

The Decline in Establishment Reporting: Impact on CWHS Industrial and Geographic Data

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Almost since the beginning of its program operations, the Social Security Administration (SSA) has collected location and type of business data from employers—as a byproduct of the requirement that they report employee wages for benefit computation purposes. The agency has been able to draw on these statistical data for planning and policy analysis. Wage, location, and type of business data are associated with worker records in the SSA Continuous Work History Sample (CWHS). Wage data are received by SSA under one of two systems: Some employers with multiunit businesses voluntarily supply information through the Establishment Reporting Plan (ERP) with each establishment classified under a separate primary geographic location and industrial activity. All other employers report as single unit entities and are classified under one primary geographic location and industrial activity.

For three decades, many multiunit employers elected the ERP to report wages. In the mid-1970's, signs of declining participation became evident. In 1978, when SSA changed to annual wage reporting and asked employers to use magnetic media for their reports, a further significant decline in voluntary ERP reporting occurred.

Both the industrial and geographic classification of workers included in the CWHS have been affected by these declines. As employers moved from the ERP to single unit reporting, a significant "superficial" shift of workers' geographic location to States in which corporate headquarters are located was noted. The impact on industrial classification was less severe.

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To provide statistical data needed for the agency's planning and policy analysis, the Social Security Administration (SSA) has, since the early days of the program's operations, collected information from employers about their location and type of business. This information is used in connection with the employer's annual wage reports to code workers included in the Continuous Work History Sample (CWHS)¹ by geography and industry.² The Office of Research and Statistics (ORS) publishes geographic data at the State level in the **Annual Statistical Supplement** to the **Social Security Bulletin**. County level data are published in a separate publication, **Earnings and Employment Data, by State and County**.³ Geographic information from the CWHS is also provided in the **State Statistics** data series prepared by ORS and the Office of Public Affairs. These single-page-

per-State data sheets are used by SSA officials in public presentations and for other informational activities.⁴ Data on State and local government workers are analyzed on a State-by-State basis. Geographic data are used by SSA's Office of Disability to monitor disability application and award rates by State.

The geographic data collected by SSA have been useful to other Government agencies, also. These data have been used by the Bureau of Labor Statistics (BLS) in its publication, **Annual Earnings and Employment Patterns**;⁵ the Bureau of Economic Analysis in its **Regional Work Force Characteristics and Migration Data**;⁶ and the Bureau of the Census in its current business surveys and in **County Business Patterns**.⁷

Industrial data provide information about the nature of individual work histories. Internally, these data are

used to describe the work histories of special groups, such as those currently receiving payments under the Supplemental Security Income program. For analysis purposes, industrial data help identify workers in special coverage groups—State and local governments, Federal civilian, military, and nonprofit—whose wages may not be covered or are only partially covered for FICA (Federal Insurance Contributions Act) tax purposes.

Outside government agencies have also made substantial use of the industrial data collected by SSA.⁸ In fact, the CWHS provides the only source of longitudinal data on industry for a large representative sample of workers. Historically, industrial data from the CWHS have been used by a number of Federal agencies and educational institutions to study industrial mobility and job turnover and the relationship between industrial and geographic mobility. Industrial data have also been of great interest to health researchers for epidemiological studies dealing with the health effects of exposure to certain elements. Most recently, industrial data from the CWHS linked with death certificate data were used to prepare a set of tabulations for staff members at the National Cancer

¹Definitions for acronyms and technical terms have been provided in the glossary beginning on page 19.

²Creston M. Smith, "The Social Security Administration's Continuous Work History Sample," **Social Security Bulletin**, October 1989, pages 20-28.

³**Annual Statistical Supplement, 1989** to the **Social Security Bulletin**, Office of Research and Statistics, Office of Policy, Social Security Administration, 1989, page 145, table 4.B.10.

⁴**State Statistics**, Office of Research and Statistics and Office of Governmental Affairs, Social Security Administration, June 1989.

⁵**Earnings and Employment Data for Wage and Salary Workers Covered Under Social Security, by State and County, 1986**, Office of Research and Statistics, Office of Policy, Social Security Administration, 1989.

⁶**Regional Work Force Characteristics and Migration Data: A Handbook on the Social Security Continuous Work History Sample and Its Application**, Bureau of Economic Analysis, Department of Commerce, 1976.

⁷**Annual Earnings and Employment Patterns of Private Nonagricultural Employees**, Bureau of Labor Statistics, Department of Labor, 1973.

⁸**Bibliography of Labor Mobility Research Papers Using Data From the Social Security Administration's Continuous Work History Sample**, Office of Research and Statistics, Social Security Administration, August 1971.

Institute to analyze the relationship between the length of exposure in certain industries and death rates due to specific causes.

Background

Single unit employers,⁹ who primarily operate only one place of business, are assigned one geographic and industrial code¹⁰ based on the primary physical location and business activity of that business. For employers with more than one place of business and with 100 employees or more and who have agreed to use SSA's Establishment Reporting Plan (ERP),¹¹ each establishment¹² (or reporting unit) is individually classified by its primary physical location and business activity.¹³ The ERP is a voluntary program under which employers group their employees by establishment within the annual wage report, identify each group by an employer assigned establishment number, and file a master list of these numbers with SSA. In addition to being a source of statistical data, the ERP was intended to facilitate the processing of reports from employers with 100 employees or more and to aid in resolving wage reporting discrepancies. The ERP was first presented to multiunit employers¹⁴ on a test basis in 1941, and the favorable employer response led SSA to adopt establishment reporting

as a permanent procedure in 1943. Multiunit employers, not participating in ERP, are considered to be a single unit for purposes of classification because information on the physical location and industrial activity is not available on each individual establishment. The geographic code, therefore, is usually based on the physical location of the home office and the industrial code is based on the primary activity of all the locations.

The ERP has been used by a large number of employers and, for many years, was quite successful. However, indications in the mid-1970's showed that ERP participation was declining, and the changeover to annual wage reporting (AWR)¹⁵ in 1978 resulted in a significant drop in voluntary participation in the plan. Attempts were made to revitalize employer participation in ERP, but the structure of the AWR system put certain constraints on administration of the plan. Difficulties associated with these reports in the early years delayed the receipt of the data needed to identify and correct ERP reporting problems in a timely manner. In addition, SSA's solicitation of employer participation in magnetic media wage reporting resulted in further erosion of the voluntary ERP program.

The deterioration of multiunit reporting has had an impact on both industrial and geographic classification. Over time, significant shifts of workers' geographic location to States where the headquarters for large companies are located has occurred. These shifts are merely artifacts of the discontinuance of ERP participation and do not represent real changes in the geography of the workforce. The impact on industrial classification

was less severe, involving mainly employers in the manufacturing sector.

This article presents an analysis of the impact of the decline of ERP on industrial and geographic data in the CWHS. The analysis begins with a discussion of the industrial and geographic coding operation in the CWHS followed by an overview of the shifts of geographic and industrial distributions during the period 1971-86, with special attention focused on the advent of annual reporting. Next, the specific impact on coding in the CWHS is examined by identifying those workers with the same employer in 1976 and 1981 whose industrial or geographic designations changed due to the change in reporting status of multiunit employers. The implications of these findings for the longitudinal analyses of industry and geography in the CWHS and some implications for future coding operations conclude the analysis.

Coding of Employer Applications

Each employer whose business is subject to the Federal Insurance Contributions Act must complete a Form SS-4 (Application for an Employer Identification Number (EIN)).¹⁶ For statistical purposes, SSA has coded information from the SS-4 since the first 3 million employers were enumerated in 1936-37. The Internal Revenue Service (IRS) took over the job of assigning these numbers in 1950, but the geographic and industrial coding operations remained with SSA. With the exception of household employers and of nonemploying entities with "6-million series" numbers (for example, trust funds, fiduciaries, and estates that

⁹See glossary, page 20.

¹⁰*Ibid.*

¹¹*Ibid.*

¹²*Ibid.*

¹³The definition of an establishment/reporting unit under ERP differs from that of establishment units coded by other government agencies for statistical purposes. For a discussion of the differences, see

A Review of Industry Coding Systems, Statistical Policy Office, Office of Information and Regulatory Affairs, Office of Management and Budget, March 1984, pages 21-25.

¹⁴See glossary, page 20.

¹⁵See glossary, page 19.

¹⁶*Ibid.*

are assigned a 6 in the third position of the EIN), all the SS-4's are coded. Codes assigned to the form identify the following employer characteristics: geographic location, industrial activity, type of organization, size, and reason for application.

The industrial classification used for coding of single unit employers is based primarily on the **1972 Standard Industrial Classification (SIC) Manual**¹⁷ as amended by the **1977 Supplement**. In some cases, SSA uses foldback codes that consolidate 2 or more SIC codes for closely related activities when full SIC detail is difficult to ascertain and is not required for statistical purposes. If, during the coding operation, a 4-digit level of the SIC or the 4-digit SSA foldback code cannot be assigned because of insufficient information, a 2- or 3-digit level of the SIC is used. Cases that cannot be classified are assigned 4 zeroes.

Relevant items to aid in selection of an industrial code are true name or trade name, type of organization, nature of principal business activity, type of employees, principal product manufactured and raw materials used, and the purchaser of most of the products or services. The classification is based on the primary activity, if it is clearly stated by the employer. When employer information is inadequate, commercial reference materials (such as **Dunn & Bradstreet Reference Books of the United States, Standard & Poor's Corporation Records, and Moody's Industrial Manuals**) are used to help identify the industrial activity.

The scope of geographic coding for single unit employers includes the United States and outlying areas (American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and the Virgin Islands). Employers who

have military (APO/FPO) or foreign addresses are also included. The geographic classification of single unit employers is based on the physical location of the business when provided; otherwise, the mailing address is used.

Through coordination with the Bureau of the Census, SSA periodically updates the industrial and geographic data based on Economic Census reports¹⁸ after major SIC revisions. During this operation, the Census industrial code, which is also based on the SIC, is substituted for the SSA industrial code except where (1) the SSA date and source code is later than the Economic Census year; (2) the Census industrial code is not valid; (3) the major group level of the industrial code is the same, but SSA has superior detail in the 3rd and 4th digits; and (4) the Census industrial code is auxiliary and the first 2 digits do not equal SSA's code. The procedure for substitution of geographic codes is similar. The most recent SSA-Census coordination occurred in 1974 for the 1972 SIC revision.

The accuracy of industrial and geographic data is also improved through direct employer contact. To properly classify workers in the CWHS, each year SSA sends an SSA-L378 form to active employers (usually with 11 employees or more) whose codes are incomplete. Employers who supplied insufficient information on the SS-4 and those who filed a current annual wage report without SSA having a record of their SS-4 are targeted for contact.

¹⁸For the purpose and content of the Economic Census see, for example, **Manufacturers' Census**, MC87, and other internal reports published by the Bureau of the Census.

Establishment Reporting Plan

Although most employers are single-establishment firms, a small number of large firms are multiestablishment, operating more than one place of business in different geographic areas or engaged in different industrial activities. A breakdown of multiunit employment and wages allocable to various industries and geographic areas is advantageous for classifying employees in multiunit firms. The Establishment Reporting Plan was developed to obtain this information.

An establishment is generally defined as an economic unit, usually at a single physical location, engaged in one, or predominantly one, type of economic activity. If two or more distinct and separate industrial activities (for example, a construction firm and a lumber yard) are operated in the same physical location, they should be treated as separate establishments. However, in some instances it may be more convenient for the employer to use a payroll grouping other than an establishment as a "reporting unit." In this case, the employer may group two or more establishments (preferably engaged in the same industrial activity) within a county or State and treat them as one establishment. For example, an employer who operates four retail shoe stores in the same county may use one establishment number to identify the entire group of employees in all four stores or may list each store separately, with an individual establishment number. Where the employer does not have a fixed location (for example, construction sites or traveling salesmen) employees may be combined under one Statewide reporting unit. The employer should combine only employees engaged in the same industrial activity. It would not serve the statistical purposes of

¹⁷See glossary, page 20.

the ERP to report as a single unit a division that has numerous locations with distinct and separate industrial activities.

The form SS-4 and annual wage reports aid in preliminary identification of multiunit employers. Once such employers are identified, correspondence is initiated to determine if they are eligible and wish to participate in the ERP.¹⁹ To be eligible the employer must have 100 employees or more (50 or more before 1984), more than one place of business under one EIN, and must report at least one of the following: 6 or more employees in a secondary State, 10 percent of employment or at least 50 employees in a secondary county or industry, or 2 or more manufacturing establishments in the same geographic area. Employer participation involves: (1) providing SSA with a form SSA-5019 that lists establishments with a 4-digit number assigned to each establishment, and (2) reporting all employees under the same establishment numbers on annual wage reports.²⁰

With one exception, the same general approach is used for the industrial and geographic coding for the individual units listed under the ERP and for coding the SS-4. If an

establishment provides an auxiliary service to other establishments of the employer, it is coded for the primary industrial activity of the establishments it services.

The classification of each establishment is based on the stated activity and location at the time the business entity is set up under the ERP or when it is received as a supplement to the original list of units. This classification remains constant for each tax year, unless a code correction results from corrections or revisions submitted by the employer.

Employer Coding Files

The data obtained from the SS-4 and ERP coding are maintained in two data files. The Single Unit Code File (SUCF)²¹ contains one record for each employer identified from either the SS-4 received and coded by SSA or from information accreted during annual wage processing when no record of the form's receipt is in the existing SUCF. Excluded from the SUCF are household employers, nonemploying "6-million series" EIN's, and inactive employers whose records were purged from the files in the early 1970's. In addition to the EIN, industrial code, and geographic code, each record also contains: business birth codes for coverage (for example, nonprofit or government) or type of organization (such as individual, corporation, or partnership); size (number of employees); reason for application (for example, started new business or purchased going business); and date and source of the information.²²

²¹ See glossary, page 20.

²² Business birth codes are only carried for coded form SS-4 records. Also, class and reason for application were not carried in the SUCF until 1979 because they were not, and still are not, required for CWHS purposes.

The Multiunit Code File (MUCF)²³ contains one record for each establishment of participating ERP employers. The record contains similar information at the establishment level to that maintained in the SUCF.²⁴ Each year, the CWHS records of jobs that contain employer identification numbers are matched to the coding files to associate industrial and geographic codes with individual workers.

Evaluation of ERP Status

The analysis of the deterioration of the ERP's effectiveness and the relevant impact on industrial and geographic data in the CWHS is twofold. First, State and industry distributions are analyzed at four points in time (1971, 1976, 1981, and 1986). For some States and industrial groups, these data show substantial changes that might be attributable to the decline in ERP participation. Second, changes in State and industry codes for workers that were reported under the same EIN in both 1976 and 1981 are analyzed. When these changes are associated with a change in employer reporting, the impact of the declining participation can be measured directly.

The data for both analyses are from a 1-percent sample of the employee/employer records maintained as part of the CWHS. Data for 1971 and 1976 were taken

²³ See glossary, page 20.

²⁴ Both coding files contain counts of the number of W-2's reported for each of the five most current years for each establishment. These data provide a measure of employer size and identify active and inactive employers.

¹⁹ Certain employers are not solicited for ERP participation. They include Federal, State, and local governments and seasonal agricultural employers.

²⁰ In grouping employees under these same establishment numbers when reporting annual wages to SSA under the ERP, an employer with less than 250 employees may select paper or magnetic media. Under mandate, employers with 250 employees or more must report on magnetic media or be subject to a fine of \$50 per employee for noncompliance. Paper reporters may select the Standard Reporting Method (employer submits forms W-2 for each establishment under cover of a separate form W-3) or Optional Reporting Method (employer, who may be unable to use the Standard Reporting Method because of payroll or systems limitations, submits one form W-3 for each shipment of forms W-2 with the same EIN regardless of the number of establishments in the shipment).

from the Longitudinal Employee/Employer Data (LEED)²⁵ file. Data for 1981 and 1986 were taken from individual annual data files.²⁶ Records that contained EIN's for employers not participating in the ERP but using the establishment number for other purposes were excluded. Such employers were mainly State and local government agencies that use the establishment number field to designate payroll reporting units. They were excluded in an attempt to isolate the effects of ERP participation, especially in the detailed comparisons of industrial and geographic code changes between 1976 and 1981.

State and Industry Distribution Over Time

Tables 1 and 2 show the differences in the total number of jobs by State and industrial major group (MG)²⁷ in 1971, 1976, 1981, and 1986 and the number of jobs that were reported, by establishment, for each of these years.²⁸ The increase or decrease in the number of jobs in each State or industrial MG could be attributed to either the decline in the number of workers being reported under establishment numbers or one of the following: worker migration between jobs; changes in the number of jobs per worker; new workers entering the workforce; recessions and other economic trends; major Standard Industrial Classification revisions; code coordination with the Census Bureau and other updates to the code files; changes in the employer's establishment locations or industrial activities, including those affected by

the deterioration of ERP; or delinquent annual wage reports.

The decline in reporting by establishment numbers for the 4 years under analysis is shown in table 3. The decline in ERP participation is clearly indicated. In 1971, 28.4 percent of the total jobs were reported under an establishment number. By 1976, the proportion declined slightly. However, in 1981, compared with 1976, the proportion had decreased by more than one-half. This decrease can be attributed primarily to the onset of annual reporting in 1978 and its impact on voluntary employer ERP participation and in SSA's maintenance of the program. The number of jobs reported by establishment continued to decline through 1986. A large portion of this decrease was generated by large firms dropping ERP when they changed from paper to magnetic media wage reporting. By 1986, only 8.2 percent of all jobs were reported under establishment numbers. This proportion was a decrease of 27.4 percent for the 1981–86 period and an overall decrease of 71.1 percent from 1971.

The decline in establishment reporting was also measured by identifying, for each year, the total number of unique EIN's with workers in the CWHS reported under establishment numbers. In 1971, 13,944 employers reported workers under establishment numbers. A small decline in employer participation was evident by 1976. However, similar to the pattern for the number of jobs reported by establishment, the number of participating employers decreased by more than one-half by 1981. The number of ERP employers continued to decline at the same rate from 1981 to 1986. By 1986, only 2,675 employers were reporting their workers by establishment number—

an overall decline of almost 81 percent in ERP participation from 1971 to 1986.²⁹

Impact on Industrial Classification

Changes in industrial distributions over time are presented in table 1. The table presents industrial classification by major group. Several features of the data can be easily explained. For example, a major industrial code revision (based on the 1972 SIC) that took place in 1974 resulted in the shifting of workers from one MG to another during the study period. The shifts in major groups included:

- All of 19 (Ordnance Manufacturers) moved to 34 (Fabricated Metal Product Manufacturers).
- Part of 50 (Wholesale) formed 51 (Wholesale Nondurable Goods); 50 became Wholesale Durable Goods.
- Part of 86 (Nonprofit Membership Organizations) formed 83 (Social Services); 86 was retitled Membership Organizations.

Table 1 also shows a large increase in the number of unclassified jobs in 1976–81. That increase partly reflects the update process to the single unit and multiunit code files begun in 1978. Unmatched establishments and single unit entities from annual wage reports were accreted to the code

²⁹ Employer counts somewhat underestimate the total number of employers participating in ERP because in a given year a participating employer might not have had an employee who was in the 1-percent CWHS. However, there is no reason to believe that the measurement of decline in participation is significantly distorted. Similar results on the pattern of decline, specifically in Texas, are found in the Office of Management and Budget publication, **A Comparative Study of Reporting Units in Selected Employer Data Systems** (Statistical Policy Working Paper 16), May 1990.

²⁵ See glossary, page 20.

²⁶ Smith, *op. cit.*

²⁷ See glossary, page 20.

²⁸ Some workers in this study, depending on the number of jobs worked in a given year, may have more than one record.

Table 1.—Industry distribution for all jobs of workers: Industrial major group classification, by ERP¹ participation, selected years, 1971-86

Industrial major groups ²	1971			1976			1981			1986		
	Total	Establishment number		Total	Establishment number		Total	Establishment number		Total	Establishment number	
		Yes	No		Yes	No		Yes	No		Yes	No
Total	1,143,012	324,494	818,518	1,252,067	313,266	938,801	1,337,429	151,629	1,185,800	1,491,259	121,570	1,369,689
00 Unclassified	17,612	3,917	13,695	42,770	26,584	16,186	166,665	30,237	136,428	219,458	29,255	190,203
01 Agricultural Production	24,598	633	23,963	28,115	547	27,568	31,268	375	30,893	22,400	88	22,312
07 Agricultural Services	5,072	403	4,669	5,633	249	5,384	7,059	193	6,866	9,189	0	9,189
08 Forestry	189	43	146	365	113	252	295	34	261	328	22	306
09 Fishing, Hunting, & Trapping	532	8	524	599	14	585	367	0	367	251	0	251
10 Metal Mining	1,273	841	432	1,265	827	438	1,304	281	1,023	629	34	595
11 Anthracite Mining	97	17	80	61	20	41	122	4	118	120	5	115
12 Bituminous Coal & Lignite Mining	2,153	1,061	1,892	2,901	1,205	1,696	2,515	430	2,085	1,622	54	1,568
13 Oil & Gas Extraction	4,819	1,690	3,129	6,319	1,923	4,396	11,278	900	10,378	5,183	517	4,666
14 Mining/Quarrying of Nonmetallic Minerals, Except Fuels	2,832	620	1,412	1,996	713	1,283	1,754	133	1,621	1,552	77	1,475
15 General Building Contractors	29,307	3,741	25,566	25,373	1,959	23,414	21,930	448	21,482	21,779	126	21,653
16 Heavy Construction Contractors	20,209	4,704	15,505	20,286	4,929	15,357	17,642	1,173	16,469	13,828	646	13,182
17 Special Trade Contractors	48,139	3,942	44,297	45,324	2,878	42,446	44,902	944	43,958	53,196	382	52,814
19 Ordnance & Accessories ³	2,879	2,413	466	0	0	0	0	0	0	0	0	0
20 Food & Kindred Products Manufacturing	32,494	15,201	17,293	29,783	11,925	17,858	29,163	3,392	25,771	27,096	2,111	24,985
21 Tobacco Manufacturing	1,472	1,138	334	1,231	631	600	993	317	676	808	404	404
22 Textile Mills	15,931	8,311	7,620	13,984	6,848	7,136	10,708	2,865	7,843	8,812	1,298	7,514
23 Apparel & Other Textile Product Manufacturing	24,750	5,597	19,153	23,486	4,541	18,945	16,849	1,057	15,792	14,797	797	14,000
24 Lumber & Wood Products Manufacturing, Including Logging	10,988	2,361	8,627	12,625	2,693	9,932	9,106	721	8,387	9,642	330	9,312
25 Furniture & Fixtures Manufacturing	8,188	2,258	5,930	8,246	1,988	6,258	6,128	395	5,733	6,221	205	6,016
26 Paper & Allied Products Manufacturing	10,172	6,092	4,080	8,559	5,084	3,475	7,156	1,720	5,436	6,345	1,048	5,297
27 Printing & Publishing	16,853	4,718	12,135	17,109	3,909	13,200	17,494	1,076	16,418	19,506	739	18,767
28 Chemicals & Allied Products Manufacturing	14,070	9,895	4,175	13,583	8,742	4,841	12,367	3,848	8,519	11,119	2,420	8,699
29 Petroleum & Coal Products Manufacturing	2,616	1,926	690	2,483	1,663	820	3,974	752	3,222	3,126	421	2,705
30 Rubber & Misc. Plastics Products Manufacturing	9,195	4,181	5,014	10,533	4,157	6,376	9,611	1,033	8,578	9,386	459	8,927
31 Leather & Leather Products Manufacturing	5,108	1,858	3,250	4,385	1,633	2,752	4,047	581	3,466	2,794	88	2,706
32 Stone, Clay, & Glass Products Manufacturing	10,170	4,819	5,351	9,469	4,310	5,159	7,456	888	6,568	6,986	622	6,364
33 Primary Metal Manufacturing	16,385	11,453	4,932	14,872	9,654	5,218	12,379	5,073	7,306	8,341	2,424	5,917
34 Fabricated Metal Products Manufacturing	21,981	8,728	13,253	22,900	8,194	14,706	20,886	2,651	18,235	17,134	1,420	15,714
35 Machinery (Except Electrical) Manufacturing	26,679	13,373	13,306	29,186	12,607	16,579	29,236	5,362	23,874	22,428	2,227	20,201

See footnotes at end of table.

Table 1.—Industry distribution for all jobs of workers: Industrial major group classification, by ERP¹ participation, selected years, 1971-86—Continued

Industrial major groups ²	1971			1976			1981			1986		
	Total	Establishment number		Total	Establishment number		Total	Establishment number		Total	Establishment number	
		Yes	No		Yes	No		Yes	No		Yes	No
36 Electric & Electronic Equipment Manufacturing	25,407	16,471	8,936	24,294	13,165	11,129	22,695	6,174	16,521	19,627	3,520	16,107
37 Transportation Equipment Manufacturing	24,916	17,663	7,253	23,431	16,834	6,597	26,097	10,583	15,514	24,771	8,369	16,402
38 Instruments & Related Products Manufacturing	5,674	3,411	2,263	7,530	3,849	3,681	7,816	1,603	6,213	6,866	1,089	5,777
39 Miscellaneous Manufacturing	7,790	1,831	5,959	8,031	1,733	6,298	6,585	420	6,165	7,138	139	6,999
40 Railroad Transportation	19	0	19	34	0	34	35	0	35	28	0	28
41 Local & Interurban Passenger Transit	6,333	644	5,689	5,556	371	5,185	4,857	222	4,635	5,009	1	5,008
42 Trucking & Warehousing	22,207	8,019	14,188	21,444	7,363	14,081	19,782	3,046	16,736	21,612	3,639	17,973
43 U.S. Postal Service	0	0	0	2	0	2	13	0	13	14	0	14
44 Water Transportation	6,939	2,997	3,942	5,776	1,592	4,184	5,563	323	5,240	3,553	194	3,359
45 Transportation by Air	4,814	3,352	1,462	4,238	2,727	1,511	4,492	1,509	2,983	6,168	2,078	4,090
46 Pipelines, Except Natural Gas	180	148	32	207	154	53	267	30	237	524	32	492
47 Transportation Services	2,247	608	1,639	3,171	437	2,734	3,190	59	3,131	3,932	31	3,901
48 Communications	14,703	11,768	2,935	13,922	10,237	3,685	15,018	7,993	7,025	13,682	6,122	7,560
49 Electric, Gas, & Sanitary Services	8,264	5,900	2,364	8,258	5,663	2,595	8,219	2,817	5,402	8,026	2,223	5,803
50 Wholesale Durable Goods	69,661	21,904	47,757	43,568	11,542	32,026	41,343	5,310	36,033	43,929	3,978	39,951
51 Wholesale Nondurable Goods	0	0	0	34,771	8,027	26,744	32,198	2,672	29,526	34,384	2,059	32,325
52 Retail Building Materials & Garden Supplies	9,078	858	8,220	8,306	729	7,577	7,937	455	7,482	9,804	291	9,513
53 General Merchandise Stores	46,470	30,585	15,885	41,088	28,696	12,392	34,900	16,275	18,625	36,605	14,859	21,746
54 Food Stores	33,493	12,659	20,834	35,942	11,557	24,385	31,218	3,779	27,439	40,900	5,967	34,933
55 Retail Automotive Dealers & Service Stations	36,830	2,959	33,871	36,043	2,869	33,174	26,628	694	25,934	30,433	574	29,859
56 Apparel & Accessory Stores	17,374	3,134	14,240	18,320	3,077	15,243	16,264	1,160	15,104	16,734	583	16,151
57 Furniture & Home Furnishing Stores	8,495	652	7,843	9,010	601	8,409	7,851	101	7,750	10,028	84	9,944
58 Eating & Drinking Places	77,510	7,202	70,308	105,245	7,934	97,311	100,630	1,819	98,811	128,880	990	127,890
59 Miscellaneous Retail	25,807	3,421	22,386	33,355	5,242	28,113	29,724	2,041	27,683	33,629	1,046	32,583
60 Banking	14,341	3,907	10,434	16,740	3,481	13,259	17,550	1,048	16,502	18,747	919	17,828
61 Credit Agencies Other Than Banks	5,585	1,044	4,541	6,691	814	5,877	7,358	193	7,165	10,310	117	10,193
62 Security, Commodity Brokers, & Services	2,822	1,507	1,315	2,247	949	1,298	3,053	139	2,914	4,838	105	4,733
63 Insurance Carriers	14,840	11,406	3,434	16,087	10,760	5,327	15,764	4,475	11,289	19,147	4,348	14,799
64 Insurance Agents, Brokers, & Services	4,492	509	3,983	5,250	412	4,838	5,835	75	5,760	7,507	79	7,428
65 Real Estate	17,466	1,203	16,263	18,032	267	17,765	17,542	42	17,500	24,480	64	24,416
66 Combined Real Estate, Insurance & Finance	530	12	518	522	2	520	474	0	474	521	0	521
67 Holding & Other Investment Offices	1,926	266	1,660	5,215	68	5,147	6,511	54	6,457	12,658	1	12,657

See footnotes at end of table.

Table 1.—Industry distribution for all jobs of workers: Industrial major group classification, by ERP¹ participation, selected years, 1971-86—Continued

Industrial major groups ²	1971			1976			1981			1986			
	Total	Establishment number		Total	Establishment number		Total	Establishment number		Total	Establishment number		
		Yes	No		Yes	No		Yes	No		Yes	No	
70 Hotels & Other													
Lodging Places.....	23,143	2,162	20,981	25,883	2,615	23,268	21,639	465	21,174	24,578	316	24,260	
72 Personal Services.....	17,764	1,118	16,646	15,826	1,312	14,514	14,311	717	13,594	16,700	854	15,846	
73 Business Services.....	43,640	10,841	32,799	57,006	9,434	47,572	64,463	5,100	59,363	92,428	5,766	86,662	
75 Auto Repair, Services & Garages.....	8,579	339	8,240	9,137	339	8,798	9,266	12	9,254	11,626	19	11,607	
76 Miscellaneous Repair Services.....	3,932	483	3,449	4,677	637	4,040	4,181	274	3,907	4,154	313	3,841	
78 Motion Pictures.....	5,806	1,537	4,269	5,564	1,402	4,162	5,151	510	4,641	4,694	598	4,096	
79 Amusement & Recreation Services.....	14,565	607	13,958	17,455	536	16,919	16,737	56	16,681	17,680	153	17,527	
80 Health Services.....	49,010	1,439	47,571	63,806	2,163	61,643	69,273	952	68,321	78,147	735	77,412	
81 Legal Services.....	4,389	35	4,354	6,190	58	6,132	7,413	0	7,413	10,095	0	10,095	
82 Educational Services.....	15,362	493	14,869	15,388	264	15,124	17,191	59	17,132	19,249	4	19,245	
83 Social Services.....	0	0	0	13,954	184	13,770	16,523	149	16,374	20,403	18	20,385	
84 Museums, Botanical, & Zoological Gardens.....	389	3	386	355	0	355	371	0	371	489	0	489	
86 Membership Organizations..	26,085	1,790	24,295	21,602	801	20,801	20,699	121	20,578	24,507	112	24,395	
88 Private Households.....	11,547	3	11,544	10,196	1	10,195	8,461	18	8,443	7,645	1	7,644	
89 Miscellaneous Services.....	10,377	1,687	8,690	10,774	1,810	8,964	14,195	1,202	12,993	17,865	961	16,904	
90 Public Administration.....	5,474	75	5,399	6,221	18	6,203	10,587	0	10,587	8,891	0	8,891	
94 Foreign/International Government.....	0	0	0	19	0	19	51	0	51	21	0	21	
97 Unclassified Out of Business.....	0	0	0	605	0	605	519	0	519	466	0	466	
99 Activities Not Classified In Scope of Above.....	774	0	774	1,642	0	1,642	4,333	0	4,333	3,083	0	3,083	

¹ Establishment Reporting Plan.

² Based on 1972 Standard Industrial Classification (SIC) used in CWHS data years, 1974-88.

³ 1967 SIC (used in CWHS data years, 1969-73) was combined with MG 34 under 1972 SIC.

files with unclassified industrial codes. This action preceded any employer contact for industrial coding information. The decline in ERP participation also increased the number of unclassified jobs as many multiunit firms, highly diversified in industry, began to be processed as unclassifiable single unit entities. As a result of SSA's direct efforts to obtain additional information from employers whose industry was unclassified, growth in the number of unclassified jobs was reduced to 31.7 percent from 1981 to 1986,

compared with 289.7 percent in the preceding 5-year period.³⁰

Other changes in the industry distributions over time may have resulted from changes in the general economy. For example, during the 1981 recession, data for major groups show a decline in employment or a decline in growth from the levels in 1976. However, certain industries showed abnormally high increases from the number of

jobs reported in 1976. These increases appeared in the following major groups: 07-Agricultural Services (25.3 percent), 13-Oil and Gas Extraction (78.5 percent), 29-Petroleum and Coal Products Manufacturing (60.0 percent), 37-Transportation Equipment Manufacturing (11.4 percent), 62-Security and Commodity Brokers and Services (35.9 percent), 73-Business Services (13.1 percent), 82-Educational Services (11.7 percent), 89-Miscellaneous Services (31.8 percent), 90-Government (70.2 percent), and 99-Industries, not classified in scope of SIC (163.9 percent). Workers

³⁰This percentage change was obtained by subtracting the total number of 1981 unclassifieds from the corresponding 1986 total and dividing by the 1981 total. All other percentages of increase and decrease from tables 1 and 2 are computed in a similar manner.

Table 2.—State distribution for all jobs of workers: State classification, by ERP¹ participation, selected years, 1971-86

State	1971			1976			1981			1986		
	Total	Establishment number		Total	Establishment number		Total	Establishment number		Total	Establishment number	
		Yes	No		Yes	No		Yes	No		Yes	No
Total	1,143,012	324,494	818,518	1,252,067	313,268	938,801	1,337,429	151,629	1,185,800	1,491,259	121,570	1,369,689
Alabama	16,008	4,661	11,347	17,644	4,740	12,904	17,741	2,023	15,718	18,519	1,361	17,158
Alaska	1,798	581	1,217	3,593	915	2,678	3,436	949	2,487	3,625	773	2,852
Arizona	11,170	2,464	8,706	12,524	2,695	9,829	15,476	1,494	13,982	18,566	1,213	17,353
Arkansas	9,182	2,228	6,954	11,015	2,552	8,463	11,341	1,033	10,308	13,404	913	12,491
California	120,060	31,134	88,926	138,577	31,923	106,654	155,936	15,665	140,271	172,652	14,502	158,150
Colorado	13,935	3,356	10,579	16,240	3,335	12,905	21,087	2,134	18,953	21,855	1,273	20,582
Connecticut	17,518	5,858	11,660	18,447	5,333	13,114	20,949	3,032	17,917	26,466	2,668	23,798
Delaware	3,758	1,361	2,397	3,582	1,087	2,495	5,057	698	4,359	6,734	721	6,013
District of Columbia	8,079	1,310	6,769	8,260	1,309	6,951	8,749	303	8,446	10,400	132	10,268
Florida	44,834	8,804	36,030	49,274	8,717	40,557	57,768	4,951	52,817	72,355	4,376	67,979
Georgia	27,602	8,952	18,650	28,645	8,142	20,503	29,171	3,539	25,632	38,297	3,522	34,775
Hawaii	4,520	914	3,606	4,877	840	4,037	5,354	285	5,069	5,934	262	5,672
Idaho	3,766	865	2,901	4,788	1,119	3,669	5,294	628	4,666	5,149	382	4,767
Illinois	64,575	21,601	42,974	69,066	20,690	48,396	64,133	10,025	54,108	76,509	7,007	69,502
Indiana	27,713	10,363	17,350	29,724	10,006	19,718	26,910	4,524	22,386	29,295	2,407	26,888
Iowa	12,418	3,490	8,928	15,003	3,761	11,242	13,813	2,023	11,790	13,604	1,775	11,829
Kansas	9,996	2,325	7,671	13,727	2,757	10,970	14,443	1,182	13,261	15,459	905	14,554
Kentucky	13,562	4,113	9,449	15,747	4,404	11,343	14,691	1,991	12,700	15,422	1,296	14,126
Louisiana	17,623	4,190	13,433	21,747	4,485	17,262	23,859	2,002	21,857	19,359	1,293	18,066
Maine	5,215	1,120	4,095	6,068	1,388	4,680	5,782	410	5,372	6,696	361	6,335
Maryland	20,163	5,576	14,587	20,357	4,959	15,398	24,325	2,312	22,013	29,571	1,761	27,810
Massachusetts	33,761	9,352	24,409	34,759	8,129	26,630	37,075	3,884	33,191	48,565	3,642	44,923
Michigan	44,191	15,311	28,880	48,112	14,703	33,409	49,293	9,013	40,280	56,313	7,910	48,403
Minnesota	19,799	5,194	14,605	23,386	5,692	17,694	25,861	2,491	23,370	28,871	1,757	27,114
Mississippi	9,532	2,267	7,265	10,782	2,510	8,272	9,961	897	9,064	9,873	685	9,188
Missouri	25,275	7,373	17,902	27,706	7,489	20,217	27,531	4,759	22,772	31,523	3,985	27,538
Montana	3,040	604	2,436	3,974	665	3,309	3,866	246	3,620	3,683	124	3,559
Nebraska	7,693	1,817	5,876	8,666	1,745	7,121	8,931	957	7,974	8,851	638	8,213
Nevada	4,074	671	3,403	5,218	787	4,431	6,398	415	5,983	7,266	399	6,867
New Hampshire	4,293	958	3,335	4,917	928	3,989	5,464	494	4,970	7,133	369	6,764
New Jersey	41,251	11,547	29,704	41,001	9,869	31,132	43,272	4,193	39,079	53,358	3,609	49,749
New Mexico	4,844	944	3,900	6,004	1,120	4,884	6,917	429	6,488	7,493	246	7,247
New York	112,562	29,354	83,208	106,543	23,811	82,732	124,069	13,307	110,762	138,402	13,550	124,852
North Carolina	30,392	9,435	20,957	31,601	9,122	22,679	32,575	4,899	27,676	38,708	4,344	34,364
North Dakota	2,306	375	1,931	3,107	403	2,704	3,056	169	2,887	2,838	100	2,738
Ohio	56,063	20,750	35,313	60,056	19,983	40,073	61,691	8,194	53,497	70,607	6,231	64,376
Oklahoma	12,697	3,075	9,622	15,255	3,435	11,820	19,329	1,565	17,764	14,631	1,130	13,501
Oregon	11,922	2,740	9,182	14,315	3,218	11,097	14,783	1,383	13,400	15,644	1,077	14,567
Pennsylvania	62,546	20,964	41,582	62,112	18,603	43,509	62,721	7,237	55,484	67,629	5,233	62,396
Puerto Rico	8,227	783	7,444	7,815	631	7,184	441	21	420	781	82	699
Rhode Island	5,584	1,289	4,295	6,056	1,179	4,877	6,144	463	5,681	7,245	326	6,919
South Carolina	13,392	4,788	8,604	15,062	4,730	10,332	15,143	2,348	12,795	16,460	1,368	15,092
South Dakota	2,499	432	2,067	3,277	495	2,782	3,016	191	2,825	3,141	155	2,986
Tennessee	21,379	6,613	14,766	24,495	6,747	17,748	23,983	2,922	21,061	29,005	1,892	27,113
Texas	66,252	16,159	50,093	83,691	18,827	64,864	101,046	9,503	91,543	119,943	6,405	113,538
Utah	5,174	1,325	3,849	7,159	1,672	5,487	8,003	487	7,516	8,332	427	7,905
Vermont	2,276	554	1,722	2,569	460	2,109	2,694	213	2,481	3,341	170	3,171
Virgin Islands	432	18	414	316	19	297	303	4	299	68	5	63
Virginia	23,035	6,467	16,568	25,393	6,485	18,908	25,313	2,394	22,919	32,286	2,278	30,008
Washington	16,746	4,361	12,385	20,916	4,520	16,396	23,010	1,619	21,391	24,514	1,302	23,212
West Virginia	7,282	2,488	4,794	8,013	2,435	5,578	6,535	1,023	5,512	6,038	517	5,521
Wisconsin	21,454	6,201	15,253	25,111	6,524	18,587	26,956	3,531	23,425	30,656	1,934	28,722
Wyoming	1,872	366	1,506	2,710	517	2,193	3,067	295	2,772	2,187	100	2,087
Other	7,672	4,653	3,019	2,645	656	1,989	3,867	880	2,987	4,003	677	3,326

¹ Establishment Reporting Plan.

Table 3.—Rates of ERP¹ participation, selected years, 1971–86

Year	Percent of jobs reported under establishment number	Number of employers with workers in CWHS ² reported by establishment number ³
1971	28.4	13,944
1976	25.0	11,449
1981	11.3	5,106
1986	8.2	2,675

¹ Establishment Reporting Plan.

² Continuous Work History Sample.

³ Universe of Establishment Reporting Plan (ERP) employers is undercounted because totals represent only ERP employers with workers in the CWHS.

migration or economic trends may have generated increases in certain job markets (such as services and oil and gas industries). Except for MG's 29, 37, 90, and 99, all the reported increases in the CWHS are supported by similar increases in the first quarter employment figures reported in **County Business Patterns** (CBP) for the same period.³¹ Major groups 29 and 37 were reported in the CBP with somewhat lower increases (that is, 7.2 percent for 29 and 5.9 percent for 37) and MG's 90 and 99 were not within the scope of the CBP. The larger increase in jobs reported in the CWHS data for MG's 29 and 37 is probably due to establishments of multiunit employers, who are diversified manufacturers, being classified under one of these industrial groups as the primary activity of the employer reporting as a single unit entity.

³¹ See Bureau of the Census, **County Business Patterns**, or Bureau of Labor Statistics, **Employment and Wages Annual Averages**. Comparisons of job totals used by SSA, the Bureau of the Census, and the Bureau of Labor Statistics need to take into account the different measurements used by each agency. Actual annual employment figures are used by SSA; the Census Bureau totals are based on first-quarter employment; and BLS uses average annual employment data. Thus, SSA base totals for any single year will almost always be higher than those of the Census Bureau or BLS. Some of those totals will, however, be superficially distorted by artificial shifts of jobs into some industries and States as ERP data became less accurate.

Some examples of suspected effects of the decline in multiunit reporting follow. In most manufacturing group industries (20–39), a decline occurred from 1976 to 1981.³² The only manufacturing industries that did not show a continued decline in 1981–86 were major groups 24-Lumber and Wood Products Manufacturing, Including Logging (5.9 percent); 25-Furniture and Fixtures Manufacturing (1.5 percent); and 39-Miscellaneous Manufacturing (8.4 percent). The large decline in job reporting in the manufacturing industries could partially be due to recessions and other economic trends. However, the large increase in unclassified jobs (especially in 1981, compared with 1976) could also explain the decrease in jobs reported in these industries. Workers in highly diversified multiunit manufacturing companies and their sales units could have been coded as unclassified if their employer stopped reporting by establishment.

About one-half of the CWHS reported decreases in manufacturing jobs were consistent with the decreases in first quarter employment reported in the CBP

³² Major group 27 (Printing and Publishing) showed a steady increase in jobs (15.7 percent), reflecting the current trend in service-oriented industries. All other manufacturing industries with an abnormal increase from 1976 to 1981, had a decrease in 1986.

from 1976 to 1981. In most cases where CBP and CWHS job decreases did not agree, the CBP increase in first quarter employment was minimal. Large differences between the two statistical sources were found for major groups 30-Rubber and Miscellaneous Plastics Products Manufacturing; 34-Fabricated Metal Products Manufacturing; and 36-Electric and Electronic Equipment Manufacturing. For example, CWHS data showed a 6.6 percent decrease in jobs in MG 36 in 1981, compared with the 1976 level; CBP showed a 21.7 percent increase in first quarter employment. This difference was probably due to the artificial negative outflow of jobs from this MG to other manufacturing MG's or to the unclassified MG—as a result of the decline of establishment reporting.

Most of the CWHS reported decreases in jobs for manufacturing coincided with similar decreases reported in the CBP from 1981 to 1986. However, the CWHS continued to show decreases in jobs for MG's 30 and 36; CBP reported increases for these jobs.

All retail industries (MG's 52–59) had declines in CWHS reported jobs from 1976 to 1981. However, in the CBP, only MG 55—Retail Automotive Dealers and Service Stations—had a decrease in first quarter employment in these years. The large decreases in CWHS data during this period appear to have been caused more by a reduction in part-time retail jobs during the 1981 recession than by a heavy deterioration of establishment reporting in this area. The basis for the interpretation of this discrepancy is that all of these industries reported considerable job increases by 1986.

Impact on State Classification

Similar to the changes found in the industrial distributions, most major changes in the distribution of jobs for each State shown in table 2 could be

attributed to any number of causes. Real changes may be confounded with the artifacts of the decline of ERP.

Some of the increases in jobs in States that contain large cities may have been superficially generated by multiunit firms being classified as single unit entities under home office addresses that are generally located in major cities. For example, New York State shows a questionably large increase in CWHS reported jobs (16.4 percent) from 1976 to 1981, a time when many industries were in a significant recession. The CBP shows only a 10 percent increase in first quarter employment in New York State for the same period. The increase in the CWHS job data may have been artificially created by large multiunit firms being processed as single unit entities under home offices located in New York City. This likely overstatement of employees is also supported by the fact that the total number of New York State jobs reported in the CWHS for any given year far exceeds the total State employment in other government statistical publications. For example, the **Employment and Wages Annual Averages, 1981**, from the Bureau of Labor Statistics, reports total average annual employment for New York that is more than 5 million less than the total jobs reported in the CWHS for 1981. For Delaware—where many large companies incorporate for tax purposes—CWHS data show a job increase of 41.2 percent during the 1976–81 period. The CBP reported only a 14.8 percent increase in first quarter employment for Delaware. Total jobs reported in the CWHS for 1981 in this State were almost double the annual average employment reported by BLS.

There are other examples of confounding between artificial changes due to the decline of ERP and real changes. The CWHS records showed large increases in

the total number of jobs in California (12.5 percent) and Texas (20.7 percent) from 1976 to 1981. The increases could be due to false shifts of workers into these States as multiunit firms began to be classified under their home office address only. However, actual migration of workers into States with warmer climates might also explain some of the increases. Other Sun Belt States with large increases in the number of CWHS reported jobs during this period were Florida (17.2 percent), Arizona (23.6 percent), and Nevada (22.6 percent). The increase in jobs reported in Texas could also be due to the growth of the oil and gas industry; MG 13—Oil and Gas Extraction—had a 78.5 percent increase in jobs for the same period. Other statistical sources of total employment data show even greater increases for these States during the same period. For example, CBP reports a 31.9 percent increase in first quarter employment for California and 37.1 percent for Texas.

Numerous States showed a decline in CWHS reported jobs between two periods in time. Although these declines could coincide with large decreases in major industries associated with these States, they also could reflect the decline in ERP participation. For example, from 1981 to 1986, a 54.0 percent decrease in total jobs occurred in MG 13—Oil and Gas Extraction—which could have contributed to the 9.0 percent decrease in the number of jobs in Texas during the same period. Also, the 24.6 percent decrease in jobs in West Virginia from 1976 to 1986 may be tied to the 44.1 percent decrease in MG 12—Coal Mining. However, when other government statistics for the same periods are examined, they do not show actual decreases in total employment in these States, as the CWHS data indicate they should. From 1981 to 1986, for example, figures from the BLS and Census

Bureau show 6–9 percent increases in annual average and first quarter employment for Texas, compared with the CWHS data that show a 9.0 percent decrease. Again, these data differences support the idea that job distributions by State are likely to have been significantly affected by the deterioration of establishment reporting.

Effect of ERP Decline on Statistical Codes

The following analysis is aimed at making a more direct assessment of the shifts in State and industry counts, which may be artifacts of the drop in the number of jobs being reported under establishment numbers. A detailed comparison was conducted of State and industrial MG codes for the universe of jobs of those workers that were reported under the same Employer Identification Number (EIN) for both 1976 and 1981. The analysis focuses on jobs that were reported both years under the same EIN but were reported under an establishment for one year and not for the other. Industrial or geographic changes associated with these types of jobs are directly related to the decline in ERP. For the purpose of this comparison, the jobs were divided into the following ERP status categories:

- Jobs reported without an establishment number for both years (59.0 percent of universe);
- jobs reported under an establishment number for both years (20.5 percent of universe);
- jobs reported under an establishment number in 1981 but without a number in 1976 (0.8 percent of universe); and
- jobs reported under an establishment number in 1976 but without a number in 1981 (19.7 percent of universe).

The presence of an establishment number is interpreted to mean that the job was reported for an employer participating in ERP. Those jobs without an establishment number were from employers who reported as a single unit. However, some exceptions are possible. Some employers—not set up under ERP—misused the establishment number field on their wage reports by entering a number that was used for internal purposes only. Other employers, who were set up under ERP, reported under numbers for which they did not provide a form SSA-5019 with identifying information on the industrial activity and geographic location of the establishment.³³

Impact on State Classification

An overall picture of the universe of jobs in this comparison (table 4) shows that 86.4 percent of all jobs remained classified under the same State for both years. The majority of jobs were reported either without an establishment (non-ERP) for both years (58.5 percent) or with an establishment (ERP) for both years

³³Procedures for handling establishments not in multiunit code file (MUCF) at time job was coded differed between the 2 years. With no record of the establishment in MUCF for 1976, establishment number was retained and job was assigned "00" (unclassified) for both the State code and industrial major group level. If same condition existed in 1981, establishment number was to be zeroed out and job was to be assigned geographic and industrial codes from the SUCF. However, a conflicting procedure, used to update MUCF before matching jobs for codes, overrode the latter process in most cases. Under this procedure, establishment numbers reported for a given tax year that did not match the MUCF were accreted to code files with a State code based on the Internal Revenue District (IRD) of the employer's EIN along with a "0000" industrial code. Many of these accretions were reported by employers not set up under ERP and, in many cases, not even eligible. This procedure prevented jobs reported under the latter process from being coded with good SUCF State and industrial codes.

Table 4.—Change in State code and industrial MG¹ code for jobs of workers with same EIN,² by status of ERP³ participation, 1976 and 1981

State code and industrial MG code	Total	Establishment Reporting Plan (ERP) status			
		Non-ERP 1976 and 1981	Non-ERP to ERP 1976 to 1986	ERP to non-ERP 1976 to 1981	ERP 1976 and 1981
All records	284,346	167,754	2,231	55,966	58,395
State code					
Valid code-no change	245,744	166,212	1,587	27,975	49,970
Valid code change	38,602	1,542	644	27,991	8,425
Industrial MG code					
Valid code-no change	243,640	161,063	531	33,573	48,475
Valid code change	20,117	2,454	251	13,599	3,811
Valid code to unclassified	12,423	2,776	1,333	4,741	3,573
Unclassified to valid code	6,358	719	98	3,599	1,942
Unclassified-no change	1,808	742	18	454	594
Percent of State or industrial MG code category					
All records	100.0	59.0	0.8	19.7	20.5
State code					
Valid code-no change	100.0	67.6	.6	11.4	20.3
Valid code change	100.0	4.0	1.7	72.5	21.8
Industrial MG code					
Valid code-no change	100.0	66.1	.2	13.8	19.9
Valid code change	100.0	12.2	1.2	67.6	19.9
Valid code to unclassified	100.0	22.3	10.7	38.2	28.8
Unclassified to valid code	100.0	11.3	1.5	56.6	30.5
Unclassified-no change	100.0	41.0	1.0	25.1	32.9
Percent of ERP status category					
All records	100.0	100.0	100.0	100.0	100.0
State code					
Valid code-no change	(4)	99.1	71.1	60.0	85.6
Valid code change	(4)	.9	28.9	50.0	14.4
Industrial MG code					
Valid code-no change	(4)	96.0	23.8	60.0	83.0
Valid code change	(4)	1.5	11.3	24.3	6.5
Valid code to unclassified	(4)	1.7	59.7	8.5	6.1
Unclassified to valid code	(4)	.4	4.4	6.4	3.3
Unclassified-no change	(4)	.4	.8	.8	1.0
Percent of all records					
All records	100.0	59.0	0.8	19.7	20.5
State code					
Valid code-no change	86.4	58.5	.6	9.8	17.6
Valid code change	13.6	.5	.2	9.8	3.0
Industrial MG code					
Valid code-no change	85.7	56.6	.2	11.8	17.0
Valid code change	7.1	.9	.1	4.8	1.3
Valid code to unclassified	4.4	1.0	.5	1.7	1.3
Unclassified to valid code	2.2	.3	.0	1.3	.7
Unclassified-no change .....	.6	.3	.0	.2	.2

¹Major Group.

²Employer Identification Number.

³Establishment Reporting Plan.

⁴Not applicable.

(17.6 percent). Only 13.6 percent of jobs in the universe had a State classification change. These jobs were primarily reported under an establishment in 1976 and not in 1981 (9.8 percent) or reported under an establishment for both years (3.0 percent).³⁴

Among jobs with no establishment number reported for both years, 99.1 percent remained under the same State code (58.5 percent of the universe). Only 0.9 percent of the jobs in this category had changed assigned State codes (0.5 percent of the universe).³⁵

³⁴In general, a job reported under an establishment number was assigned a geographic code based on the primary location of the establishment where employed and an industrial code based on the primary activity conducted at this location. For establishment numbers electronically accreted to the MUCF from annual wage reports without identifying information from the employer, the job was assigned a statewide geographic code based on the IRD and an unclassified industry code. For a job reported without an establishment number, geographic code was assigned from the SUCF based on the primary location of the entire company that may or may not have more than one physical location. Industrial code was also assigned from the SUCF based on the primary activity of the entire company that may or may not have consisted of more than one activity. This principal location—usually the home office—was not necessarily in the State where the job was worked. Nor did the coded industrial activity necessarily apply to that of the job if there was more than one possible activity. If job's establishment number did not match to MUCF in 1976, it was assigned 0's (unclassified) for both the geographic and industrial code. However, if establishment number did not match in 1981 (those that slipped through the accretion process), number was zeroed out and job was assigned geographic and industrial codes from SUCF. Jobs whose employers did not match to SUCF were in turn assigned a statewide code based on IRD of the EIN and a "0000" industrial code.

³⁵Most of those changes would have been generated by annual code corrections to the SUCF coming from single unit employer correspondence (form SSA-L378) or geographic exception listings.

Of those jobs reported under an establishment number for both 1976 and 1981, 85.6 percent remained under the same State code (17.6 percent of the universe). Among jobs in this category with different State codes, the differences may be attributed to one of the following reasons:

- Location changes were submitted by the employer on the same establishment number under which the job was reported for both years;
- information was not available on the establishment number (which may or may not be the same number) in the multiunit code file (MUCF) at the time the job was coded for one of the years; or
- the job was reported in 1981 under a different establishment number with a different State location.

Jobs in which the worker was reported by establishment in 1976, but not in 1981—apparently due to loss of employer participation in ERP—are of special interest. Of these jobs, only one-half remained in the same State.³⁶ The remaining half of the States showed potentially significant outflows or inflows due solely to the decline in ERP participation. Table 5 shows States with the largest additions and States with the largest subtractions of jobs. New York, for example, shows a net gain of 7.4 percent as 13.5 percent of the ERP to non-ERP jobs shift into

³⁶When a job is reported under an establishment number, it is assigned a geographic code for the physical location of the establishment where the worker was employed. However, jobs without an establishment number are assigned a geographic code based on the principal location at the time of the birth of the business, which is generally the home office address.

the State and 6.1 percent shift out. More than 50 percent of the heaviest inflow is concentrated in California, Illinois, Michigan, New Jersey, New York, Ohio, Pennsylvania, and Texas. The principal reason for the large shift of jobs to these States is that these eight States contain many of the major cities in which the home offices of companies are located.

Impact on Industrial Classification

Using industries classified at the major group level, table 4 shows industrial changes for jobs with the same EIN in 1976 and 1981. A large majority—86.3 percent—remained under the same industrial MG code (including 0.6 percent unclassified). Two-thirds of these jobs were reported without an establishment for both years; an additional 20.0 percent were reported with an establishment for both years. Jobs that showed a change in industrial classification accounted for 13.7 percent of the universe. Of those changing industrial classifications, 4.4 percent went from a classified industrial MG code to unclassified, 2.2 percent went from unclassified to a classified industrial MG code, and 7.1 percent went from one classified industrial MG code to another. Most jobs in this last group were reported under an establishment number in 1976 and without a number in 1981.

Of the jobs not reported under an establishment in either year, 96.4 percent remained under the same industrial MG code (including 0.4 percent as unclassified). They represent 56.9 percent of the universe. Of the jobs in this category, which showed movement between different industrial MG's, 1.5 percent moved from one classified MG code to another (0.9 percent of the universe) and 2.1 percent showed either movement from an unclassified to a classified MG code

or vice versa (1.2 percent of the universe).³⁷

Of those jobs reported under an establishment number for both years, the industrial MG code remained unchanged for 84.0 percent (1.0 percent were unclassified)—17.2 percent of the universe. Of the 16 percent reported under an establishment number for both years with different MG codes, about two-

thirds moved from unclassified to a classified MG code or from one classified MG to another. These changes may be due to either a job moving from under one establishment number to another with a different industrial activity, the industrial activity of the same establishment number being changed by the employer, or by the

employer providing classifiable industrial data on an establishment that was previously unclassified. About one-third of the jobs with different MG codes went from a classified industry MG to unclassified (1.3 percent of the universe). The primary reason for this change may be that in 1981 the job moved to an establishment number that was an unclassified annual wage report accretion to the MUCF.³⁸

³⁷ Industrial codes for jobs reported without establishment numbers come from the Single Unit Code File (SUCF). A primary reason for the small change in industrial classification over time for these jobs is that the SUCF is an historical file where there is no periodic refileing conducted. This file is affected by changes only when (1) a mailing of the form SSA-L378 (Employer Classification Update) is sent to large employers with 11 employees or more who were unclassified at the time of business birth; (2) an ERP employer is processed as

single unit or refusal and a primary industrial activity code based on the employer information at hand (usually the form SSA-5019) entered into SUCF may differ from the original birth activity; (3) there is a Census-SSA code coordination, which only occurs with a major SIC revision, and no coordination occurred from 1976 to 1981; (4) original birth record is erroneously replaced with information from miskeyed EIN record (percent of occurrence is unknown); or (5) a code correction is made.

Again, of special interest are jobs that were reported under an establishment for 1976 but not in 1981. As explained in the analysis of the State code changes, this group primarily represents jobs that moved from ERP reporting to non-ERP. For these jobs, 60.8 percent remained

³⁸ See footnote 33.

Table 5.—Largest State code changes for jobs of workers with same EIN,¹ ERP² in 1976, and non-ERP in 1981

1976 State code from ERP code file	1981 State code from non-ERP code file																Movement from State ³
	Total	Calif-ornia	Colo-rado	Illi-nois	Indi-ana	Loui-siana	Michi-gan	Minne-sota	New Jersey	New York	Ohio	Okla-homa	Pennsyl-vania	Tennes-see	Texas	All other States	
Total	27,991	1,680	632	1,635	616	798	1,542	713	945	3,792	3,923	295	1,480	723	1,358	7,859	100
Alabama	569	3	10	21	12	7	33	4	2	56	89	4	13	133	13	169	2.0
California	2,273	...	121	141	47	30	74	49	105	498	207	9	134	44	304	510	8.1
Florida	684	15	49	55	2	14	18	30	36	124	98	...	25	5	17	196	2.4
Georgia	827	27	10	58	11	3	43	5	27	112	148	8	34	8	23	310	3.0
Illinois	1,721	111	16	...	114	9	103	96	54	237	220	5	100	25	34	597	6.1
Indiana	807	38	28	73	...	6	98	12	25	78	158	5	78	19	13	176	2.9
Kentucky	863	28	3	39	24	1	71	9	11	50	338	2	28	92	9	158	3.1
Louisiana	614	15	8	23	9	...	12	4	7	42	52	37	12	154	85	154	2.2
Maryland	524	19	33	17	18	6	5	3	42	197	33	1	26	8	5	111	1.9
Massachusetts	637	25	23	23	7	8	18	15	26	113	111	...	29	9	29	201	2.3
Michigan	731	28	19	57	50	3	...	25	18	76	191	...	51	5	16	192	2.6
Montana	744	25	7	114	8	6	77	20	16	88	78	2	24	8	48	223	2.7
New Jersey	1,106	53	15	74	20	8	51	5	...	358	106	1	118	5	45	247	4.0
New York	1,695	80	32	121	21	10	127	74	134	...	367	1	136	10	34	548	6.1
North Carolina	645	42	4	46	14	1	8	6	26	74	108	2	26	9	16	263	2.3
Ohio	1,513	94	14	109	44	13	407	28	51	154	...	7	177	19	15	381	5.4
Pennsylvania	1,894	104	38	128	69	26	41	42	82	458	441	3	...	7	29	426	6.8
Tennessee	761	70	12	29	20	12	53	13	13	94	143	1	10	...	17	274	2.7
Texas	1,326	172	34	88	33	49	34	30	43	183	173	101	38	22	...	326	4.7
Virginia	718	18	22	30	4	7	32	5	10	91	150	...	25	11	46	267	2.6
Washington	778	75	1	9	5	402	5	19	21	28	7	1	11	...	74	120	2.8
West Virginia	391	5	...	6	4	29	3	1	8	51	91	...	136	...	7	50	1.4
Wisconsin	483	11	4	101	10	...	35	23	8	44	82	...	37	2	6	120	1.7
All other States	5,687	622	129	273	70	148	194	195	180	586	532	105	212	128	473	1,840	20.3
Movement to State ³	100	6.0	2.3	5.8	2.2	2.9	5.5	2.5	3.4	13.5	14.0	1.1	5.3	2.6	4.9	28.1	...

¹ Employer Identification Number.

² Establishment Reporting Plan.

³ Expressed as percents.

under the same industrial MG (0.8 percent were unclassified)—representing 12.0 percent of the universe.

About 39 percent of the jobs reported under ERP for 1976 and non-ERP for 1981 changed industrial classification (table 6). Among these jobs, 24.3 percent moved from one classified industrial MG to another (4.8 percent of the universe). They accounted for 67.6 percent of all jobs with changes in valid industrial codes. Some of the principal industrial areas involved (defined in table 1) are detailed below.

Manufacturing.—The largest shifts of jobs were between the metals, machinery, electrical equipment, and transportation equipment manufacturers (MG's 33, 34, 35, 36, and 37). In these cases, jobs exist for an employer who is highly diversified in the manufacturing industries and who as

a non-ERP reporter in 1981 is classified based on the principal manufacturing activity.

Wholesale Trade.—The next largest movement of jobs was between wholesale trade (MG's 50 and 51) and manufacturing (MG's 20, 27, 28, 29, 34, 35, 36, and 38). Jobs that were previously being reported under separate wholesale establishments of manufacturing firms are now classified under manufacturing—the primary activity of the employer in the SUCF.

Retail Trade.—The third largest movement of jobs occurred between retail trade and manufacturing. Jobs that exist for separate retail food store establishments (MG 54) of food manufacturing companies (MG 20) are now classified under food manufacturing.

Of the jobs that were reported under ERP in 1976 but not in 1981, an additional 6.4 percent went from unclassified to a classified industrial MG (1.3 percent of the universe) as shown in table 7. This group represented 56.6 percent of all jobs that shifted from an unclassified to a classified industrial MG code. These shifts largely reflect processing differences. In 1976, they were reported under establishment numbers that were not in the MUCF when the records were coded or that were in the MUCF but without sufficient information from the employer to classify the activity under an industrial MG. However, in 1981, these same jobs were assigned to a classified industrial MG code from the SUCF because they were reported without an establishment number. The primary industrial areas involved are:

Table 6.—Largest industrial MG ¹ code changes for jobs of workers with same EIN, ² ERP ³ in 1976, and non-ERP in 1981

1976 Industrial MG code ⁴ from ERP code file	1981 Industrial MG code from non-ERP code file																All other MG's	Movement from MG ⁵
	Total	20	22	27	28	29	30	33	34	35	36	37	38	53	61	67		
Total	13,655	1,931	379	193	546	548	401	470	912	786	916	2,163	433	386	169	157	3,265	100
12	160	...	...	...	...	...	...	15	...	...	...	...	...	...	...	114	31	1.2
13	182	...	...	...	1	156	...	1	10	...	...	...	...	...	...	...	14	1.3
23	179	3	136	...	1	...	6	...	...	1	...	...	...	...	...	...	32	1.3
32	416	...	...	...	144	16	9	31	74	5	11	43	10	...	...	...	73	3.0
33	512	...	...	...	4	2	10	...	49	137	54	189	...	...	...	...	67	3.7
34	853	3	8	...	2	1	22	116	...	151	47	320	45	...	...	...	138	6.2
35	894	2	8	4	2	...	8	39	99	...	259	338	38	...	...	...	97	6.5
36	1,294	1	...	...	3	4	4	28	92	41	...	1,030	53	...	...	...	38	9.5
37	354	...	3	...	7	...	22	13	71	102	89	...	7	...	...	...	40	2.6
38	337	...	9	...	25	...	2	7	108	31	65	86	...	...	...	...	4	2.5
50	1,264	15	7	9	45	16	38	80	156	133	243	62	171	12	...	...	277	9.3
51	1,130	334	86	126	144	187	2	2	32	22	5	2	11	...	...	1	176	8.3
54	1,737	1,470	...	...	...	...	...	...	...	...	...	...	...	170	...	...	97	12.7
55	171	5	...	...	...	17	135	...	1	...	...	...	...	2	...	...	11	1.3
56	158	...	...	...	...	...	1	...	...	...	...	...	...	96	...	...	61	1.2
60	145	...	...	...	...	...	...	...	...	...	...	...	...	...	120	...	25	1.1
All other MG's	3,869	98	122	54	168	149	142	138	220	163	143	93	98	106	49	42	2,084	28.3
Movement to MG ⁵	100	14.1	2.8	1.4	4.0	4.0	2.9	3.4	6.7	5.8	6.7	15.8	3.2	2.8	1.2	1.1	23.9	...

¹ Major Group.

² Employer Identification Number.

³ Establishment Reporting Plan.

⁴ See table 1 for 1976 and 1981 industrial MG titles.

⁵ Expressed as percents.

Industry group	Major group
Heavy construction	16
Manufacturing ¹	20, 27, 29, 35, 37
Trucking/Warehousing	42
Retail ²	53, 54, 58
Banking/Insurance	60, 63
Business services	73

¹Includes food, printing/publishing, chemicals, machinery, and transportation equipment.

²Includes general merchandise and food stores, and eating and drinking establishments.

An additional 8.5 percent of the jobs that were reported under ERP in 1976 but not in 1981 went from a classified industrial MG to unclassified (1.7 percent of the universe) as shown in table 8. They accounted for 38.2 percent of all jobs that showed this type of shift in industrial MG code status. In 1976, these jobs were reported under establishment numbers that were listed in the MUCF with a good industrial code. However, these same jobs were assigned an unclassified code from the single unit code files when reported without an establishment number in 1981. An unclassified code is assigned when:

- The employer reported in 1976 but refused to do so in 1981. In this situation, an ERP employer's previous list of establishments (form SSA-5019) is all processed under one industrial code that is entered into the SUCF. When 80 percent of the establishments' activities cannot be classified under one industrial MG, the employer is assigned an unclassified industrial code.
- Other employer source forms used to code employers as single unit entities in the SUCF did not provide sufficient information for 1981 to assign a code to at least an industrial MG or the employer-provided information was too diversified to code to one MG.

Table 7.—Largest move from unclassified industrial MG¹ code to classified for jobs of workers with same EIN,² ERP³ 1976, and non-ERP in 1981

1981 Industrial MG code from non-ERP code file	Total ⁴	Unclassified 1976 industrial MG code from ERP code file
Total jobs	100	3,599
16 Heavy Construction Contractors	3.9	141
20 Food & Kindred Products Manufacturing	9.8	351
27 Printing & Publishing	2.7	98
29 Petroleum & Coal Products Manufacturing	4.0	145
35 Machinery (Except Electrical) Manufacturing	2.7	96
37 Transportation Equipment Manufacturing	8.9	322
42 Trucking & Warehousing	2.7	98
53 General Merchandise Stores	4.4	158
54 Food Stores	3.5	126
58 Eating & Drinking Places	3.9	140
60 Banking	5.4	196
63 Insurance Carriers	3.9	140
73 Business Services	2.7	98
All other MG codes	41.4	1,490

¹Major Group.

²Employer Identification Number.

³Establishment Reporting Plan.

⁴Expressed as percents.

Table 8.—Largest move from classified industrial MG¹ code to unclassified for jobs of workers with same EIN,² ERP³ in 1976, and non-ERP in 1981

1976 Industrial MG code from ERP code file	Total ⁴	Unclassified 1981 industrial MG code from non-ERP code file
Total jobs	100	4,741
20 Food & Kindred Products Manufacturing	2.6	123
23 Apparel & Other Textile Product Manufacturing	3.1	147
24 Lumber & Wood Products Manufacturing, Including Logging	3.0	140
26 Paper & Allied Products Manufacturing	3.1	145
27 Printing & Publishing	2.1	99
28 Chemicals & Allied Products Manufacturing	3.0	142
32 Stone, Clay, & Glass Products Manufacturing	5.4	257
34 Fabricated Metal Products Manufacturing	2.6	124
35 Machinery (Except Electrical) Manufacturing	4.2	199
36 Electric & Electronic Equipment Manufacturing	4.9	230
37 Transportation Equipment Manufacturing	2.3	107
38 Instruments & Related Products Manufacturing	2.5	118
48 Communications	11.9	563
49 Electric, Gas, & Sanitary Services	7.5	357
50 and 51 Wholesale Durable & Nondurable Goods	7.4	349
53 General Merchandise Stores	8.1	385
60 Banking	7.6	362
All other MG codes	18.9	894

¹Major Group.

²Employer Identification Number.

³Establishment Reporting Plan.

⁴Expressed as percents.

The primary industrial areas involved are:

Industry group	Major group
Manufacturing ¹	20, 23, 24, 26, 27, 28, 32, 35, 36, 37, 38
Communications/Utilities	48, 49
Wholesale trade/General merchandise stores	50, 51, 53
Banking	60

¹ Includes food, textile products, wood products, paper products, printing/publishing, chemicals, stone/clay/glass products, machinery, electrical equipment, transportation equipment, and instruments.

Summary and Conclusion

The pronounced decline in Establishment Reporting Plan (ERP) participation appears to have had a significant impact on industrial and geographic coding in the Continuous Work History Sample (CWHS). The foregoing analysis suggests that about one-half of the States and certain industrial major groups are most affected. Cross-sectional distributions of jobs by State will overrepresent those States in which corporate headquarters are likely to be located. The numbers of jobs in other States will be somewhat underestimated. Analysis of geographic mobility will substantially overstate interstate movement over time. This problem will be especially true when the analysis crosses 1978, the year that annual wage reporting began.

Overall, the decline of ERP appears to have had less of an effect on industrial distributions than on geographic distributions. The main impact on industry involves major groups in the manufacturing area and certain associated activities. Some interchange appears to have taken place between the manufacturing groups themselves

and some association of sales and distribution activities with the corresponding manufacturing group. Researchers studying industry exposure or industrial mobility may have difficulties if the areas of interest involve these distinct groups, especially if the analysis crosses 1978.

The decline in ERP participation also suggests a need for changes in the way that industrial and geographic data are associated with wage reports in SSA's statistical files. Industrial data on all employers could continue to be coded as part of the existing form SS-4 processing activities and could be added to the Single Unit Code File (SUCF) maintained by SSA's Office of Information Management. Obtaining geographic data, however, could require a substantially new approach. At this time, the most promising alternative appears to be the use of address data from the form W-2 information for employers reporting by magnetic media. These data should more accurately reflect the geographic location of workers for larger employers than those now obtained from SSA's employer coding files. Geographic codes for workers employed by smaller firms that are not using magnetic media could continue to be obtained from the SUCF. This type of approach should substantially improve estimates of the cross-sectional distribution of jobs by State. Until a revised system is in place, geographic and industrial data for the CWHS files will be derived from the most current SUCF and the MUCF updated through 1990.

Glossary of Program Terms

Annual Wage Reporting (AWR).

Prior to January 1978, employers reported FICA covered earnings to SSA on a quarterly basis. Beginning with tax year 1978, employers were required to report annually using form W-2's. These forms are submitted with a transmittal form W-3.

Continuous Work History

Sample (CWHS). The CWHS is a set of longitudinal data files containing information on a 1-percent sample of workers. These data files were developed to fulfill the need for statistics to be used in planning and operating the old-age insurance system established by the Social Security Act of 1935. The contents of the files evolved from information on employment, earnings, and benefits collected as part of the administration of Social Security programs. Today, the CWHS is still a major source of Social Security program statistics and workforce data. The CWHS data files are regularly used by SSA staff in making revenue estimates, evaluating legislative proposals, and responding to informational inquiries.

Employer Identification Number

(EIN). Each employer subject to the Federal Insurance Contributions Act is required to apply for an EIN using the Application for Employer Identification Number (Form SS-4) for statistical information, by using EIN's, SSA codes information from the forms in order to classify jobs by industry and geographic locations.

ERP code file. See Multiunit Code File.

Establishment. An economic unit, usually at a single physical location, engaged in one, or predominantly one, type of economic activity.

Establishment Reporting Plan (ERP). A voluntary program under which employers group employees by establishment or reporting unit within the Annual Wage Report (AWR). Employers with more than one place of business and a total of 100 employees or more, of whom at least 6 are in a separate location, are asked to use this plan. The employers provide SSA with a list giving the location, industrial activity, and approximate number of employees for each establishment. The list identifies each group with a preassigned establishment number. Thus SSA is able to classify employees more precisely by geographic location and industrial type.

Geographic code. Five-digit numerical code, based on SSA's **Employer-Worker Classification Geographic Code Manual**, assigned by SSA to employer establishments for the purpose of geographically classifying jobs of workers in the CWHS. The first two digits of this code identify the State and the last three digits identify the county within that State.

Industrial code. Four-digit numerical code, based on the **1972 Standard Industrial Classification Manual**, as amended by the **1977 Supplement**, assigned by SSA to employer establishments for the purpose of industrially classifying jobs of workers in the CWHS. The first two digits of this code identify the major group, the third digit identifies the industry group, and the last digit identifies the industry.

Longitudinal Employee-Employer Data (LEED) file. This file is assembled from the annual 1-percent sample of employee-employer (EE-ER) records. The original records from the various annual files have been resequenced so that all records associated with an employee, over the time span of the file, appear together. The basic data elements in this file include: (1) personal characteristics—year of birth, sex, and race; (2) wages—annual taxable, quarterly taxable (prior to 1978), total estimated wages (prior to 1978), and total compensations (1978 and later); (3) employer—State and county, industry, and coverage group; (4) insurance status; (5) benefit status; and (6) Medicare qualified government earnings (1983 and later).

Major Group (MG). The industrial code (IC) for purposes of discussion in this article is being expressed at the major group level, which is the first two digits of the IC.

Multiunit Code File (MUCF). One record for each establishment (reporting unit) of all participating ERP employers is contained in this file. This record contains similar information at the unit level to that maintained in the Single Unit Code File (SUCF). Both MUCF and SUCF coding files contain counts of the number of W-2's reported for each of its 5 most current years for each Employer Identification Number (EIN) establishment. These data provide a means for measuring employer size and identifying active and inactive employers.

Multiunit employers. These employers have several physical locations and may be involved in diversified industrial activities.

Non-ERP code file. See Single Unit Code File.

Single Unit Code File (SUCF). This file contains one record for each employer identified from a form SS-4 that is received and coded by SSA or that is accreted during annual wage processing when no record of an SS-4 receipt is in the existing SUCF. Excluded from the SUCF are household employers, nonemploying "6-million series" EIN's, and inactive employers whose records were purged from the files in the early 1970's. Each SUCF record contains the EIN, industrial code, geographic code, business birth codes for coverage or type of organization, size, reason for application, and date and source of the information.

Single unit employers. These employers have one physical location and are involved in one primary industrial activity.

Standard Industrial Classification (SIC). The industrial classification used for coding both multiunit and single unit employer forms in SSA is based primarily on the **1972 Standard Industrial Classification Manual**, as amended by the **1977 Supplement**.