THE SURVEY OF INCOME AND PROGRAM PARTICIPATION

Enhancing Data from the Survey of Income and Program Participation with Data from Economic Censuses and Surveys

No. 6

Douglas K. Sater

U.S. Census Bureau

October 1985

U.S. Department of Commerce U.S. CENSUS BUREAU

Survey of Income and Program Participation

Working Paper Series

Enhancing Data From the Survey of Income and Program Participation With Data From Economic Censuses and Surveys
No. 8505 6

Douglas K. Sater

SIPP Working Paper #6

October 1985

ACKNOWLEDGEMENTS

The discussion of this project reflects project development and plans as of July 1, 1985, and does not necessarily reflect the final project. This paper has not undergone the careful review and clearance normally associated with published Census Bureau documents. The statements made in this paper are the sole responsibility of the author at the time of publication and should not be interpreted as statements of Census Bureau position. Special thanks should go to Victor Valdisera, Sheldon Haber, and Daniel Kasprzyk who prepared selected sections of the paper, to Hayden Mearkle for invaluable assistance with the SSEL matching process, to members of the Working Group on Exact Matching Methodology and, of course, to Deborah Loreto-Domer who graciously prepared the numerous redrafts of this paper. Editorial and clerical assistance for this Working Paper was provided by Delma T. Frankel and Hazel V. Beaton.

PREFACE

The Survey of Income and Program Participation (SIPP) is a new Census Bureau survey designed to collect a host of information on the social, demographic, and economic situation of the Nation's individuals and families. The data in the SIPP will be extremely valuable to labor market analysis, but, as with all demographic surveys, do not include characteristics of the employer for which the sample persons worked. This suggests the need to augment the SIPP data with data on the employer.

The pilot project will investigate various methodologies for matching individuals in the SIPP to their employers in the economic censuses, test the chosen methodology, identify problem areas and devise solutions, conduct the match for a pilot sample, develop proposals for analysis, and begin selected analysis.

This paper describes the matching methodology, matching problems and resolutions, and other issues such as access problems, error identification and estimation, adjustment for matching problems, and data releases.

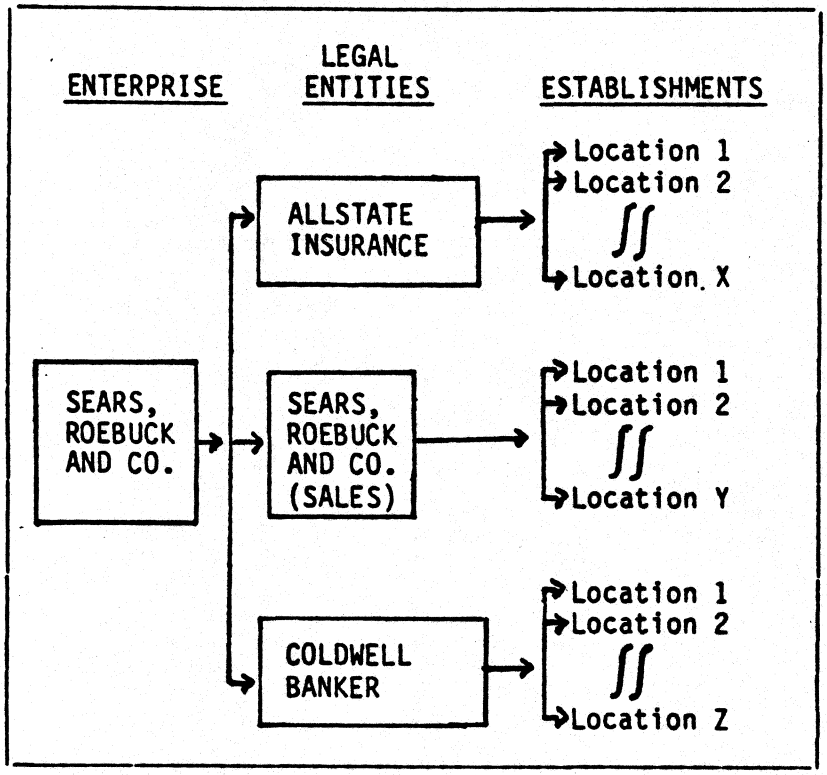
TABLE OF CONTENTS

	Page Numbers
Preface	i
Introduction/Project Outline	1
Uses of the Data	2
Access Problems and Resolutions	3
Source File Data	4
Matching Methodology	8
Matching Problems and Resolutions	14
Results and Evaluations	16
Methods of Computing Error Rates	16
Other Evaluation Methodologies	16
Error Rates and Other Results	16
Adjustment for Matching Problems--Allocation, Reweighting, and Classification of Match Status	21
Other Issues	21
Data Releases--Microdata Files/Tabulations	22
Conclusions and Recommendations	23
List of References	
Attachments	

INTRODUCTION/PROJECT OUTLINE

The Survey of Income and Program Participation (SIPP) is a new Census Bureau survey designed to collect a host of information on the social, demographic, and economic situation of the Nation's individuals and families. The SIPP is a longitudinal personal interview survey which began in October 1983 with three interviews, or waves, per year. The SIPP collects data on cash and noncash sources of income, participation in selected benefit programs, taxes, assets, liabilities, numerous demographic characteristics, and data relating to the individual's labor force activities such as education, job training, prior work experience, characteristics of the current and previous job, and health and disability (see Merriot and Kasprzyk (1984) and Nelson (1984) for a more complete description). These data in themselves will be extremely valuable to labor market analysts, but are limited in that they do not include characteristics of the employer for which the sample persons worked. The potential uses suggest the need to augment the SIPP data with data on the employer.

Such data can be found in the Census Bureau's numerous economic censuses and surveys, such as the Census of Manufactures (CM). For example, data for establishments from the CM include: number of employees, payroll, sales, receipts, hours worked by production employees, cost of materials and services used, inventories, capital expenditures, value of shipments, and--on a sample basis--supplementary labor costs, value of depreciable assets, value of retired depreciable assets, depreciation, rental payments, and value of shipments to other plants of the same company.



For purposes of this paper, an establishment is defined as a single physical location within the United States and its territories where business is conducted or where services or industrial operations are performed. Where separate activities are performed at a single physical location, each activity would be treated as a separate establishment. (More details can be found in the Standard Statistical Establishment List (SSEL)). The legal entity is an organizational unit which is assigned an employer identification number (EIN) by the Internal Revenue Service (IRS) for tax reporting purposes. The legal entity represented by the EIN may comprise one or more establishments. The enterprise is the entire economic unit consisting of one or more establishments under common ownership or control. It may be a single legal entity with only one establishment or a complex family of legal entities and establishments. The study is designed primarily to match at the establishment level. However, some of the economic data sources are collected only at the legal entity or enterprise level. [redacted] codes allows us to match at the establishment, legal entity, and enterprise level.

This pilot project will investigate various methodologies for matching individuals in the SIPP who report their employer name to the employer data contained in the economic censuses, test the chosen methodology, identify problem areas and devise solutions, develop allocation strategies, conduct the match for a pilot sample, develop proposals for analysis, and begin selected analysis. The discussion in this paper reflects project development and plans as of July 1, 1985.

USES OF THE DATA

The addition of economic data to the demographic data for individuals in the SIPP will enable researchers to obtain improved estimates of the impact of economic and institutional forces which have been intensively studied but are only partially understood or measured. It will also enable researchers to examine aspects of labor market outcomes and production processes that have, heretofore, been difficult to study. [redacted] wage rates, the study of labor mobility [redacted] employers, the study of differences in individual earnings in low- and high-paying firms due to the characteristics of the workers and the degree of capitalization of the employer, measuring the effect of minimum wage legislation, studying structural unemployment, examining characteristics of high-tech workers in high-tech firms, studying implications of the transition from a goods to a service economy, analyzing the effect of unions on the labor market, examining the substitutibility of capital and labor, and conducting productivity analysis. See Haber, et al. (1984) and Haber (1985) for a more complete description of the uses.

The data will also be useful in evaluating the reporting of firm size by respondents in the SIPP.

ACCESS PROBLEMS AND RESOLUTIONS

The SIPP and economic data files actually used in this study are prepared at the Census Bureau under the authority and protection of Title 13 of the U.S. Code. Thus, the access to these data files by Census Bureau personnel pose only very minor problems. The SSEL, however, requires more consideration. It is a hybrid of census and administrative data from the Social Security Administration (SSA) and from the IRS; we are looking into the access issues for such a hybrid.

The confidentiality provisions of Title 13, however, prohibit access to these data by non-Bureau personnel. Only tabulations or public-use microdata files which have been prepared so that no individual, household, or business can be identified would be available for use by non-Bureau personnel. Issues concerning the access to and the release of tabulations or public-use microdata files derived from this augmented data set are discussed in "Data Releases--Microdata Files/Tabulations" on page 22. Since one of the alternative matching methodologies involves the use of W-2 information (Social Security number (SSN) and employer identification number (EIN)) from IRS files, issues involving access to W-2 records by the Census Bureau are discussed briefly.

Does the Census Bureau have access to the W-2 data? The W-2 information is classified as tax return information under the Tax Reform Act of 1976 and, as such, is governed by the IRS confidentiality laws and regulations. These laws and regulations provide for the confidentiality of the tax return information and for the special exceptions whereby identifiable tax return information may be disclosed. The Census Bureau is authorized access to the W-2 information for this project by Title 26 of the U.S. Code, Section 6103(j) and Title 26 of the Code of Federal Regulations, Section 6103(j)(1)-1(b)(2)(iii). To obtain the data, the Census Bureau must request the information specifying the exact data required, how it will be used, and citing the above authorization in correspondence from the Secretary of Commerce to the Secretary of the Treasury.

Operationally, how can the Census Bureau obtain the W-2 information? Alternatives considered:

1) The Census Bureau could provide the IRS with a "finder file" of SSN's and have IRS staff extract the W-2 information for these SSN's. This is prohibited by the confidentiality provisions of Title 13 which prohibits the Census Bureau from releasing any data which would permit the identification of any particular household, individual, or establishment. One proposed solution was to augment the finder file with false SSN's to attempt to mask the survey respondents.

2) The Census Bureau staff could work with the IRS staff in developing the programs, then "take over" a site where this is the only process running and confidentiality would be assured because only the Census Bureau personnel would be involved in running the project.

The IRS is not likely to be very receptive to this proposal, and it is a very inefficient use of staff and computer resources. The use of an independent site for processing may be more acceptable to the IRS, but the establishment of physical security, moving the W-2 tapes (150,000,000 records), etc., would be a substantial undertaking and an administrative morass.

3) Could the IRS employees be made employees of the Bureau (Special Sworn Employees) for purposes of processing the match in option 1 above? The answer is no. The primary reason why this cannot occur is that the IRS employees are required by law to investigate any evidence of noncompliance with tax laws. This is in conflict with the confidentiality provisions of Title 13 and the statistical mandate of the Census Bureau.

4) The IRS could create an extract from the W-2 file containing SSN and EIN for all W-2's in the file and disclose this to the Census Bureau. This is administratively straightforward and can be implemented, but the Census Bureau would then have to process about 150,000,000 W-2 records to locate about 20,000 records needed for the exact match. (A judicious use of sample design information could reduce the number of records processed, but the fact remains that this is a large data processing task.)

Options 1, 2, and 3 have one additional problem--the IRS disclosure policy that requires a record to be identified as disclosed on their files if the record has been disclosed in an identifiable form outside the IRS. The use of an independent site specifically prevents this from occurring. The IRS policy would have to be modified; the issue of whether the IRS would be receptive to a change in policy has not been broached. Essentially, option 4 seems to be the only viable alternative.

SOURCE FILE DATA

This section briefly describes several data sources--the SIPP, the economic censuses, the Standard Statistical Establishment List (SSEL), the Census Control System (CCS), and the W-2 file.

The SIPP is a nationally representative household survey intended to provide detailed information on all sources of cash and noncash income, eligibility and participation in various government transfer programs, disability, labor force status, assets and liabilities, pension coverage, taxes, and many other items. Data from the survey will provide a multi-year perspective on changes in income and the relationship of those changes to participation in government programs, changes in household composition, and so forth.

The SIPP started in October 1983 as an ongoing survey program of the Bureau of the Census with one sample panel of approximately 21,000 households in 174 primary sample units (PSU's) selected to represent the noninstitutional population of the United States.

Each household is interviewed once every 4 months for 2 2/3 years to produce sufficient data for longitudinal analyses while providing a relatively short recall period for reporting monthly income. The reference period for the principal survey items is the 4 months preceding the interview. For example, in October, the reference period is June through September; when the household is interviewed again in February, it is October through January. This interviewing plan will result in eight interviews per household.

To facilitate field operations, each sample panel is divided into four approximately equal subsamples, called rotation groups; one rotation group will be interviewed in a given month. Thus, there is only one cycle or "wave" of interviewing and processing workload each month instead of one large workload every 4 months; however, it results in each rotation group using a different reference period.

The content of SIPP was developed around a "core" of labor force and income questions designed to measure the economic situation of persons in the United States. These questions expand the data currently available on the distribution of cash and noncash income and are repeated at each interviewing wave. SIPP core data build an income profile of each person [redacted] a sample household. The profile is developed by determining the labor force participation status of each person in the sample and asking specific questions about the types of income received, including transfer payments and noncash benefits from various programs, for each month of the reference period. A few questions on private health insurance coverage are also included in the core.

Persons employed at anytime during the 4-month reference period are asked to report on jobs held or businesses owned, number of hours and weeks worked, hourly rate of pay, amount of earnings received, and weeks without a job or business.

In addition to questions about labor force activity and earnings from a job, self-employment, or farm, the core includes questions related to nearly 50 other types of income. Questions about common income types are specifically asked while the receipt of less common income types are elicited through general probing questions. Questions are asked about the receipt of government transfer payments from retirement, disability, unemployment benefits, and welfare programs. [redacted] Medicare and Medicaid is also obtained. Other income questions in the core relate to private transfers such as pensions from employers, alimony, and child support. For certain income types, such as food stamps, questions are included which help to identify the household members covered by the payment, thus allowing the proper construction of program analysis units. Finally, the core data also include questions on the ownership of assets which produce income, such as savings accounts, money market accounts, interest earning checking accounts, stocks, mutual fund shares, and rental property. The amounts of income received from these income producing assets are also obtained, as well as an indication of joint holding and estimates of account balances if the amount of interest is now known.

In addition to the core, the SIPP also requests supplemental information in "topical modules." The content of these varies [redacted]. For example, the third SIPP interview questionnaire collects information on health and disability, and education and work history. The fourth interview contains topical data on assets and liabilities, retirement and pension coverage, and housing conditions/energy usage. In addition to these, an annual "round-up" module is also administered to obtain annual wage and salary data from forms provided by employers to both the Internal Revenue Service and the employee, annual self-employment and property income data, and tax-related information.

We will be conducting the matching activity with Wave 6 of the SIPP, the first annual "round-up." In addition to the above data, the Wave 6 topical module questionnaire also asks for the name, address, and employer identification number (EIN). This is requested for up to three employers for calendar year 1984. See attachment A for a copy of selected questions in the Wave 6 SIPP, and see Herriot and Kasprzyk (1984) for more details on the SIPP survey in general.

The SIPP collection process makes a substantial effort to obtain data as accurately as possible; that is, respondents are asked to use tax returns, W-2's, and other forms as references during the interview. Even though the EIN is on the W-2, we expect to obtain valid EIN's about 40 percent of the time, basically because only about half of the SIPP respondents will use such references. For the remaining 60 percent, we will have employer names and addresses, employer names only, or complete nonresponse. We have not, as yet, estimated the relative sizes of these groups. The SIPP also requests the SSN of the respondent. These SSN's are validated and "improved" so that they are as accurate and as complete as possible, but there will still be about 5 percent nonresponse and about 3 percent refusals (see Kasprzyk (1983) for a more complete description).

Note that many of the estimates shown in this paper have been developed for planning purposes from various sources and may not accurately reflect the true number we actually obtain from the SIPP. For example, the W-2 form was used during the interview in Wave 6 of the 1979 Income Survey Development Program (ISDP) about half the time. Allowing for 3 percent EIN refusals, 5 percent transcription and processing errors, and 12 percent missing EIN's on the W-2 form, the estimated EIN acquisition rate becomes 40 percent.

There is a host of information available from the economic censuses and surveys. Such censuses and surveys include:

[redacted]
2) the Annual Survey of Manufactures (ASM)
[redacted]
4) the Enterprise Statistics (ES)--these are derived from the economic censuses and the data are aggregated to the enterprise level
5) the Census of Mineral Industries (CMI)
6) the Census of Construction Industries (CCI)
7) the Census of Distributive Trades (CDT)
8) the Census of Retail Trade (CRT)

9) [redacted])
10) the Capital Expenditure Survey (CE)
11) the Research and Development Expenditures Survey file (R&D)
12) the Quarterly Financial Report (QFR)

As an example of the data available from these sources, the CM includes: number of employees, payroll, sales, receipts, hours worked by production employees, cost of materials and services used, inventories, capital expenditures, value of shipments, and--on a sample basis--supplementary labor costs, value of depreciable assets, value of retired depreciable assets, depreciation, rental payments, and value of shipments to other plants of the same company. More details can be found in Haber et al. (1984).

The economic censuses also contain a census file number (CFN) which uniquely identifies the establishment (and the enterprise for multi-establishment organizations), and the establishment name and address, but does not contain the EIN.

The Standard Statistical Establishment List (SSEL) is a centralized multipurpose computerized name and address file of all known multi-establishment and single-establishment employer firms and nonemployer agricultural firms in the United States. The establishment is the basic building block of the SSEL as it is considered to be the smallest basic unit for which key figures of economic activity such as employment, payroll, and the value of products or services are available.

For the SSEL, EIN's with only one establishment (and not owned or controlled by or affiliated with another enterprise) are referred to as Single Unit (SU) enterprises or companies. Multi-establishment EIN's or affiliated single-establishment EIN's are referred to as Multi-Unit (MU) enterprises or companies. A legal entity which is owned or controlled by another enterprise is called a "subsidiary." Each subsidiary possesses a separate EIN.

The SSEL, prepared and maintained by the Census Bureau, contains selected economic data, the establishment name and address, the EIN, and the CFN for the establishment (and the enterprise for multi-establishment organizations).

The Census Control System (CCS) is a set of programs and files for an interactive, random access, name-search process. This file contains selected economic data, the establishment name and address, the EIN, and the CFN. These data are derived from the SSEL. The file also contains selected search keys: ZIP Code from the address, a name-search key, the EIN, and the CFN.

The W-2 file is based on computerized and noncomputerized W-2 forms provided to the SSA by each employer. Selected information from this form is posted to the W-2 master file. The W-2 file contains the SSN of the payee and the EIN of the employer, but does not contain name and address of the employer and address of the payee.

MATCHING METHODOLOGY

The purpose of this project is to match the employer name reported by individuals in the SIPP to employer data in selected economic censuses, and then augment the SIPP record with these data. The primary goals are to perform the link to show it is possible, to identify problems and devise solutions, to evaluate the quality and completeness of the link, and to begin to use the data for selected labor market studies to demonstrate the reliability and usefulness of the augmented data set. There are some limitations on the scope of this project. First, the universe may be limited. At a minimum, the match will include the Census of Manufactures and will probably include other economic censuses and surveys. (More specific plans will be developed in the upcoming months.) Second, regardless of the matching methodology, a substantial amount of professional and clerical review will be needed to conduct the match. This may affect the amount of time available for the "hard-to-match" cases. That is, an a priori cutoff of the search for the hard-to-match has not yet been made. Finally, the actual match process is viewed as a one-shot process and is being designed to use existing programs and program systems. (See attachment B for a flow diagram of the proposed SIPP-SSEL Link Project.)

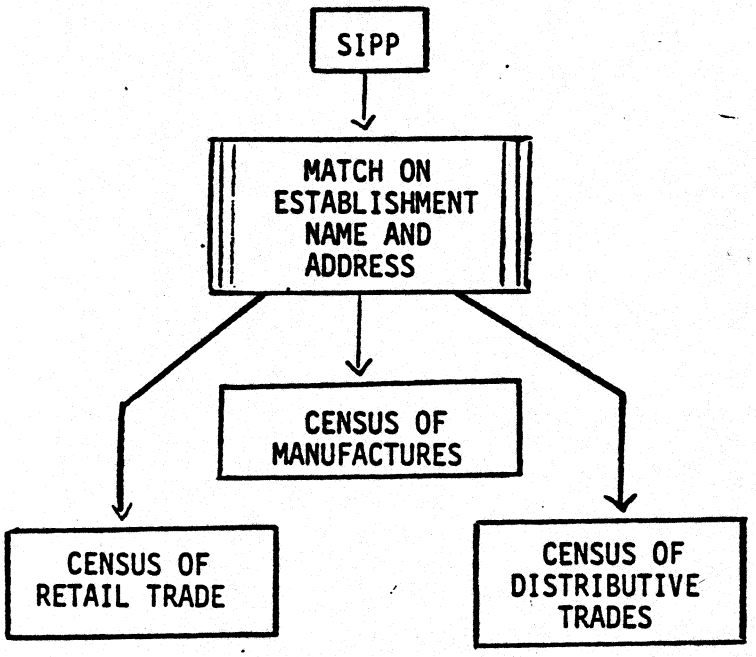
[redacted] The first is to match the SIPP to the economic censuses directly. Due to the content (matching identifiers), the match would have to be based solely on the employer name, address, and industry code. This would require numerous independent matches. Since the match involves only about 20,000 SIPP cases, the development and testing of programs and the sorting of the economic files were more than we wanted to tackle in this pilot project. Further, the economic censuses do not cover all establishments. That is, they do not cover some "out-of-scope" establishments or very small establishments. Since about half of all establishments have less than five employees (see table 1 on page 13), this is a serious shortfall for our purposes.

The second process is to match the SIPP to the SSEL to pick up the CFN, and then use this CFN to match to the economic censuses (using the name and address as validity checks). This process does not have the drawbacks noted above. A potential drawback to this approach relates to the file reference periods and organizational structure changes of the employers. The economic censuses represent corporate structures as of 1982, while the SSEL represents corporate structures as of 1984. If such changes affect the CFN--that is, an establishment or legal entity changes from one enterprise to another--then there will be a problem matching the SSEL CFN to the economic censuses. For this project, the second process was chosen.

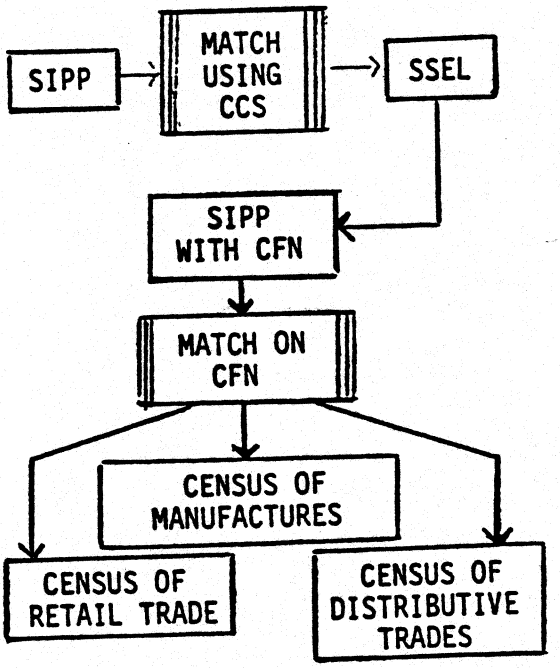
[redacted] (1) the use of the W-2 file, (2) straight character-by-character name-matching, (3) more sophisticated character string preprocessing and computer-matching algorithms, and (4) computer-assisted manual search using the CCS. The following is a description of our thoughts on each of these techniques.

CHART A

OPTION 1



OPTION 2



Use of the W-2 file. This technique involves the selection of all W-2 records for the SSN's reported in the SIPP. The EIN from these W-2's would then be transferred to the SIPP record. A major drawback is the difficulty of matching the correct employer in the SIPP to the correct employer on the W-2's for persons with more than one employer (because of the lack of employer name on the W-2 file rather than problems with the EIN). This can be solved by adding another step in which the EIN is matched to the SSEL to obtain the name. At this point, the EIN from the W-2 could be matched to the SIPP, but this would still require some manual or computer name-matching. For legal entities which have more than one establishment, we need to use the EIN obtained through the W-2 and the address reported in the SIPP to identify the correct establishment. This also requires manual matching. Chart B shows an outline of this process. In addition, there are already substantial cost and timing drawbacks of this approach. First, the W-2 file would not be available until at least 18 months after the time of filing; that is, the 1984 W-2's would not be available until late 1986. Second, the process is expensive; we would have to process about 150,000,000 records to obtain about 20,000 EIN's. Finally, plans for the SIPP Wave 6 interview include requesting the EIN from the respondents. This negates some of the utility of this approach.

The character-by-character search algorithm. This technique was summarily rejected because of the expected cost of sorting the SSEL and the expected degree of nonmatches due to matching problems.

The use of more sophisticated character string preprocessing and computer-matching algorithms. This technique was considered, in general, but rejected because of the pilot project limitations. Namely:

1) A SSEL name-link file would have to be developed which would involve developing and testing a program system and files, and the reformatting and sorting of approximately 6.7 million records on the SSEL file--an investment outside the scope of this pilot project.

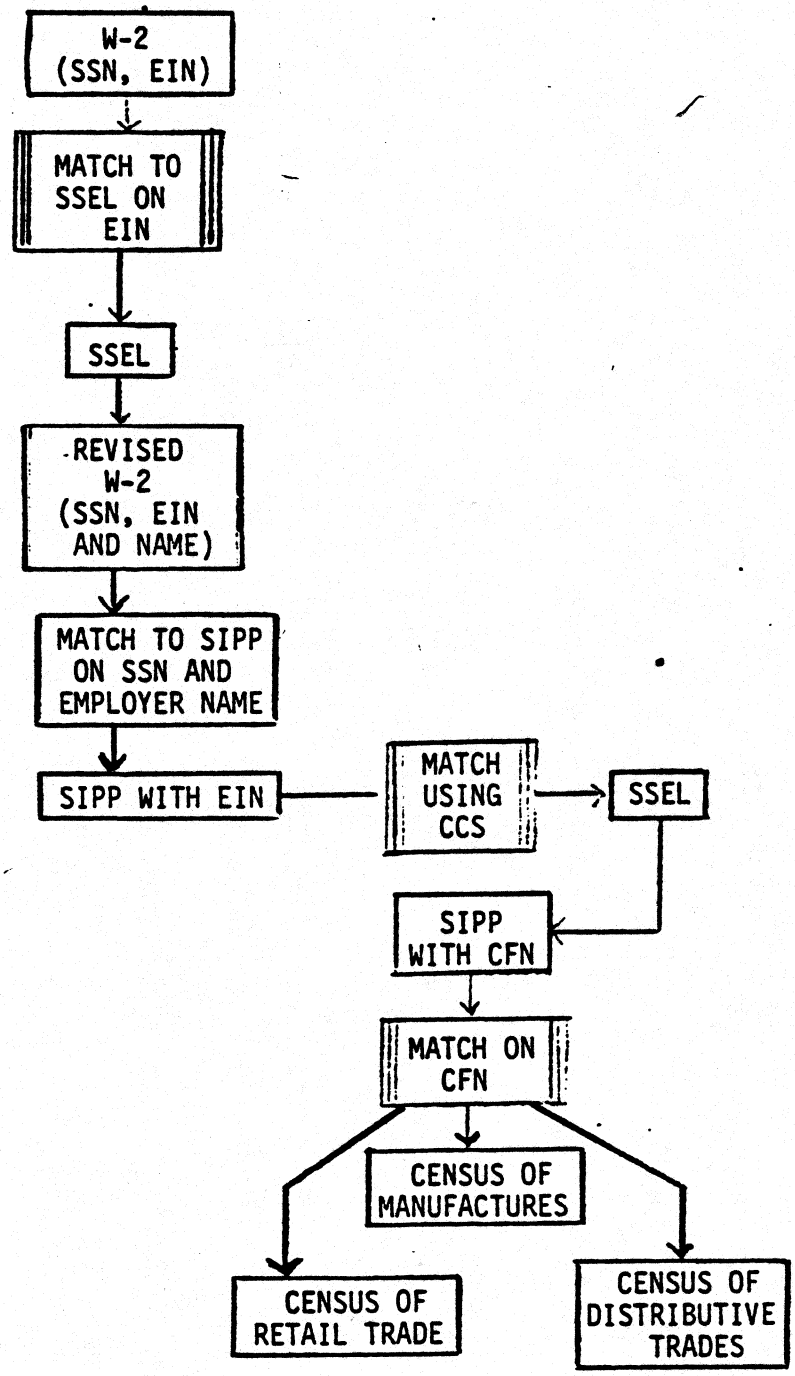
2) The process would still require some manual review.

3) We have little experience in the area of computer name-matching, in general, or in the area of matching survey-provided employer names to names in the SSEL. That is, we do not know a priori the magnitude of some of the matching problems nor do we have algorithms to provide solutions.

4) The match involves only about 20,000 records from the SIPP.

The Census Control System did not have these drawbacks and, indeed, seemed to fit very nicely with this project. One additional advantage is the ability to refine the process or develop solutions to unique problems on an ad hoc basis. Although the need for manual work is a potential drawback, the project is being developed to minimize the amount of manual work, and resources are available.

CHART B


W-2
(SSN, EIN)
MATCH TO
SSEL ON
EIN
SSEL
REVISED
W-2
(SSN, EIN
AND NAME)
MATCH TO SIPP
ON SSN AND
EMPLOYER NAME
SIPP WITH EIN
MATCH
USING
CCS
SSEL
SIPP
WITH CFN
MATCH ON
CFN
CENSUS OF
MANUFACTURES
CENSUS OF
RETAIL TRADE
CENSUS OF
DISTRIBUTIVE
TRADES

Thus, a computer-assisted manual search process using the CCS was chosen. The following is a brief description of the matching process using the CCS.

1) In the EIN mode, one provides the system with the EIN, and it returns an abbreviated SSEL record for that EIN. To locate the establishment for multi-establishment EIN's, additional searching is needed.

2) In the name-search mode, one provides the system with the name. The system compresses the name, selects four (or eight) digits to use as the search key, locates the block of records corresponding to this name key, and returns all records in this block. Additional screening is performed based on other data (such as ZIP Code) if provided to the system. The name compression used to develop the name key is a fairly simple algorithm. This system blanks out all vowels, special characters, and noise words (such as "and," "the," "Co.," "Inc.," etc.), and then compresses the names into one character string. For establishments in the single unit file (SU), only the first and last words of the name field are used in the compression; for multi-unit establishments (MU), all words that comprise the primary master name are used. For the SU segment, the final key is limited to four characters. For the MU segment, there are two keys of four characters each. For example, "Smith Business Machines" would be compressed to "SMTHMCHNS," and the key is "SMTH."

The selection of the correct record from those supplied by the CCS is then done manually. If the entry is a single-unit enterprise, the CFN can be posted from this record. However, if the entry is a multi-unit enterprise, further work needs to be done. The correct MU enterprise is selected and a second listing is prepared--a list showing all establishments within the enterprise. The selection of the correct establishment is then done manually. An example might be as follows:

Suppose one wanted to locate American Art Supplies, 1235 Main Street 20735. We would provide the system with "American Art Supplies, 20735."

INPUT: American Art Supplies, 20735

It returns, for example, the following three records from the Block.

CCS RETURNS:
1. American Art Supplies
2. American Fabricators
3. American Farm Products

We then select 1 and it provides a second listing containing, for example, three records.

CCS RETURNS:
1. American Art Supplies--HDQTRS
   1235 Main Street
2. American Art Supplies--MFG
   425 Canal Street
3. American Art Supplies--SALES
   1240 Main Street

We then extract the CFN associated with record 1.

This is an oversimplification of the system and records generated, but it gives an idea of the process.

The process, therefore, involves a combination of computer and manual work. To make the process as efficient as possible, a stage-by-stage process has been designed which maximizes the amount of computer work and minimizes the amount of manual review. Of the manual work, a process has been designed which maximizes the first pass SSEL find rate and minimizes the amount of subsequent professional review.

There are several things that can be done in this regard; for example, well-considered sorting of the working file can greatly speed the process. That is, assembling the same employer names in the same group in the search listings will allow one search for many records with the same name. Employers of 250 or more employees account for only 0.7 percent of all employers, but account for 31 percent of all employees (see table 1). Another similar process would be to sort the file on employer names and examine those names with three or more records each. These generally represent companies with more than 135,000 employees. If the EIN is reported and is the same on at least two records (same name and address), it could be transferred to corresponding records with the EIN not reported. At this stage; the posting of the primary master name and establishment EIN for the top 350 establishments (as noted above) can also be done.

TABLE 1--NUMBER OF ESTABLISHMENTS AND EMPLOYEES BY EMPLOYER SIZE: 1980 AND 1982 1/

Employee Size	1980		1982	
	Number of Establishments	Number of Employees	Number of Establishments	Number of Employees
Total....	4,543,167	74,835,525	4,633,960	74,297,252
1-4.....	2,468,995	5,011,523	2,487,036	5,123,367
5-9.....	897,505	6,362,906	948,398	6,649,092
10-19....	565,392	8,048,663	577,838	8,125,558
20-49....	376,416	11,901,700	385,909	12,003,916
50-99....	131,159	9,266,354	131,775	9,139,345
100-249..	70,568	10,811,345	70,786	10,675,392
250-499..	20,187	7,027,831	19,630	6,768,997
500-999..	8,235	5,689,079	7,938	5,435,817
1,000+...	4,710	10,716,124	4,650	10,375,768

1/ Excludes employees of interstate railroads and governments. Data are for the week including March 12, 1980, and March 12, 1982.

SOURCE: 1980 County Business Patterns

After these initial improvements are made, all records with EIN's for computer matching on the EIN can be extracted. For single-establishment EIN's, the CFN can be obtained during this match. However, for multi-establishment EIN's, a manual match on establishment address for that EIN is needed. (Also, the

EIN cannot be viewed as a panacea because of the large number of EIN issuances (almost 1 million annually) due to company births, corporate reorganizations, or changes in ownership.)

As with any manual match process, one can spend almost as much time as one wants on the hard-to-match cases to obtain some degree of success. The issue to face is the trade-off between time spent, expected match success, and the level of acceptable overall match rates. There are different types of hard-to-match cases which have different efficiencies in terms of the above trade-offs and associated priorities. We are attempting to build such a priority for the hard-to-match cases and have designed the match process open-ended; that is, we will accept all remaining nonmatches when we determine we have good match rate and expect little improvement. Although this sounds arbitrary, it can be made reasonable by keeping track of the match rate by cost per match at each stage of the process and making an extrapolation to the next stage using a limit function. An alternative decision criterion may be project funding limitations.

The final steps in the process are to match the SIPP to the economic censuses based on the CFN. A final name check should then be done and disparities examined and resolved.

MATCHING PROBLEMS AND RESOLUTION

[redacted]

1) Duplicate establishment names on SSEL records. That is, different establishments may have the same name. For example, consider a franchise operation such as "Wendys." The Census Control System will work given only the "company" name, but it will generate a relatively large number of SSEL listings per SIPP case. For example, a listing of all "Wendys" in the country would be formidable. Thus, some sort of geographic area search is needed. The listings then become manageable and the match on address can be done. What happens if no address is reported? For some cases, an exact match is not possible. For others, there may be solutions to the dilemma. If an employer has only one establishment in the area, it may be matched by using a geographic area search. For example, it is unlikely that an automobile manufacturing firm will have more than one large plant in a local area (other than Detroit). The address of the respondent could be used to define a search area. Another solution might be to use reference materials such as telephone directories, 1980 Census Company Name and Place of Work directories, Dun and Bradstreet References, Standard and Poor's Directory, etc., to identify the address. Frequently, however, a reported address is critical to the matching operation. Another possibility would be to use the SIPP respondent's occupation. For example, if the SIPP occupation is "salesman" and the choice to be made is between a manufacturers division and a sales division of the same company, a reasonable choice would be to assign the case to the sales division.

2) [redacted] For a household interview survey, there are several things that must occur to get a correct name spelling. First, the interviewer must correctly spell the name on the form. Second, a data keyer must correctly read the entry and correctly key the name. This, in itself, is more than ample opportunity for the introduction of errors. Plus, there are errors introduced through phonetic problems. Names such as "Kroehler," "Burroughs," or "Pfeiffer" might pose such problems. Most of the cases with misspelled names are expected to be resolved through the computer-assisted manual search process using "judgement." For example, if we were trying to locate "Krayler, 75 Ely St., Binghamton, NY," we might decide that the correct match is "Kroehler Manufacturing of Binghamton." This process is referred to as judgement because some degree of uncertainty may exist. If uncertainty exists, the case will be referred for further review.

3) [redacted] The match process does not have in its design an a priori process to resolve these problems, but the professional review process may be able to identify and resolve these problems. Example 1--Legal name is "Shell Oil Company," but SIPP reports "Allen's Shell Station" and an address is reported. Using "Allen's Shell Station," the first search will not be successful, so a second search on "Shell Oil Company" may be tried. In this case, the second search would be successful. Example 2--Legal name is "Allen's Shell Station" but SIPP reports "Shell Station" as the name. The first search will not be successful. In an examination of a telephone directory, one might find the entry "Allen's Shell Station" at the address reported in the SIPP. The search then can be successfully completed, but, if the SIPP entry were "Shell Oil" or if the address were not reported, the match could not be made.

4) [redacted] It is possible that other SIPP information may provide a clue as to the correct link (such as occupation or industry). However, we expect that we will not be able to accurately link to the correct establishment in this case and are investigating imputation schemes. (See "Adjustment for Matching Problems--Allocation, Reweighting, and Classification of Match Status" on page 21.)

5) [redacted]. Although every effort is made to obtain the physical location for the SSEL file, there are occurrences where the address on the SSEL is the address of the lawyer, accountant, or the administrative office and will be different from the physical address reported by the SIPP respondent. Depending on the particular circumstances, the problems may be solved or may be intractable.

Also, you may have noticed a nasty perversity, at least for our purposes, of the Census Control System--the use of primary master name for multi-unit establishments, rather than the establishment name. This requires a pre-search process which identifies the parent company (enterprise) for the establishment to be located. For example, if one wanted to locate the record for "Coldwell Banker" or "Allstate Insurance," one would have to provide the search with "Sears, Roebuck, and Company." A list of the top 350 (in employment size) establishments and their associated parent companies and affiliates (this represents about 20 percent of the nonagricultural employees) is being prepared. The codes for these establishments can be posted directly without a great expenditure of time. The match process using the CCS can then take place.

[redacted]

Methods of Computing Error Rates

We have just begun to explore methods of defining the accuracy of the match and to compute the error rates. The first step is to define three sets of flags--one which shows how the match was done (using EIN, the name, and/or address), one which shows at what level the match was done (enterprise, legal entity, or establishment), and another which shows the confidence of the match (matched exactly on EIN, name and address; matched on EIN and name, but address not matched; etc.).

Error measurement will be the subject of future project development.

Other Evaluation Methodologies

Evaluation strategies will be the subject of further project development.

[redacted]

A small scale familiarization test of the computer-assisted manual search process using the Census Control System was conducted. The sample was comprised of 166 employer names reported in Waves 1 and 2 of the 1984 SIPP Panel. These cases were drawn from a sample of primary sampling units (PSU's). These PSU's were not scientifically sampled, but were arbitrarily chosen to include (1) a smattering of PSU's (by size and region), (2) a variety of manufactures, and (3) cities for which we had a telephone directory. Because this is not a scientific sample and only manufactures are included, the results cannot be generalized and are included only as an approximate indication of the potential success of a larger scale operation. The purpose of this exercise was primarily educational; that is, to see how the process works with real data.

Respondents in Waves 1 and 2 were asked for the name of the employer for which they worked during the survey reference period. Although the employer address and EIN were not collected in these interviews, we tried to obtain the employer addresses for these cases from a variety of reference materials such as the Major Employer Lists from the 1980 census, telephone directories, and Standard and Poors Index of Corporations. Approximately 12 hours (or

about 4 1/2 minutes per case) were spent trying to find the employer addresses for these cases. We were not, however, always successful in locating this information. Table 2 presents the different levels of employer information and the proportion of cases at each of these levels.

TABLE 2--RESULTS OF ADDRESS SEARCH OPERATION FOR TESTING COMPUTER-ASSISTED MANUAL SEARCH PROCESS 1/

	Number	Percent
Total.....	166	100.0
With Corporate Headquarters.....	94	56.6
No Corporate Headquarters.....	72	43.4
Obtained Establishment Address 2/..	72	43.4
Obtained Corporate Headquarters..	44	26.5
Did Not Obtain Corporate Headquarters.....	28	16.9
Did Not Obtain Establishment Address.....	94	56.6
Obtained Corporate Headquarters..	50	30.1
Did Not Obtain Corporate Headquarters.....	44	26.5

1/ Nonscientific sample of employers (manufactures) in Waves 1 and 2 of the 1984 SIPP Panel.

2/ These are cases where we could uniquely determine establishment address; i.e., it excludes cases where we located more than one establishment in the area.

Table 3 shows the results of our matching test given this information.

TABLE 3--RESULTS OF MATCHING TEST

SIPP-SSEL MATCH STATUS	TOTAL		WITH ESTABLISHMENT ADDRESS		NO ESTABLISHMENT ADDRESS	
	Number	Percent	Number	Percent	Number	Percent
Total	166	100.0	72	100.0	94	100.0
Matched to Enterprise	130	78.3	63	87.5	67	71.3
Matched to Legal Entity (EIN)	130	78.3	63	87.5	67	71.3
Matched to Establishment	84	50.6	58	80.6	26	27.7
Uniquely Identified by Name	75	45.2	49	68.1	26	27.7
Uniquely Identified by Name and Address	9	5.4	9	12.5	X	X
Not Matched to Establishment	46	27.7	5	6.9	41	43.6
Type 1	31	18.7	X	X	31	33.0
Type 2	9	5.4	5	6.9	4	4.3
Type 3	6	3.6	0	.0	6	.0
Type 4	0	0	0	.0	0	.0
Not Matched to Legal Entity (EIN)	36	21.7	9	12.5	27	28.7
Not Matched to Enterprise	36	21.7	9	12.5	27	28.7

X -- Data Cell Does Not Apply.

Type 1--These nonmatches represent cases where more than one establishment was found in the SSEL, listed at different addresses but still part of the same company, and the company name matched the name reported in the SIPP.

Type 2--These nonmatches represent cases where more than one establishment is listed at the same address in the SSEL; that is, we need more information than just the address (such as plant or division name or SIPP occupation) to identify the correct establishment.

Type 3--These are cases where the SSEL contains mixed types of entries, some Type 1 and some Type 2.

Type 4--These are cases where we could not identify any establishments in the enterprise by name. There were no Type 4's in the test.

(See text for more details on the definition of the Types 1-4 nonmatches.)

Even though an establishment address was found for only 42 percent of the cases, the employer name in the SIPP was matched exactly to the correct enterprise 78 percent of the time. The similar match rate was 78 percent for legal entities (that is, there were no cases that were matched to the enterprise but not to the legal entity) and 51 percent for establishments. For those cases where there was an establishment address, the match rates was: 88 percent for enterprises, 88 percent for legal entities, and 81 percent for establishments. It is possible that a company was reorganized but not yet reflected in the SSEL, and this would have caused a false match on enterprise. The relationship between the SSEL update and the reference period of the SIPP is being examined.

(Note that the lines "Matched to Enterprise" and "Matched to Legal Entity" are not equivalent. As an example, if a person reported he/she worked for "Sears, Roebuck, and Company," the person can be matched to the enterprise, but not to the legal entity--because we wouldn't know which of the following would be the correct legal entity: "Allstate Insurance," "Coldwell Banker and Co.," "Dean Witter Financial Services," or "Sears Merchandise Group." As it turns out in this very small scale test, we did not encounter any cases of this type. Hence, the number matched to the legal entity is 130 and the number matched to the enterprise is also 130.

Type 1--These nonmatches represent cases where more than one establishment was found in the SSEL that were listed at different addresses but still part of the same company, and the company name matched the name reported in the SIPP. A hypothetical example is as follows:

SIPP: Clinton Aluminum
No address

SSEL: Clinton Aluminum -- Headquarters
1325 Main Street

Clinton Aluminum -- Clinton Plant
751 Ash Street

Clinton Aluminum -- Recycling Division
755 Ash Street

Clinton Aluminum -- Sales Division
98 Poplar Street

If the address was reported in the SIPP, we would be able to match this case. Thirty-one of the 46 nonmatch cases were Type 1's.

Type 2--These nonmatches represent cases where more than one establishment is listed at the same address in the SSEL; that is, we would need more information than just the address (such as plant or division name or SIPP occupation) to identify the correct establishment. For example:

SIPP: American Art Supplies
1235 Willow Lane

SSEL: American Art Supplies -- Manufacturing Plant
1235 Willow Lane

American Art Supplies -- Sales Division
1235 Willow Lane

If the SIPP respondent provided sufficient detail in the company name, then a match would be possible; that is, reporting of division or group names as well. Given the amount of questionnaire space and responses we have seen in this test, this is not likely. However, occupation may be the key to matching cases such as these. If the respondent reported an occupation such as assembler, foreman, operator, sales representative, etc., we would be able to assign one of the establishments with high probability of success. Such a process is planned for the Wave 6 matching activity. The assignment of a flag to identify this type of case is also planned. Nine of the 46 nonmatch cases were Type 2's.

Type 3--These are cases where the SSEL contains mixed types of entries, some Type 1 and some Type 2.

Type 4--These are cases where we could not identify any establishments in the enterprise by name. There were no Type 4's observed in the feasibility test.

There were 36 cases for which we could not locate the enterprise, largely because the enterprise address was not available. That is, the location was outside the search area we tried (PSU of the SIPP respondent's address). For purposes of this test, we did not expand the search area or otherwise try to resolve these cases. An address reported in the SIPP will permit us to match most of these cases.

One final note on the Type 2 and 3 cases. For those cases where a correct match cannot be determined based on employer name, address, and occupation, an imputation of establishment should be made. In the example shown for Type 2 (above), one could randomly assign one of the two establishments with a 50-percent chance of an exact match for establishment (enterprise and legal entity are matched exactly). A flag and probability assessment would also be assigned for future use. Other criteria are also being considered; for example, an alignment based on employee size or an assignment of average values.

The matching process was carried one step further. We tried to match the 130 SIPP-SSEL matched cases to the Census of Manufactures. Of the 130 cases, we matched 100 to the correct establishment. The other 30 cases did not

match because 26 were not manufacturing establishments (the enterprise level codes were not sufficient); 3 were very small and out-of-scope for the CM; and 1 was of undetermined cause--a true nonmatch.

Considering that neither employer address nor EIN was obtained in the first two SIPP interviews, these results are very encouraging.

Adjustment for Matching Problems--Allocation, Reweighting, and Classification of Match Status

As in any match project, match confidence flags, methods of imputation, and methods of reweighting for nonresponses to the employer name and false non-matches will need to be developed. The final method will undoubtedly incorporate several of these. At one level, there will be a need to adjust for complete nonmatches using imputation, reweighting, or post-stratification adjustments. However, there is also a second level--where partial information is known. For example, suppose that a person works for a "Wendys" in the Charlotte PSU, and this PSU contains 20 "Wendys." Because there is a substantial amount of information available, it is better to impute based on this information than ignore and reweight. One approach would be to assign average values for all "Wendys" in the area, another would be to randomly assign the person to one of the "Wendys," or to do the assignment according to a probability function based on employment size. The probability of correct match is dependent on the probability function; only for nonmatches, data utility is dependent on the degree of homogeneity of the four establishments. In the "Clinton Aluminum" example, suppose that all four establishments are the same size. Then the chance of a correct match is one in four. In this same example, the wage structure, degree of unionization, etc., are likely to be quite different between the establishments. Thus, a nonmatch will distort the data. In a case such as "Wendys" or "McDonalds," such data distortion would be minimal. There are going to be varying degrees of uncertainty in this process and they will require alternate match status flags. The flags should contain two types of information--a description of the match status and an assessment of the probability of correct match. These methods will be examined in upcoming phases of the project.

OTHER ISSUES

These issues are also of concern:

1) Will differences in reference periods between SIPP and the SSEL cause any problems? How and when is the SSEL updated, and how will this affect the match rates?

2) Can/should employment-size data be obtained for government workers, especially state and local governments? Is it important to do so? How will self-employed persons and persons in selected industries (such as agriculture) be handled?

3) Is the employer-size data in the SIPP accurate? If it were available in the SIPP Wave 6 topical module, would it help in the search method?

DATA RELEASES--MICRODATA FILES/TABULATIONS

The problems with releasing public-use microdata files are fairly well known and pose difficulties for such a detailed survey as the SIPP. The addition of detailed economic data to the SIPP exacerbates the problem.

One factor in determining disclosure risk is the accuracy of the responses and the amount of detailed information in the survey. The SIPP contains a large amount of information and substantial effort is expended on obtaining accurate responses. Adding more data can only increase the risk of disclosure. Another factor is whether a file contains a significant fraction of some defined population (see Statistical Policy Working Paper 2 (1978) for more detail on issues involved in data disclosure). While SIPP respondents represent only a small proportion of the labor force, it is likely that a substantial percentage of the respondents are employed in large establishments and companies, and that these large firms comprise a significant fraction of all large firms. Another factor in risk analysis is the value gained by someone trying to determine data for a particular individual or establishment. Data on establishments are generally regarded as a higher risk than data on individuals. Hence, matching SIPP to census economic data introduces disclosure problems which are not encountered when SIPP stands alone.

How then can confidentiality be maintained for a SIPP file matched to economic data?

1) One way of doing this is to delete those records which are considered to be identifiable, e.g., records for the largest companies in each industry might be deleted. This approach, i.e., deletion of records for large firms, was taken by the Bureau of Labor Statistics in creating its micro-firm public-use tape of Employer Expenditures on Employee Compensation. The large establishments dropped from the file comprised 15 percent of manufacturing employment.

2) Another idea for avoiding confidentiality disclosures in a public-use version of a SIPP file matched to economic data might be to aggregate the records for several companies with similar characteristics.

3) Still another possibility is to scale all the economic variables in the file by a common value (e.g., number of employees) to mask the size of a company and the absolute value of the other variables in the file.

4) Alternatively, random noise can be introduced to preserve the average value of a variable for a group of observations, e.g., average sales receipts in an industry. The variance of the sales receipts variable and the firms comprising the industry would increase, however.

5) [redacted]

The limitation of all of these procedures is that confidentiality is maintained at the expense of data detail and accuracy. Moreover, none of these procedures may be adequate to maintain the confidentiality of the combined SIPP/economic censuses data set and the data may be distorted to such an extent as to preclude meaningful analysis. Research on the development of public-use microdata files from this linked data set will not be a part of this project, but certainly will require investigation.

One alternative to creating public-use SIPP linked data sets with transformed data to maintain confidentiality is to develop programs which would bring investigators to the Census Bureau as Special Sworn Employees. A vehicle for doing this is the ASA/Census Research Fellowship and Associate Program. Appointments in this program, however, are normally for a period of one year. A more attractive proposal would be to establish a visiting scholar program--a joint working agreement between the Bureau and governmental agencies, nonprofit research organizations, and individual academic researchers with university or foundation support. One arrangement would be for prospective users to work with census analysts in the specification of cross-tabulation statistics, econometric models, and other economic and statistical relationships. To ensure confidentiality, all tasks that involve data retrieval and manipulation would be done by census employees, with only final aggregated outputs being made available to the data users. The Bureau has established such a procedure for the Longitudinal Establishment Data file.

Problems in preparing suppression criteria for tabulations are similarly compounded and will require careful examination.

CONCLUSIONS AND RECOMMENDATIONS

[redacted] and usefulness of a SIPP/economic [redacted] of producing it. [redacted] phases of the project and preparing to conduct the match early this fall.

LIST OF REFERENCES

Haber, Sheldon E. "Applications of a Matched File Linking the Bureau of the Census Survey of Income and Program Participation and Economic Data," SIPP Working Paper Series No. 8502. Washington, D.C.: U.S. Bureau of the Census, 1985.

Haber, Sheldon E., George Washington University, and Paul Ryscavage, Doug Sater, and Victor Valdisera, Bureau of the Census. "Matching Economic Data to the Survey of Income and Program Participation: A Pilot Study," in the Proceedings of the Social Statistics Section, American Statistical Association, 1984.

Kasprzyk, Daniel. "Social Security Number Reporting, the Uses of Administrative Records and the Multiple Frame Design in the Income Survey Development Program," Technical, Conceptual and Administrative Lessons of the Income Survey Development Program. New York: Social Science Research Council, 1983.

Herriot, Roger A. and Daniel Kasprzyk. "The Survey of Income and Program Participation," in the Proceedings of the Social Statistics Section, American Statistical Association, 1984.

Nelson, Dawn, David B. McMillen and Daniel Kasprzyk. "An Overview of the Survey of Income and Program Participation," SIPP Working Paper Series No. 8401. Washington, D.C.: U.S. Bureau of the Census, 1984.

U.S. Department of Commerce, Bureau of the Census. The Standard Statistical Establishment List Program, Technical Paper 44. Washington, D.C., 1979.

U.S. Department of Commerce, Office of Federal Statistical Policy and Standards. Statistical Policy Working Paper 2--Report on Statistical Disclosure and Disclosure Avoidance Techniques. Washington, D.C., 1978.

OMB No. 0607-0425: Approval Expires August 31, 1987

FORM SIPP-4600 (11-19-84)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

SURVEY OF INCOME AND PROGRAM PARTICIPATION

1984 PANEL

WAVE 6 QUESTIONNAIRE

NOTICE — Your report to the Census Bureau is confidential by law (title 13, U.S. Code). It may be seen only by sworn Census employees and may be used only for statistical purposes.

PGM 6

1. Book ____ of ____
2. (cc 1) R.O. code
3a. (cc 2) PSU Segment Serial
b. (cc 3) Add. ID (cc 17) Entry Add. ID

4. PERSON
a. Number (cc 18)
b. Name (cc 19a)
Last
First, middle
Maiden

5. PERSON CHARACTERISTICS — *Fill a,b,c, and d using the control card*
a. Relationship code (cc 19b)
b. Date of birth (cc 24) Month Day Year
c. Sex code (cc 28)
d. Marital status code (cc 26a)

6. Interviewer Identification
Code Name

Section 2 — EARNINGS AND EMPLOYMENT

CHECK ITEM E1

Is "Worked" marked on the ISS? [1712]
1 ☐ Yes
2 ☐ No — *SKIP to First ISS Code marked or Check Item P1, page 45*

1a. You said . . . worked during the 4-month period. Was . . . working for an employer or was . . . self-employed?
(Include unpaid worker in family business or farm as working for an employer.) [1714]
1 ☐ Worked for employer only
2 ☐ Self-employed only — *SKIP to Statement B, page 18*
3 ☐ Both worked for employer and self-employed

b. How many different employers did . . . work for during this 4-month period? [1716]
1 ☐ 1 employer
2 ☐ 2 employers
3 ☐ 3 or more employers

CHECK ITEM E2

Is "Both worked for employer and self-employed" marked in 1a? [1718]
1 ☐ Yes
2 ☐ No — *SKIP to 2a*

STATEMENT A

. . . worked for an employer and was also self-employed. The first questions will be about . . .'s work for an employer.

EARNINGS AND EMPLOYMENT

Section 2 — EARNINGS AND EMPLOYMENT (Continued)

Part A1 — EMPLOYER IDENTIFICATION NUMBER 1

2a. What is the name of the employer for whom . . . worked during this 4-month period?

(If . . . worked for more than one employer, enter the employer for whom . . . worked the most hours during the 4-month period or the most recent employer.)

PGM 8 — Employer Name — 2000 _____

CHECK ITEM E3 Enter employer ID number from cc item 42, or if a new employer, enter next available number →

PGM 8 — Employer ID No. — 2002 [ ]

2b. What kind of business or industry was *(Name of company or business)*?

For example: TV and radio manufacturing, retail shoe store, State Labor Department, farm.

PGM 8 — 2004 _____

c. *ASK OR VERIFY —* Is it mainly —

PGM 8 — 2006
- 1 ☐ Manufacturing?
- 2 ☐ Wholesale Trade?
- 3 ☐ Retail Trade?
- 4 ☐ Some other kind of business?

d. What kind of work was . . . doing on this job?

For example: Electrical engineer, stock clerk, typist, farmer

PGM 8 — 2008 _____

e. What were . . .'s main activities or duties?

For example: Types, keeps account books, files, sells cars, operates printing press, finishes concrete.

PGM 8 — 2010 _____

f. *ASK OR VERIFY —* Was . . . an employee of —

PGM 8 — 2012
- 1 ☐ A private company or individual?
- 2 ☐ Federal government (exclude Armed Forces)?
- 3 ☐ State government?
- 4 ☐ Local government?
- 5 ☐ Armed Forces?
- 6 ☐ Unpaid in family business or farm? — *SKIP to Check Item E5*

3a. *ASK OR VERIFY —* Was . . . employed by *(Name of employer)* during the entire 4-month period?

PGM 7 — 2014
- 1 ☐ Yes — *SKIP to 4*
- 2 ☐ No

b. When was . . . employed by *(Name of employer)* during this 4-month period?

FROM
2016 [ ] Month 2018 [ ] Day

TO
2020 [ ] Month 2022 [ ] Day

4. *ASK OR VERIFY —* How many hours per week did . . . usually work at this job?

2024 [ ] Hours
- x3 ☐ None
- x1 ☐ DK

5. Was . . . paid by the hour on this job?

2026
- 1 ☐ Yes
- 2 ☐ No — *SKIP to 7*

6. What was . . .'s regular hourly pay rate at the end of *(Read last month or "to" date in item 3b)*?

2028 $ [ ] . [ ]
- x1 ☐ DK
- x2 ☐ Ref. — *SKIP to Check Item E5*

7. During the 4-month period how often was . . . paid on this job?

2030
- 1 ☐ Once a week
- 2 ☐ Once each 2 weeks
- 3 ☐ Once a month
- 4 ☐ Twice a month
- 5 ☐ Some other way — *Specify* _____

Section 2 — EARNINGS AND EMPLOYMENT (Continued)

Part A2 — EMPLOYER IDENTIFICATION NUMBER 2

10a. What is the name of the other employer for whom . . . worked during this 4-month period?

(If . . . worked for more than one employer, enter the employer for whom . . . worked the second most hours during the 4-month period.)

PGM 8 — Employer Name
2100 _____

CHECK ITEM E6 Enter employer ID number from cc item 42, or if a new employer, enter next available ID number →

PGM 8 — Employer ID No.
2102 [ ]

10b. What kind of business or industry was *(Name of company or business)*?

For example: TV and radio manufacturing, retail shoe store, State Labor Department, farm.

PGM 8
2104 _____

c. *ASK OR VERIFY* —

Is it mainly —

PGM 8
2106
1 ☐ **Manufacturing?**
2 ☐ **Wholesale Trade?**
3 ☐ **Retail Trade?**
4 ☐ **Some other kind of business?**

d. What kind of work was . . . doing on this job?

For example: Electrical engineer, stock clerk, typist, farmer

PGM 8
2108 _____

e. What were . . .'s main activities or duties?

For example: Types, keeps account books, files, sells cars, operates printing press, finishes concrete.

PGM 8
2110 _____

f. *ASK OR VERIFY* —

Was . . . an employee of —

PGM 8
2112
1 ☐ **A private company or individual?**
2 ☐ **Federal government (exclude Armed Forces)?**
3 ☐ **State government?**
4 ☐ **Local government?**
5 ☐ **Armed Forces?**
6 ☐ **Unpaid in family business or farm? —** *SKIP to Check Item E8*

11a. *ASK OR VERIFY* —

Was . . . employed by *(Name of employer)* **during the entire 4-month period?**

PGM 7
2114
1 ☐ Yes — *SKIP to 12*
2 ☐ No

b. When was . . . employed by *(Name of employer)* **during this 4-month period?**

FROM
2116 [ ][ ] Month 2118 [ ][ ] Day
TO
2120 [ ][ ] Month 2122 [ ][ ] Day

12. *ASK OR VERIFY* —

How many hours per week did . . . usually work at this job?

2124 [ ][ ] Hours
x3 ☐ None
x1 ☐ DK

13. Was . . . paid by the hour on this job?

2126
1 ☐ Yes
2 ☐ No — *SKIP to 15*

14. What was . . .'s regular hourly pay rate at the end of *(Read last month or "to" date in item 11b)*?

2128 $ [ ]
x1 ☐ DK
x2 ☐ Ref. — *SKIP to Check Item E8*

15. During the 4-month period how often was . . . paid on this job?

2130
1 ☐ Once a week
2 ☐ Once each 2 weeks
3 ☐ Once a month
4 ☐ Twice a month
5 ☐ Some other way — *Specify* _____

Section 2 — EARNINGS AND EMPLOYMENT (Continued)

Part B1 — SELF-EMPLOYMENT IDENTIFICATION NUMBER 1

STATEMENT B You said . . . was (also) self-employed during this 4-month period.

1a. What was the name of . . .'s business/professional practice/farm?

PGM 8 Business name
2200 _____

CHECK ITEM S1 Enter business ID number from cc item 43, or if a new business enter the next available ID number →

PGM 8 Business ID No.
2202 ☐

1b. What kind of business was this?

PGM 8
2204 _____

ASK OR VERIFY —
c. Is it mainly —

PGM 8
2206
1 ☐ Manufacturing?
2 ☐ Wholesale Trade?
3 ☐ Retail Trade?
4 ☐ Some other kind of business?

d. What kind of work was . . . doing?

PGM 8
2208 _____

e. What were . . .'s most important activities or duties?

PGM 8
2210 _____

ASK OR VERIFY —
f. How many hours per week did . . . usually work at this business?

PGM 7
2212 ☐☐ Hours
x3 ☐ None
x1 ☐ DK

2. Do you think that the gross earnings of this business will be $1,000 or more during the next 12 months?
Gross earnings include sales and receipts before expenses.

2214
1 ☐ Yes
2 ☐ No — *SKIP to 10*
x1 ☐ DK

CHECK ITEM S2 Have questions 3—5b already been answered for this business by another household member?

2216
1 ☐ Yes — *SKIP to 6a*
2 ☐ No

3. What was the total number of employees working for this business? Be sure to include . . . .
Enter 999 if 1,000 or more employees.

2218 ☐☐☐ Employees
x1 ☐ DK

4a. Was . . .'s business incorporated?

2220
1 ☐ Yes — *SKIP to 5a*
2 ☐ No

b. Was . . .'s business a sole proprietorship or a partnership?

2222
1 ☐ Sole proprietorship — *SKIP to 6a*
2 ☐ Partnership

5a. Aside from . . . were any other members of this household owners or partners in this business?

2224
1 ☐ Yes
2 ☐ No — *SKIP to 6a*

b. Which members?

	Person No.	Name
2226	☐☐☐	
2228	☐☐☐	
2230	☐☐☐	

6a. Was . . . paid a regular salary from this business during the 4-month period?

2232
1 ☐ Yes
2 ☐ No

b. Did . . . receive any (other) income from the business during this 4-month period?

2234
1 ☐ Yes
2 ☐ No

CHECK ITEM S3 Is "Yes" marked in either item 6a or 6b?

2236
1 ☐ Yes
2 ☐ No — *SKIP to Check Item S5*

Section 2 — EARNINGS AND EMPLOYMENT (Continued)

Part B2 — SELF-EMPLOYMENT IDENTIFICATION NUMBER 2

12a. What was the name of . . .'s other business/professional practice/farm?

PGM 8 — Business name
2300 _____

CHECK ITEM S7 Enter business ID number from cc item 43, or if a new business, enter the next available ID number →

PGM 8 — Business ID No.
2302 [ ]

12b. What kind of business was this?

PGM 8
2304 _____

ASK OR VERIFY —
c. Is it mainly —

PGM 8
2306
1 ☐ Manufacturing?
2 ☐ Wholesale Trade?
3 ☐ Retail Trade?
4 ☐ Some other kind of business?

d. What kind of work was . . . doing?

PGM 8
2308 _____

e. What were . . .'s most important activities or duties?

PGM 8
2310 _____

f. How many hours per week did . . . usually work at this business?

PGM 7
2312 [ ][ ] Hours
x3 ☐ None
x1 ☐ DK

13. Do you think that the gross earnings of this business will be $1,000 or more during the next 12 months?
Gross earnings include sales and receipts before expenses.

2314
1 ☐ Yes
2 ☐ No — *SKIP to 21*
x1 ☐ DK

CHECK ITEM S8 Have questions 14—16b already been answered for this business by another household member?

2316
1 ☐ Yes — *SKIP to 17a*
2 ☐ No

14. What was the total number of employees working for this business? Be sure to include . . . .
Enter 999 if 1,000 or more employees.

2318 [ ][ ][ ] Employees
x1 ☐ DK

15a. Was . . .'s business incorporated?

2320
1 ☐ Yes — *SKIP to 16a*
2 ☐ No

b. Was . . .'s business a sole proprietorship or a partnership?

2322
1 ☐ Sole proprietorship — *SKIP to 17a*
2 ☐ Partnership

16a. Aside from . . . were any other members of this household owners or partners in this business?

2324
1 ☐ Yes
2 ☐ No — *SKIP to 17a*

b. Which members?

	Person No.	Name
2326	[ ][ ][ ]	
2328	[ ][ ][ ]	
2330	[ ][ ][ ]	

17a. Was . . . paid a regular salary from this business during the 4-month period?

2332
1 ☐ Yes
2 ☐ No

b. Did . . . receive any (other) income from the business during this 4-month period?

2334
1 ☐ Yes
2 ☐ No

CHECK ITEM S9 Is "Yes" marked in either item 17a or 17b?

2336
1 ☐ Yes
2 ☐ No — *SKIP to Check Item S11*

Section 5 — TOPICAL MODULES

Part A — EARNINGS AND BENEFITS

STATEMENT C The purpose of this part of our interview is to get the most accurate picture possible of the situation of persons and families during calendar year 1984. It would be very helpful to refer to records during this interview.

CHECK ITEM T1 Are the names of any businesses listed for . . . on the control card? (cc item 43)

8000 1 ☐ Yes — *SKIP to 1b*
2 ☐ No

CHECK ITEM T2 Were interviews obtained for . . . for each of the 2nd, 3rd, 4th, and 5th waves (cc items 44, 45, 46, and 47)?

8002 1 ☐ Yes — *SKIP to Check Item T13*
2 ☐ No

1a. Did . . . own and operate a business at any time during calendar year 1984?
Include farms

8004 1 ☐ Yes
2 ☐ No — *SKIP to Check Item T13*

ASK OR VERIFY —
b. How many different businesses did . . . own and operate during calendar year 1984?

8006 ☐☐ Businesses
OR
x3 ☐ None — *SKIP to Check Item T13*

ASK OR VERIFY —
c. What were the names of the businesses that . . . owned and operated during calendar year 1984? *(List up to 2 businesses; list according to net income from business beginning with the business providing the largest net income.)*

PGM8	PGM8
8008 Business name _____	8058 Business name _____

CHECK ITEM T3 Transcribe ID number for this business from the control card (cc item 42)

PGM7	PGM7
8010 ☐ Business ID No.	8060 ☐ Business ID No.
OR	OR
x3 ☐ Not listed on control card	x3 ☐ Not listed on control card

CHECK ITEM T4 Has information about this business already been obtained in an interview for another household member?

8012 1 ☐ Yes	8062 1 ☐ Yes
2 ☐ No — *SKIP to 2a*	2 ☐ No — *SKIP to 2a*

INTERVIEWER INSTRUCTION:

Enter name, person number, and business ID Number of other owner to indicate location of information about this business.

Name _____	Name _____
Person number 8014 ☐☐☐	Person number 8064 ☐☐☐
Business ID number 8016 ☐	Business ID number 8066 ☐
OR x3 ☐ None	OR x3 ☐ None
SKIP to Check Item T10	*SKIP to Check Item T11*

2a. What was the form of this (business/practice) — was it a sole proprietorship, a partnership, or a corporation?

8018 1 ☐ Sole proprietorship	8068 1 ☐ Sole proprietorship
2 ☐ Partnership	2 ☐ Partnership
3 ☐ Corporation — *Obtain information in employee section — Go to Check Item T10*	3 ☐ Corporation — *Obtain information in employee section — Go to Check Item T11*
x1 ☐ DK	x1 ☐ DK

CHECK ITEM T5 Was information on this business obtained in Part B1 (p.18) or Part B2 (p.20)?

8020 1 ☐ Yes — *SKIP to 2d*	8070 1 ☐ Yes — *SKIP to 2d*
2 ☐ No	2 ☐ No

2b. What kind of business or industry was *(Name of company or business)*?

PGM8	PGM8
8022 _____	8072 _____

FORM SIPP-4600 (11-19-84)

Section 5 — TOPICAL MODULES (Continued)

Part A — EARNINGS AND BENEFITS (Continued)

2c. Was it mainly —	PGM 8 S100 1☐ Manufacturing? 2☐ Wholesale trade? 3☐ Retail trade? 4☐ Some other kind of business?	PGM 8 S150 1☐ Manufacturing? 2☐ Wholesale trade? 3☐ Retail trade? 4☐ Some other kind of business?
d. Was this business primarily located in . . .'s own home or somewhere else?	PGM 7 S102 1☐ Own home 2☐ Somewhere else	PGM 7 S152 1☐ Own home 2☐ Somewhere else
CHECK ITEM T6 Is "sole proprietorship" marked in item 2a?	S104 1☐ Yes — *SKIP to 2j* 2☐ No	S154 1☐ Yes — *SKIP to 2j* 2☐ No
2e. Were any other members of this household part-owners of this (business/practice)?	S106 1☐ Yes 2☐ No } *SKIP to 2i* x1☐ DK } *SKIP to 2i*	S156 1☐ Yes 2☐ No } *SKIP to 2i* x1☐ DK } *SKIP to 2i*
f. Which other household members were owners?	S108 Person No. ☐☐☐ Name _____	S158 Person No. ☐☐☐ Name _____
	S110 Person No. ☐☐☐ Name _____	S160 Person No. ☐☐☐ Name _____
g. Was this (business/practice) owned entirely by members of this household?	S112 1☐ Yes — *SKIP to 2i* 2☐ No	S162 1☐ Yes — *SKIP to 2i* 2☐ No
h. What percentage of this (business/practice) was owned by members of this household?	S114 ☐☐ Percent OR x1☐ DK	S164 ☐☐ Percent OR x1☐ DK
i. What percentage of this (business/practice) did . . . own in . . .'s own name?	S116 ☐☐ Percent OR x1☐ DK	S166 ☐☐ Percent OR x1☐ DK
j. What were the gross receipts of this (business/practice) in 1984? Please use records if they are available. ★ *Obtain estimate, if necessary.*	S118 $ _____ . 00 x1☐ DK x2☐ Ref.	S168 $ _____ . 00 x1☐ DK x2☐ Ref.
k. What were the total expenses of this (business/practice) in 1984? Please use records if they are available. ★ *Obtain estimate, if necessary.*	S120 $ _____ . 00 x1☐ DK x2☐ Ref.	S170 $ _____ . 00 x1☐ DK x2☐ Ref.
CHECK ITEM T7 Is "DK" marked in either 2j or 2k?	S122 1☐ Yes 2☐ No — *SKIP to Check Item T8*	S172 1☐ Yes 2☐ No — *SKIP to Check Item T8*
2l. Information on (receipts/expenses) is especially important for this survey. If we were to call back later could you provide us with an estimate?	S124 1☐ Yes — *Mark Reminder Card, Item 11a or 11b* 2☐ No	S174 1☐ Yes — *Mark Reminder Card, Item 11a or 11b* 2☐ No

TOPICAL MODULES

Section 5 — TOPICAL MODULES (Continued)

Part A — EARNINGS AND BENEFITS (Continued)

CHECK ITEM T8 Is "sole proprietorship" marked in item 2a?	8200 1 ☐ Yes — *SKIP to Check Item T10* 2 ☐ No	8250 1 ☐ Yes — *SKIP to Check Item T11* 2 ☐ No
2m. What was . . .'s net income from this (business/practice) in 1984? Please use records if they are available. ★ *Obtain estimate, if necessary.*	8202 $ _____ . 00 } *SKIP to Check Item T9* x3 ☐ None . . . . . } *SKIP to Check Item T9* x1 ☐ DK x2 ☐ Ref. — *SKIP to Check Item T9* 8204 x4 ☐ Lost money — *Enter amount of loss in box — SKIP to Check Item T9*	8252 $ _____ . 00 } *SKIP to Check Item T9* x3 ☐ None . . . . . } *SKIP to Check Item T9* x1 ☐ DK x2 ☐ Ref. — *SKIP to Check Item T9* 8254 x4 ☐ Lost money — *Enter amount of loss in box — SKIP to Check Item T9*
n. This information is especially important for the purposes of this survey. If we were to call back later could you provide us with an estimate?	8206 1 ☐ Yes — *Mark Reminder Card, Item 12* 2 ☐ No	8256 1 ☐ Yes — *Mark Reminder Card, Item 12* 2 ☐ No
CHECK ITEM T9 Were any other household members part owners of this business? *(See item 2f.)*	8208 1 ☐ Yes 2 ☐ No — *SKIP to Check Item T10*	8258 1 ☐ Yes 2 ☐ No — *SKIP to Check Item T11*
2o. Apart from the net income already reported for . . ., did *(Read names of other household owners)* receive any net income in 1984 from this (business/practice)?	8210 1 ☐ Yes 2 ☐ No } *SKIP to Check Item T10* x1 ☐ DK } *SKIP to Check Item T10*	8260 1 ☐ Yes 2 ☐ No } *SKIP to Check Item T11* x1 ☐ DK } *SKIP to Check Item T11*
p. What was the amount of net income that was received by *(Read names of other household owners)*? *Obtain estimate, if necessary.*	Person No. 8212 ☐☐☐ 8214 $ _____ . 00 x3 ☐ None x1 ☐ DK x2 ☐ Ref. 8216 x4 ☐ Lost money — *Enter amount of loss in box* SECOND CO-OWNER Person No. 8218 ☐☐☐ 8220 $ _____ . 00 x3 ☐ None x1 ☐ DK x2 ☐ Ref. 8222 x4 ☐ Lost money — *Enter amount of loss in box*	Person No. 8262 ☐☐☐ 8264 $ _____ . 00 x3 ☐ None x1 ☐ DK x2 ☐ Ref. 8266 x4 ☐ Lost money — *Enter amount of loss in box* SECOND CO-OWNER Person No. 8268 ☐☐☐ 8270 $ _____ . 00 x3 ☐ None x1 ☐ DK x2 ☐ Ref. 8272 x4 ☐ Lost money — *Enter amount of loss in box*
CHECK ITEM T10 Is another business listed in 1c?	8274 1 ☐ Yes — *Complete Check Item T3 for next business* 2 ☐ No — Go to Check Item T12	*Go to Check Item T11*
CHECK ITEM T11 Is the number of businesses marked in 1b three or more?	8276 1 ☐ Yes 2 ☐ No — *SKIP to Check Item T12*	
3. What was . . .'s net income from . . .'s other businesses in 1984? Please use records if they are available.	8278 $ _____ . 00 x3 ☐ None x1 ☐ DK x2 ☐ Ref. 8280 x4 ☐ Lost money — *Enter amount of loss in box*	

Section 5 — TOPICAL MODULES (Continued)

Part A — EARNINGS AND BENEFITS (Continued)

CHECK ITEM T12	Was . . . identified as the owner of a corporation in item 2a?	8282 1☐ Yes — *SKIP to 4b and consider . . . to be an employee of that corporation* 2☐ No
CHECK ITEM T13	Are the names of any employers listed for . . . on the control card? (cc item 42)	8284 1☐ Yes — *SKIP to 4b* 2☐ No
CHECK ITEM T14	Were interviews obtained for . . . for each of the 2nd, 3rd, 4th, and 5th waves? (cc items 44, 45, 46, and 47)	8286 1☐ Yes — *SKIP to Check Item T19* 2☐ No
4a.	**Did . . . work at a paid job at any time during calendar year 1984?**	8288 1☐ Yes 2☐ No — *SKIP to Check Item T19*
	ASK OR VERIFY — **b. For how many different employers did . . . work during calendar year 1984?** *(Include self-owned corporations.)*	8290 ☐ Employers OR x2☐ None — *SKIP to Check Item T19*

ASK OR VERIFY — **4c. What were the names of the employers that . . . worked for in 1984?**	PGM 8	Employer Name	PGM 8	Employer Name	PGM 8	Employer Name	
	8300		8350		8400		
		Address		Address		Address	
What is the address of that employer (the address of the physical location)?	PGM 8		PGM 8		PGM 8		
	8302		8352		8402		
List up to 3 employers; list employers according to amount of earnings received in 1984, beginning with employer from whom . . . received the greatest earnings.	PGM 8	ZIP code	PGM 8	ZIP code	PGM 8	ZIP code	
	8304	☐☐☐☐☐	8354	☐☐☐☐☐	8404	☐☐☐☐☐	
CHECK ITEM T15 — Was information on this employer obtained in Part A1(p.14) or Part A2(p.16)?	PGM 7		PGM 7		PGM 7		
	8310	☐ Yes, ID number — *SKIP to 4i* OR 2☐ No	8360	☐ Yes, ID number — *SKIP to 4i* OR 2☐ No	8410	☐ Yes, ID number — *SKIP to 4i* OR 2☐ No	
4d. What kind of business or industry was *(Name of company or business)?*	PGM 8		PGM 8		PGM 8		
	8312		8362		8412		
e. Was it mainly —	PGM 8		PGM 8		PGM 8		
	8314	1☐ Manufacturing? 2☐ Wholesale trade? 3☐ Retail trade? 4☐ Some other kind of business?	8364	1☐ Manufacturing? 2☐ Wholesale trade? 3☐ Retail trade? 4☐ Some other kind of business?	8414	1☐ Manufacturing? 2☐ Wholesale trade? 3☐ Retail trade? 4☐ Some other kind of business?	
f. What kind of work was . . . doing on this job?	PGM 8		PGM 8		PGM 8		
	8316		8366		8416		
g. What were . . .'s main activities or duties?	PGM 8		PGM 8		PGM 8		
	8318		8368		8418		

NOTES

Section 5 — TOPICAL MODULES (Continued)

Part A — EARNINGS AND BENEFITS (Continued)

4h. Was . . . an employee of —	PGM 8 8500 1☐ A private company or individual? 2☐ Federal Government? *(Exclude Armed Forces)* 3☐ State Government? 4☐ Local Government? 5☐ Armed Forces? 6☐ Unpaid in family business or farm? — *SKIP to Check Item T17*	PGM 8 8550 1☐ A private company or individual? 2☐ Federal Government? *(Exclude Armed Forces)* 3☐ State Government? 4☐ Local Government? 5☐ Armed Forces? 6☐ Unpaid in family business or farm? — *SKIP to Check Item T17*	PGM 8 8600 1☐ A private company or individual? 2☐ Federal Government? *(Exclude Armed Forces)* 3☐ State Government? 4☐ Local Government? 5☐ Armed Forces? 6☐ Unpaid in family business or farm? — *SKIP to Check Item T18*
ASK OR VERIFY — **i.** Did . . . stop working for *(Employer's name)* at any time during 1984?	PGM 7 8502 1☐ Yes 2☐ No — *SKIP to 5a*	PGM 7 8552 1☐ Yes 2☐ No — *SKIP to 5a*	PGM 7 8602 1☐ Yes 2☐ No — *SKIP to 5a*
j. What was the main reason . . . stopped working for *(Name of employer)*? Was it because . . . *(Read categories)* — *Mark only one.*	8504 1☐ Was laid off? 2☐ Quit that job to take another job? — *SKIP to 4q* 3☐ Retired? } *SKIP to 5a* 4☐ Was discharged? } *SKIP to 5a* 5☐ Job was temporary and ended? — *SKIP to 5a* 6☐ Quit that job for some other reason? — *SKIP to 4q*	8554 1☐ Was laid off? 2☐ Quit that job to take another job? — *SKIP to 4q* 3☐ Retired? } *SKIP to 5a* 4☐ Was discharged? } *SKIP to 5a* 5☐ Job was temporary and ended? — *SKIP to 5a* 6☐ Quit that job for some other reason? — *SKIP to 4q*	8604 1☐ Was laid off? 2☐ Quit that job to take another job? — *SKIP to 4q* 3☐ Retired? } *SKIP to 5a* 4☐ Was discharged? } *SKIP to 5a* 5☐ Job was temporary and ended? — *SKIP to 5a* 6☐ Quit that job for some other reason? — *SKIP to 4q*
k. Did the place where . . . worked close down either at the time . . . was laid off or sometime after?	8506 1☐ Yes 2☐ No — *SKIP to 4o*	8556 1☐ Yes 2☐ No — *SKIP to 4o*	8606 1☐ Yes 2☐ No — *SKIP to 4o*
l. When did it close down?	Month 8508 ☐☐ Year 8510 1 9 8 ☐ x1☐ DK	Month 8558 ☐☐ Year 8560 1 9 8 ☐ x1☐ DK	Month 8608 ☐☐ Year 8610 1 9 8 ☐ x1☐ DK
m. Is it still closed down?	8512 1☐ Yes— *SKIP to 5a* 2☐ No	8562 1☐ Yes— *SKIP to 5a* 2☐ No	8612 1☐ Yes— *SKIP to 5a* 2☐ No
n. When did it reopen?	Month 8514 ☐☐ Year 8516 1 9 8 ☐ x1☐ DK	Month 8564 ☐☐ Year 8566 1 9 8 ☐ x1☐ DK	Month 8614 ☐☐ Year 8616 1 9 8 ☐ x1☐ DK
ASK OR VERIFY — **o.** Did . . . return to work for *(Name of employer)* after being laid off?	8518 1☐ Yes 2☐ No — *SKIP to 5a*	8568 1☐ Yes 2☐ No — *SKIP to 5a*	8618 1☐ Yes 2☐ No — *SKIP to 5a*

Section 5 — TOPICAL MODULES (Continued)

Part A — EARNINGS AND BENEFITS (Continued)

4p. For how many weeks was . . . laid off?	8650 Weeks ☐☐ OR x1☐DK } SKIP to 5a	8700 Weeks ☐☐ OR x1☐DK } SKIP to 5a	8750 Weeks ☐☐ OR x1☐DK } SKIP to 5a
q. What were the reasons . . . decided to change jobs/leave that job? *Mark all that apply.*	8652 1☐Level of earnings 8654 2☐Type of work 8656 3☐Work conditions 8658 4☐Job location 8660 5☐Family or personal reasons 8662 6☐Job was temporary and ended 8664 7☐Other	8702 1☐Level of earnings 8704 2☐Type of work 8706 3☐Work conditions 8708 4☐Job location 8710 5☐Family or personal reasons 8712 6☐Job was temporary and ended 8714 7☐Other	8752 1☐Level of earnings 8754 2☐Type of work 8756 3☐Work conditions 8758 4☐Job location 8760 5☐Family or personal reasons 8762 6☐Job was temporary and ended 8764 7☐Other
ASK OR VERIFY — **r.** After the time that . . . stopped working for *(Name of employer)* did . . . return to work for *(Name of employer)*?	8666 1☐Yes 2☐No — *SKIP to 5a*	8716 1☐Yes 2☐No — *SKIP to 5a*	8766 1☐Yes 2☐No — *SKIP to 5a*
s. When did . . . return to work for *(Name of employer)*?	8668 Month ☐☐ 8670 Year 1 9 8 ☐	8718 Month ☐☐ 8720 Year 1 9 8 ☐	8768 Month ☐☐ 8770 Year 1 9 8 ☐
5a. Do you have a W-2 form from *(Read name of employer)* that you can refer to? *(If "Yes," ask respondent to use the W-2 form.)*	8672 1☐Yes 2☐No	8722 1☐Yes 2☐No	8772 1☐Yes 2☐No
b. (According to . . .'s W-2 form) how much did . . . earn from . . .'s job with *(Read name of employer)* during 1984 before any deductions? *Obtain estimate, if necessary.*	8674 $ ☐ . 00 x1☐DK x2☐Ref. — *SKIP to 5e*	8724 $ ☐ . 00 x1☐DK x2☐Ref. — *SKIP to 5e*	8774 $ ☐ . 00 x1☐DK x2☐Ref. — *SKIP to 5e*
CHECK ITEM T16 Does . . . have a W-2 form to refer to?	8676 1☐Yes 2☐No — *SKIP to 5e*	8726 1☐Yes 2☐No — *SKIP to 5e*	8776 1☐Yes 2☐No — *SKIP to 5e*
5c. According to the W-2 form, what is the identification number of this employer?	Identification number 8678 ☐☐ — ☐☐ 8680 ☐☐☐☐☐ 8682 x1☐DK	Identification number 8728 ☐☐ — ☐☐ 8730 ☐☐☐☐☐ 8732 x1☐DK	Identification number 8778 ☐☐ — ☐☐ 8780 ☐☐☐☐☐ 8782 x1☐DK

NOTES

Section 5 — TOPICAL MODULES (Continued)

Part A — EARNINGS AND BENEFITS (Continued)

5d. In 1984, how much was deducted from . . .'s pay for —	8800 $. 00	8850 $. 00	8900 $. 00
(1) Federal income Taxes?	x3☐ None x2☐ Ref.	x3☐ None x2☐ Ref.	x3☐ None x2☐ Ref.
(2) State and local income taxes?	8802 $. 00 x3☐ None x2☐ Ref.	8852 $. 00 x3☐ None x2☐ Ref.	8902 $. 00 x3☐ None x2☐ Ref.
(3) Social Security (FICA) taxes?	8804 $. 00 x3☐ None x2☐ Ref.	8854 $. 00 x3☐ None x2☐ Ref.	8904 $. 00 x3☐ None x2☐ Ref.
(4) Health insurance?	8806 $. 00 x3☐ None x2☐ Ref.	8856 $. 00 x3☐ None x2☐ Ref.	8906 $. 00 x3☐ None x2☐ Ref.
e. On this job, was . . . covered by life insurance that was provided through . . .'s employer?	8808 1☐ Yes 2☐ No x1☐ DK } SKIP to 5g	8858 1☐ Yes 2☐ No x1☐ DK } SKIP to 5g	8908 1☐ Yes 2☐ No x1☐ DK } SKIP to 5g
f. Did . . .'s employer pay for all, part, or none of the cost of that plan?	8810 1☐ All 2☐ Part 3☐ None x1☐ DK	8860 1☐ All 2☐ Part 3☐ None x1☐ DK	8910 1☐ All 2☐ Part 3☐ None x1☐ DK
g. Did . . . have the use of a company car or truck on that job? (Count vehicles licensed for highway driving only.)	8812 1☐ Yes 2☐ No x1☐ DK } SKIP to 5i	8862 1☐ Yes 2☐ No x1☐ DK } SKIP to 5i	8912 1☐ Yes 2☐ No x1☐ DK } SKIP to 5i
h. Did . . . keep the car or truck at home when . . . was not working?	8814 1☐ Yes 2☐ No x1☐ DK	8864 1☐ Yes 2☐ No x1☐ DK	8914 1☐ Yes 2☐ No x1☐ DK
i. Did . . . have an expense account on that job?	8816 1☐ Yes 2☐ No x1☐ DK } SKIP to 5k	8866 1☐ Yes 2☐ No x1☐ DK } SKIP to 5k	8916 1☐ Yes 2☐ No x1☐ DK } SKIP to 5k
j. Could the expense account be used to pay for some of the expenses of the persons with whom . . . did business?	8818 1☐ Yes 2☐ No x1☐ DK	8868 1☐ Yes 2☐ No x1☐ DK	8918 1☐ Yes 2☐ No x1☐ DK
k. Did . . . regularly receive meals as part of that job?	8820 1☐ Yes 2☐ No x1☐ DK } SKIP to 5m	8870 1☐ Yes 2☐ No x1☐ DK } SKIP to 5m	8920 1☐ Yes 2☐ No x1☐ DK } SKIP to 5m

Section 5 — TOPICAL MODULES (Continued)

Part A — EARNINGS AND BENEFITS (Continued)

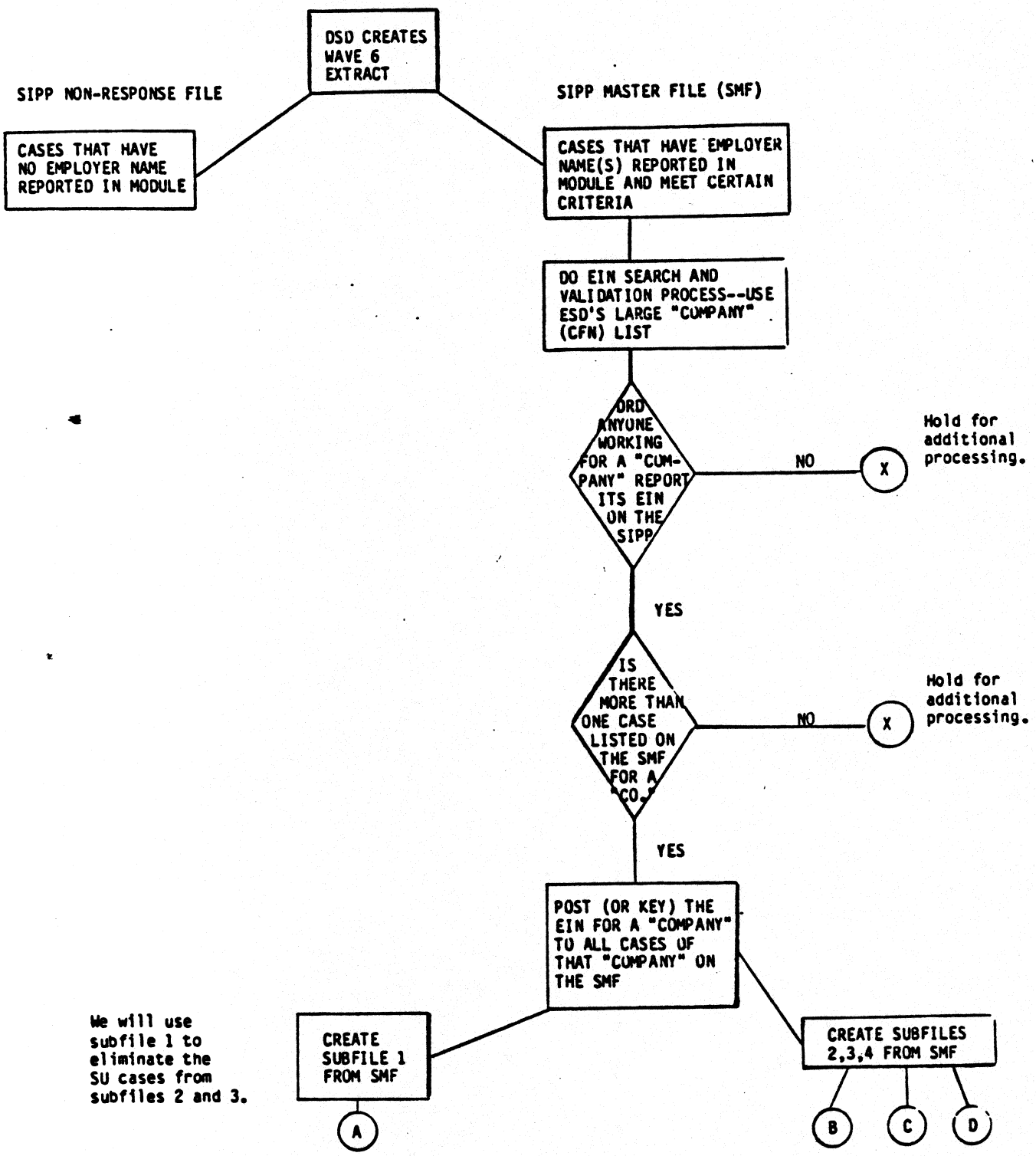
5l. How many meals a week did . . . usually receive as part of that job?	8950 ☐☐ Meals x1☐ DK	9000 ☐☐ Meals x1☐ DK	9050 ☐☐ Meals x1☐ DK
m. Did . . . regularly receive lodging as part of that job?	8952 1☐ Yes 2☐ No } *SKIP to Check Item T17* x1☐ DK }	9002 1☐ Yes 2☐ No } *SKIP to Check Item T17* x1☐ DK }	9052 1☐ Yes 2☐ No } *SKIP to Check Item T18* x1☐ DK }
n. How many nights of lodging per week did . . . receive as part of that job?	8954 ☐☐ Nights x1☐ DK	9004 ☐☐ Nights x1☐ DK	9054 ☐☐ Nights x1☐ DK
CHECK ITEM T17 Is another employer listed in 4c?	8956 1☐ Yes — *Complete Check Item T15 for next employer* 2☐ No — *SKIP to Check Item T19*	9006 1☐ Yes — *Complete Check Item T15 for next employer* 2☐ No — *SKIP to Check Item T19*	*Go to Check Item T18*
CHECK ITEM T18 Is the number of employers marked in 4b four or more?	9058 1☐ Yes 2☐ No — *SKIP to Check Item T19*		

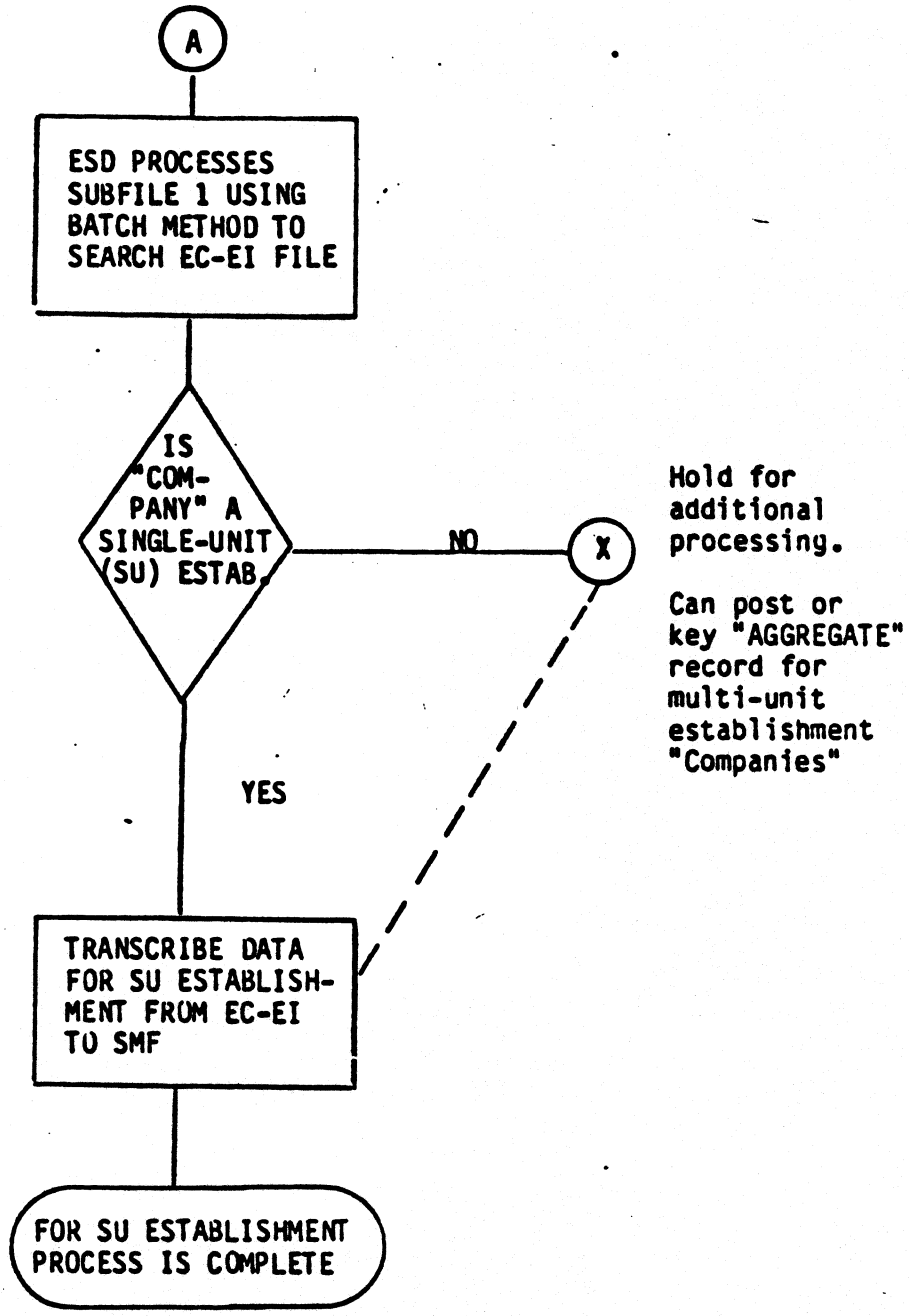
6. What was the total amount . . . earned from . . .'s other employers in 1984 before deductions? (Please use W-2 forms if you have any.) *Obtain estimate, if necessary.*	9060 $ ☐ . 00 x1☐ DK x2☐ Ref.

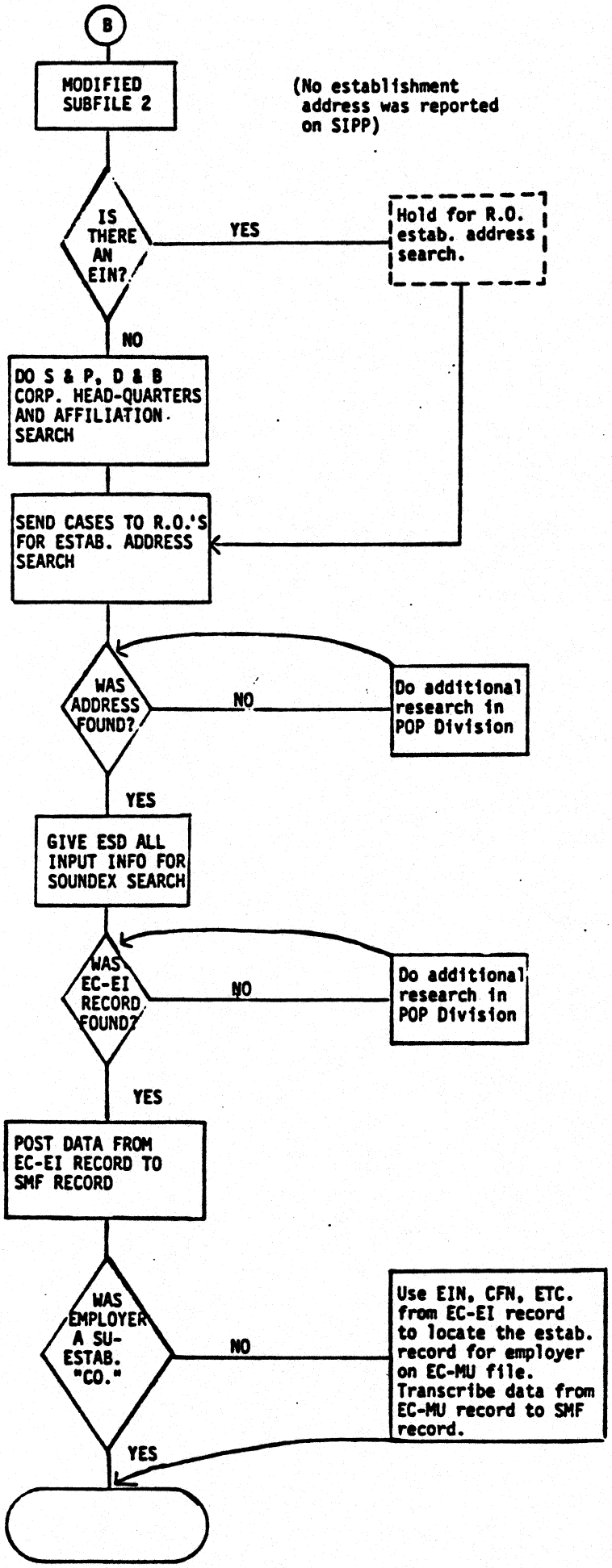
NOTES

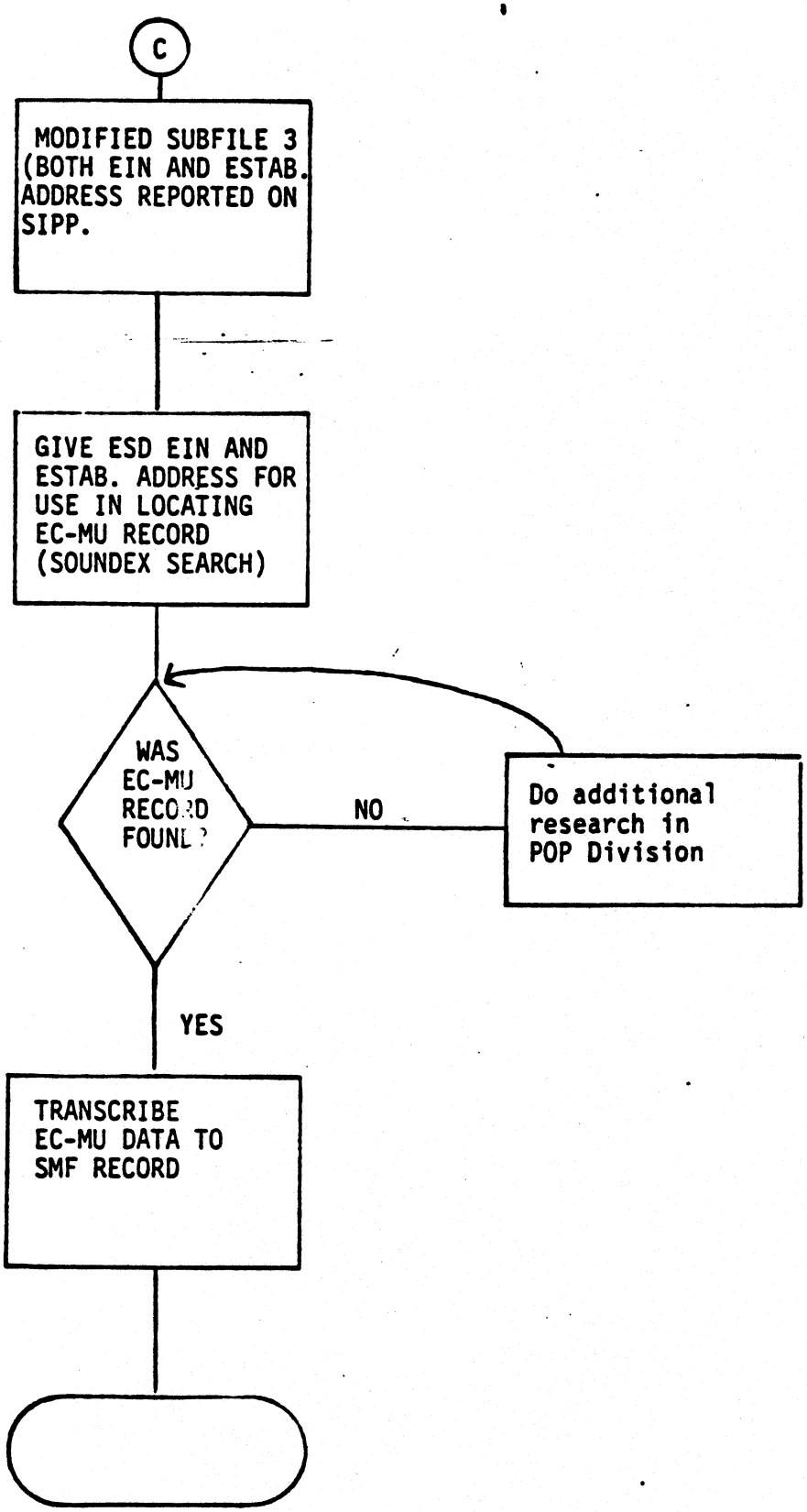
ATTACHMENT B

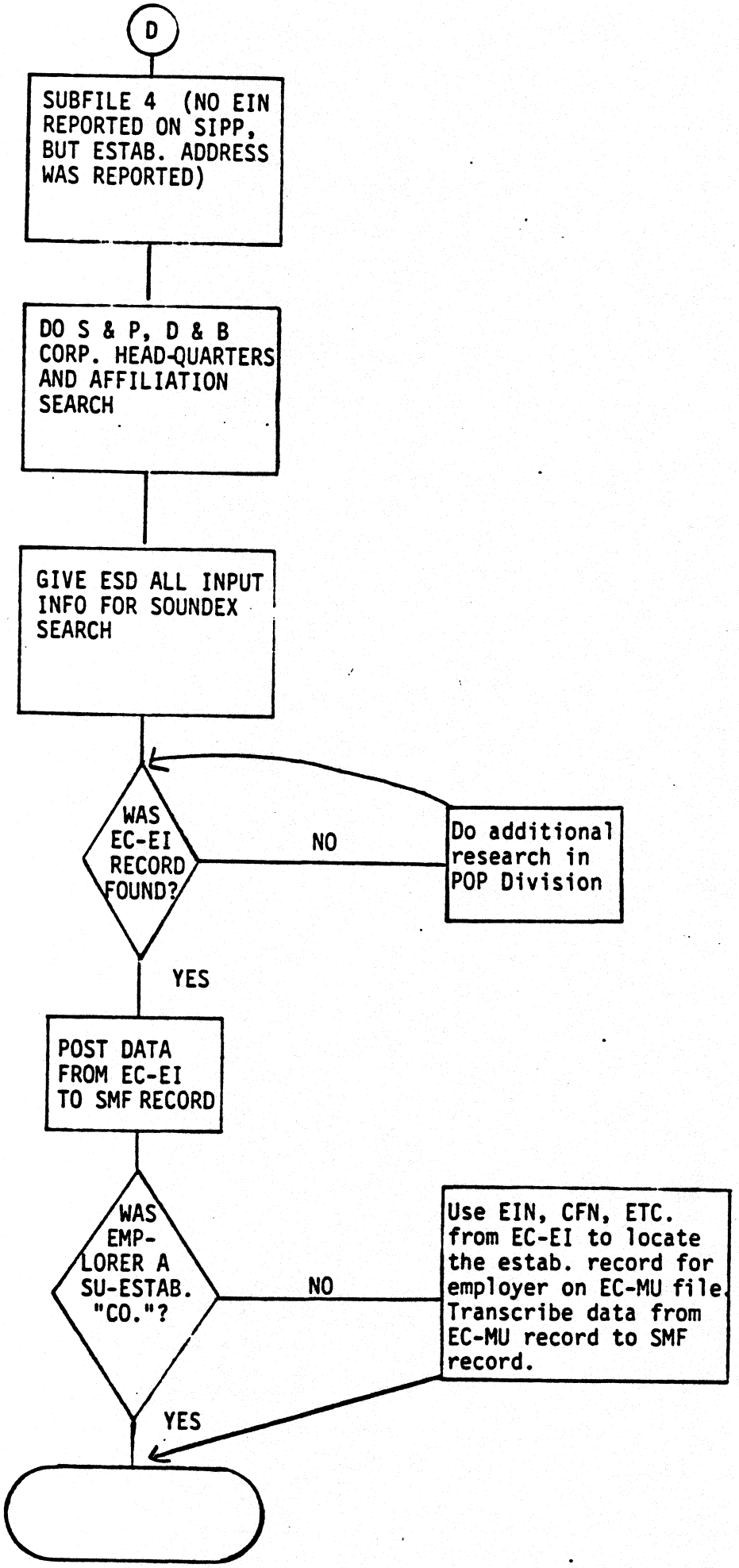
SIPP-SSEL LINK PROJECT




A
ESD PROCESSES SUBFILE 1 USING BATCH METHOD TO SEARCH EC-EI FILE
IS "COM-PANY" A SINGLE-UNIT (SU) ESTAB.
NO
X
Hold for additional processing.
Can post or key "AGGREGATE" record for multi-unit establishment "Companies"
YES
TRANSCRIBE DATA FOR SU ESTABLISH-MENT FROM EC-EI TO SMF
FOR SU ESTABLISHMENT PROCESS IS COMPLETE


B
MODIFIED SUBFILE 2
(No establishment address was reported on SIPP)
IS THERE AN EIN?
YES
Hold for R.O. estab. address search.
NO
DO S & P, D & B CORP. HEAD-QUARTERS AND AFFILIATION SEARCH
SEND CASES TO R.O.'S FOR ESTAB. ADDRESS SEARCH
WAS ADDRESS FOUND?
NO
Do additional research in POP Division
YES
GIVE ESD ALL INPUT INFO FOR SOUNDEX SEARCH
WAS EC-EI RECORD FOUND?
NO
Do additional research in POP Division
YES
POST DATA FROM EC-EI RECORD TO SMF RECORD
WAS EMPLOYER A SU-ESTAB. "CO."
NO
Use EIN, CFN, ETC. from EC-EI record to locate the estab. record for employer on EC-MU file. Transcribe data from EC-MU record to SMF record.
YES


C
MODIFIED SUBFILE 3 (BOTH EIN AND ESTAB. ADDRESS REPORTED ON SIPP.
GIVE ESD EIN AND ESTAB. ADDRESS FOR USE IN LOCATING EC-MU RECORD (SOUNDEX SEARCH)
WAS EC-MU RECORD FOUND?
NO
Do additional research in POP Division
YES
TRANSCRIBE EC-MU DATA TO SMF RECORD


D
SUBFILE 4 (NO EIN REPORTED ON SIPP, BUT ESTAB. ADDRESS WAS REPORTED)
DO S & P, D & B CORP. HEAD-QUARTERS AND AFFILIATION SEARCH
GIVE ESD ALL INPUT INFO FOR SOUNDEX SEARCH
WAS EC-EI RECORD FOUND?
NO
Do additional research in POP Division
YES
POST DATA FROM EC-EI TO SMF RECORD
WAS EMP-LORER A SU-ESTAB. "CO."?
NO
Use EIN, CFN, ETC. from EC-EI to locate the estab. record for employer on EC-MU file. Transcribe data from EC-MU record to SMF record.
YES