACH DEGREE PROGRAM" FTDEGREE FTNONDEG "D-F/T NONDEG PGM" "D-HIGHEST DEGREE ATTAINED" HIDEGREE INCLEVEL "D-LEVEL OF INCOME" "D-RACE-ETHNICITY" RACEETHN SALARY "D-ANNUAL SALARY/CURRENT OR MOST RCNT JOB" SCHOOLNG "D-YEARS OF SCHOOL COMPLETED" "IMPUTATION FLAG FOR LABOR FORCE STATUS" AELABF AGEF "IMPUTATION FLAG FOR AGE" EVERMARF "IMPUTATION FLAG FOR EVERMARI"

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"IMPUTATION FLAG FOR HIGHGRAD"
HIGHGRAF
HISPVERF
          "IMPUTATION FLAG FOR HISPVER"
          "IMPUTATION FLAG FOR HSDIPLMA"
HSDIPLMF
INCOMRNF
          "INCOMRNG IMPUTED FLAG"
          "IMPUTATION FLAG FOR MARISTAT"
MARISTAF
NUMPERSF
          "NUMPERS IMPUTED FLAG"
OWNHOMEF "OWNHOME IMPUTED FLAG"
RACEVERF
          "IMPUTATION FLAG FOR RACEVER"
          "IMPUTATION FLAG FOR SALARY"
SALARYF
SICF
          "IMPUTATION FLAG FOR SIC"
SOCF
          "IMPUTATION FLAG FOR SOC"
          "IMPUTATION FLAG FOR UNDER16"
UNDER16F
          "FINAL ADULT WEIGHT"
AEWT
          "REPLICATE WEIGHT"
AEREPL1
         "REPLICATE WEIGHT"
AEREPL2
          "REPLICATE WEIGHT"
AEREPL3
AEREPL4
          "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL5
AEREPL6
          "REPLICATE WEIGHT"
         "REPLICATE WEIGHT"
AEREPL7
          "REPLICATE WEIGHT"
AEREPL8
AEREPL9
         "REPLICATE WEIGHT"
AEREPL10 "REPLICATE WEIGHT"
AEREPL11
          "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL12
AEREPL13
          "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL14
AEREPL15
          "REPLICATE WEIGHT"
AEREPL16 "REPLICATE WEIGHT"
AEREPL17
          "REPLICATE WEIGHT"
AEREPL18
          "REPLICATE WEIGHT"
AEREPL19
          "REPLICATE WEIGHT"
AEREPL20 "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL21
AEREPL22 "REPLICATE WEIGHT"
AEREPL23 "REPLICATE WEIGHT"
AEREPL24 "REPLICATE WEIGHT"
AEREPL25
          "REPLICATE WEIGHT"
AEREPL26
          "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL27
AEREPL28
          "REPLICATE WEIGHT"
         "REPLICATE WEIGHT"
AEREPL29
AEREPL30 "REPLICATE WEIGHT"
AEREPL31 "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL32
AEREPL33
          "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL34
AEREPL35
          "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL36
AEREPL37
          "REPLICATE WEIGHT"
AEREPL38
          "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL39
AEREPL40
          "REPLICATE WEIGHT"
AEREPL41
          "REPLICATE WEIGHT"
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AEREPL42 "REPLICATE WEIGHT"
            AEREPL43 "REPLICATE WEIGHT"
            AEREPL44
                       "REPLICATE WEIGHT"
            AEREPL45 "REPLICATE WEIGHT"
            AEREPL46 "REPLICATE WEIGHT"
                       "REPLICATE WEIGHT"
            AEREPL47
            AEREPL48 "REPLICATE WEIGHT"
            AEREPL49 "REPLICATE WEIGHT"
            AEREPL50 "REPLICATE WEIGHT"
VALUE LABELS
AGE
             -1 'INAPPLICABLE'
             -7 'REFUSED'
             -8 'DK'
             -9 'NOT ASCERTAINED'
LIVENOW
             -1 'INAPPLICABLE'
             -7 'REFUSED'
              -8 'DK'
             -9 'NOT ASCERTAINED'
              1 'HERE'
              2 'STUDENT HOUSING'
              3 'OTHER PRIVATE HOME OR APARTMENT'
              4 'INSTITUTUIN OR GROUP QUARTERS'
NUMPERS
             -1 'INAPPLICABLE'
             -7 'REFUSED'
             -8 'DK'
             -9 'NOT ASCERTAINED'
              0 'BLANKS ALLOWED'
HOMETYPE
             -1 'INAPPLICABLE'
             -7 'REFUSED'
              -8 'DK'
             -9 'NOT ASCERTAINED'
              0 'BLANKS ALLOWED'
              2 'APARTMENT'
              3 'SOME OTHER TYPE OF HOME'
OWNHOME
             -1 'INAPPLICABLE'
             -7 'REFUSED'
             -8 'DK'
             -9 'NOT ASCERTAINED'
              0 'BLANKS ALLOWED'
              1 'OWN YOUR HOME'
              2 'RENT YOUR HOME'
               3 'HAVE SOME OTHER ARRANGEMENT'
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/ INCOMRNG
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                0 'BLANKS ALLOWED'
                1 '$5,000 OR LESS'
                10 'OVER $75,000'
                 2 '$5,001 TO $10,000'
                 3 '$10,001 TO $15,000'
                 4 '$15,001 TO $20,000'
                 5 '$20,001 TO $25,000'
                 6 '$25,001 TO $30,000'
                 7 '$30,001 TO $40,000'
                 8 '$40,001 TO $50,000'
                 9 '$50,001 TO $75,000'
  FTANY
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  FTSCHOOL
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  FTASSOC
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  FTBACHLR
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  FTVOCA
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

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/ FTBASIC
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  FTENGLSH
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  FTOTHER
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  FTGED
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  FTCERT
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  CURENROL
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  FTNUM
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
  PTENROLL
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ PTDEGREE
                -1 'INAPPLICABLE'
               -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                 0 'NOT ENROLLED/NOT DEGREE SEEKING'
                1 "ASSOCIATE'S DEGREE"
                 2 "BACHELOR'S DEGREE"
                 3 "MASTER'S DEGREE"
                 4 'DOCTORATE'
                 5 'PROFESSIONAL (RE) CERTIFICATION'
                91 'OTHER DEGREE (SPECIFY)'
  PTNUM
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
               -9 'NOT ASCERTAINED'
/ OTNONCR
               -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ OTCORRS
               -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  OTPRIV
               -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  OTGROUP
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  OTBASIC
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                 2 'NO'
```

```
/ OTENGL
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ OTOTHER
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ OTGED
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ OTCOMP
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ OTCLASS
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
                2 'NO'
 OTNUM
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
/ CRDEGREE
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
TAKEREA1
              -1 'INAPPLICABLE'
              -7 'REFUSED'
              -8 'DK'
              -9 'NOT ASCERTAINED'
               1 'PERSONAL, FAMILY, OR SOCIAL REASON'
               2 'TO IMPROVE, ADVANCE, KEEP UP CURRENT JOB'
               3 'TO TRAIN FOR A NEW JOB OR CAREER'
               4 'TO IMPROVE READING, WRITING, MATH SKILLS'
               5 'TO MEET REQUIREMENT FOR DIPLOMA/DEGREE'
              91 'OTHER REASON'
TAKEREA2
              -1 'INAPPLICABLE'
              -7 'REFUSED'
              -8 'DK'
              -9 'NOT ASCERTAINED'
               1 'PERSONAL, FAMILY, OR SOCIAL REASON'
               2 'TO IMPROVE, ADVANCE, KEEP UP CURRENT JOB'
               3 'TO TRAIN FOR A NEW JOB OR CAREER'
               4 'TO IMPROVE READING, WRITING, MATH SKILLS'
               5 'TO MEET REQUIREMENT FOR DIPLOMA/DEGREE'
              91 'OTHER REASON'
TAKEREA3
              -1 'INAPPLICABLE'
              -7 'REFUSED'
              -8 'DK'
              -9 'NOT ASCERTAINED'
               1 'PERSONAL, FAMILY, OR SOCIAL REASON'
               2 'TO IMPROVE, ADVANCE, KEEP UP CURRENT JOB'
               3 'TO TRAIN FOR A NEW JOB OR CAREER'
               4 'TO IMPROVE READING, WRITING, MATH SKILLS'
               5 'TO MEET REQUIREMENT FOR DIPLOMA/DEGREE'
              91 'OTHER REASON'
TAKEREA4
              -1 'INAPPLICABLE'
              -7 'REFUSED'
              -8 'DK'
              -9 'NOT ASCERTAINED'
               1 'PERSONAL, FAMILY, OR SOCIAL REASON'
               2 'TO IMPROVE, ADVANCE, KEEP UP CURRENT JOB'
               3 'TO TRAIN FOR A NEW JOB OR CAREER'
               4 'TO IMPROVE READING, WRITING, MATH SKILLS'
               5 'TO MEET REQUIREMENT FOR DIPLOMA/DEGREE'
              91 'OTHER REASON'
EMPLREA1
              -1 'INAPPLICABLE'
              -7 'REFUSED'
              -8 'DK'
              -9 'NOT ASCERTAINED'
               1 'YES'
               2 'NO'
```

```
/ EMPLREA2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ EMPLREA3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ EMPLREA4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ TRNMGMT1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 TRNMGMT2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
                2 'NO'
 TRNMGMT3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 TRNMGMT4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ TRNSUPR1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
 TRNSUPR2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
 TRNSUPR3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 TRNSUPR4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 TRNPROF1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
                2 'NO'
 TRNPROF2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 TRNPROF3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ TRNPROF4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  TRNTECH1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  TRNTECH2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ TRNTECH3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  TRNTECH4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  TRNCS1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  TRNCS2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
                -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ TRNCS3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ TRNCS4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ TRNHLTH1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ TRNHLTH2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ TRNHLTH3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
                2 'NO'
 TRNHLTH4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 TRNQC1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ TRNQC2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  TRNQC3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  TRNQC4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ TRNSALE1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ TRNSALE2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  TRNSALE3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  TRNSALE4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
                -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ TRNEMPL1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ TRNEMPL2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ TRNEMPL3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ TRNEMPL4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
 TRNOTHE1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
                2 'NO'
 TRNOTHE2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 TRNOTHE3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
TRNOTHE4
              -1 'INAPPLICABLE'
              -7 'REFUSED'
              -8 'DK'
              -9 'NOT ASCERTAINED'
              1 'YES'
              2 'NO'
REQUIRE1
              -1 'INAPPLICABLE'
              -7 'REFUSED'
              -8 'DK'
              -9 'NOT ASCERTAINED'
              1 'YES'
              2 'NO'
REQUIRE2
              -1 'INAPPLICABLE'
              -7 'REFUSED'
              -8 'DK'
              -9 'NOT ASCERTAINED'
              1 'YES'
              2 'NO'
REQUIRE3
              -1 'INAPPLICABLE'
              -7 'REFUSED'
              -8 'DK'
              -9 'NOT ASCERTAINED'
              1 'YES'
              2 'NO'
REQUIRE4
              -1 'INAPPLICABLE'
              -7 'REFUSED'
              -8 'DK'
              -9 'NOT ASCERTAINED'
              1 'YES'
              2 'NO'
DEGREE1
              -1 'INAPPLICABLE'
              -7 'REFUSED'
              -8 'DK'
              -9 'NOT ASCERTAINED'
               0 'INELIGIBLE TYPE REPORTED'
               1 '8TH GRADE CERTIFICATE OF COMPLETION'
               2 'HIGH SCHOOL DIPLOMA (INCL EQUIVALENCY)'
               3 'VOCATIONAL DIPLOMA OR CERTIFICATE'
               4 '2-YEAR DEGREE FROM COLLEGE OR TECHNICAL'
               5 '4-YEAR DEGREE FROM COLLEGE OR UNIVERSITY'
               6 'GRADUATE OR PROFESSIONAL DEGREE/CERTIF'
               7 'COLLEGE CERTIFICATE'
               8 'LICENSE'
              91 'OTHER (SPECIFY)'
```

```
DEGREE2
              -1 'INAPPLICABLE'
              -7 'REFUSED'
              -8 'DK'
              -9 'NOT ASCERTAINED'
               0 'INELIGIBLE TYPE REPORTED'
               1 '8TH GRADE CERTIFICATE OF COMPLETION'
               2 'HIGH SCHOOL DIPLOMA (INCL EQUIVALENCY)'
               3 'VOCATIONAL DIPLOMA OR CERTIFICATE'
               4 '2-YEAR DEGREE FROM COLLEGE OR TECHNICAL'
               5 '4-YEAR DEGREE FROM COLLEGE OR UNIVERSITY'
               6 'GRADUATE OR PROFESSIONAL DEGREE/CERTIF'
               7 'COLLEGE CERTIFICATE'
               8 'LICENSE'
              91 'OTHER (SPECIFY)'
 DEGREE3
              -1 'INAPPLICABLE'
              -7 'REFUSED'
              -8 'DK'
              -9 'NOT ASCERTAINED'
               0 'INELIGIBLE TYPE REPORTED'
               1 '8TH GRADE CERTIFICATE OF COMPLETION'
               2 'HIGH SCHOOL DIPLOMA (INCL EQUIVALENCY)'
               3 'VOCATIONAL DIPLOMA OR CERTIFICATE'
               4 '2-YEAR DEGREE FROM COLLEGE OR TECHNICAL'
               5 '4-YEAR DEGREE FROM COLLEGE OR UNIVERSITY'
               6 'GRADUATE OR PROFESSIONAL DEGREE/CERTIF'
               7 'COLLEGE CERTIFICATE'
               8 'LICENSE'
              91 'OTHER (SPECIFY)'
DEGREE 4
              -1 'INAPPLICABLE'
              -7 'REFUSED'
              -8 'DK'
              -9 'NOT ASCERTAINED'
               0 'INELIGIBLE TYPE REPORTED'
               1 '8TH GRADE CERTIFICATE OF COMPLETION'
               2 'HIGH SCHOOL DIPLOMA (INCL EQUIVALENCY)'
               3 'VOCATIONAL DIPLOMA OR CERTIFICATE'
               4 '2-YEAR DEGREE FROM COLLEGE OR TECHNICAL'
               5 '4-YEAR DEGREE FROM COLLEGE OR UNIVERSITY'
               6 'GRADUATE OR PROFESSIONAL DEGREE/CERTIF'
               7 'COLLEGE CERTIFICATE'
               8 'LICENSE'
              91 'OTHER (SPECIFY)'
 LICENSE1
              -1 'INAPPLICABLE'
              -7 'REFUSED'
              -8 'DK'
              -9 'NOT ASCERTAINED'
              1 'YES'
               2 'NO'
```

```
/ LICENSE2
                -1 'INAPPLICABLE'
               -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  LICENSE3
                -1 'INAPPLICABLE'
               -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  LICENSE4
               -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  OBTAIN1
               -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'OBTAIN LICENSE OR CERTIFICATION'
                2 'RENEW LICENSE OR CERTIFICATION'
  OBTAIN2
               -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'OBTAIN LICENSE OR CERTIFICATION'
                2 'RENEW LICENSE OR CERTIFICATION'
  OBTAIN3
               -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'OBTAIN LICENSE OR CERTIFICATION'
                2 'RENEW LICENSE OR CERTIFICATION'
  OBTAIN4
               -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'OBTAIN LICENSE OR CERTIFICATION'
                 2 'RENEW LICENSE OR CERTIFICATION'
```

SPONTYP1 -1 'INAPPLICABLE' -7 'REFUSED' -8 'DK' -9 'NOT ASCERTAINED' 1 'ELEMENTARY/JUNIOR HIGH/HIGH SCHOOL' 10 'PRIVATE COMMUNITY ORGANIZATION' 2 '2-YR COMMUNITY/JR COLLEGE/TECHNICAL INST' 3 '4-YR COLLEGE OR UNIVERSITY' 4 'VOCA/TRADE/BUSINESS/HOSPITAL/FLIGHT SCHL' 5 'TUTOR OR PRIVATE INSTRUCTOR' 6 'BUSINESS OR INDUSTRY' 7 'LABOR ORGANIZATION OR PROFESSIONAL ASSOC' 8 'LIBRARY' 9 "FEDERAL/STATE/COUNTY/LOCAL GOV'T AGENCY" 91 'SOMEONE ELSE' SPONTYP2 -1 'INAPPLICABLE' -7 'REFUSED' -8 'DK' -9 'NOT ASCERTAINED' 1 'ELEMENTARY/JUNIOR HIGH/HIGH SCHOOL' 10 'PRIVATE COMMUNITY ORGANIZATION' 2 '2-YR COMMUNITY/JR COLLEGE/TECHNICAL INST' 3 '4-YR COLLEGE OR UNIVERSITY' 4 'VOCA/TRADE/BUSINESS/HOSPITAL/FLIGHT SCHL' 5 'TUTOR OR PRIVATE INSTRUCTOR' 6 'BUSINESS OR INDUSTRY' 7 'LABOR ORGANIZATION OR PROFESSIONAL ASSOC' 8 'LIBRARY' 9 "FEDERAL/STATE/COUNTY/LOCAL GOV'T AGENCY" 91 'SOMEONE ELSE' SPONTYP3 -1 'INAPPLICABLE' -7 'REFUSED' -8 'DK' -9 'NOT ASCERTAINED' 1 'ELEMENTARY/JUNIOR HIGH/HIGH SCHOOL'

- 10 'PRIVATE COMMUNITY ORGANIZATION'
- 2 '2-YR COMMUNITY/JR COLLEGE/TECHNICAL INST'
- 3 '4-YR COLLEGE OR UNIVERSITY'
- 4 'VOCA/TRADE/BUSINESS/HOSPITAL/FLIGHT SCHL'
- 5 'TUTOR OR PRIVATE INSTRUCTOR'
- 6 'BUSINESS OR INDUSTRY'
- 7 'LABOR ORGANIZATION OR PROFESSIONAL ASSOC'
- 8 'LIBRARY'
- 9 "FEDERAL/STATE/COUNTY/LOCAL GOV'T AGENCY"
- 91 'SOMEONE ELSE'

```
/ SPONTYP4
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'ELEMENTARY/JUNIOR HIGH/HIGH SCHOOL'
                10 'PRIVATE COMMUNITY ORGANIZATION'
                 2 '2-YR COMMUNITY/JR COLLEGE/TECHNICAL INST'
                 3 '4-YR COLLEGE OR UNIVERSITY'
                 4 'VOCA/TRADE/BUSINESS/HOSPITAL/FLIGHT SCHL'
                 5 'TUTOR OR PRIVATE INSTRUCTOR'
                 6 'BUSINESS OR INDUSTRY'
                 7 'LABOR ORGANIZATION OR PROFESSIONAL ASSOC'
                 8 'LIBRARY'
                 9 "FEDERAL/STATE/COUNTY/LOCAL GOV'T AGENCY"
                91 'SOMEONE ELSE'
  EMPLPRO1
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  EMPLPRO2
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  EMPLPRO3
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  EMPLPRO4
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  EMPLTIM1
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ EMPLTIM2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ EMPLTIM3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ EMPLTIM4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ EMPLONL1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ EMPLONL2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
                2 'NO'
 EMPLONL3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 EMPLONL4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ ATWORK1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ ATWORK2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ ATWORK3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ ATWORK4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ EMPLREQ1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
                2 'NO'
 EMPLREQ2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 EMPLREQ3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ EMPLREQ4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ TIMEOFF1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ TIMEOFF2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ TIMEOFF3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ TIMEOFF4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  CORRESP1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  CORRESP2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
                -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ CORRESP3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ CORRESP4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  MAILTV1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'THROUGH THE MAIL'
                2 'BY TELEVISION OR RADIO'
  MAILTV2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'THROUGH THE MAIL'
                2 'BY TELEVISION OR RADIO'
  MAILTV3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'THROUGH THE MAIL'
                2 'BY TELEVISION OR RADIO'
  MAILTV4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'THROUGH THE MAIL'
                2 'BY TELEVISION OR RADIO'
  PAIDFAM1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
                -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ PAIDFAM2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDFAM3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDFAM4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDFED1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDFED2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
               2 'NO'
 PAIDFED3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 PAIDFED4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
                2 'NO'
```

```
/ PAIDSTA1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDSTA2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDSTA3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ PAIDSTA4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDBUS1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
                2 'NO'
 PAIDBUS2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 PAIDBUS3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ PAIDBUS4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDPRI1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDPRI2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDPRI3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDPRI4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
               2 'NO'
 PAIDOTH1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 PAIDOTH2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
                2 'NO'
```

```
/ PAIDOTH3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDOTH4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDFRE1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -9 'NOT ASCERTAINED'
                1 'NO CHARGE'
                2 'CHARGE'
/ PAIDFRE2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -9 'NOT ASCERTAINED'
               1 'NO CHARGE'
               2 'CHARGE'
/ PAIDFRE3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -9 'NOT ASCERTAINED'
                1 'NO CHARGE'
                2 'CHARGE'
 PAIDFRE4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -9 'NOT ASCERTAINED'
                1 'NO CHARGE'
                2 'CHARGE'
/ PAIDUNI1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ PAIDUNI2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ PAIDUNI3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDUNI4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDEMP1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDEMP2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PAIDEMP3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
                2 'NO'
 PAIDEMP4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 TUITONE1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ TUITONE2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ TUITONE3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  TUITONE 4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ TUITNUM1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
  TUITNUM2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
  TUITNUM3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
 TUITNUM4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
 CLASNUM1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
/ CLASNUM2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
```

```
/ CLASNUM3
                -1 'INAPPLICABLE'
               -7 'REFUSED'
                -8 'DK'
               -9 'NOT ASCERTAINED'
  CLASNUM4
               -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
               -9 'NOT ASCERTAINED'
/ CLASUNI1
               -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'WEEKS'
                 2 'MONTHS'
                3 'SEMESTERS'
                4 'QUARTERS'
                5 'YEARS'
/ CLASUNI2
               -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'WEEKS'
                 2 'MONTHS'
                 3 'SEMESTERS'
                4 'QUARTERS'
                5 'YEARS'
/ CLASUNI3
                -1 'INAPPLICABLE'
               -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'WEEKS'
                2 'MONTHS'
                3 'SEMESTERS'
                4 'QUARTERS'
                5 'YEARS'
/ CLASUNI4
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                 1 'WEEKS'
                 2 'MONTHS'
                 3 'SEMESTERS'
                 4 'QUARTERS'
                 5 'YEARS'
```

```
/ CLASHRS1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
/ CLASHRS2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
/ CLASHRS3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
/ CLASHRS4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
/ COMPLET1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
               2 'NO'
/ COMPLET2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
               2 'NO'
 COMPLET3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
               2 'NO'
/ COMPLET4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
                2 'NO'
```

```
/ TAKING1
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'STILL TAKING COURSE'
                2 'DROPPED COURSE'
  TAKING2
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'STILL TAKING COURSE'
                2 'DROPPED COURSE'
  TAKING3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'STILL TAKING COURSE'
                2 'DROPPED COURSE'
 TAKING4
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'STILL TAKING COURSE'
                2 'DROPPED COURSE'
  BASIC
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  ENGLISH
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  CITIZEN
               -1 'INAPPLICABLE'
               -7 'REFUSED'
                -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ AECOURSE
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ AEPAST3
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ AEJOB
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ AEBASIC
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ AELICENS
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
                2 'NO'
 PREVJOB
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 PREVTIME
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ PREVCOST
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
/ PREVLOCA
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
 PREVTRAN
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ PREVCHIL
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ PREVFAM
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
                2 'NO'
 PREVINFO
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 PREVINT
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ PREVOTHR
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
 PREVOLD
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
 PREVSICK
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ PREVDSIR
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
               2 'NO'
 PREVMOTV
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
               1 'YES'
                2 'NO'
 PREVTIRD
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 PREVBUSY
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ RACEVER
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'WHITE'
                2 'BLACK'
                3 'NATIVE AMERICAN OR ALASKAN NATIVE'
                4 'ASIAN OR PACIFIC ISLANDER'
               91 'SOME OTHER RACE'
/ HISPVER
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ SEXVER
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'MALE'
                2 'FEMALE'
/ EVERMARI
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
/ MARISTAT
               -1 'INAPPLICABLE'
               -7 'REFUSED'
                -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'MARRIED'
                2 'SEPARATED'
                3 'DIVORCED'
                4 'WIDOWED'
  WORKPAY
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ WORKWEEK
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
                3 'RETIRED'
  VACATION
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  LEAVEMM
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
  LEAVEYY
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
  WORKHRS
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
  LOOKWORK
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  LOOKPUBL
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  LOOKPRIV
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ LOOKEMPL
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  LOOKFRND
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  LOOKADS
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  LOOKNOTH
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  LOOKOTHR
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  LASTACTY
               -1 'INAPPLICABLE'
               -7 'REFUSED'
                -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'KEEPING HOUSE/CARING FOR CHILDREN'
                2 'GOING TO SCHOOL'
                3 'RETIRED'
                4 'UNABLE TO WORK'
               91 'OTHER (SPECIFY)'
  UNDER16
               -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
```

```
/ UNDER16N
                -1 'INAPPLICABLE'
               -7 'REFUSED'
               -8 'DK'
               -9 'NOT ASCERTAINED'
 HIGHGRAD
               -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                1 'UP TO EIGHTH GRADE'
                 2 'NINTH TO ELEVENTH GRADE'
                 3 'HIGH SCHOOL DIPLOMA OR EQUIVALENT'
                 4 'VOCATIONAL/TECHNICAL AFTER HIGH SCHOOL'
                 5 '1-2 YEARS OF COLLEGE'
                 6 "ASSOCIATE'S DEGREE"
                 7 '3-4 YEARS OF COLLEGE'
                 8 "BACHELOR'S DEGREE"
                 9 'GRADUATE OR PROFESSIONAL SCHOOL'
 HSDIPLMA
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 MAINACTY
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                 1 'PURSUING AN EDUCATION'
                 2 'WORKING AT A JOB'
                3 'KEEPING HOUSE OR CARING FOR CHILDREN'
                91 'SOMETHING ELSE'
                92 'RETIRED'
                93 'SICK OR DISABLED'
 LIBMO
               -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
 LIBYR
                -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                 2 'NO'
```

```
/ CENSUSDV
                -1 'INAPPLICABLE'
                1 'NEW ENGLAND'
                 2 'MIDDLE ATLANTIC'
                 3 'EAST NORTH CENTRAL'
                 4 'WEST NORTH CENTRAL'
                 5 'SOUTH ATLANTIC'
                 6 'EAST SOUTH CENTRAL'
                 7 'WEST SOUTH CENTRAL'
                 8 'MOUNTAIN'
                 9 'PACIFIC'
  CENSUSRG
                -1 'INAPPLICABLE'
                1 'NORTHEAST'
                 2 'MIDWEST'
                 3 'SOUTH'
                 4 'WEST'
  MAINRSLT
              '-1' 'INAPPLICABLE'
              'CA' 'ADULT ED PART'
              'CN' 'ADULT ED NONPART'
   MILFLG
               -1 'INAPPLICABLE'
                -7 'REFUSED'
                -8 'DK'
                -9 'NOT ASCERTAINED'
                1 'YES'
                2 'NO'
  REGION
                -1 'INAPPLICABLE'
                -9 'NOT ASCERTAINED'
                1 'NORTHEAST'
                 2 'CENTRAL'
                 3 'SOUTHEAST'
                4 'WEST'
   SAMPSTAT
                1 'NONPARTICIPANT'
                 2 'FULL-TIME DEGREE SEEKING'
                 3 'OTHER(PART-TIME)'
   SIC
            '-1 ' 'INAPPLICABLE'
            '-7 ' 'REFUSED'
            '-8 ' 'UNKNOWN'
            '-9 ' 'UNACCERTAINED'
            'A ' 'AGRICULTURE, FORESTRY, AND FISHING'
               ' 'MINING'
            'B
            ' C
                ' 'CONSTRUCTION'
               ' 'MANUFACTURING'
            'D35 ' 'INDUSTRIAL MACHINERY AND EQUIPMENT'
            'D36 ' 'ELECTRONIC AND OTHER ELECTRIC EQUIPMENT'
            'D37 ' 'TRANSPORTATION EQUIPMENT'
            'E 'TRANSPORTATION AND PUBLIC UTILITIES'
            'E41 ' 'LOCAL AND INTERURBAN PASSENGER TRANSIT'
            'E42 ' 'TRUCKING AND WAREHOUSING'
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'E43 ' 'U.S. POSTAL SERVICE'
        'E48 ' 'COMMUNICATIONS'
        'E49 ' 'ELECTRIC, GAS, AND SANITARY SERVICES'
           ' 'WHOLESALE TRADE'
           ' 'RETAIL TRADE'
        'G
        'H ' 'FINANCE, INSURANCE, AND REAL ESTATE'
        'I 'SERVICES'
        'I737' 'COMPUTER AND DATA PROCESSING'
        'I80 ' 'HEALTH SERVICES'
        'I81 ' 'LEGAL SERVICES'
        '1821' 'ELEMENTARY AND SECONDARY SCHOOLS'
        '1822' 'COLLEGES AND UNIVERSITIES'
        '1824' 'VOCATIONAL SCHOOL'
        '187 ' 'ENGINEERING AND MANAGEMENT'
        'J ' 'PUBLIC ADMINISTRATION'
        'J914' 'FEDERAL GOVERNMENT'
        'J915' 'STATE OR LOCAL GOVERNMENT'
        'J971' 'NATIONAL SECURITY'
        'K
           ' 'NONCLASSIFIABLE ESTABLISHMENTS'
SOC
        '-1 ' 'INAPPLICABLE'
        '-7 ' 'REFUSED'
        '-8 ' 'UNKNOWN'
        '-9 ' 'UNACCERTAINED'
        'A
             ' 'EXECUTIVE, ADMIN, MANAGERIAL OCCUPATIONS'
        'B
           ' 'ENGINEERS, SURVEYORS, AND ARCHITECTS'
           ' 'NATURAL SCIENTISTS, AND MATHEMATICIANS'
        'C171' 'COMPUTER SCIENTISTS'
        'D19 ' 'SOCIAL SCIENTISTS, AND URBAN PLANNERS'
        'D20 ' 'SOCIAL, RECREATION, AND RELIGIOUS WORKERS'
        'D21 ' 'LAWYERS AND JUDGES'
        'E22 ' 'TEACHERS; COLL., UNIV., POSTSECONDARY INST.'
        'E23 ' 'TEACHERS, EXCEPT POSTSECONDARY INST.'
        'E24 ' 'VOCATIONAL AND EDUCATIONAL COUNSELORS'
        'E25 ' 'LIBRARIANS, ARCHIVISTS, AND CURATORS'
        'F26 ' 'PHYSICIANS AND DENTISTS'
        'F27 ' 'VETERINARIANS'
        'F28 ' 'OTHER HEALTH DIAG/TREATING PRACTITIONERS'
        'G29 ' 'REGISTERED NURSES'
        'G30 ' "PHARM., DIET., THERAPISTS, PHYSICIAN'S ASST"
           ' 'WRITERS, ARTISTS, ENTERTAINERS, ATHLETES'
           ' 'HEALTH TECHNOLOGISTS AND TECHNICIANS'
        'J37 ' 'ENGINEERING/TECHNOLOGISTS, TECHNICIANS'
        'J38 ' 'SCIENCE TECHNOLOGISTS AND TECHNICIANS'
        'J39 ' 'TECHNICIANS; EXCEPT HEALTH, ENG., SCIENCE'
           ' 'MARKETING AND SALES OCCUPATIONS'
        'L
            ' 'ADMINISTRATIVE SUPPORT, INCL CLERICAL'
        'M ' 'SERVICE OCCUPATIONS'
           ' 'AGRICULTURE, FORESTRY, FISHING OCCUPATIONS'
        'N
           ' 'MECHANICS AND REPAIRERS'
        '0611' 'VEHICLE, MOBILE EQUIP. MECHANICS/REPAIRER'
        '0615' 'ELECTRIC, ELECTRONIC EQUIPMENT REPAIRERS'
        'P 'CONSTUCTION AND EXTRACTIVE OCCUPATIONS'
```

' 'PRECISION PRODUCTION OCCUPATIONS'

' Q

```
'R ' 'PRODUCTION WORKING OCCUPATIONS'
           'S 'TRANSPORTATION, MATERIAL MOVING'
           'S821' 'MOTOR VEHICLE OPERATORS'
           'T ' 'HANDLERS, EQUIP. CLEANERS, HELPERS, LABORER'
           'U 'MILITARY OCCUPATIONS'
           'V 'MISCELLANEOUS OCCUPATIONS'
           'Y 'HOUSEWIFE'
           'Z 'UNEMPL, RETIRED, DISABLED, UNCLASSIFIABLE'
/ URBAN
               -1 'INAPPLICABLE'
               -9 'NOT ASCERTAINED'
               0 'NON'
                1 'MSA'
               2 'NECMA'
/ AEBASLIT
               0 'NO'
               1 'YES'
/ AEDEGREQ
               0 'NO'
                1 'YES'
 AEEMPREA
               0 'NO'
               1 'YES'
 AEEMPREQ
               0 'NO'
                1 'YES'
                2 'N/EMP WHEN TAKING'
 AEESL
               0 'NO'
                1 'YES'
 AEEVER
               0 'NEVER'
                1 'PAST 12 MTHS'
                2 'PAST 3Y N/PAST 12M'
                3 'BEFORE PAST 3YRS'
 AELABOR
               1 'EMPLOYED'
                2 'UNEMPLOYED'
                3 'NOT IN LABOR FORCE'
```

```
/ AELICNS
                0 'NO'
                1 'YES'
 AEPARANY
                0 'NO'
                1 'YES'
   AEPARTIC
                0 'NO'
                1 'YES'
   AEPRTIME
                0 'NO'
                1 'YES'
  AETRAIN
                0 'NO'
                1 'YES'
 CEMPREA1
                0 'NO'
                1 'YES'
 CEMPREA2
                0 'NO'
                1 'YES'
  CEMPREA3
                0 'NO'
                1 'YES'
/ CEMPREA4
                0 'NO'
                1 'YES'
 CREQUIR1
                0 'NO'
                1 'YES'
  CREQUIR2
                0 'NO'
                1 'YES'
  CREQUIR3
                0 'NO'
                1 'YES'
 CREQUIR4
                0 'NO'
                1 'YES'
   CTRAIN1
                0 'NO'
                1 'YES'
   CTRAIN2
                0 'NO'
                1 'YES'
  CTRAIN3
                0 'NO'
                1 'YES'
   CTRAIN4
                0 'NO'
                1 'YES'
  FTBASESL
                0 'NO'
                1 'YES'
```

```
FTDEGREE
               0 'NO'
              1 'YES'
FTNONDEG
               0 'NO'
               1 'YES'
 HIDEGREE
               1 'LESS THAN H/S DIP'
               2 'H/S DIP/EQUIV'
               3 'ASSOCIATE DEG'
               4 'BACH DEG/HIGHER'
INCLEVEL
               1 '$10,000 OR LESS'
               2 '$10,001-$15,000'
               3 '$15,001-$20,000'
               4 '$20,001-$25,000'
               5 '$25,001-$30,000'
               6 '$30,001-$40,000'
               7 '$40,001-$50,000'
               8 '$50,001-$75,000'
               9 'OVER $75,000'
RACEETHN
               1 'WHITE, NON-HISPANIC'
               2 'BLACK, NON-HISPANIC'
               3 'HISPANIC'
               4 'ALL OTHER RACES'
SCHOOLNG
               1 'UP TO 8TH GRD'
               2 '9-11 GRADE'
               3 '12TH GRADE'
               4 'VOC AFTER H/S'
               5 'SOME COLLEGE'
               6 'ASSOCIATE DEG'
               7 'BACH DEG/HIGHER'
 AELABF
              -1 'INAPPLICABLE'
              1 'IMPUTED VALUE'
 AGEF
              -1 'INAPPLICABLE'
              1 'IMPUTED VALUE'
 EVERMARF
              -1 'INAPPLICABLE'
              1 'IMPUTED VALUE'
 HIGHGRAF
              -1 'INAPPLICABLE'
              1 'IMPUTED VALUE'
 HISPVERF
              -1 'INAPPLICABLE'
              1 'IMPUTED VALUE'
 HSDIPLMF
              -1 'INAPPLICABLE'
              1 'IMPUTED VALUE'
```

/	INCOMRNF		
		-1 'I	NAPPLICABLE'
		1 'I	MPUTED VALUE
/	MARISTAF		
		-1 'I	NAPPLICABLE'
		1 'I	MPUTED VALUE'
/	NUMPERSF		
		-1 'I	NAPPLICABLE'
		1 'II	MPUTED VALUE'
/	OWNHOMEF		
		-1 'I	NAPPLICABLE'
		1 'II	MPUTED VALUE'
/	RACEVERF		
			NAPPLICABLE'
		1 'I	MPUTED VALUE'
/	SALARYF		
			NAPPLICABLE'
,		1 'II	MPUTED VALUE'
/	SICF		
			NAPPLICABLE'
,	~~~	1 'II	MPUTED VALUE'
/	SOCF	1	
			NAPPLICABLE'
,	IDIDED 1 6 E	1 'II	MPUTED VALUE'
/	UNDER16F	1 1 -	י יים בסת דמת בו
			NAPPLICABLE'
		1 'II	MPUTED VALUE'
	•		

C-115

COURSE FILE SPSS-X CONTROL CARDS

```
//READFILE JOB (account info), 'programmer name'
         EXEC XSPSS, REGION=4096K
//LIBRARY DD SPACE=(TRK, (50,50,60))
//WORK DD UNIT=SYSDA, SPACE=(24322, (1850, 1000),,, ROUND)
        DD DSN=COURSE.DATA,DISP=SHR,
//IN1
//
             UNIT=3400-6, VOL=SER=WV1919, LABEL=(2, SL),
//
             DISP=(RECFM=FB, LRECL=780, BLKSIZE=11700)
//SYSIN DD
*************
**
** This is a SPSS program which will read in the raw data **
** file into a SPSS data file. The JCL is a generic one **
** for an IBM SYSTEM/370. Each IBM facility will have **
** its own site specific commands and conventions. These **
** conventions must be implemented by the programmer.
******************
DATA LIST FILE=IN1 FIXED /
   CLASID 1-11
                    (A)
   PERSID
            12-20
                     (A)
   AGE
             21-22
   INCOMRNG
           23-24
   FTSCHOOL 25-26
   CURENROL
           27-28
   OTNUM
             29-30
   OTNAME
             31-70
                    (A)
   CRDEGREE
             71-72
   TAKEREAS
             73-74
   EMPLREAS
             75-76
   TRNMGMT
             77-78
   TRNSUPR
             79-80
   TRNPROF
            81-82
   TRNTECH
             83-84
   TRNCS
            85-86
   TRNHLTH
            87-88
            89-90
   TRNQC
            91-92
   TRNSALES
            93-94
   TRNEMPL
   TRNOTHER
            95-96
   REQUIRE
             97-98
   DEGREE
             99-100
   LICENSE
            101-102
            103-104
   OBTAIN
           105-106
   SPONTYPE
   EMPLPROV 107-108
   EMPLTIME
            109-110
   EMPLONLY
             111-112
   ATWORK
            113-114
   EMPLREQ
            115-116
   TIMEOFF 117-118
           119-120
   CORRESPN
   MAILTV
            121-122
```

	100 15:	
PAIDFAM	123-124	
	125-126	
PAIDSTAT		
PAIDBUSI		
PAIDPRIV	131-132	
PAIDOTHR	133-134	
PAIDFREE	135-136	
PAIDUNIV		
PAIDEMPL		
	141-148	
	149-150	
	151-152	
	151-152	
CLASUNIT		
	157-158	
COMPLETE		
	161-162	
	163-164	
	165-166	
	167-168	
MARISTAT	169-170	
UNDER16	171-172	
HIGHGRAD	173-174	
HSDIPLMA		
CENSUSDV		
CENSUSRG		
MILFLG	181-182	
	183-184	(Z\)
	185-186	(A)
SAMPSTAT		
		(7) \
SIC	189-192	
SOC	193-196	(A)
	197-198	
	199-200	(A)
AEBASLIT		
AEDEGREQ		
AEEMPREA		
AEEMPREQ	207-208	
AEESL	209-210	
AELABOR	211-212	
AELICNS	213-214	
AENUMCSE	215-216	
AETRAIN	217-218	
CEMPREAS	219-220	
CNUMWKS	221-223	
CREQUIRE	224-225	
CTRAIN	224 223	
FTBASESL	228-229	
FTDEGREE	230-231	
	232-233	
FTNONDEG		
HIDEGREE	234-235	
INCLEVEL	236-237	
RACEETHN	238-239	
SALARY	240-244	

SCHOOLNG	245-246
AELABF	247-248
AGEF	249-250
HIGHGRAF	251-252
HISPVERF	253-254
	255-256
HSDIPLMF	257-258
INCOMRNF	
MARISTAF	259-260
RACEVERF	261-262
SALARYF	263-264
SICF	265-266
SOCF	267-268
UNDER16F	269-270
AEWT	271-280
AEREPL1	281-290
AEREPL2	291-300
AEREPL3	301-310
AEREPL4	311-320
AEREPL5	321-330
AEREPL6	331-340
AEREPL7	341-350
AEREPL8	351-360
AEREPL9	361-370
	371-380
AEREPL10	
AEREPL11	381-390
AEREPL12	391-400
AEREPL13	401-410
AEREPL14	411-420
AEREPL15	421-430
AEREPL16	431-440
AEREPL17	441-450
AEREPL18	451-460
AEREPL19	461-470
AEREPL20	471-480
AEREPL21	481-490
AEREPL22	491-500
AEREPL23	501-510
AEREPL24	511-520
AEREPL25	521-530
AEREPL26	531-540
AEREPL27	541-550
AEREPL28	551-560
AEREPL29	561-570
	571-580
AEREPL30	581-590
AEREPL31	
AEREPL32	591-600
AEREPL33	601-610
AEREPL34	611-620
AEREPL35	621-630
AEREPL36	631-640
AEREPL37	641-650
AEREPL38	651-660
AEREPL39	661-670
AEREPL40	671-680

681-690
691-700
701-710
711-720
721-730
731-740
741-750
751-760
761-770
771-780.

VARIABLE LABEL

ADLTID 2-DIGIT SEQUENTIAL#"
BASEID 2-DIGIT PERSNUM"
ANUARY 1,1991"
HOUSEHOLD INCOME - RANGE"
ENTARY OR HIGH SCHOOL"
LY ENROLLED AS FULL-TIME STND"
CLASSES TAKEN DURING PAST 12"
CENT AE CLAS(FR ADLT.OTNAME#)"
FOR CREDIT TOWARD DEGREE"
ASON FOR TAKING A10 CLASS"
REASONS FOR TAKING A10 CLASS"
IVE MGMT DEVELOPMENT TRAINING"
ISORY TRAINING"
SIONAL DEVELOPMENT TRAINING"
CAL/SKILLED WORKER TRAINING"
ROCESSING/COMPUTER SOFTWARE"
ALTH AND SAFETY TRAINING"
Y CONTROL/STATISTICAL PROCESS"
AND MARKETING TRAINING"
PLOYEE TRAINING"
THER KIND OF TRAINING"
O CLASS TO MEET REQUIREMENT"
SS FULFILLS TYPE REQUIREMENT"
SS TO OBTAIN/RENEW LICENSE"
N OR RENEW LICENSE/CERTIFICAT"
SS SPONSORED BY TYPE ORG"
SS SPONSOR IS EMPLOYER"
ED AT TIME A10 CLASS TAKEN"
SS PARTICIPATN-EMPLOYEES ONLY"
SS GIVEN AT WORK"
ER REQUIRED A10 CLASS"
IME OFF TO TAKE A10 CLASS"
SS A CORRESPONDENCE COURSE"
R COURSE - TYPE INSTRUCTION"
FAMILY PAID"
L GOVERNMENT PAID"
COUNTY/LOCAL GOVERNMENT PAID"
SS OR INDUSTRY PAID"
E ORGANIZATION PAID"
E ELSE PAID"
WAS NO CHARGE"

"A29H POST-SEC INST PAID-RECODE" PAIDUNIV "A30 EMPLOYER WAS SOURCE OF PAYMENT" PAIDEMPL "A31 AMOUNT PAID FOR TUITION & FEES A10" TUITION TUITONE "A31A TUITION FOR MORE THAN ONCE COURSE?" "A31B NUMBER OF COURSES TUITION COVERS" TUITNUM CLASNUM "A32 # WEEKS A10 CLASS SCHEDULED TO RUN" "A32 UNITS A10 CLASS SCHEDULED TO RUN" CLASUNIT "A33 # HOURS PER WEEK A10 CLASS SCHEDULED" CLASHRS "A34 COMPLETED A10 CLASS" COMPLETE "A34A STILL TAKING COURSE OR DROPPED COUR" TAKING RACEVER "A42A RACE VERIFICATION" "A42A1 RESPONDENT OF HISPANIC ORIGIN" HISPVER "A42B S42B GENDER VERIFICATION" SEXVER "A44 CURRENTLY MARRIED" MARISTAT UNDER16 "A57 HAVE ANY KIDS < 16 WHO LIVE W/YOU" "A59 HIGHEST GRADE COMPLETED" HIGHGRAD HSDIPLMA "A60 RECEIVE HIGH SCHOOL DIPLOMA OR EQUIV" "CENSUS DIVISION" CENSUSDV "CENSUS REGION" CENSUSRG MILFLG "MILITARY FLAG" PSU "FOR TAYLOR SERIES VARIANCE" "DEPARTMENT OF EDUCATION REGION" REGION "PARTICIPATION STATUS AT SAMPLING" SAMPSTAT "INDUSTRY CODE" SIC "OCCUPATION CODE" SOC URBAN "URBANICITY" "FOR TAYLOR SERIES VARIANCE" VSTRAT AEBASLIT "D-ADULT EDUCATION TO IMPROVE SKILLS" AEDEGREQ "D-ADULT EDUCATION REQUIRED F/DEGREE" "D-ADULT EDUCATION F/JOB-RELATED REASON" AEEMPREA AEEMPREQ "D-ADULT EDUCATION REQUIRED BY EMPLOYER" AEESL "D-ADULT EDUCATION F/ENGLISH AS 2ND LANG" "D-LABOR FORCE STATUS" AELABOR "D-ADULT EDUCATION F/LICENSE/CERTIFICATE" AELICNS "D-TOTAL # AE COURSES TAKEN IN PAST 12M" AENUMCSE "D-ADULT EDUCATION W/TRAINING COMPONENT" AETRAIN CEMPREAS "D-JOB RELATED REASON FOR TAKING COURSE" "D-NUMBER OF WEEKS SCHEDULED TO RUN" CNUMWKS "D-REORD FOR CERTIF OF COMPLETION/DIPLOMA" CREQUIRE "D-ANY TRAINING COMPONENT IN COURSE" CTRAIN FTBASESL "D-F/T BASIC SKILLS/ESL COURSE" FTDEGREE "D-FULLTIME ASSOC/BACH DEGREE PROGRAM" FTNONDEG "D-F/T NONDEG PGM" "D-HIGHEST DEGREE ATTAINED" HIDEGREE "D-LEVEL OF INCOME" INCLEVEL RACEETHN "D-RACE-ETHNICITY" SALARY "D-ANNUAL SALARY/CURRENT OR MOST RCNT JOB" SCHOOLNG "D-YEARS OF SCHOOL COMPLETED" "IMPUTATION FLAG FOR LABOR FORCE STATUS" AELABF AGEF "IMPUTATION FLAG FOR AGE" HIGHGRAF "IMPUTATION FLAG FOR HIGHGRAD" "IMPUTATION FLAG FOR HISPVER" HISPVERF

C-123

"IMPUTATION FLAG FOR HSDIPLMA"

"INCOMRNG IMPUTED FLAG"

HSDIPLMF

INCOMRNF

```
"IMPUTATION FLAG FOR MARISTAT"
MARISTAF
RACEVERF
          "IMPUTATION FLAG FOR RACEVER"
SALARYF
          "IMPUTATION FLAG FOR SALARY"
SICF
          "IMPUTATION FLAG FOR SIC"
          "IMPUTATION FLAG FOR SOC"
SOCF
UNDER16F
          "IMPUTATION FLAG FOR UNDER16"
          "FINAL ADULT WEIGHT"
AEWT
          "REPLICATE WEIGHT"
AEREPL1
         "REPLICATE WEIGHT"
AEREPL2
          "REPLICATE WEIGHT"
AEREPL3
AEREPL4
          "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL5
         "REPLICATE WEIGHT"
AEREPL6
AEREPL7
         "REPLICATE WEIGHT"
         "REPLICATE WEIGHT"
AEREPL8
AEREPL9
          "REPLICATE WEIGHT"
AEREPL10
          "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL11
AEREPL12
          "REPLICATE WEIGHT"
         "REPLICATE WEIGHT"
AEREPL13
          "REPLICATE WEIGHT"
AEREPL14
AEREPL15 "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL16
AEREPL17
          "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL18
AEREPL19
          "REPLICATE WEIGHT"
AEREPL20
          "REPLICATE WEIGHT"
AEREPL21
          "REPLICATE WEIGHT"
AEREPL22 "REPLICATE WEIGHT"
AEREPL23 "REPLICATE WEIGHT"
AEREPL24
          "REPLICATE WEIGHT"
AEREPL25
          "REPLICATE WEIGHT"
AEREPL26 "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL27
AEREPL28 "REPLICATE WEIGHT"
AEREPL29 "REPLICATE WEIGHT"
AEREPL30 "REPLICATE WEIGHT"
AEREPL31
          "REPLICATE WEIGHT"
AEREPL32
          "REPLICATE WEIGHT"
AEREPL33 "REPLICATE WEIGHT"
AEREPL34
          "REPLICATE WEIGHT"
         "REPLICATE WEIGHT"
AEREPL35
AEREPL36 "REPLICATE WEIGHT"
AEREPL37 "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL38
AEREPL39
          "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL40
AEREPL41
          "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL42
AEREPL43
          "REPLICATE WEIGHT"
AEREPL44
          "REPLICATE WEIGHT"
          "REPLICATE WEIGHT"
AEREPL45
AEREPL46
          "REPLICATE WEIGHT"
AEREPL47
          "REPLICATE WEIGHT"
```

```
AEREPL48 "REPLICATE WEIGHT"
               AEREPL49 "REPLICATE WEIGHT"
              AEREPL50 "REPLICATE WEIGHT".
VALUE LABELS
/ AGE
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
  INCOMRNG
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     0 'BLANKS ALLOWED'
                     1 '$5,000 OR LESS'
                     10 'OVER $75,000'
                     2 '$5,001 TO $10,000'
                      3 '$10,001 TO $15,000'
                      4 '$15,001 TO $20,000'
                      5 '$20,001 TO $25,000'
                      6 '$25,001 TO $30,000'
                      7 '$30,001 TO $40,000'
                      8 '$40,001 TO $50,000'
                     9 '$50,001 TO $75,000'
  FTSCHOOL
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
  CURENROL
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
  OTNUM
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
  CRDEGREE
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
```

```
/ TAKEREAS
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'PERSONAL, FAMILY, OR SOCIAL REASON'
                     2 'TO IMPROVE, ADVANCE, KEEP UP CURRENT JOB'
                     3 'TO TRAIN FOR A NEW JOB OR CAREER'
                     4 'TO IMPROVE READING, WRITING, MATH SKILLS'
                     5 'TO MEET REQUIREMENT FOR DIPLOMA/DEGREE'
                     91 'OTHER REASON'
 EMPLREAS
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
 TRNMGMT
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
  TRNSUPR
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
  TRNPROF
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
 TRNTECH
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
 TRNCS
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
```

```
/ TRNHLTH
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                    2 'NO'
/ TRNQC
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ TRNSALES
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ TRNEMPL
                    -1 'INAPPLICABLE'
                     -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ TRNOTHER
                    -1 'INAPPLICABLE'
                     -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ REQUIRE
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
```

```
DEGREE
                   -1 'INAPPLICABLE'
                   -7 'REFUSED'
                   -8 'DK'
                   -9 'NOT ASCERTAINED'
                    0 'INELIGIBLE TYPE REPORTED'
                    1 '8TH GRADE CERTIFICATE OF COMPLETION'
                    2 'HIGH SCHOOL DIPLOMA (INCL EQUIVALENCY)'
                    3 'VOCATIONAL DIPLOMA OR CERTIFICATE'
                    4 '2-YEAR DEGREE FROM COLLEGE OR TECHNICAL'
                    5 '4-YEAR DEGREE FROM COLLEGE OR UNIVERSITY'
                    6 'GRADUATE OR PROFESSIONAL DEGREE/CERTIF'
                    7 'COLLEGE CERTIFICATE'
                    8 'LICENSE'
                   91 'OTHER (SPECIFY)'
LICENSE
                   -1 'INAPPLICABLE'
                   -7 'REFUSED'
                   -8 'DK'
                   -9 'NOT ASCERTAINED'
                    1 'YES'
                   2 'NO'
 OBTAIN
                   -1 'INAPPLICABLE'
                   -7 'REFUSED'
                   -8 'DK'
                   -9 'NOT ASCERTAINED'
                    1 'OBTAIN LICENSE OR CERTIFICATION'
                   2 'RENEW LICENSE OR CERTIFICATION'
 SPONTYPE
                   -1 'INAPPLICABLE'
                   -7 'REFUSED'
                   -8 'DK'
                   -9 'NOT ASCERTAINED'
                    1 'ELEMENTARY/JUNIOR HIGH/HIGH SCHOOL'
                   10 'PRIVATE COMMUNITY ORGANIZATION'
                    2 '2-YR COMMUNITY/JR COLLEGE/TECHNICAL INST'
                    3 '4-YR COLLEGE OR UNIVERSITY'
                    4 'VOCA/TRADE/BUSINESS/HOSPITAL/FLIGHT SCHL'
                    5 'TUTOR OR PRIVATE INSTRUCTOR'
                    6 'BUSINESS OR INDUSTRY'
                    7 'LABOR ORGANIZATION OR PROFESSIONAL ASSOC'
                    8 'LIBRARY'
                    9 "FEDERAL/STATE/COUNTY/LOCAL GOV'T AGENCY"
                   91 'SOMEONE ELSE'
 EMPLPROV
                   -1 'INAPPLICABLE'
                   -7 'REFUSED'
                   -8 'DK'
                   -9 'NOT ASCERTAINED'
                   1 'YES'
                    2 'NO'
```

```
/ EMPLTIME
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ EMPLONLY
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ ATWORK
                    -1 'INAPPLICABLE'
                     -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ EMPLREQ
                    -1 'INAPPLICABLE'
                     -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ TIMEOFF
                    -1 'INAPPLICABLE'
                     -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
  CORRESPN
                    -1 'INAPPLICABLE'
                     -7 'REFUSED'
                    -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
 MAILTV
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                     -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'THROUGH THE MAIL'
                     2 'BY TELEVISION OR RADIO'
```

```
/ PAIDFAM
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ PAIDFED
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ PAIDSTAT
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ PAIDBUSI
                    -1 'INAPPLICABLE'
                     -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ PAIDPRIV
                    -1 'INAPPLICABLE'
                     -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ PAIDOTHR
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ PAIDFREE
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                     -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'NO CHARGE'
                     2 'CHARGE'
```

```
/ PAIDUNIV
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ PAIDEMPL
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ TUITION
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
/ TUITONE
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
  TUITNUM
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                     -9 'NOT ASCERTAINED'
/ CLASNUM
                    -1 'INAPPLICABLE'
                    -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
/ CLASUNIT
                    -1 'INAPPLICABLE'
                     -7 'REFUSED'
                    -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'WEEKS'
                     2 'MONTHS'
                     3 'SEMESTERS'
                     4 'QUARTERS'
                     5 'YEARS'
/ CLASHRS
                    -1 'INAPPLICABLE'
                     -7 'REFUSED'
                    -8 'DK'
                    -9 'NOT ASCERTAINED'
```

```
/ COMPLETE
                     -1 'INAPPLICABLE'
                    -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
/ TAKING
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'STILL TAKING COURSE'
                     2 'DROPPED COURSE'
/ RACEVER
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'WHITE'
                     2 'BLACK'
                     3 'NATIVE AMERICAN OR ALASKAN NATIVE'
                     4 'ASIAN OR PACIFIC ISLANDER'
                     91 'SOME OTHER RACE'
/ HISPVER
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
  SEXVER
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'MALE'
                     2 'FEMALE'
  MARISTAT
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'MARRIED'
                     2 'SEPARATED'
                     3 'DIVORCED'
                     4 'WIDOWED'
  UNDER16
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
```

```
/ HIGHGRAD
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                      1 'UP TO EIGHTH GRADE'
                      2 'NINTH TO ELEVENTH GRADE'
                      3 'HIGH SCHOOL DIPLOMA OR EQUIVALENT'
                      4 'VOCATIONAL/TECHNICAL AFTER HIGH SCHOOL'
                      5 '1-2 YEARS OF COLLEGE'
                      6 "ASSOCIATE'S DEGREE"
                      7 '3-4 YEARS OF COLLEGE'
                      8 "BACHELOR'S DEGREE"
                     9 'GRADUATE OR PROFESSIONAL SCHOOL'
  HSDIPLMA
                     -1 'INAPPLICABLE'
                     -7 'REFUSED'
                     -8 'DK'
                     -9 'NOT ASCERTAINED'
                     1 'YES'
                     2 'NO'
 CENSUSDV
                     -1 'INAPPLICABLE'
                      1 'NEW ENGLAND'
                      2 'MIDDLE ATLANTIC'
                      3 'EAST NORTH CENTRAL'
                      4 'WEST NORTH CENTRAL'
                      5 'SOUTH ATLANTIC'
                      6 'EAST SOUTH CENTRAL'
                      7 'WEST SOUTH CENTRAL'
                      8 'MOUNTAIN'
                     9 'PACIFIC'
  CENSUSRG
                     -1 'INAPPLICABLE'
                      1 'NORTHEAST'
                      2 'MIDWEST'
                     3 'SOUTH'
                     4 'WEST'
  MILFLG
                     -1 'INAPPLICABLE'
                     1 'IMPUTED VALUE'
  REGION
                     -1 'INAPPLICABLE'
                     -9 'NOT ASCERTAINED'
                     1 'NORTHEAST'
                      2 'CENTRAL'
                      3 'SOUTHEAST'
                      4 'WEST'
  SAMPSTAT
                      1 'NONPARTICIPANT'
                      2 'FULL-TIME DEGREE SEEKING'
                      3 'OTHER(PART-TIME)'
```

```
SIC
               '-1 ' 'INAPPLICABLE'
               '-7 ' 'REFUSED'
               '-8 ' 'UNKNOWN'
               '-9 ' 'UNACCERTAINED'
               'A ' 'AGRICULTURE, FORESTRY, AND FISHING'
               'B ' 'MINING'
               ' C
                  ' 'CONSTRUCTION'
                  ' 'MANUFACTURING'
               'D
               'D35 ' 'INDUSTRIAL MACHINERY AND EQUIPMENT'
               'D36 ' 'ELECTRONIC AND OTHER ELECTRIC EQUIPMENT'
               'D37 ' 'TRANSPORTATION EQUIPMENT'
                   ' 'TRANSPORTATION AND PUBLIC UTILITIES'
               'E41 ' 'LOCAL AND INTERURBAN PASSENGER TRANSIT'
               'E42 ' 'TRUCKING AND WAREHOUSING'
               'E43 ' 'U.S. POSTAL SERVICE'
               'E48 ' 'COMMUNICATIONS'
               'E49 ' 'ELECTRIC, GAS, AND SANITARY SERVICES'
                  ' 'WHOLESALE TRADE'
                  ' 'RETAIL TRADE'
               ' G
               'H ' 'FINANCE, INSURANCE, AND REAL ESTATE'
               'I 'SERVICES'
               'I737' 'COMPUTER AND DATA PROCESSING'
               'I80 ' 'HEALTH SERVICES'
               'I81 ' 'LEGAL SERVICES'
               '1821' 'ELEMENTARY AND SECONDARY SCHOOLS'
               '1822' 'COLLEGES AND UNIVERSITIES'
               '1824' 'VOCATIONAL SCHOOL'
               '187 ' 'ENGINEERING AND MANAGEMENT'
               'J ' 'PUBLIC ADMINISTRATION'
               'J914' 'FEDERAL GOVERNMENT'
               'J915' 'STATE OR LOCAL GOVERNMENT'
               'J971' 'NATIONAL SECURITY'
                   ' 'NONCLASSIFIABLE ESTABLISHMENTS'
 SOC
               '-1 ' 'INAPPLICABLE'
               '-7 ' 'REFUSED'
               '-8 ' 'UNKNOWN'
               '-9 ' 'UNACCERTAINED'
               'A
                   ' 'EXECUTIVE, ADMIN, MANAGERIAL OCCUPATIONS'
                    ' 'ENGINEERS, SURVEYORS, AND ARCHITECTS'
                  ' 'NATURAL SCIENTISTS, AND MATHEMATICIANS'
               ' C
               'C171' 'COMPUTER SCIENTISTS'
               'D19 ' 'SOCIAL SCIENTISTS, AND URBAN PLANNERS'
               'D20 ' 'SOCIAL, RECREATION, AND RELIGIOUS WORKERS'
               'D21 ' 'LAWYERS AND JUDGES'
               'E22 ' 'TEACHERS; COLL., UNIV., POSTSECONDARY INST.'
               'E23 ' 'TEACHERS, EXCEPT POSTSECONDARY INST.'
               'E24 ' 'VOCATIONAL AND EDUCATIONAL COUNSELORS'
               'E25 ' 'LIBRARIANS, ARCHIVISTS, AND CURATORS'
               'F26 ' 'PHYSICIANS AND DENTISTS'
               'F27 ' 'VETERINARIANS'
               'F28 ' 'OTHER HEALTH DIAG/TREATING PRACTITIONERS'
```

'G29 ' 'REGISTERED NURSES'

```
'G30 ' "PHARM., DIET., THERAPISTS, PHYSICIAN'S ASST"
                   ' 'WRITERS, ARTISTS, ENTERTAINERS, ATHLETES'
                   ' 'HEALTH TECHNOLOGISTS AND TECHNICIANS'
               'J37 ' 'ENGINEERING/TECHNOLOGISTS, TECHNICIANS'
               'J38 ' 'SCIENCE TECHNOLOGISTS AND TECHNICIANS'
               'J39 ' 'TECHNICIANS; EXCEPT HEALTH, ENG., SCIENCE'
               'K ' 'MARKETING AND SALES OCCUPATIONS'
               'L ' 'ADMINISTRATIVE SUPPORT, INCL CLERICAL'
                  ' 'SERVICE OCCUPATIONS'
                   ' 'AGRICULTURE, FORESTRY, FISHING OCCUPATIONS'
               'O 'MECHANICS AND REPAIRERS'
               '0611' 'VEHICLE, MOBILE EQUIP. MECHANICS/REPAIRER'
               '0615' 'ELECTRIC, ELECTRONIC EQUIPMENT REPAIRERS'
               'P 'CONSTUCTION AND EXTRACTIVE OCCUPATIONS'
               ' 0
                  ' 'PRECISION PRODUCTION OCCUPATIONS'
               'R
                   ' 'PRODUCTION WORKING OCCUPATIONS'
                  ' 'TRANSPORTATION, MATERIAL MOVING'
               'S821' 'MOTOR VEHICLE OPERATORS'
                  ' 'HANDLERS, EQUIP. CLEANERS, HELPERS, LABORER'
               'U
                  ' 'MILITARY OCCUPATIONS'
               'V 'MISCELLANEOUS OCCUPATIONS'
               'Y 'HOUSEWIFE'
               'Z 'UNEMPL, RETIRED, DISABLED, UNCLASSIFIABLE'
URBAN
                   -1 'INAPPLICABLE'
                   -9 'NOT ASCERTAINED'
                   0 'NON'
                   1 'MSA'
                   2 'NECMA'
 AEBASLIT
                   0 'NO'
                   1 'YES'
 AEDEGREQ
                   0 'NO'
                   1 'YES'
 AEEMPREA
                   0 'NO'
                   1 'YES'
AEEMPREQ
                   0 'NO'
                   1 'YES'
                   2 'N/EMP WHEN TAKING'
 AEESL
                   0 'NO'
                   1 'YES'
 AELABOR
                   1 'EMPLOYED'
                   2 'UNEMPLOYED'
                   3 'NOT IN LABOR FORCE'
 AELICNS
                   0 'NO'
                   1 'YES'
```

```
/ AETRAIN
                     0 'NO'
                     1 'YES'
  CEMPREAS
                      0 'NO'
                     1 'YES'
  CREQUIRE
                     0 'NO'
                     1 'YES'
  CTRAIN
                     0 'NO'
                     1 'YES'
  FTBASESL
                     0 'NO'
                     1 'YES'
  FTDEGREE
                     0 'NO'
                     1 'YES'
  FTNONDEG
                      0 'NO'
                     1 'YES'
  HIDEGREE
                     1 'LESS THAN H/S DIP'
                      2 'H/S DIP/EQUIV'
                      3 'ASSOCIATE DEG'
                     4 'BACH DEG/HIGHER'
  INCLEVEL
                      1 '$10,000 OR LESS'
                      2 '$10,001-$15,000'
                      3 '$15,001-$20,000'
                      4 '$20,001-$25,000'
                      5 '$25,001-$30,000'
                      6 '$30,001-$40,000'
                      7 '$40,001-$50,000'
                      8 '$50,001-$75,000'
                      9 'OVER $75,000'
  RACEETHN
                      1 'WHITE, NON-HISPANIC'
                      2 'BLACK, NON-HISPANIC'
                      3 'HISPANIC'
                      4 'ALL OTHER RACES'
  SCHOOLNG
                      1 'UP TO 8TH GRD'
                      2 '9-11 GRADE'
                      3 '12TH GRADE'
                      4 'VOC AFTER H/S'
                      5 'SOME COLLEGE'
                      6 'ASSOCIATE DEG'
                     7 'BACH DEG/HIGHER'
  AELABF
                     -1 'INAPPLICABLE'
                     1 'IMPUTED VALUE'
```

/	AGEF		
		-1	'INAPPLICABLE'
		1	'IMPUTED VALUE'
/	HIGHGRAF		
		-1	'INAPPLICABLE'
		1	'IMPUTED VALUE'
/	HISPVERF		
		-1	'INAPPLICABLE'
,		1	'IMPUTED VALUE'
/	HSDIPLMF	-	
		-1	'INAPPLICABLE'
,	TNICOMPNIE	1	'IMPUTED VALUE'
/	INCOMRNF	_1	'INAPPLICABLE'
		1	'IMPUTED VALUE'
/	MARISTAF		INIOIDD VIIDOD
,		-1	'INAPPLICABLE'
		1	'IMPUTED VALUE'
/	RACEVERF		
		-1	'INAPPLICABLE'
		1	'IMPUTED VALUE'
/	SALARYF		
		-1	'INAPPLICABLE'
		1	'IMPUTED VALUE'
/	SICF		
		-1	
,	000E	1	'IMPUTED VALUE'
/	SOCF	-1	'INAPPLICABLE'
		1	'IMPUTED VALUE'
/	UNDER16F		THIOTED VALUE
,	01100111101	-1	'INAPPLICABLE'
		1	'IMPUTED VALUE'
	•		

C-137

APPENDIX D

GUIDELINES FOR USING SAS AND SPSS-X

APPENDIX D

Guidelines for using SAS and SPSS-X

The files provided on the public release tape include SAS data files, SAS input card files, and VALUE cards for PROC FORMAT. The data files are in SAS system format created using SAS release 5.18. These files contain the questionnaire variables, flag variables, composite variables, weight variables and labels associated with each variable.

Because of the size of the data files, SAS users should use the '(KEEP=...)' and '(DROP=...)' options in the 'SET...;' and/or 'DATA...;' or 'PROC...;' statements when creating temporary working data sets. This will minimize space usage and maximize processing efficiency. Also, SAS users may want to override the default work space and memory allocation when working with large data files. Increasing the REGION value in the options of the //EXEC SAS statement of the JCL will override the default memory allocation. The //LIBRARY DD can be used to increase the capacity of the format library, if the user includes the large number of VALUE cards in the PROC FORMAT statement. The //WORK DD statement can be used to increase the work space. The //WORK DD statement card should be placed just after the //EXEC SAS or the //LIBRARY DD card, as shown in the following example:

```
//EXEC
                SAS, REGION=2048K
                DD SPACE=(TRK, (50,50,60))
//LIBRARY
                DD UNIT=SYSDA, SPACE=(24322, (1850, 1000),,, ROUND)
//WORK
               DD DSN=ADULT.SASLIB,DISP=SHR
//TN1
//SYSIN
               * ממ
PROC FORMAT;
VALUE FYESNO
                -1
                        = 'INAPPLICABLE'
                        = 'REFUSED'
                        = 'DK'
                -8
                -9
                        = 'NOT ASCERTAINED'
                        = 'YES'
                2
                        = 'NO';
VALUE FHIGHGRD
                        = 'INAPPLICABLE'
                -7
                        = 'REFUSED'
                        = 'DK'
                -8
                -9
                        = 'NOT ASCERTAINED'
                        = 'UP TO EIGHTH GRADE'
                2
                        = 'NINTH TO ELEVENTH GRADE'
                3
                        = 'HIGH SCHOOL DIPLOMA OR EQUIVALENT'
                4
                        = 'VOCATIONAL/TECHNICAL AFTER HIGH SCHOOL'
                        = '1-2 YEARS OF COLLEGE'
                        = 'ASSOCIATE''S DEGREE'
                6
                        = '3-4 YEARS OF COLLEGE'
                        = 'BACHELORS'' DEGREE'
                8
                        = 'GRADUATE OR PROFESSIONAL SCHOOL';
```

PROC FREQ DATA=IN1.ADULT(KEEP=HIGHGRAD LIBMO);
FORMAT

HIGHGRAD FHIGHGRD.

LIBMO FYESNO.;
TABLES HIGHGRAD*LIBMO;
TITLE 'HIGHEST GRADE COMPLETED BY USED PUBLIC LIBRARY IN PAST MONTH';

The user may include in the PROC FORMAT only those VALUE cards for the variables which are needed for specific analyses. Once the PROC FORMAT has been established, users can include the FORMAT...; statements in any SAS data step or procedures.

The guidelines mentioned here are general suggestions. Each specific computer site will have its own set of requirements. The user should contact the technical assistance persons for the specific site to most efficiently utilize the system.

SPSS-X systems files may be created and used on most computer sites. SPSS-X control cards to read in the raw data file into an SPSS-X system file, as well as the variable label and value label statements, are included on the public release tape. Some of the guidelines mentioned above for SAS can also be applied to SPSS-X, such as keeping only the variables needed for the specific analysis and the use of the //WORK DD... statement to increase the work space. User should contact the technical assistance person for the specific site to obtain the information necessary to utilize SPSS-X most efficiently.

APPENDIX E SAS CODE FOR COMPOSITE VARIABLES

```
** SOURCE: PROGRAM TO CREATE A FILE WITH DERIVED VARS **
             TO BE MERGED ONTO THE ADULT FILE.
              PCHLIB.CNTL(ADLTFILE) 8/31/91
DATA
 (KEEP=BASEID PERSID MAINRSLT AGE RACE RACEVER
  HISPVER WORKWEEK VACATION WORKPAY LOOKWORK HISPANIC
  LOOKPUBL LOOKPRIV LOOKEMPL LOOKFRND LOOKADS CRDEGREE
  LASTACTY FTBASIC OTBASIC BASIC FTENGLSH OTENGL
  ENGLISH LICENSE1 LICENSE2 LICENSE3 LICENSE4
  PTDEGREE FTVOCA TAKEREA1 TAKEREA2 FTGED FTCERT
  TAKEREA3 TAKEREA4 EMPLREA1 EMPLREA2 EMPLREA3
  EMPLREA4 EMPLREQ1 EMPLREQ2 EMPLREQ3 EMPLREQ4
  EMPLTIM1 EMPLTIM2 EMPLTIM3 EMPLTIM4 FTASSOC
   FTBACHLR PTENROLL REQUIRE1 REQUIRE2 REQUIRE3
  REQUIRE4 FTNUM PTNUM OTNUM AECOURSE OTCLASS
   TRNMGMT1 TRNMGMT2 TRNMGMT3 TRNMGMT4 TRNSUPR1
  TRNSUPR2 TRNSUPR3 TRNSUPR4 TRNPROF1 TRNPROF2
  TRNPROF3 TRNPROF4 TRNTECH1 TRNTECH2 TRNTECH3
  TRNTECH4 TRNCS1 TRNCS2 TRNCS3 TRNCS4 TRNHLTH1
  TRNHLTH2 TRNHLTH3 TRNHLTH4 TRNQC1 TRNQC2 TRNQC3
  TRNQC4 TRNSALE1 TRNSALE2 TRNSALE3 TRNSALE4
  TRNEMPL1 TRNEMPL2 TRNEMPL3 TRNEMPL4 FTANY FTOTHER
  AEPAST3 CLASUNI1 CLASUNI2 CLASUNI3 CLASUNI4
  CLASNUM1 CLASNUM2 CLASNUM3 CLASNUM4 HIGHGRAD
  HSDIPLMA INCOMRNG
    RACEETHN AELABOR AEBASLIT AEESL AELICNS AEEMPREA
    AEDEGREQ AEEMPREQ AENUMCSE AEEVER AETRAIN FTDEGREE
    FTBASESL AEPARANY AEPARTIC AEPRTIME CEMPREA1
    CEMPREA2 CEMPREA3 CEMPREA4 CREQUIR1 CREQUIR2 CREQUIR3
    CREQUIR4 CTRAIN1 CTRAIN2 CTRAIN3 CTRAIN4 CNUMWKS1
    CNUMWKS2 CNUMWKS3 CNUMWKS4 INCLEVEL HIDEGREE SCHOOLNG
   SALARY FINONDEG
  );
   LENGTH RACEETHN 2;
  LENGTH AELABOR 2;
  LENGTH AEBASLIT 2;
  LENGTH AEESL 2;
  LENGTH AELICNS 2;
  LENGTH AEEMPREA 2;
  LENGTH AEDEGREO 2;
  LENGTH AEEMPREO 2;
   LENGTH AENUMCSE 4;
   LENGTH AEEVER 2;
   LENGTH AETRAIN 2;
  LENGTH FTDEGREE 2;
  LENGTH FTBASESL 2:
  LENGTH AEPARANY 2;
  LENGTH AEPARTIC 2;
  LENGTH AEPRTIME 2;
  LENGTH CEMPREA1 2;
   LENGTH CEMPREA2 2:
   LENGTH CEMPREA3 2;
   LENGTH CEMPREA4 2;
  LENGTH CREQUIR1 2;
  LENGTH CREQUIR2 2;
  LENGTH CREQUIR3 2;
  LENGTH CREQUIR4 2;
  LENGTH CTRAIN1 2;
  LENGTH CTRAIN2 2;
  LENGTH CTRAIN3 2;
  LENGTH CTRAIN4 2;
```

```
LENGTH CNUMWKS1 4;
  LENGTH CNUMWKS2 4;
  LENGTH CNUMWKS3 4;
  LENGTH CNUMWKS4 4:
  LENGTH INCLEVEL 2;
  LENGTH HIDEGREE 2;
  LENGTH SCHOOLNG 2;
  LENGTH SALARY 4;
  LENGTH FTNONDEG 2;
                                                        RACEETHN
IF HISPVER = 1 THEN RACEETHN = 3;
ELSE IF RACEVER = 2 THEN RACEETHN = 2;
ELSE IF RACEVER = 1 THEN RACEETHN = 1;
ELSE IF (RACEVER = 3 | RACEVER = 4 | RACEVER = 91)
  THEN RACEETHN = 4;
ELSE RACEETHN = .;
  ARRAY ANYMISS WORKWEEK LASTACTY FTBASIC OTBASIC BASIC FTASSOC
    FTENGLSH OTENGL ENGLISH LICENSE1-LICENSE4 FTCERT CRDEGREE
    PTDEGREE FTVOCA TAKEREA1-TAKEREA4 EMPLREA1-EMPLREA4
    FTBACHLR PTENROLL REOUIRE1-REOUIRE4 EMPLTIM1-EMPLTIM4
    EMPLREQ1-EMPLREQ4 FTNUM PTNUM OTNUM AECOURSE OTCLASS
    TRNMGMT1-TRNMGMT4 TRNSUPR1-TRNSUPR4 TRNPROF1-TRNPROF4
    TRNTECH1-TRNTECH4 TRNCS1-TRNCS4 TRNHLTH1-TRNHLTH4
    TRNOC1-TRNOC4 TRNSALE1-TRNSALE4 TRNEMPL1-TRNEMPL4
    FTANY FTOTHER FTGED FTCERT AEPAST3 CLASUNI1-CLASUNI4
    CLASNUM1-CLASNUM4 INCOMRNG HIGHGRAD;
  DO OVER ANYMISS;
    IF (ANYMISS=-1 | ANYMISS=-7 | ANYMISS=-8 | ANYMISS=-9)
      THEN ANYMISS = .;
                                                        AEPRTIME
IF (OTCLASS = 1 | PTENROLL = 1) THEN AEPRTIME = 1;
ELSE IF (OTCLASS = . & PTENROLL = .) THEN AEPRTIME = .;
ELSE AEPRTIME = 0;
                                                        FTNONDEG
FTNONDEG = 0;
IF FTVOCA = 1 | FTBASIC = 1 | FTENGLSH = 1 |
 FTOTHER = 1 | FTGED = 1 THEN FTNONDEG = 1;
                                                        SALARY
SALARY = .;
IF EARNAMT NE -1 THEN DO;
 IF EARNRATE = 6 THEN SALARY = EARNAMT * 26;
  ELSE IF EARNRATE = 5 THEN SALARY = EARNAMT;
  ELSE IF EARNRATE = 4 THEN SALARY = EARNAMT * 12;
  ELSE IF EARNRATE = 3 THEN SALARY = EARNAMT * 52;
  ELSE IF EARNRATE = 2 THEN SALARY = EARNAMT * 260;
  ELSE IF EARNRATE = 1 THEN DO;
IF 1 <= WORKHRS <= 39 THEN SALARY = EARNAMT * WORKHRS * 52;
ELSE IF WORKHRS >= 40 THEN SALARY = EARNAMT * 40 * 52;
  END;
  END:
SALARY = ROUND (SALARY, 1);
 IF SALARY NE . THEN DO;
 IF SALARY <= 1000 THEN SALARY = 1000;
 ELSE IF SALARY >= 75000 THEN SALARY = 75000;
```

```
AEPARTIC
IF (PTENROLL=1 | OTCLASS=1 | FTVOCA=1 | FTBASIC=1 |
  FTOTHER=1 | FTENGLSH=1 | FTGED=1 ) THEN AEPARTIC=1;
ELSE IF (PTENROLL=. & OTCLASS=. & FTVOCA =. & FTBASIC =.
  & FTENGLSH=. & FTGED =. & FTOTHER=.) THEN AEPARTIC=.;
ELSE AEPARTIC=0;
                                                        AELABOR
IF WORKWEEK=1 | (WORKWEEK=2 & VACATION=1)
  THEN AELABOR=1;
ELSE IF (WORKPAY=2 | (WORKWEEK=2 & VACATION=2)) & LOOKWORK=1
  & (LOOKPUBL=1 | LOOKPRIV=1 | LOOKEMPL=1 | LOOKFRND=1 |
  LOOKADS=1) THEN AELABOR=2;
ELSE IF (WORKPAY=. & WORKWEEK=. & LOOKWORK=.) THEN AELABOR=.;
ELSE AELABOR=3;
                                                        AEBASLIT
IF (OTBASIC=1 | TAKEREA1=4 | TAKEREA2=4 |
  TAKEREA3=4 | TAKEREA4=4 | BASIC=1) THEN AEBASLIT=1;
ELSE IF AEPRTIME=0 THEN AEBASLIT=0;
ELSE IF (OTBASIC=. & BASIC=.) THEN AEBASLIT=.;
ELSE AEBASLIT=0;
                                                        AEESL
IF OTENGL=1 | ENGLISH=1 THEN AEESL=1;
ELSE IF AEPRTIME=0 THEN AEESL=0;
ELSE IF (OTENGL=. & ENGLISH=.) THEN AEESL=.;
ELSE AEESL=0;
                                                        AELICNS
IF (LICENSE1=1 | LICENSE2=1 | LICENSE3=1 | LICENSE4=1 |
  PTDEGREE=5) THEN AELICNS=1;
ELSE IF AEPRTIME=0 THEN AELICNS=0;
ELSE IF (LICENSE1=. & LICENSE2=. & LICENSE3=. & LICENSE4=.)
  & ((PTENROLL=2 | PTENROLL=.) | (PTENROLL = 1 & PTDEGREE = .))
  THEN AELICNS = .;
ELSE AELICNS=0;
                                                        AEEMPREA
IF (TAKEREA1=2 | TAKEREA1=3 | TAKEREA2=2 |
  TAKEREA2=3 | TAKEREA3=2 | TAKEREA3=3 | TAKEREA4=2 |
   TAKEREA4=3 | EMPLREA1=1 | EMPLREA2=1 | EMPLREA3=1 |
  EMPLREA4=1) THEN AEEMPREA=1;
ELSE IF AEPRTIME=0 THEN AEEMPREA=0;
ELSE IF (TAKEREA1=. & TAKEREA2=. & TAKEREA3=. &
  TAKEREA4=. & EMPLREA1=. & EMPLREA2=. & EMPLREA3=.
   & EMPLREA4=.) THEN AEEMPREA=.;
ELSE AEEMPREA=0;
                                                        AEDEGREO
IF (PTENROLL=1 | TAKEREA1=5 | TAKEREA2=5 |
  TAKEREA3=5 | TAKEREA4=5 | REQUIRE1=1 | REQUIRE2=1 |
  REOUIRE3=1 | REOUIRE4=1) THEN AEDEGREO=1;
ELSE IF AEPRTIME=0 THEN AEDEGREQ=0;
```

```
ELSE IF (PTENROLL = . & TAKEREA1 = .
  & TAKEREA2=. & TAKEREA3=. & TAKEREA4=. & REQUIRE1=.
  & REQUIRE2=. & REQUIRE3=. & REQUIRE4=.)
  THEN AEDEGREQ=.;
ELSE AEDEGREQ=0;
                                                       AEEMPREQ
IF EMPLREQ1=1 | EMPLREQ2=1 | EMPLREQ3=1 |
  EMPLREQ4=1 THEN AEEMPREQ=1;
ELSE IF (EMPLTIM1=2 & EMPLTIM2=2 & EMPLTIM3=2 &
  EMPLTIM4=2) | (EMPLTIM1=2 & EMPLTIM2=. & EMPLTIM3=.
  & EMPLTIM4=.) | (EMPLTIM1=2 & EMPLTIM2=2 & EMPLTIM3=. &
  EMPLTIM4=.) | (EMPLTIM1=2 & EMPLTIM2=2 & EMPLTIM3=2 &
  EMPLTIM4=.) THEN AEEMPREQ=2;
ELSE IF AEPRTIME=0 THEN AEEMPREQ=0;
ELSE IF (EMPLREQ1=. & EMPLREQ2=. & EMPLREQ3=. & EMPLREQ4=.)
  THEN AEEMPREQ=.;
ELSE AEEMPREQ=0;
                                                       AENUMOSE
IF PTNUM=. THEN PTNUM=0;
IF OTNUM=. THEN OTNUM=0;
AENUMCSE= PTNUM + OTNUM;
                                                       AFEVER
IF AEPRTIME=1 THEN AEEVER=1;
ELSE IF AECOURSE=1 & AEPAST3=1 THEN AEEVER=2;
ELSE IF AECOURSE=1 & (AEPAST3=2 | AEPAST3=.) THEN AEEVER=3;
ELSE IF (AECOURSE=. & AEPRTIME=.) THEN AEEVER=.;
ELSE AEEVER=0;
                                                       AETRAIN
IF (TRNMGMT1=1 | TRNMGMT2=1 | TRNMGMT3=1 |
  TRNMGMT4=1 | TRNSUPR1 = 1 | TRNSUPR2 = 1 | TRNSUPR3 = 1 |
  TRNSUPR4 = 1 | TRNPROF1 = 1 | TRNPROF2 = 1 | TRNPROF3 = 1 |
  TRNPROF4 = 1 | TRNTECH1 = 1 | TRNTECH2 = 1 | TRNTECH3 = 1 |
  TRNTECH4 = 1 | TRNCS1 = 1 | TRNCS2 = 1 | TRNCS3 = 1 |
  TRNCS4 = 1 | TRNHLTH1 = 1 | TRNHLTH2 = 1 | TRNHLTH3 = 1 |
  TRNHLTH4 = 1 | TRNQC1 = 1 | TRNQC2 = 1 | TRNQC3 = 1 |
  TRNQC4 = 1 | TRNSALE1 = 1 | TRNSALE2 = 1 | TRNSALE3 = 1 |
  TRNSALE4 = 1 | TRNEMPL1 = 1 | TRNEMPL2 = 1 | TRNEMPL3 = 1 |
  TRNEMPL4 = 1)
 THEN AETRAIN = 1;
ELSE AETRAIN = 0;
                                                       FTDEGREE
IF FTASSOC = 1 | FTBACHLR = 1 | FTCERT = 1
  THEN FTDEGREE = 1;
ELSE FTDEGREE = 0;
                                                       FTBASESL
IF FTBASIC = 1 | FTENGLSH = 1 THEN FTBASESL = 1;
```

ELSE FTBASESL = 0;

E-6

AEPARANY

```
IF (FTASSOC = 1 | FTBACHLR = 1 | FTVOCA = 1 |
  FTBASIC = 1 | FTENGLSH=1 | FTOTHER=1 | FTGED=1 |
  FTCERT = 1 | PTENROLL = 1 | OTCLASS = 1) THEN AEPARANY = 1;
ELSE IF (FTANY=. & PTENROLL=. & OTCLASS=.) THEN AEPARANY = .;
ELSE AEPARANY = 0;
                                                      CEMPREA (n)
IF TAKEREA1=2 | TAKEREA1=3 | EMPLREA1=1
  THEN CEMPREA1= 1;
ELSE IF (TAKEREA1=. & EMPLREA1=.):THEN CEMPREA1=.;
ELSE CEMPREA1=0;
IF TAKEREA2=2 | TAKEREA2=3 | EMPLREA2=1
  THEN CEMPREA2= 1;
ELSE IF (TAKEREA2=. & EMPLREA2=.) THEN CEMPREA2=.;
ELSE CEMPREA2=0;
IF TAKEREA3=2 | TAKEREA3=3 | EMPLREA3=1
  THEN CEMPREA3= 1;
ELSE IF (TAKEREA3=. & EMPLREA3=.) THEN CEMPREA3=.;
ELSE CEMPREA3=0;
IF TAKEREA4=2 | TAKEREA4=3 | EMPLREA4=1
 THEN CEMPREA4= 1;
ELSE IF (TAKEREA4=. & EMPLREA4=.) THEN CEMPREA4=.;
ELSE CEMPREA4=0;
                                                      CREQUIR (n)
IF TAKEREA1=5 | REQUIRE1=1 THEN CREQUIR1=1;
ELSE IF (TAKEREA1=. & REOUIRE1=.) THEN CREOUIR1=.;
ELSE IF CRDEGREE = 1 THEN CREQUIR1 = 1;
ELSE CREQUIR1=0;
IF TAKEREA2=5 | REQUIRE2=1 THEN CREQUIR2=1;
ELSE IF (TAKEREA2=. & REQUIRE2=.) THEN CREQUIR2=.;
ELSE IF CRDEGREE = 1 THEN CREQUIR2 = 1;
ELSE CREQUIR2=0;
IF TAKEREA3=5 | REQUIRE3=1 THEN CREQUIR3=1;
ELSE IF (TAKEREA3=. & REQUIRE3=.) THEN CREQUIR3=.;
ELSE IF CRDEGREE = 1 THEN CREQUIR3 = 1;
ELSE CREQUIR3=0;
IF TAKEREA4=5 | REQUIRE4=1 THEN CREQUIR4=1;
ELSE IF (TAKEREA4=. & REQUIRE4=.) THEN CREQUIR4=.;
ELSE IF CRDEGREE = 1 THEN CREQUIR4 = 1;
ELSE CREQUIR4 = 0;
                                                      CTRAIN(n)
IF (TRNMGMT1=1 | TRNSUPR1=1 | TRNPROF1=1 |
  TRNTECH1=1 | TRNCS1=1 | TRNHLTH1=1 | TRNQC1=1 |
   TRNSALE1=1 | TRNEMPL1= 1) THEN CTRAIN1=1;
ELSE IF (TRNMGMT1=. & TRNSUPR1=. & TRNPROF1=. & TRNTECH1=.
  & TRNCS1 =. & TRNHLTH1=. & TRNQC1=. & TRNSALE1 = .
  & TRNEMPL1=.) THEN CTRAIN1=.;
ELSE CTRAIN1=0;
```

```
IF (TRNMGMT2=1 | TRNSUPR2=1 | TRNPROF2=1 |
   TRNTECH2= 1 | TRNCS2=1 | TRNHLTH2=1 | TRNQC2=1 |
   TRNSALE2=1 | TRNEMPL2= 1) THEN CTRAIN2=1;
ELSE IF (TRNMGMT2=. & TRNSUPR2=. & TRNPROF2=. & TRNTECH2=.
   & TRNCS2 =. & TRNHLTH2=. & TRNQC2=. & TRNSALE2 = .
   & TRNEMPL2=.) THEN CTRAIN2=.;
ELSE CTRAIN2=0;
IF (TRNMGMT3=1 | TRNSUPR3=1 | TRNPROF3=1 |
   TRNTECH3= 1 | TRNCS3=1 | TRNHLTH3=1 | TRNQC3=1 |
   TRNSALE3=1 | TRNEMPL3= 1) THEN CTRAIN3=1;
ELSE IF (TRNMGMT3=. & TRNSUPR3=. & TRNPROF3=. & TRNTECH3=.
   & TRNCS3 =. & TRNHLTH3=. & TRNOC3=. & TRNSALE3 = .
   & TRNEMPL3=.) THEN CTRAIN3=.;
ELSE CTRAIN3=0;
IF (TRNMGMT4=1 | TRNSUPR4=1 | TRNPROF4=1 |
   TRNTECH4= 1 | TRNCS4=1 | TRNHLTH4=1 | TRNQC4=1 |
   TRNSALE4=1 | TRNEMPL4= 1) THEN CTRAIN4=1;
ELSE IF (TRNMGMT4=. & TRNSUPR4=. & TRNPROF4=. & TRNTECH4=.
   & TRNCS4 =. & TRNHLTH4=. & TRNQC4=. & TRNSALE4 = .
   & TRNEMPL4=.) THEN CTRAIN4=.;
ELSE CTRAIN4 = 0;
                                                      CNUMWKS (n)
IF CLASUNI1 = 1 THEN CNUMWKS1 = CLASNUM1;
ELSE IF CLASUNI1 = 2 THEN CNUMWKS1 = CLASNUM1*4;
ELSE IF CLASUNI1 = 3 THEN CNUMWKS1 = CLASNUM1*16;
ELSE IF CLASUNI1 = 4 THEN CNUMWKS1 = CLASNUM1*12;
ELSE IF CLASUNI1 = 5 THEN CNUMWKS1 = CLASNUM1*52;
FISE CNUMWKS1 = .:
IF CLASUNI2 = 1 THEN CNUMWKS2 = CLASNUM2;
ELSE IF CLASUNI2 = 2 THEN CNUMWKS2 = CLASNUM2*4;
ELSE IF CLASUNI2 = 3 THEN CNUMWKS2 = CLASNUM2*16;
ELSE IF CLASUNI2 = 4 THEN CNUMWKS2 = CLASNUM2*12;
ELSE IF CLASUNI2 = 5 THEN CNUMWKS2 = CLASNUM2*52;
ELSE CNUMWKS2 = .;
IF CLASUNI3 = 1 THEN CNUMWKS3 = CLASNUM3;
ELSE IF CLASUNI3 = 2 THEN CNUMWKS3 = CLASNUM3*4;
ELSE IF CLASUNI3 = 3 THEN CNUMWKS3 = CLASNUM3*16;
ELSE IF CLASUNI3 = 4 THEN CNUMWKS3 = CLASNUM3*12;
ELSE IF CLASUNI3 = 5 THEN CNUMWKS3 = CLASNUM3*52;
ELSE CNUMWKS3 = .;
IF CLASUNI4 = 1 THEN CNUMWKS4 = CLASNUM4;
ELSE IF CLASUNI4 = 2 THEN CNUMWKS4 = CLASNUM4*4;
ELSE IF CLASUNI4 = 3 THEN CNUMWKS4 = CLASNUM4*16;
ELSE IF CLASUNI4 = 4 THEN CNUMWKS4 = CLASNUM4*12;
ELSE IF CLASUNI4 = 5 THEN CNUMWKS4 = CLASNUM4*52;
ELSE CNUMWKS4 = .:
                                                        INCLEVEL
IF INCOMRNG = 1 | INCOMRNG = 2 THEN INCLEVEL = 1;
ELSE IF INCOMRNG = 3 THEN INCLEVEL = 2;
ELSE IF INCOMRNG = 4 THEN INCLEVEL = 3;
ELSE IF INCOMPNG = 5 THEN INCLEVEL = 4:
ELSE IF INCOMRNG = 6 THEN INCLEVEL = 5;
ELSE IF INCOMRNG = 7 THEN INCLEVEL = 6;
ELSE IF INCOMRNG = 8 THEN INCLEVEL = 7;
ELSE IF INCOMRNG = 9 THEN INCLEVEL = 8;
ELSE IF INCOMRNG = 10 THEN INCLEVEL = 9;
ELSE IF INCOMRNG = . THEN INCLEVEL = .;
```

HIDEGREE

```
IF HIGHGRAD = 8 | HIGHGRAD = 9 THEN HIDEGREE = 4;
ELSE IF HIGHGRAD = 6 THEN HIDEGREE = 3;
ELSE IF ((HIGHGRAD = 4 | HIGHGRAD = 5) & HSDIPLMA = 1) |
HIGHGRAD = 3 | HIGHGRAD = 7 THEN HIDEGREE = 2;
ELSE IF HIGHGRAD=1 | HIGHGRAD=2 | HIGHGRAD=4 | HIGHGRAD=5
  THEN HIDEGREE = 1;
ELSE IF HIGHGRAD = . THEN HIDEGREE = .;
                                                        SCHOOLNG
IF HIGHGRAD = 1 THEN SCHOOLNG = 1;
ELSE IF HIGHGRAD = 2 THEN SCHOOLNG = 2;
ELSE IF HIGHGRAD = 3 THEN SCHOOLNG = 3;
ELSE IF HIGHGRAD = 4 THEN SCHOOLNG = 4;
ELSE IF HIGHGRAD = 5 | HIGHGRAD = 7 THEN SCHOOLNG = 5;
ELSE IF HIGHGRAD = 6 THEN SCHOOLNG = 6;
ELSE IF HIGHGRAD = 8 | HIGHGRAD = 9 THEN SCHOOLNG = 7;
ELSE IF HIGHGRAD = . THEN SCHOOLNG = .;
   LABEL RACEETHN = 'D-RACE-ETHNICITY'
   AELABOR = 'D-LABOR FORCE STATUS'
   AEBASLIT = 'D-ADULT EDUCATION TO IMPROVE SKILLS'
           = 'D-ADULT EDUCATION F/ENGLISH AS 2ND LANG'
   AELICNS = 'D-ADULT EDUCATION F/LICENSE/CERTIFICATE'
  AEEMPREA = 'D-ADULT EDUCATION F/JOB-RELATED REASON'
  AEDEGREQ = 'D-ADULT EDUCATION REQUIRED F/DEGREE'
   AEEMPREQ = 'D-ADULT EDUCATION REQUIRED BY EMPLOYER'
   AENUMCSE = 'D-TOTAL # AE COURSES TAKEN IN PAST 12M'
  AEEVER = 'D-EVER PARTICIPATED IN ADULT EDUCATION'
  AETRAIN = 'D-ADULT EDUCATION W/TRAINING COMPONENT'
   FTDEGREE = 'D-FULLTIME ASSOC/BACH DEGREE PROGRAM'
   FTBASESL = 'D-F/T BASIC SKILLS/ESL COURSE'
   AEPARANY = 'D-ADULT EDUC INCLUDING F/T DEGREE PROG'
   AEPARTIC = 'D-ADULT EDUC EXCLUDING F/T DEGREE PGMS'
   AEPRTIME = 'D-ADULT EDUC. EXCLUDING F/T PROGRAM'
  CEMPREA1 = 'D-REASON F/TAKING COURSE-1 JOB RELATED'
  CEMPREA2 = 'D-REASON F/TAKING COURSE-2 JOB RELATED'
  CEMPREA3 = 'D-REASON F/TAKING COURSE-3 JOB RELATED'
  CEMPREA4 = 'D-REASON F/TAKING COURSE-4 JOB RELATED'
  CREQUIR1 = 'D-CRSE-1 REQ F/CERT OF COMPLETION/DIPL'
  CREQUIR2 = 'D-CRSE-2 REQ F/CERT OF COMPLETION/DIPL'
   CREQUIR3 = 'D-CRSE-3 REQ F/CERT OF COMPLETION/DIPL'
  CREQUIR4 = 'D-CRSE-4 REQ F/CERT OF COMPLETION/DIPL'
   CTRAIN1 = 'D-ANY TRAINING COMPONENT COURSE-1'
   CTRAIN2 = 'D-ANY TRAINING COMPONENT COURSE-2'
   CTRAIN3 = 'D-ANY TRAINING COMPONENT COURSE-3'
   CTRAIN4 = 'D-ANY TRAINING COMPONENT COURSE-4'
   CNUMWKS1 = 'D-#WEEKS COURSE-1 SCHEDULED TO RUN'
   CNUMWKS2 = 'D-#WEEKS COURSE-2 SCHEDULED TO RUN'
   CNUMWKS3 = 'D-#WEEKS COURSE-3 SCHEDULED TO RUN'
  CNUMWKS4 = 'D-#WEEKS COURSE-4 SCHEDULED TO RUN'
   INCLEVEL = 'D-LEVEL OF INCOME'
  HIDEGREE = 'D-HIGHEST DEGREE ATTAINED'
   SCHOOLNG = 'D-YEARS OF SCHOOL COMPLETED'
  FTNONDEG = 'D-F/T NONDEG PGM'
   SALARY = 'D-ANNUAL SALARY/CURRENT OR MOST RCNT JOB'
```

NOTE: All composite variables created by the CATI system are not included in this section (e.g., OTCLASS).