

BUREAU OF THE CENSUS
MANUFACTURING AND CONSTRUCTION DIVISION

MCD Working Paper Number:
Census/MCD/WP-95/02

THE RELATION BETWEEN THE STANDARD
STATISTICAL ESTABLISHMENT LIST
AND MANUFACTURING ESTABLISHMENT SURVEYS

by
Stacey J. Cole
Joanne Petrik
Robert E. Struble
Manufacturing and Construction Division
Bureau of the Census

September 1995

This series contains a working paper, written by or in cooperation with staff members of the Manufacturing and Construction Division. The views reflected in this working paper are not necessarily those of the Census Bureau nor do they necessarily represent Census Bureau statistical policy or practice. Inquires may be addressed to the author(s) or the MCD Working Paper Coordinator, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

Introduction

Over the past several years, the Manufacturing Programs Methodology Branch has received many questions about the Standard Statistical Establishment List (SSEL) and the role it plays in our surveys and censuses. To address the questions raised and to assist in the review of the current censuses we have prepared this guide to the SSEL and to coverage activities for our programs.

General

There are approximately 9 million private nonfarm business establishments with paid employees in the U.S. economy. The retail trade area is the largest, with about 2 million locations. By comparison, the manufacturing universe contains only 350,000 establishments. Usually, the surveys of the Manufacturing and Construction Division (MCD) are designed to produce estimates to represent this manufacturing population.

Every 5 years, we conduct our Census of Manufactures in which detailed operational and production data are collected from the largest 200,000 plus establishments. For the remaining 150,000 establishments, employment and payroll information are obtained based on administrative data from the Internal Revenue Service (IRS), the Social Security Administrative (SSA), and the Bureau of Labor Statistics (BLS) and used to impute the detailed operational data. This allows us to generate a comprehensive and detailed profile of the manufacturing population. Statistics on employment, value of products shipped, value of inventories, and capital expenditures are published at both national and geographic levels.

This wealth of detail obtained from our target population in the census years is carried to our sample designs for our other programs. Usually, the panels for our on-going surveys are selected from these 5-year census data files. The year-to-year correlation of the operational activities at the establishment level allows us to develop sample designs that generate reasonably precise estimates during the years between censuses with manageable sized samples.

Unfortunately, the manufacturing population is not fixed between censuses. The universe constantly is changing. "Entries," newly opened manufacturing establishments, occur continuously. Differences in products or processes may result in these entries behaving differently than existing cases. "Exits," establishments that cease operations, also occur continuously. Changes in ownership, primary activity, and name/address all occur continuously. Capturing and recording these population changes and reflecting them in our surveys is a challenge.

Fortunately, we are not left to our own resources to do this work. A master "control" file, the SSEL, exists at the Census Bureau. The SSEL is a database containing company and establishment information for all known private nonfarm employer business entities within the U.S. The SSEL is used by the entire economic area of the Census Bureau for their surveys.

The primary purpose of this document is to provide an overview of the interaction between the SSEL and MCD's establishment-based surveys. We have split the document into the following sections.

1. Description of the SSEL
 - a. Basic structure
 - b. Sources of information for updating
 - c. Updating cycle
2. Concepts of Sample Maintenance
 - a. Births
 - b. Deaths
 - c. Changes in ownership
 - d. Miscellaneous situations
3. Principals involved and their responsibilities
4. Analyst reference guide
5. SSEL Glossary
6. Reference lists
 - a. Coverage Control Source (CCS) codes
 - b. PDIV codes

1. Description of the SSEL

a. Basic Structure

The SSEL is a database of company and establishment information used by the entire economic area of the Census Bureau. The scope of the SSEL includes: Agriculture, Mining, Manufacturing, Transportation/Communication, Wholesale, Retail, Finance/Insurance/Real Estate, Services, and Public Administration. The SSEL maintains current information on ownership, address, classification, employment, payroll, and operational status of each establishment.

Limited amounts of historical information also are included.

Businesses that have paid employees are required to obtain an Employer Identification number (EIN) from the IRS. When the IRS assigns an EIN to a business entity, a record is created in the IRS Business Master File (BMF). The 9-digit EIN basically serves as an account number for the business entity in its dealings with both IRS and the SSA. Employee tax withholdings and employer contributions to FICA are controlled using its specific EIN. An EIN can only be assigned to a single legal entity; although an entity may have more than one EIN. Once an EIN becomes activated (entity has filed either the IRS-941 or 943 form), an SSEL record is constructed using information from the BMF record. Currently, the SSEL contains approximately 8 million records that directly correspond to EINs; only 6 million actually have current payroll, the remaining 2 million merely are 941-active.

There are four different types of records included in the SSEL and each has a unique format:

(1) Single-Unit Company Records

"Single-unit" companies (SU) are defined as companies that operate at a single physical location. The EIN for a specific SU is used to derive its "Census File Number" (CFN) which is the primary identification field within the SSEL. The 10-digit CFN for a SU is derived by prefacing its 9-digit EIN by "0". By directly associating our SU CFN with its EIN, we are able to readily update the SSEL for SUs using the EIN-based files from SSA or IRS. An SSEL record is maintained for each active SU enterprise.

(2) Multiunit Establishment Records

"Multiunit" companies (MU) are defined as companies with activity at two or more physical locations. Under the regulations used by IRS in assigning EINs, it is not necessary for an enterprise to obtain a unique EIN for each separate location it operates. Therefore, a company with ten separate locations may have one EIN for all ten establishments or may have as many as ten EINs (one EIN for each location). This makes it impossible for us to assign a unique CFN to each establishment of a multiunit company that can be directly associated with its EIN. Therefore, a different strategy for assigning CFNs is used for MU establishments.

A 10-digit CFN still is used, the first 6 digits are associated with a specific company (company "alpha" number) and the last 4 digits are a specific plant number within that company.

The first digit of the company alpha number must be greater than 0 (to avoid the possibility of duplicating an SU CFN). For example, all of the establishments under the control of ACME Motor Vehicle Company have CFNs that begin with the same 6-digit company alpha number. A separate SSEL record is maintained for each MU establishment.

(3) Multiunit Master Records

In addition to the individual SSEL records for each establishment of a MU company, a "master" record also is maintained for each MU company. The CFN for the master is equal to the company alpha plus 0000. This record has a unique format and contains company level information that is consolidated from the establishment records.

(4) EIN Submasters

One of the major difficulties in using files obtained from either the SSA or IRS files is that their EIN-based structure does not make the distinction between EIN records associated with SU companies and those associated with MU companies. The files received from IRS include records for all active EINs. Therefore, the Economic Planning and Coordination Division (EPCD) creates for the SSEL, a SU-type record for every active EIN, regardless of the type of company it is associated with. The EPCD also developed an EIN/ALPHA cross-reference file that links MU companies to the EINs that they are associated with. As noted earlier, an EIN can belong to only one legal entity. If an EIN record is linked to a MU company, the EIN is defined as an "EIN submaster." In examining the SSEL, EIN submasters have the "look and feel" of SUs; their CFN is 10-digits and begins with 0. However, they do not represent true SU companies. To determine if a specific SU SSEL record is a true SU or an EIN submaster, one must examine the "EIALPH" field of the SU SSEL record. The presence of a 6-digit non-zero entry indicates that the record is an EIN submaster.

The 6-digit entry in the EIALPH field corresponds to the company alpha of the MU company that the EIN is associated with. An EIN only can be associated with one MU company, but a MU company can be associated with multiple EINs.

b. Sources of Information for Updating

All new data introduced into the SSEL are controlled by EPCD. The information used to update the SSEL is obtained from both external and internal sources.

The SU portion of the SSEL is updated monthly and quarterly. The information for these updates is obtained from the IRS, SSA, and, more recently, the BLS. The MU portion of the SSEL is not directly updated from any of these external sources. All external updates for SU SSEL records are done in a "batch" mode; that is, EPCD applies the updates to the entire SU SSEL on a periodic basis. There is a minimal lag in timing for these batch updates.

In addition to the above external sources, information is continuously being provided by both SU and MU respondents that needs to be reflected in the SSEL. This information may be provided on questionnaires, by correspondence, or by phone. The information may come from any survey conducted within the economic area. These updates are carried interactively and carried to the SSEL nightly.

(1) External Updates to SU Records: Information obtained from other Federal Agencies and updated in a batch operation

For the SU portion of the SSEL, the overwhelming proportion of updates originate from the files obtained from IRS, SSA, and BLS. The SUs can be corrected interactively; however, the Census Bureau initiates contact with only a small portion of the SU records on an annual basis.

(a) IRS

Files received from the IRS are obtained from their BMF. On an annual basis, information from the entire BMF is received for each currently active EIN. This information includes name and address, address changes, Standard Industrial Classification (SIC), and the EIN's filing requirements to IRS. On a monthly basis, BMF adds and deletions from the annual file are received.

Payroll updates are received weekly. These adds, deletes, and payroll updates are carried to the SSEL by EPCD monthly.

The BMF is the only source of SU records in the SSEL. If a current BMF record does not exist, there cannot be a current SU SSEL record, PERIOD! Newly active EIN records identified from these monthly IRS update files are the only source of SU births.

(b) SSA

Files from the SSA also are received monthly. These files contain Legal Form of Organization (LFO) codes, birth reason codes, employment size codes, geographic codes, and SIC information for each EIN on their file. File mismatches are inherent; no adds or deletes to the SSEL are made based on the information obtained from SSA.

(c) BLS

Classification information also is received from the BLS. A file of SUs with partial manufacturing SICs (less than 4-digits, but classified within manufacturing) or totally unclassified SICs (0000) is provided to BLS to be matched to their Business Establishment Listing (BEL). The SICs received back from BLS are applied to the SSEL. At this point, this updating is intended to be performed quarterly.

The SIC codes for SUs are received from all three external update sources and each is stored within the SU SSEL record. In addition, SIC information is obtained from ongoing Census Bureau programs (Census of Manufactures, Annual Survey of Manufactures (ASM), Current Industrial Reports (CIR)). The actual SU SIC used for Census Bureau purposes is selected from all available sources and is updated only if the replacement is felt to be more reliable. The EPCD has established a reliability hierarchy based on their historical analysis.

The hierarchy for assigning SIC codes for the 1992 Economic Census is as follows: assigned from census processing, current survey processing, SSA, BLS, clerically name-coded, IRS; where IRS has the lowest reliability and census processing the highest.

(2) Internal Updates to both SU and MU Records: Information obtained from Census Bureau surveys and carried interactively to the SSEL

The Directory Unit in Data Preparation Division (DPD) is the primary unit responsible for carrying the interactive updates to the SSEL. For most surveys, the returned questionnaires are received in DPD; those possibly requiring SSEL updating are identified and forwarded to the Directory Unit. In addition, Directory Unit continuously receives information from the Washington analysts that may require SSEL updating.

In designing the SSEL database, the EPCD has incorporated an interactive correction feature.

This feature allows EPCD to update the SSEL on a flow basis using information obtained from other Census Bureau surveys or direct company contacts. A set of menu-driven correction routines have been developed for the Directory Unit and Analyst units in Jeffersonville. These routines have been fully tested to assure that the integrity and accuracy of the SSEL is maintained. With the exception of a limited number of people in Washington, these two groups in DPD are the **only** people that have the authority to make SSEL corrections.

In contrast to the SUs, virtually all MU SSEL updates are generated interactively. Since the IRS, SSA, and BLS files provide only EIN-based information, they cannot be directly used to update the MU establishment records. Therefore, all information on changes to the multiunit universe must come from surveys conducted by the Census Bureau.

The EPCD conducts the Company Organization Survey (COS) on an annual basis. The primary function of the COS is to obtain the information we need to update the MU portion of the SSEL. Each year, 50,000-60,000 MU companies are selected to participate in the COS.

This includes all MU companies with any employees engaged in manufacturing, totally nonmanufacturing companies with 50 or more employees, and a sample of totally nonmanufacturing companies with less than 50 employees. Over the 3-year cycle every multiunit company receives at least one mailing. Each company receiving the COS is requested to provide the following information for each establishment under its control: EIN, major activity, company affiliation, activity status, payroll, and employment information.

A listing of all known establishments belonging to the company is provided. In addition, the company is requested to provide information on newly acquired establishments, plants under construction, and establishments sold or closed.

Returned COS questionnaires are processed and reviewed by the DPD staff in Jeffersonville. Information that may require an SSEL update is identified and forwarded to the Directory Unit in DPD.

The Directory Unit is comprised of experienced clerks and analysts who fully understand the structure and updating requirements of the SSEL. The clerks in the Directory Unit are responsible for entering specific information via interactive menu-driven screens. The SSEL corrections for all fields are generated automatically by the database system.

Information from MU companies is often obtained from other on-going surveys (ASM, Manufacturers' Shipments, Inventories, and Orders, CIR, etc.). This information is routinely forwarded to the Directory Unit for the interactive SSEL updating.

c. Updating Cycle

The current SSEL is the result of over 20 years of updating and refinement. Unlike most surveys where the database is recreated with every cycle of the survey, the SSEL is truly a database that has evolved over time. The SSEL should be thought of as a continuously changing frame that represents the Census Bureau's best attempt to define the population of business entities. Updates, both from external files and those carried interactively, are carried nightly; but the SSEL frame never perfectly represents the true business population. Updating the SSEL is an endless game of catch up, we can never get ahead. We can never get even.

Despite this insurmountable barrier, an annual updating cycle has been developed. The timing of this cycle coincides with the annual processing of the COS and ASM. The goal of this cycle is that upon completion of the processing of the 19xx COS, the SSEL should reflect the population as of the end of 19xx. Due to the time it takes to process the COS (10-12 months), the SSEL cannot be a "real-time" database. Just the same, we feel that the SSEL does an excellent job in representing the business universe. The following schedule is typical of the regular COS processing cycle.

October

The SSEL is "initialized" for processing. Existing entries in current year fields are moved to the corresponding prior year fields. The "ACT" field for active records (SU and MU) is set to "blank" and the current year CCS code is set to 000.

For MU records, the current year employment and payroll fields are then set to "blank". For SU records, first and second quarter employment and payroll data from IRS are entered, if available.

January

The COS and ASM are mailed jointly. The COS collects employment, payroll, EIN, and operational status information for only the nonASM establishments of each MU company. For ASM establishments, this information is obtained directly from the ASM schedules.

February through August

The COS and ASM forms are returned to DPD on a flow basis, microfilmed (ASM only), and data keyed. Keyed data records are matched to the SSEL on a CFN basis (Control File match) to allow EPCD to provide both the reported data and SSEL information to MCD for our edit processing. The Control File match identifies situations where ASM establishments may require SSEL updating and refers them to the Directory Unit in DPD. These referrals are reviewed by the Directory Unit and interactive updates to the SSEL are made.

August through September

The DPD "close-out" occurs. Data entry is halted and interactive updates to the SSEL are suspended. Imputation of SSEL employment and payroll data for SU records, and delinquent and nonmail MU establishments is performed.

Final CFN linkages are established for changes in ownership situations. The EIN linkages to MU companies are completed.

September through October

Mail files are recreated for the next COS/ASM cycle.

2. Concepts of Sample Maintenance

One of the key requirements to all sample designs is the existence of a sample frame from which the actual sample is drawn.

If one is extremely fortunate, the available frame accurately represents the population for which you desire to generate estimates.

In many cases, the frame may not be current, may not include eligible units, or may include ineligible units. For most of our surveys, the SSEL (or derivatives from it) serve as our sample frame. With few exceptions, the SSEL reasonably represents the manufacturing population (universe) of interest.

As stated earlier, the manufacturing universe is not static. The EPCD has developed a complex system for identifying changes in the SSEL and introducing the appropriate updates to the establishment and company records. The frames we assemble for sampling are "point-in-time" lists of eligible units. Our samples can represent only these point-in-time frames. However, as the SSEL is updated, procedures must be in place to update our samples. Otherwise, our sample may represent a population that is several years old and considerably different than the current population.

There are four broad categories of frame updates that occur routinely: births, deaths, changes in ownership, and changes in reporting unit. Below is a description of each and how they are handled within our establishment sample surveys.

a. Births

The "birth" concept is fairly easy to understand. Any currently existing eligible unit that was not in the frame used to draw the sample is defined as a birth record. There are three different types of births.

New Operations--Cases that were not in existence when the frame was created.

New In-Scope Cases--Cases that were in existence, but not in-scope, that have changed their operations, and are now in-scope.

Frame Misses--Cases that should have been included in the frame, but were not due to errors in the data file or in the assembly of the frame. [Note: These are not really true births since they do not represent new units to the true manufacturing universe. However, they are new to the sample frame file that we are using as a proxy for the universe.]

The characteristic that is common to all three is that none of them are represented within any sample drawn from the original frame. The first two categories represent true changes to the manufacturing population that are occurring continuously.

The third represents errors introduced by our processing.

(1) SU Births

The identification of the birth universe is not a terribly difficult task. The real difficulty is to coordinate the introduction of these births into all our on-going programs. The SU births are identified by matching the current year SU manufacturing universe to the prior year SU manufacturing universe. Cases present only in the current year file are defined as births. In general, this operation is performed in March each year. Files are delivered to the program managers for inclusion in their surveys.

This process has one serious defect. A new SU SSEL record is created for each newly active EIN on IRS's BMF. Our matching process will identify all these newly created SU SSEL records as births. Unfortunately, not every newly active EIN on the BMF represents a new business entity.

Existing companies may obtain a new EIN for many reasons; unfortunately, these cases also will have a new SU SSEL record created. Historical analysis indicates that as much as 35-40 percent of the newly created SU SSEL records do not correspond to newly opened SU businesses. Many of the larger SU SSEL births will subsequently become EIN submasters once the Census Bureau becomes aware of the linkage.

(2) MU Births

The MU manufacturing births are identified by EPCD from the COS questionnaire and mailed an Census/ASM form if time permits.

For each MU company, the COS form is preprinted with information for every known establishment of the company.

In addition to providing information for the list of establishments, the company is requested to provide basic information for any additional establishments under its control that were not preprinted. For these additional establishments, we also ask the company to indicate if the location was acquired or newly constructed.

The newly constructed MU establishments are added to the SSEL interactively as births. Acquired locations are processed as "changes in ownership" and not considered to be births. Depending on when the add is made, a current year ASM form may be mailed to birth establishments. Therefore, a complete file of MU births cannot be assembled until DPD completes their COS processing. Generally, this occurs in August.

b. Deaths

"Deaths" are defined as units that were eligible in the original frame that have since become ineligible for the survey. There are three types of deaths.

Out-of-Business--Cases that have ceased all operations.

Out-of-Scope--Cases that have changed their principal activity from manufacturing to non-manufacturing.

Erroneously Included--Cases that should not have been included in the universe; includes, duplicates, nonexistent establishments.

From a sample design perspective, the key difference between births and deaths is that deaths were included in the sample frame. Therefore, any sample selected from the frame should expect a number of selected units to become deaths. These deaths within the sample represent deaths within the frame. Therefore, estimates derived from the sample still represent the original frame.

(1) SU Deaths

In general, SUs that go out-of-business cease to report payroll information under their EIN to IRS. Our direct CFN link to the EIN allows EPCD to identify SU EINS that become inactive.

During the annual SSEL loading operation, SUs with no active payroll in the previous eight quarters or in the current first quarter fields are removed from the SSEL and not reloaded. If the EIN were to become reactivated, an SSEL record would be recreated.

Unfortunately, an inactive EIN does not always indicate a business death. A SU may have obtained a new EIN (and ceased using the old one) and continued to operate, or the SU may have been acquired by another company and choose to use an EIN of the acquiring company. It is fair to say that "all SU out-of-business deaths have inactive EINS, but not all inactive EINS are associated with a SU death."

Classification information from IRS, SSA, and BLS is received and processed continuously. The SUs can be automatically switched to nonmanufacturing if the reliability of the update code is higher than the current code. In addition, SIC codes can be updated interactively using information obtained from the respondent.

(2) MU Deaths

The MU establishment deaths are identified by EPCD primarily via the COS and to a lesser extent by the ASM and other ongoing surveys. Both surveys have an "Operational Status" question which includes "ceased operation" as a possible response. The key limitation in properly identifying MU deaths is our dependence on the MU company to inform us of the closure.

Without direct evidence that a specific plant has ceased operations, we are forced to assume that it is operating in a normal manner.

The files from IRS are of limited value in identifying MU establishment deaths due to the lack of a direct EIN/CFN link.

Information regarding the SIC classification of MU establishments is obtained from the Census Bureau's on-going surveys. The information may be provided on the questionnaires or obtained via telephone by either the DPD or Washington analysts.

c. Changes in Ownership

In general, changes in ownership do not represent changes to the universe. Initially, the acquiring company is not likely to fundamentally change either the major activity or the scale of operation. Changes in ownership should be thought of as shifts within the frame, not entries or exits. [There are exceptions, but they are rare.]

Since there has been no change to the universe, no change to the structure of the sample is required. The original sample status of a unit is unaffected by a subsequent change in ownership. If the unit was originally selected, it remains in the sample with the same sample weight. The only difference is that the questionnaire for the unit should be mailed to the new owner. If the unit was not selected, it remains nonselect.

Conceptually, the handling of ownership changes is straight forward. The SSEL database has been designed to maintain a linkage between records when ownership changes occur. Within each SSEL record, there are four fields that maintain this linkage for all changes in ownership (parentheses represent SSEL data base field mnemonics): current CFN (CFN), new CFN (NEWID), old CFN (OLDID), and permanent plant number (PPN). For ASM establishments, a fifth field, tabulation number (TAB), also is used.

- o The most recent previous owner (predecessor) of an establishment can be identified by examining the OLDID field.
- o The new owner (successor) of an establishment can be identified by examining the NEWID field.
- o The PPN is an identification number that is "attached" to a specific physical establishment. The PPN remains with the physical location regardless of changes in ownership; that is, both predecessor and successor records have the same PPN. In addition, once a PPN is used, it cannot be reassigned to a different physical establishment.
- o For ASM establishments, the TAB behaves similar to the PPN.

These linkages are maintained by Directory Units using the SSEL interactive correction routines.

The majority of ownership change situations involve MU companies. If the acquiring company is an SU, a new MU company will be set-up, if necessary. The addition of acquired establishments is handled routinely by the Directory Unit.

d. Miscellaneous

The SSEL is an establishment-based database. The goal is to maintain a record in the SSEL for each physical location. Below are descriptions of specific situations that occur infrequently.

(1) New Combined Reports

These involve cases where the Census Bureau has agreed to accept data for more than one location on a combined basis. The SSEL records being consolidated to a single combined record are inactivated and a single SSEL record is created. There is no permanent record maintained in the SSEL that allows to directly link the original locations to the newly created record. For this reason, combined reports are created infrequently.

From a sample design perspective, we have merely redefined the reporting unit; there has been no true entry or exit from the universe. These are considered "shifts" within the universe and should not affect the sample status of the involved establishments. However, due to the inclusion of nonsampled units (or sampled units with varying sample weights) within the new combined reports, significant estimation problems can arise.

In addition, due to the widespread dependence on the SSEL across the economic area, EPCD has established guidelines outlining the conditions that should be met prior to allowing a combined report. In general, combined reports are only allowed when the locations have the same 4-digit SIC, are located within the same state/county cell (ST/COU), and use the same EIN.

(2) New Split Reports

This is essentially the opposite of "new combined reports." An SSEL record that was previously thought to correspond to a single location has informed the Census Bureau that they have been reporting for multiple locations on the single report.

A new SSEL record is created for each location and the original SSEL record is deleted. Each new location is considered to be an extension of the original location; therefore, the sample status and weight of each new location is determined by the original.

(3) Physical Location Changes

These are cases where an establishment has transferred its operation to a new physical location. With the exception of ASM cases that report a change in county, all cases are treated as simple address corrections to the SSEL record. These are regarded as "shifts" within the universe and not entries and exits. However, for ASM records with a change in county, the original SSEL record is deleted and a new SSEL record is added. The linkage between the two records is maintained via the NEWID and OLDID fields. We are essentially creating a "death" in the original county and a "birth" in the new county. This is done primarily for estimation and variance considerations.

(4) Erroneous Adds

These are cases where a clerical error occurred that has resulted in an invalid MU SSEL record being created. An SSEL record has either been created for a location that does not truly exist or for a location that is already present in the SSEL (duplicate). This is generally due to misinterpreting information provided by the company. These cases are inactivated.

3. Principals involved and their responsibilities

Indirectly, there are several divisions actively involved in maintaining the completeness and quality of the SSEL.

a. EPCD

The EPCD's primary role is to coordinate all the activities that are involved in maintaining the SSEL. They are responsible for assuring that both the batch and interactive updating processes are timely, complete, and accurate. Specifically, EPCD:

- o Reviews and assures the quality of all files received from the IRS, SSA, or BLS.
- o Conducts the COS and directs all Economic Statistical Methods and Programming Division (ESMPD) and DPD activities relating to the processing of the COS.
- o Prepares all functional requirements to ESMPD relating to the SSEL interactive correction routines.
- o Provides DPD with guidelines for using the interactive routines.

b. ESMPD

The ESMPD provides computer support for maintaining and updating the SSEL. Specifically, ESMPD:

- o Receives files from SSA, IRS, and BLS and processes all required batch updates to the SSEL.
- o Performs all database maintenance operations as specified by EPCD.
- o Creates the mail files for both the ASM and COS.

c. DPD

- o DPD provides the processing support for the COS and most other surveys, including: assembly of mail packages; follow-up and correspondence activities; microfilming and data entry; questionnaire sorting.
- o The **Directory Unit** is directly responsible for carrying updates to the SSEL via the interactive routines.

d. Other Economic Divisions

- o Ongoing surveys conducted by other Economic Divisions (MCD, Services) frequently obtain operational status or ownership information that is not reflected in the current SSEL. It is the responsibility of these divisions to provide this information to the Directory Unit in DPD to assure proper SSEL updating.

e. Manufacturing Programs Methodology Branch (MPMB)

- o The MPMB in MCD maintains contact with EPCD to keep appraised of any problems with their SSEL processing system and to make EPCD aware of any errors or problems encountered by MCD.
- o The MPMB is responsible for assuring that the sample maintenance rules that have been established are adhered to and that any proposed changes to the SSEL updating system are consistent with these rules.
- o Specific operational status situations identified by the analysts are referred to the MPMB staff for research and resolution. An outline of the types of situations that should be referred to MPMB is provided in section 4 below.
- o The MPMB staff maintains communication with the Directory Unit in DPD to monitor the status of the clerical and analyst SSEL updating work.
- o MPMB provides supplemental files of births and newly classified establishments to manufacturing to the Division's programs on an annual basis.

4. **Analyst Reference Guide**

This section describes the key fields in the SSEL that are expected to be updated during routine interactive processing by DPD.

****** For ASM/Census processing, the timing of the SSEL interactive updates may be delayed due to delays in programming the centralized Census Bureau processing system or DPD processing priorities. These activities are under the direct control of EPCD. Routine interactive updates are carried on a flow basis and may be carried at any point prior to DPD close-out.**

Prior to close-out, the lack of an update does not indicate that an error has occurred. Therefore, one must exercise caution when examining the SSEL. Erroneous updates can occur at any time; and if detected, should be referred to the MPMB staff. *****

a. Changes in ownership (page 15)

(1) Defined as:

- o establishment sold
- o company mergers
- o spin-offs into new independent companies
- o new joint ventures where one company has controlling interest (50 plus percent)
- o change in EIN where the new EIN is already associated with another company

(2) Expected SSEL updates:

(a) predecessor record (the sold establishment)

- o ACT = "G"
- o CCS = 19x (non-ASM) or 14x (ASM)
- o NEWID = successor CFN
- o EIALPH (SU only) = successor alpha

(b) successor record (new establishment in the acquiring company)

- o ACT = "A" or blank
- o CCS = 34x (non-ASM) or 24x (ASM)
- o OLDID = predecessor CFN
- o PPN = predecessor PPN
- o SIC = predecessor SIC
- o ASM only
- o WGT = predecessor WGT
- o TAB = predecessor TAB

b. Deaths (pages 13-14)

(1) Defined as:

- o permanently closed
- o out-of-business
- o establishment abandoned or destroyed
- o bankruptcy: no longer active (does not include re-organizations where the firm remains active)

(2) Expected SSEL updates:

(a) MU establishments

- o ACT = "D"
- o CCS = 11x
- o DOC = month/year closed

(b) SU establishments

- o ACT = "D"
- o CCS = 11x
- o DOC = month/year closed
- o ACQP1-4 = 0 [Note: SU records can have employment and payroll data if reported by respondent.]

c. SU operating at more than one location

(1) Defined as: SUs that report operations at multiple locations are generally converted to new MU companies. A separate MU establishment is created for each location.

(2) Expected SSEL updates

(a) Original SU

Processed as an "ownership change" to the new MU company. See above section for specific SSEL updates.

(b) Additional locations

- o ACT = "A"
- o CCS = 22x
- o SIC assigned based on primary activity
- o Assigned new PPN
- o If original SU is in the ASM sample:
 - o Assigned new TAB
 - o Assigned WGT of original SU

d. Out-of-scope cases (page 13)

(1) Defined as: Establishments that have been erroneously classified in manufacturing/minerals or have changed their primary activity to nonmanufacturing/nonminerals.

(2) Expected SSEL updates

- o SIC updated to be **not** within 10xx-14xx or 20xx-39xx
- o PDIV updated to be **not** equal to 1, 3, or I
- o CCS = 15x (ASM only)
- o TAB= 000000
- o WGT = 00100

e. Change in physical location (page 17)

(1) Defined as: Establishments that have physically relocated their operation and no longer operate at the original location.

(2) Expected SSEL updates

(a) ASM establishments with **no** change in ST/COU code

- o Correction to name and address only; all other fields remain the same

(b) ASM establishments with a change in ST/COU code

- o Original location
 - o ACT = "G"
 - o CCS = 51x
 - o NEWID = CFN corresponding to new location
- o New location
 - o ACT = "A"
 - o CCS = 31x
 - o OLDID = CFN corresponding to original location
 - o TAB should be newly assigned
 - o WGT = WGT of original location

(c) NonASM establishments

- o **No** change to CFN. These situations are not treated as a delete/add. Only the name and address of the SSEL record are updated.

f. Combined reports (page 16)

- (1) Defined as: The creation of a new reporting unit (new record on the SSEL) by consolidating at least two previously separate SSEL records. The creation of combined reports is discouraged and is generally agreed to only after discussions with the company. Combined records should be performing similar activity and located in the same county. [Note: There is no CFN linkage between the locations being combined and the newly created record.]
- (2) Expected SSEL updates
 - (a). New combined report
 - o ACT = "A"
 - o CCS = 32x
 - o TAB should be newly assigned
 - o WGT derived by MPMB on a case by case basis
 - (b). Locations being combined
 - o ACT = "D"
 - o CCS = 12x

g. Split reports (page 17)

- (1) Defined as: A single establishment being split into two or more separate reporting units. In most cases, the Census Bureau was unaware that more than one operation was being reported on a single report and we are merely correcting the error. In some cases, the company has indicated its preference to report separately. [Note: There is no CFN linkage between the original record and the newly created records.]
- (2) Expected SSEL updates
 - (a). Original establishment
 - o ACT = "D"
 - o CCS = 17x

(b). Each new establishment

- o ACT = "A"
- o CCS = 22x
- o If original establishment was in the ASM sample:
 - o TAB should be newly assigned
 - o WGT = WGT of original establishment

h. Miscellaneous(1) SU EIN Change

Using the interactive routines available, the DPD clerk will determine which of the four categories the case falls in.

- o If either the existing EIN or the new EIN is linked to a MU company, the SU is processed as "sold" to the MU company.
- o If the name/address information for the new EIN is different than the case being researched, the SU is processed as "sold" to the SU company (new EIN). A new MU company is created.
- o If the name/address information for the new EIN is identical to the case being researched, linkage is established between the two SSEL records.
 - o original SU record (predecessor)
 - o ACT = "G"
 - o CCS = 19x (non-ASM) or 14x (ASM)
 - o NEWID = successor CFN
 - o new SU record (successor)
 - o CCS = 34x (non-ASM) or 24x (ASM)
 - o PPN = predecessor PPN
 - o SIC = predecessor SIC
 - o TAB = predecessor TAB (ASM)
 - o WGT = predecessor WGT (ASM)
 - o OLDID = predecessor CFN
- o If the new EIN does not exist on the SSEL, **no** action is taken.

(2) MU EIN Change

- o EIN field of SSEL is updated; no other fields are affected.

(3) Erroneous Adds

Due to the overwhelming volume of SSEL updates that need to be processed during the annual cycle, erroneous adds do occur.

- (a) Cases that have erroneously been added to the ASM (establishment should be nonASM)
 - o CCS = 50x
 - o PDIV = "1" or "3"
- (b) Cases that have been erroneously added to the SSEL (duplicate of an existing record; no physical establishment ever existed)
 - o ACT = "D"
 - o CCS = 18x (duplicate) or 20x (invalid)

Questions concerning specific problems encountered by the analysts should be directed to the MPMB staff.

5. **SSEL Glossary**

a. Basic identifiers

EIN: A 9-digit account number assigned by IRS and used to report employee tax withholding by businesses.

CFN: A 10-digit identification number assigned to each establishment record in the SSEL that is the key index to the database. The "current" CFN for an establishment allows us to ascertain ownership of the establishment. Changes in ownership result in changes in CFN.

SU: "0" + EIN

MU: 6-digit company "alpha" + 4-digit plant number

Company

"alpha": A 6-digit code assigned uniquely to each MU company. Each establishment within a specific MU company will use the company alpha for the first 6-digits of its CFN.

NEWID: The new CFN of the record being examined.

OLDID: The prior CFN of the record being examined.

PPN: A 10-digit "permanent" identification number assigned to a specific physical location; ownership changes will not result in PPN changes.

TAB: Analogous to PPN, only limited to establishments in the current ASM sample. The use of TAB numbers pre-dates the use of PPNs and will continue for awhile.

ACT: The current "activity" status of the SSEL record. The annual initialization of the SSEL sets this field to "blank" for active records. During the interactive updating phase, a record can remain active (ACT continues to be "blank"); be linked to a new CFN (ACT = "G" ;"ghosted"); or inactivated (ACT = "D"). All adds to the SSEL after it has been initialized are assigned an ACT = "A".

CCS: A 2-digit "coverage code" that indicates the current operational status of the SSEL record. During the annual initialization the CCS is set to "00". Updates are carried automatically via the interactive routines. See attachment for definitions.

EIALPH: A field within a SU SSEL record that indicates if the EIN corresponding to the SU record is associated with a MU company. The corresponding 6-digit MU ALPHA will be entered, if applicable. SU records with the EIALPH field not "blank" or zero-filled are defined as EIN submasters.

WGT: The sample weight for establishments included in the ASM sample. For non-ASM records, WGT = 00100.

PDIV: Represents the economic division of an entity based on SIC and other characteristics. See attachment for list of valid PDIV codes.

b. Classification fields

SIC: The current 4-digit SIC code

MSIC: The 4-digit SIC used during the 1992 Census mailing operation to assign a form-type.

SSASIC: Most recent 4-digit SIC received from the SSA.

BLSSIC: Most recent 4-digit SIC received from the BLS.

c. Administrative record data (SU)

ACEMP

(APEMP): First quarter total employment for the current (prior) year.

ACQP1-4

(APQP1-4): Quarterly payroll for the current (prior) year.

ACAP

(APAP): Current (prior) year annual payroll.

ACSRI: Current year primary sales and receipts; generally available only during Census years.

d. Company Organization Survey data (MU)

REMP

(PEMP): First quarter current (prior) year total employment as reported on COS. Used as a proxy for average employment.

RQP1 (PQP1): First quarter current (prior) year payroll as reported on COS.

RAP (PAP): Total annual current (prior) year payroll as reported on COS.

CCS CODE GLOSSARY
Inactive CCS Codes

CCS code	Definition
09x	An SU postmaster return (undeliverable, bad address).
11x	Establishment out of business (closed, dismantled).
12x	Establishment data is now being included with other establishment's data on a new combined report (linked with CCS 32x).
14x	An ASM establishment sold (or merged) during 1992. Linkage to successor established (CCS 24x).
15x	Establishment is out-of-scope of manufacturing/minerals.
16x	Intercensus transfer from manufacturing to minerals - or vice versa (outgoing).
17x	The establishment's operation is being split into two or more separate reporting units. Each new reporting unit will be processed as a separate establishment in subsequent years (linked with CCS 22x).
18x	Establishment is a duplicate of another establishment.
19x	Any nonASM establishment sold during 1992. Linkage to successor established (CCS 34x) if $TE_{91} \geq 50$ (includes minerals).
20x	Establishment has been erroneously added to the Control File.
50x	Plant previously included in ASM in error. (Plant is dropped from ASM.)
51x	Establishment has changed physical location (state or county change).
53x	ASM MU ownership change in which linkage is required, but no successor could be located (reserved for analyst use).
58x	ASM SU ownership change in which linkage is required, but no successor could be located (reserved for analyst use).
79x	Establishment sold - no successor located.

CCS CODE GLOSSARY
Active CCS Codes

CCS code	Definition
00x	No change in operator or operations.
02x	Government-owned/Contractor-operated plants (GOCO).
05x	Administrative record (nonmail) with control file payroll > 0.
08x	Establishment is operating under Chapter 11 of the Bankruptcy laws.
13x	Establishment is inactive at end of 1992 but still owned. Resumption of activity is expected.
21x	Establishment is believed to be a newly-opened operation (no predecessor was located).
22x	<ul style="list-style-type: none"> a. New MU operation resulting from the splitting of a previously combined report (linked to CCS 17x). b. New MU establishment from SU splinter.
23x	Previously idle establishment that resumed activity.
24x	An ASM establishment acquired during 1992 (linkage from predecessor (CCS 14x)).
28x	<ul style="list-style-type: none"> a. SU record that is being set up as a new MU company due to operating at more than one location. The SU being deleted gets CCS 28x and the plant in the new MU representing it gets CCS 29x if the original SU was ASM, otherwise it also gets CCS 28x. The additional locations are considered newly-opened operations (5B add) and get CCS 21x. b. MU company that is being converted to a SU company since it only has one operation. The MU being deleted gets CCS 28x and the SU gets CCS 29x if the MU had been ASM, otherwise it gets CCS 28x.
29x	ASM company structure change (SU to MU or MU to SU) see 28x above for detailed explanation.
30x	Establishment erroneously deleted from processing: being restored to active status.

CCS CODE GLOSSARY
Active CCS Codes--Continued

CCS code	Definition
31x	New establishment due to physical location change (linked to 51x).
32x	New operation resulting from combining of at least two previously separate reports.
33x	Establishment previously classified as nonASM that has now been reclassified as ASM.
34x	NonASM acquired establishment (includes minerals).
35x	Establishment previously classified as nonmanufacturing (or minerals) that has now been reclassified as manufacturing (or minerals) (intercensus transfer).
36x	Intercensus transfer from manufacturing to minerals - or vice versa (incoming).
37x	Geographic code correction (previous code was in error).
40x	Plant under construction but not in operation.
61x	Classification card with inscope SIC received below remail size cutoff.
62x	Blank schedule below referral size cutoff.
74x	Establishment acquired (no predecessor plant located).
78x	Incorrect linkage to successor removed using routine 78.

Processing Division Code (PDIV)

1 - Mining	I - Manufacturing (ASM)
2 - Construction	J - Finance
3 - Manufacturing (non-ASM)	K - Insurance
4 - Transportation (inscope)	L - Real Estate
5 - Wholesale	M - EIN Submaster
6 - Retail	N - Northern Mariana Islands (inscope)
7 - Services (inscope)	O - Northern Mariana Islands (out-of-scope)
8 - Company Administrative Offices and Auxiliaries	P - Puerto Rico (out-of-scope)
9 - Puerto Rico (inscope)	S - Out-of-scope
A - Foreign	U - Guam (inscope)
B - Utilities	V - Virgin Islands (inscope)
C - Communications	W - Guam (out-of-scope)
F - Agriculture	X - Unclassified
G - Government (out-of-scope)	Z - Virgin islands (out-of-scope)
H - Government (inscope)	

U.S. Bureau of the Census		U.S. Department of Commerce		Date submitted 8/29/95	
REPORT DOCUMENTATION PAGE					
1. Title of report, paper, or article (include series number where applicable) The Relation Between the Standard Statistical Establishment List and Manufacturing Establishment Surveys				1a. Date published or presented 8/30/95	
2. Where published or presented (volume and number if applicable) Working Paper Series, Census/MCD/WP-95/02					
3. Type or report (e.g., draft memorandum, interim or final report, revision of earlier document, speech, technical paper) Working Paper					
4. Author(s) Stacey J. Cole 301-457-4771 Joanne Petrik No longer employed at Census Robert Struble 301-457-4760				4a. Telephone number (include area code)	
				4b. Division MCD	
5. Address/contact information Bureau of the Census Manufacturing and Construction Division Room 2215, FB 4				5a. Telephone number (include area code) 301-457-4589	
6. Supplemental notes None					
7. Abstract (A 200-word or less factual summary of most significant information. If document includes a significant bibliography or literature survey, mention it here.) The Standard Statistical Establishment List (SSEL) is a database of company and establishment information used by the economic divisions of the Census Bureau. Portions of the SSEL are used as frames for the establishment based censuses and surveys of the Manufacturing and Construction Division (MCD). This document describes the SSEL and its interactions with MCD's surveys. In addition, it presents an overview of the sample maintenance and coverage activities that are employed with these surveys. A reference guide is included to show how specific coverage situations are handles on the SSEL. Glossaries of SSEL terms, coverage control source codes, and processing division codes are included also for reference purposes.					
				7a. Page count 31	
8. Subject terms/key words SSEL; Sample Maintenance; Coverage					
9. Availability: <input checked="" type="radio"/> Unlimited <input type="radio"/> For official distribution					
10. Approving official Signature: <u>John H. States</u>				10a. Division MCD	
				10b. Date 8/30/95	