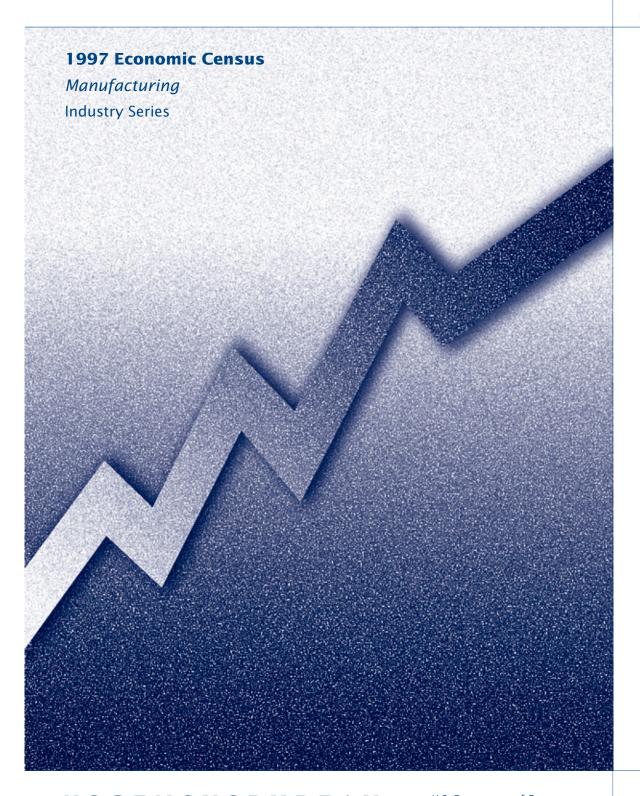
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### **Machine Shops**

EC97M-3327A

#### **1997 Economic Census**

Manufacturing **Industry Series** 





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#### **CONTENTS**

|  | duction to the Economic Census   | 1<br>5                               |
|--|--|--------------------------------------|
| TABL   | LES  |                                      |
| 1.<br>2.<br>3.<br>4.<br>5.<br>6a.<br>6b.<br>7. | Industry Statistics on NAICS Basis With Distribution Among 1987 SIC-Based Industries: 1997 Industry Statistics for Selected States: 1997 Detailed Statistics by Industry: 1997 Industry Statistics by Employment Size: 1997 Industry Statistics by Industry and Primary Product Class Specialization: 1997 Products Statistics: 1997 and 1992 Product Class Shipments for Selected States: 1997 and 1992 Materials Consumed by Kind: 1997 and 1992 | 7<br>7<br>8<br>9<br>10<br>           |
| APPI   | ENDIXES  |                                      |
| A.<br>B.<br>C.<br>D.<br>E.<br>F.               | Explanation of Terms NAICS Codes, Titles, and Descriptions. Coverage and Methodology. Geographic Notes Metropolitan Areas Footnotes for Products Statistics and Materials Consumed by Kind Comparability of Product Classes and Product Codes: 1997 to 1992.   | A-1<br>B-1<br>C-1<br><br><br><br>G-1 |

-- Not applicable for this report.

#### Introduction to the Economic Census

#### PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

#### ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

| 21    | Mining                         |
|-------|--------------------------------|
| 22    | Utilities                      |
| 23    | Construction                   |
| 31-33 | Manufacturing                  |
| 42    | Wholesale Trade                |
| 44-45 | Retail Trade                   |
| 48-49 | Transportation and Warehousing |
| 51    | Information                    |

52 Finance and Insurance 53

Real Estate and Rental and Leasing 54 Professional, Scientific, and Technical Services

55 Management of Companies and Enterprises 56 Administrative and Support and Waste

Management and Remediation Services

61 **Educational Services** 

Health Care and Social Assistance 62

Arts. Entertainment, and Recreation 71

72 Accommodation and Foodservices

Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

#### RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

#### **GEOGRAPHIC AREA CODING**

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

#### **BASIS OF REPORTING**

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

#### **DOLLAR VALUES**

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

#### **AVAILABILITY OF ADDITIONAL DATA**

#### **Reports in Print and Electronic Media**

All results of the 1997 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

#### **Special Tabulations**

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division Service Sector Statistics Division

301-457-4673 301-457-2668

#### HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

#### SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the Guide to the 1997 Economic Census and Related Statistics at www.census.gov/econquide. More information on the methodology, procedures, and history of the censuses will be published in the History of the 1997 Economic Census at www.census.gov/econ/www/history.html.

#### ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

- Α Standard error of 100 percent or more.
- D Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
- F Exceeds 100 percent because data include establishments with payroll exceeding rev-
- Ν Not available or not comparable.
- Revenue not collected at this level of detail for Q multiestablishment firms.
- S Withheld because estimates did not meet publication standards.

- V Represents less than 50 vehicles or .05 percent.
- Χ Not applicable.
- Υ Disclosure withheld because of insufficient
  - coverage of merchandise lines.
- Ζ Less than half the unit shown. 0 to 19 employees.
- a b
- 20 to 99 employees.
- 100 to 249 employees. C
- 250 to 499 employees. e
- f 500 to 999 employees.
- 1,000 to 2,499 employees. g
- h 2,500 to 4,999 employees.
- 5,000 to 9,999 employees.
- 10,000 to 24,999 employees.
- k 25,000 to 49,999 employees.
- 50,000 to 99,999 employees.
- 100,000 employees or more. m
- 10 to 19 percent estimated.
- р q 20 to 29 percent estimated.
- Revised. r
- Sampling error exceeds 40 percent.
- Not elsewhere classified. nec
- Not specified by kind. nsk
- Represents zero (page image/print only).
- (CC) Consolidated city.
- Independent city. (IC)

1997 ECONOMIC CENSUS INTRODUCTION 3 This page is intentionally blank.

### Manufacturing

#### **SCOPE**

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

#### **GENERAL**

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the "all manufacturing" level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

#### **GEOGRAPHIC AREAS COVERED**

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more

The state reports also include data at the "all manufacturing" level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

U.S. Census Bureau, 1997 Economic Census

component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semiindependent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

#### **COMPARABILITY OF THE 1992 AND 1997 CENSUSES**

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

#### **DISCLOSURE**

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

#### AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census - Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

#### Table 1. Industry Statistics on NAICS Basis With Distribution Among 1987 SIC-Based Industries: 1997

[NAICS codes appear in bold type. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

| NAICS                   |               |                             | All                                   | All em    | ployees              | Pr        | oduction work    | ers                |  |                             |            | Total capital                  |
|-------------------------|---------------|-----------------------------|---------------------------------------|-----------|----------------------|-----------|------------------|--------------------|--|-----------------------------|------------|--------------------------------|
| or SIC code             | Industry      | Com-<br>panies <sup>1</sup> | estab-<br>lish-<br>ments <sup>2</sup> | Number    | Payroll<br>(\$1.000) | Number    | Hours<br>(1,000) | Wages<br>(\$1,000) | Value added by<br>manufacture<br>(\$1,000) | Cost of materials (\$1,000) | shipments  | expendi-<br>tures<br>(\$1,000) |
|                         |               | parnoo                      | monto                                 | 110111001 | (\$1,000)            | 110111501 | (1,000)          | (φ.,σσσ)           | (\$.,555)                                  | (\$1,000)                   | (\$.,000)  | (\$1,000)                      |
| <b>332710</b><br>359910 | Machine shops | 23 438                      | 23 616                                | 290 849   | 9 491 046            | 225 752   | 429 078          | 6 339 997          | 18 460 200                                 | 8 765 790                   | 27 131 541 | 1 560 204                      |
| 339910                  | (pt)          | N                           | 23 616                                | 290 849   | 9 491 046            | 225 752   | 429 078          | 6 339 997          | 18 460 200                                 | 8 765 790                   | 27 131 541 | 1 560 204                      |

<sup>&</sup>lt;sup>1</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control. <sup>2</sup>Includes establishments with payroll at any time during the year.

#### Table 2. Industry Statistics for Selected States: 1997

[States that are disclosures or with less than 100 employees are not shown. For explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

|   |     |                                   | All<br>shments                            | All em                                      | oloyees   | Pr   | roduction work                              | ers   |   |   |   |   |
|---|-----|-----------------------------------|---|---|---|--|---|---|---|---|---|---|
| Industry and geographic area                                    | E¹  | Total                             | With 20<br>em-<br>ploy-<br>ees or<br>more | Number                                      | Payroll<br>(\$1,000)                                | Number                                     | Hours<br>(1,000)                            | Wages<br>(\$1,000)                                | Value added by manufacture (\$1,000)                  | Cost of materials (\$1,000)                         | Value of<br>shipments<br>(\$1,000)                    | Total capital<br>expendi-<br>tures<br>(\$1,000) |
| 332710, MACHINE SHOPS   |     |                                   |   |   |   |  |   |   |   |   |   |   |
| United States   | 1   | 23 616                            | 3 773                                     | 290 849                                     | 9 491 046   | 225 752                                    | 429 078                                     | 6 339 997   | 18 460 200  | 8 765 790   | 27 131 541  | 1 560 204                                       |
| Alabama Alaska Arizona Arkansas California                      | 2   | 374                               | 67  | 4 775                                       | 125 991   | 3 705                                      | 6 435                                       | 85 386  | 241 635   | 128 988   | 370 113   | 22 338  |
|   | 1   | 18                                | 1   | 106   | 3 928   | 86   | 146   | 2 678   | 7 243   | 3 915   | 11 032  | 308   |
|   | 2   | 314                               | 56  | 3 826                                       | 134 003   | 2 927                                      | 5 716                                       | 87 152  | 253 814   | 104 486   | 353 336   | 26 003  |
|   | 2   | 175                               | 17  | 1 415                                       | 35 477  | 1 122                                      | 1 918                                       | 24 719  | 65 140  | 31 671  | 97 207  | 9 370   |
|   | 1   | 3 357                             | 512                                       | 37 674                                      | 1 319 261   | 29 733                                     | 57 405                                      | 885 005   | 2 647 853   | 1 098 207   | 3 726 900   | 218 430   |
| Colorado  | 1   | 333                               | 34  | 3 139                                       | 100 480   | 2 492                                      | 4 761                                       | 70 506  | 202 618   | 119 839   | 318 971   | 24 719  |
|   | 1   | 509                               | 74  | 6 097                                       | 233 721   | 4 544                                      | 9 146                                       | 150 397   | 414 195   | 201 241   | 612 746   | 27 122  |
|   | 2   | 42                                | 6   | 444   | 14 148  | 324  | 600   | 8 767   | 28 722  | 12 867  | 41 509  | 1 461   |
|   | 2   | 627                               | 69  | 5 569                                       | 151 262   | 4 345                                      | 7 229                                       | 102 547   | 282 127   | 123 282   | 402 950   | 27 696  |
|   | 2   | 427                               | 53  | 4 525                                       | 133 691   | 3 393                                      | 5 746                                       | 83 460  | 272 116   | 161 975   | 438 426   | 19 948  |
| Idaho   | 1 - | 92                                | 9   | 699   | 16 481  | 567  | 858   | 11 843  | 30 514  | 12 249  | 42 873  | 3 402   |
| Illinois  |     | 1 252                             | 254                                       | 18 204                                      | 640 300   | 14 198                                     | 28 933                                      | 430 908   | 1 219 309   | 568 507   | 1 773 876   | 101 939   |
| Indiana   |     | 666                               | 125                                       | 8 745                                       | 269 951   | 6 840                                      | 13 098                                      | 179 990   | 514 934   | 263 002   | 775 754   | 48 192  |
| Iowa  |     | 216                               | 40  | 3 222                                       | 86 507  | 2 687                                      | 5 090                                       | 64 391  | 206 328   | 115 269   | 320 647   | 19 759  |
| Kansas  |     | 236                               | 34  | 3 066                                       | 94 350  | 2 277                                      | 4 097                                       | 59 162  | 192 050   | 107 209   | 299 866   | 14 388  |
| Kentucky  |     | 252                               | 46  | 3 788                                       | 115 532   | 2 987                                      | 6 012                                       | 79 827  | 217 128   | 98 584  | 314 125   | 16 132  |
| Louisiana   |     | 289                               | 52  | 3 879                                       | 121 614   | 3 037                                      | 5 996                                       | 84 774  | 216 199   | 110 893   | 325 021   | 20 518  |
| Maine   |     | 110                               | 15  | 1 361                                       | 48 101  | 1 053                                      | 1 775                                       | 30 981  | 103 575   | 49 097  | 150 784   | 12 062  |
| Maryland  |     | 203                               | 35  | 2 842                                       | 93 000  | 2 208                                      | 4 247                                       | 63 016  | 187 206   | 89 358  | 276 379   | 13 825  |
| Massachusetts   |     | 701                               | 113                                       | 8 992                                       | 339 278   | 6 583                                      | 13 127                                      | 215 720   | 623 359   | 286 956   | 909 669   | 57 008  |
| Michigan  | 3   | 1 375                             | 272                                       | 20 441                                      | 731 684   | 15 827                                     | 31 785                                      | 485 872   | 1 424 255   | 835 347   | 2 261 681   | 113 061   |
| Minnesota   |     | 610                               | 113                                       | 8 966                                       | 313 103   | 6 894                                      | 13 695                                      | 210 986   | 672 663   | 319 758   | 995 605   | 70 601  |
| Mississippi   |     | 149                               | 15  | 1 333                                       | 34 612  | 1 043                                      | 1 790                                       | 23 897  | 59 632  | 25 374  | 83 756  | 7 245   |
| Missouri  |     | 397                               | 55  | 3 799                                       | 112 347   | 2 935                                      | 5 302                                       | 76 941  | 202 704   | 91 215  | 292 369   | 17 303  |
| Montana   |     | 57                                | 1   | 259   | 5 849   | 190  | 290   | 3 721   | 9 788   | 4 826   | 14 394  | 568   |
| Nebraska  | 2   | 110                               | 14  | 1 014                                       | 24 171  | 797  | 1 342                                       | 17 032  | 44 362  | 21 917  | 65 625  | 4 361   |
|   | 4   | 82                                | 6   | 577   | 14 808  | 443  | 718   | 10 273  | 28 048  | 10 214  | 38 224  | 2 004   |
|   | 2   | 206                               | 31  | 2 183                                       | 75 738  | 1 695                                      | 3 148                                       | 51 306  | 130 994   | 52 735  | 184 285   | 14 554  |
|   | 1   | 637                               | 81  | 6 595                                       | 247 907   | 4 776                                      | 9 418                                       | 152 260   | 435 404   | 278 192   | 731 310   | 29 755  |
|   | 1   | 92                                | 8   | 858   | 25 168  | 667  | 1 012                                       | 16 393  | 42 125  | 18 965  | 60 855  | 3 237   |
| New York North Carolina Ohio Oklahoma Oregon                    |     | 911<br>632<br>1 692<br>359<br>339 | 129<br>72<br>322<br>42<br>49              | 10 758<br>6 325<br>24 461<br>3 852<br>3 553 | 348 154<br>182 206<br>786 309<br>103 232<br>114 790 | 8 229<br>4 967<br>19 222<br>3 057<br>2 706 | 15 641<br>8 992<br>37 777<br>5 370<br>5 015 | 227 773<br>121 593<br>536 097<br>73 948<br>76 863 | 676 482<br>329 821<br>1 527 137<br>215 528<br>224 174 | 291 947<br>166 606<br>678 040<br>105 148<br>106 412 | 954 976<br>496 659<br>2 188 863<br>317 172<br>329 428 | 57 986<br>29 599<br>108 732<br>26 284<br>24 552 |
| Pennsylvania Rhode Island South Carolina South Dakota Tennessee | 2   | 1 220<br>95<br>318<br>45<br>411   | 240<br>10<br>48<br>5<br>63                | 18 105<br>904<br>3 737<br>526<br>4 851      | 578 738<br>28 245<br>107 912<br>13 012<br>153 756   | 14 132<br>690<br>2 853<br>438<br>3 793     | 26 807<br>1 160<br>5 018<br>824<br>6 611    | 389 510<br>18 589<br>68 616<br>9 801<br>100 503   | 1 130 829<br>52 062<br>201 305<br>25 185<br>278 372   | 478 685<br>23 522<br>82 822<br>15 700<br>128 764    | 1 613 599<br>74 501<br>283 841<br>41 130<br>405 722   | 85 307<br>5 928<br>13 401<br>1 805<br>19 099    |
| Texas   | 2   | 1 699                             | 261                                       | 19 149                                      | 612 504   | 14 795                                     | 27 925                                      | 406 163   | 1 199 153   | 583 315   | 1 771 802   | 90 095  |
| Utah  | 3   | 159                               | 22  | 1 446                                       | 40 528  | 1 109                                      | 1 927                                       | 28 783  | 82 820  | 33 750  | 116 792   | 7 008   |
| Vermont   | 2   | 41                                | 6   | 412   | 12 697  | 322  | 669   | 9 331   | 25 686  | 9 672   | 35 681  | 2 172   |
| Virginia  | 2   | 348                               | 44  | 3 809                                       | 120 178   | 2 995                                      | 5 415                                       | 82 094  | 209 634   | 78 902  | 287 949   | 15 336  |
| Washington  | 1   | 483                               | 57  | 5 821                                       | 181 851   | 4 609                                      | 7 981                                       | 122 676   | 386 284   | 158 778   | 531 581   | 39 096  |
| West Virginia Wisconsin Wyoming                                 | 3   | 142                               | 30  | 1 780                                       | 44 115  | 1 424                                      | 2 250                                       | 30 459  | 82 753  | 39 138  | 121 880   | 5 338   |
|   | 1   | 724                               | 159                                       | 12 336                                      | 383 955   | 9 542                                      | 18 134                                      | 256 121   | 804 791   | 422 815   | 1 222 144   | 79 254  |
|   | 2   | 39                                | 2   | 249   | 5 597   | 197  | 264   | 3 820   | 11 271  | 6 019   | 17 252  | 395   |

<sup>\*</sup> Hawaii has no incorporated places in the sense of functioning governmental units; however, in agreement with Hawaiian law, the Bureau of the Census reports data for census designated places (CDPs) which have been designated as place equivalents. Those CDPs, only for the state of Hawaii, with 2,500 or more population are recognized.

<sup>&</sup>lt;sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

#### Table 3. Detailed Statistics by Industry: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

| Item   | Value   | Item  | Value  |
|--|---|---|--|
| 332710, MACHINE SHOPS  |   | 332710, MACHINE SHOPS—Con.  |  |
| Companies <sup>1</sup> number  | 23 438  | Value added   | 18 460 200                                   |
| All establishments   | 23 616<br>19 843<br>3 492<br>281                                    | Total inventories, beginning of year \$1,000. Finished goods inventories, beginning of year \$1,000. Work-in-process inventories, beginning of year \$1,000. Materials and supplies inventories, beginning of year \$1,000. | 2 954 364<br>607 094<br>1 669 473<br>677 797 |
| All employees         number.           Total compensation <sup>2</sup> \$1,000.           Annual payroll.         \$1,000.           Total fringe benefits         \$1,000. | 290 849<br>11 295 332<br>9 491 046<br>1 804 286                     | Total inventories, end of year \$1,000. Finished goods inventories, end of year \$1,000. Work-in-process inventories, end of year \$1,000. Materials and supplies inventories, end of year \$1,000.                         | 3 116 845<br>603 278<br>1 767 738<br>745 829 |
| Production workers, average for year   | 225 752<br>222 879<br>224 535                                       | Gross book value of total assets at beginning of year   | 12 277 421<br>1 560 204                      |
| Production workers on May 12 number  Production workers on August 12 number  | 226 782   | Capital expenditures for machinery and equipment (new   | 179 872                                      |
| Production workers on November 12         number           Production-worker hours         1,000           Production-worker wages         \$1,000                           | 228 812<br>429 078<br>6 339 997                                     | and used)   | 1 380 332<br>628 327<br>13 209 298           |
| -  |   | Total depreciation during year <sup>2</sup> \$1,000   | 1 071 162                                    |
| Total cost of materials  | 8 765 790<br>6 389 323<br>742 850<br>83 285<br>253 479<br>1 296 853 | Total rental payments <sup>2</sup>  | 832 695<br>381 789<br>450 906                |
| Quantity of electricity purchased for heat and power   | 3 827 792<br>4 091  | structures <sup>3</sup> \$1,000 .  Response coverage ratio <sup>4</sup> percent .  Cost of purchased services for the repair of machinery and   | 52 808<br>68                                 |
| Total value of shipments\$1,000  | 27 131 541  | equipment <sup>3</sup> \$1,000<br>Response coverage ratio <sup>4</sup> percent  | 173 977<br>68                                |
| Primary products value of shipments \$1,000<br>Secondary products value of shipments \$1,000<br>Total miscellaneous receipts \$1,000   | 23 295 510<br>1 543 329<br>2 292 702                                | Cost of purchased communications services <sup>3</sup> \$1,000.  Response coverage ratio <sup>4</sup> percent.  | 61 062<br>68<br>30 238                       |
| Value of resales   | 1 612 795<br>326 621  | Response coverage ratio <sup>4</sup> percent  | 30 238<br>68<br>55 466                       |
| Contract receipts \$1,000. Other miscellaneous receipts \$1,000.   | 353 286   | Response coverage ratio <sup>4</sup> percent.   | 68   |
| Primary products specialization ratio percent  | 93<br>24 704 828  | Cost of purchased advertising services <sup>3</sup> \$1,000 . Response coverage ratio <sup>4</sup> percent . Cost of purchased software and other data processing   | 44 686<br>68                                 |
| Value of primary products shipments made in this industry \$1,000 Value of primary products shipments made in other  | 23 295 510  | services <sup>3</sup>   | 26 062<br>68                                 |
| industries\$1,000  | 1 409 318   | Cost of purchased refuse removal (including hazardous waste) services <sup>3</sup> \$1,000.   | 37 321                                       |
| Coverage ratio percent   | 94  | Response coverage ratio <sup>4</sup> percent  | 68   |

Note: The amounts shown for purchased services reflect only those services that establishments purchase from other companies.

<sup>&</sup>lt;sup>1</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>2</sup>These items are collected in the ASM and estimated for the remaining establishments; therefore, the levels of estimation are higher than for other items in the table.

<sup>3</sup>Based on ASM sample data.

<sup>4</sup>A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those ASM establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

#### Table 4. Industry Statistics by Employment Size: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

|   |    | All establishments |   | All employees    |                      | Production workers |                  |                      |                                      |                             |                                    |   |
|---|----|--------------------|---|------------------|----------------------|--------------------|------------------|----------------------|--------------------------------------|-----------------------------|------------------------------------|---|
| Employment size class                           | E¹ | Total              | With 20<br>em-<br>ploy-<br>ees or<br>more | Number           | Payroll<br>(\$1,000) | Number             | Hours<br>(1,000) | Wages<br>(\$1,000)   | Value added by manufacture (\$1,000) | Cost of materials (\$1,000) | Value of<br>shipments<br>(\$1,000) | Total capital<br>expendi-<br>tures<br>(\$1,000) |
| 332710, MACHINE SHOPS                           |    |                    |   |                  |                      |                    |                  |                      |                                      |                             |                                    |   |
| All establishments                              | 1  | 23 616             | 3 773                                     | 290 849          | 9 491 046            | 225 752            | 429 078          | 6 339 997            | 18 460 200                           | 8 765 790                   | 27 131 541                         | 1 560 204                                       |
| Establishments with 1 to 4 employees            |    | 10 484             | _   | 21 995           | 531 805              | 18 315             | 25 844           | 362 023              | 971 657                              | 402 701                     | 1 375 023                          | 80 978  |
| employees                                       | 3  | 5 316<br>4 043     | _   | 35 837<br>54 719 | 989 428<br>1 717 093 | 27 627<br>42 170   | 44 640<br>76 602 | 673 780<br>1 143 175 | 1 863 830<br>3 264 384               | 740 452<br>1 338 111        | 2 605 067<br>4 591 677             | 150 555<br>267 736                              |
| Establishments with 20 to 49 employees          | 1  | 2 793              | 2 793                                     | 84 920           | 2 940 124            | 65 716             | 132 579          | 1 954 442            | 5 627 291                            | 2 377 237                   | 7 974 133                          | 472 883   |
| Establishments with 50 to 99 employees          | 1  | 699                | 699                                       | 47 700           | 1 706 463            | 36 891             | 75 463           | 1 135 550            | 3 319 465                            | 1 671 053                   | 4 945 796                          | 310 127   |
| employees                                       | -  | 253                | 253                                       | 36 580           | 1 309 425            | 28 101             | 59 247           | 873 278              | 2 788 603                            | 1 733 646                   | 4 501 064                          | 241 557   |
| employees<br>Establishments with 500 to 999     | -  | 27                 | 27  | D                | D                    | D                  | D                | D                    | D                                    | D                           | D                                  | D   |
| employees<br>Establishments with 1,000 to 2,499 | -  | 1                  | 1   | D                | D                    | D                  | D                | D                    | D                                    | D                           | D                                  | D   |
| employees Establishments with 2,500 employees   | -  | _                  | -   | -                | -                    | -                  | _                | =                    | -                                    | -                           | -                                  | -   |
| or more   | -  | _                  | _   | _                | -                    | _                  | _                | -                    | _                                    | -                           | -                                  | _   |
| Administrative records <sup>2</sup>             | 9  | 10 036             | _   | 32 484           | 699 255              | 26 262             | 34 294           | 475 466              | 1 241 802                            | 521 018                     | 1 763 291                          | 94 374  |

Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

2 Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

#### Table 5. Industry Statistics by Industry and Primary Product Class Specialization: 1997

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

| NAICS<br>industry or                 |                                   | All                      | All employees Production workers |                      |         | Value added      |                    |            | Total capital       |                                |           |
|--------------------------------------|-----------------------------------|--------------------------|----------------------------------|----------------------|---------|------------------|--------------------|------------|---------------------|--------------------------------|-----------|
| industry or<br>product<br>class code | Industry or primary product class | estab-<br>lish-<br>ments | Number                           | Payroll<br>(\$1,000) | Number  | Hours<br>(1,000) | Wages<br>(\$1,000) |            | materials shipments | expendi-<br>tures<br>(\$1,000) |           |
| 332710                               | Machine shops                     | 23 616                   | 290 849                          | 9 491 046            | 225 752 | 429 078          | 6 339 997          | 18 460 200 | 8 765 790           | 27 131 541                     | 1 560 204 |

#### Products Statistics: 1997 and 1992

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

|                        |   |  | 19                                      | 997      |                    |  | 19                                      | 992      |                    |
|------------------------|---|--|---|----------|--------------------|--|---|----------|--------------------|
| NAICS                  |   | Number of  |   | Product  | shipments          | Number of  |   | Product  | shipments          |
| product<br>code        | Product   | companies<br>with<br>shipments<br>of<br>\$100,000<br>or more | Quantity of production for all purposes | Quantity | Value<br>(\$1,000) | companies<br>with<br>shipments<br>of<br>\$100,000<br>or more | Quantity of production for all purposes | Quantity | Value<br>(\$1,000) |
| 332710                 | Machine shop work   | N  | х                                       | х        | 24 704 828         | N  | х                                       | х        | N                  |
| 3327100                | Receipts for machine shop job work and job order repairs                      | N  | x                                       | x        | 24 704 828         | N  | x                                       | ×        | N                  |
| 33271000               | Receipts for machine shop job work and job order repairs                      | N  | х                                       | x        | 20 824 856         | N  | x                                       | x        | N                  |
| 3327100000             | and job order repairs   | 10 502   | Х                                       | Х        | 20 824 856         | 9 364  | Х                                       | Х        | 12 483 808         |
| 3327100Y<br>3327100YWW | Receipts for machine shop job work and job order repairs, nsk, total          | N  | х                                       | x        | 3 879 972          | N  | х                                       | х        | N                  |
| 3327100YWY             | and job order repairs, nsk, for<br>nonadministrative-record<br>establishments | N  | х                                       | х        | 2 289 610          | N  | х                                       | х        | N                  |
|                        | administrative-record establishments  | N  | Х                                       | Х        | 1 590 362          | N  | Х                                       | Х        | N                  |

Note: For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: P 10 to 19 percent estimated; q 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

#### Product Class Shipments for Selected States: 1997 and 1992

[Not applicable for this report]

#### Table 7. Materials Consumed by Kind: 1997 and 1992

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

| NAICS  |   |                       | 97  | 19               | 992                                   |
|--|---|-----------------------|---|------------------|---------------------------------------|
| material<br>code   | Material consumed   | Quantity              | Delivered cost<br>(\$1,000)                         | Quantity         | Delivered cost<br>(\$1,000)           |
| 332710   | MACHINE SHOPS   |                       |   |                  |                                       |
| 33272203<br>33200097<br>33210001<br>33151001<br>33152005 | Metal bolts, nuts, screws, washers, rivets, and other screw machine products Other fabricated metal products (except forgings) Forgings Iron and steel castings (rough and semifinished) Aluminum and aluminum-base alloy castings (rough and semifinished)   | x<br>x<br>x<br>x<br>x | 222 578<br>450 718<br>124 549<br>678 992<br>200 504 | X<br>X<br>X<br>X | N N N N N N N N N N N N N N N N N N N |
| 33152003<br>33120007<br>33120017<br>33120019<br>33120091 | Other nonferrous castings (rough and semifinished) . Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . Steel sheet and strip, including tin plate . Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products) . All other steel shapes and forms (except castings, forgings, and fabricated metal products) .   | x<br>x<br>x<br>x      | 56 417<br>637 123<br>125 465<br>39 402<br>104 243   | x<br>x<br>x<br>x | N<br>N<br>N<br>N                      |
| 33142105<br>33142137<br>33131501<br>33100055<br>33100083 | Copper and copper-base alloy rod, bar, and mechanical wire, including extruded and/or drawn shapes All other copper and copper-based alloy shapes and forms (except castings, forgings, and fabricated metal products) Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) | x<br>x<br>x<br>x      | 49 106<br>26 484<br>213 275<br>138 919<br>66 878    | ×<br>×<br>×<br>× | N<br>N<br>N<br>N                      |
| 33351503<br>00190090<br>00970099<br>00971000             | Cutting tools for machine tools. Fluid power products All other materials and components, parts, containers, and supplies Materials, ingredients, containers, and supplies, n.s.k.  | X<br>X<br>X<br>X      | 302 384<br>124 173<br>724 908<br>2 103 205          | X<br>X<br>X      | N<br>N<br>N                           |

<sup>#</sup> Additional information is available for this item; see Appendix F.

Note: For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p 10 to 19 percent estimated; q 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

<sup>#</sup> Additional information is available for this item; see Appendix F.

@ Additional data are available for these codes at the aggregate U.S. level in the Current Industrial Report (CIR) series; see Appendix F for the CIR survey number and title.

\$ This product is primary to more than one industry; see Appendix F for a listing of the related product codes.

## Appendix A. Explanation of Terms

#### **BEGINNING- AND END-OF-YEAR INVENTORIES**

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

#### **Inventory Data by Stage of Fabrication**

Total inventories and three detailed components (1) finished goods, (2) work-in-process, and (3) materials, supplies, fuels, etc., were collected.

When using inventory data by stage of fabrication for "all industries" and at the three-digit subsector level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by an establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for all publication levels.

#### **COST OF MATERIALS**

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

- Cost of parts, components, containers, etc.—Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
- Cost of products bought and sold in the same condition.

- Cost of fuels consumed for heat and power—Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
- 4. Cost of purchased electricity—The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
- 5. Cost of contract work—This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term "Contract Work" refers to the fee a company pays to another company to perform a service.

#### **Specific Materials Consumed**

In addition to the total cost of materials, which every establishment was required to report, information also was collected for most manufacturing industries on the consumption of major materials used in manufacturing. The inquiries were restricted to those materials which were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. If less than \$25,000 of a listed material was consumed by an establishment, the cost data could be reported in the "Cost of all other materials...," Census material code 00970099. Also, the cost of materials for small establishments for which administrative records or short forms were used was imputed into the "Materials not specified by kind," Census materials code 00971000.

### Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive

1997 ECONOMIC CENSUS APPENDIX A A-1

stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

#### **COST OF PURCHASED SERVICES**

Annual Survey of Manufactures (ASM) establishments were requested to provide information on the cost of purchased services for the repair of buildings and other structures, the repair of machinery, communication services, legal services, accounting and bookkeeping services, advertising, software and other data processing services, and refuse removal. Each of these items reflects the costs paid directly by the establishment and excludes salaries paid to employees of the establishment for these services.

Included in the cost of purchased services for the repair of buildings and machinery are payments made for all maintenance and repair work on buildings and equipment. Payments made to other establishments of the same company and for repair and maintenance of any leased property also are included. Extensive repairs or reconstruction that was capitalized is considered capital expenditures and is, therefore, excluded from this item. Repair and maintenance costs provided by an owner as part of a rental contract or incurred directly by an establishment in using its own work force also are excluded.

Included in the cost of purchased advertising services are payments for printing, media coverage, and other advertising services and materials.

Included in the cost of purchased software and other data processing services are all purchases by the establishment from other companies. Excluded are services provided by other establishments of the same company (such as by a separate data processing unit).

Included in the cost of purchased refuse removal services are all costs of refuse removal services paid by the establishment, including costs for hazardous waste removal or treatment. Excluded are all costs included in rental payments or as capital expenditures.

#### **Response Coverage Ratio**

A response coverage ratio is a measure of the extent to which respondents report for an item. The estimate is made by calculating the ratio value of the weighted total employment data for all the ASM establishments that report the item to the weighted total employment data for all ASM establishments classified in an industry (reporters and non-reporters).

#### **DEPRECIATION CHARGES FOR FIXED ASSETS**

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

#### **EMPLOYEES**

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

#### **Production Workers**

This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

#### **All Other Employees**

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It

includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria, medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

#### FRINGE BENEFITS

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as companyoperated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

### GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable assets is collected on all census forms. It shows the value of depreciable assets for the beginning of year and end of year. The data encompass all fixed depreciable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

#### NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

#### **PAYROLL**

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by Federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

#### PRODUCT CODES AND CLASSES OF PRODUCTS

NAICS United States industries are identified by a six-digit code, in contrast to the four-digit SIC code. The longer code accommodates the large number of sectors and allows more flexibility in designing subsectors. Each

product or service is assigned a ten-digit code. The product coding structure represents an extension by the Census Bureau of the six-digit industry classifications of the manufacturing and mining sectors. The classification system operates so that the industrial coverage is progressively narrower with the successive addition of digits. This is illustrated as follows:

| NAICS level   | NAICS code | Description  |
|---------------|------------|--|
| Industry      | 33461      | Manufacturing and reproduction of magnetic and optical media             |
| U.S. industry | 334612     | Reproduction of software   |
| Product class | 3346120    | Prerecorded compact disc (except software), tape, and record reproducing |
| BLS link code | 3346120X   | _  |
| Product code  | 3346120XXX |  |

As in previous censuses, data were collected for most industries on the quantity and value of individual products shipped. In the 1997 census program, information was collected on the output of almost 10,000 individual product items.

In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products (ten-digit codes), and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits.

The list of products for which separate information was collected was prepared after consultation with industry and government representatives. Comparability with previous figures was given considerable weight in the selection of product categories so that comparable 1992 information is presented for most products.

Typically, both quantity and value of shipments information were collected. However, if quantity was not significant or could not be reported by manufacturers, only value of shipments was collected.

Shipments include both commercial shipments and transfers of products to other plants of the same company. For industries in which a considerable portion of the total shipments is transferred to other plants of the same company, separate information on interplant transfers also was collected. Moreover, for products that are used to a large degree within the same establishment as materials or components in the fabrication of other products, total production and often consumption of the item within the plant (quantity produced and consumed) was collected. Typically, the information on production also was collected for products for which there are significant differences between total production and shipments in a given year because of wide fluctuations in finished goods inventories. Other measures of output of products with long production cycles were used as appropriate and feasible.

#### PRIMARY PRODUCT CLASS CODE

This file presents selected statistics for establishments according to their degree of specialization in products primary to their industry. This field contains either the six-digit North American Industrial Classification System (NAICS) industry code corresponding to all establishments in the industry, or the seven-digit NAICS product class code for all establishments within the industry that are specialized in a particular product class. Product class specialization is determined by evaluating the ratio of the largest primary product class shipments to total product shipments (primary plus secondary, excluding miscellaneous receipts) for the establishment.

#### PRODUCTION-WORKER HOURS

This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

### QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

#### RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these companyowned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

#### RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

#### TOTAL CAPITAL EXPENDITURES (NEW AND USED)

For establishments in operation and any known plants under construction, manufacturers were asked to report their new and used expenditures for (1) permanent additions and major alterations to manufacturing establishments and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

#### **VALUE ADDED**

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning-and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those

industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

"Value added" avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

#### **VALUE OF SHIPMENTS**

This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment's value of product shipments:

- 1. Reported contract work—Receipts for work or services that a plant performed for others on their materials.
- 2. Value of resales—Sales of products brought and sold without further manufacture, processing, or assembly.
- 3. Other miscellaneous receipts—Such as repair work, installation, sales of scrap, etc.

Industry primary product value of shipments represents one of the three components of value of shipments. These components are:

- 1. Primary products value of shipments.
- 2. Secondary product value of shipments.
- 3. Total miscellaneous receipts.

Primary product shipments is used in the calculations of industry specialization ratio and industry coverage ratio. The term "Value of primary products shipments made in this industry" is used in this publication and refers to the same data.

1997 ECONOMIC CENSUS APPENDIX A A-5

### Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

#### **Specialization and Coverage Ratios**

These items are not collected on the report forms but are derived from the data shown in Table 3. An establishment is classified in a particular industry if its shipments of primary products of that industry exceed in value its shipments of the products of any other single industry.

An establishment's shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.). Specialization and coverage ratios have been developed to measure the relationship of primary product shipments to the data on shipments for the industry shown in Tables 1a through 5 and data on product shipments shown in Tables 6a and 6b.

Specialization ratio represents the ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for the establishments classified in the industry.

Coverage ratio represents the ratio of primary products shipped by the establishments classified in the industry to the total shipments of such products that are shipped by all manufacturing establishments wherever classified.

## Appendix B. NAICS Codes, Titles, and Descriptions

#### **332710 MACHINE SHOPS**

This U.S. industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

The data published with NAICS code 332710 include the following SIC industry:

3599 Industrial machinery, n.e.c. (pt)

## Appendix C. Coverage and Methodology

#### MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

 Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material "not specified by kind" (nsk) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as "All other" industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

MANUFACTURING APPENDIX C C-1

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

### INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

C-2 APPENDIX C MANUFACTURING

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SICbased U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census - Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no "resistance rules" or "frozen industries."

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry's output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

#### **ESTABLISHMENT BASIS OF REPORTING**

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

#### **DESCRIPTION OF THE ASM SURVEY SAMPLE**

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

MANUFACTURING APPENDIX C C-3

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

**Nonmail component.** The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

### DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

C-4 APPENDIX C MANUFACTURING

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

#### QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, completecoverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

### DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

### **DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS**

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

### VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

C-6 APPENDIX C MANUFACTURING

### Appendix D. Geographic Notes

Not applicable for this report.

1997 ECONOMIC CENSUS APPENDIX D D-1

### Appendix E. Metropolitan Areas

Not applicable for this report.

1997 ECONOMIC CENSUS APPENDIX E E-1

# Appendix F. Footnotes for Products Statistics and Materials Consumed by Kind

Not applicable for this report.

### Appendix G. Comparability of Product Classes and Product Codes: 1997 to 1992

| Section   Sect  | 1997 published           | 1997 collected     | 1992 published     | 1997 published | 1997 collected     | 1992 published | 1997 published                           | 1997 collected     | 1992 published     |
|---|--------------------------|--------------------|--------------------|----------------|--------------------|----------------|--|--------------------|--------------------|
| \$20011150  | 3321111                  |                    |                    |                | 3469989            |                |  |                    |                    |
| 32211111  | 3321111206               |                    |                    | 3321165361     | 3469971            |                | 3322127111                               | 3423621            | 3423621            |
| \$46,000   \$46,                       | 3321111311               |                    |                    | 3321165YWV     | 3469900            | 3469900        | 3322127116                               | 3423631            | 3423631            |
| \$22111.50   \$4600   \$322110   \$46000   \$322110   \$46000   \$322110   \$46000   \$322110   \$46000   \$322110   \$46000   \$322110   \$46000   \$322110   \$46000   \$322110   \$46000   \$322110   \$46000   \$322110   \$46000   \$322110   \$46000   \$322110   \$46000   \$322110   \$46000   \$322110   \$46000   \$322110   \$46000   \$322110   \$46000   \$322110   \$46000   \$46000   \$322110   \$46000     | 3321111YWV               |                    |                    |                | 34690 pt           | 34690 pt       | 3322127131                               | 3423681            | 3423681            |
| 2011     | 3321113                  | 34626              | 34626              |                | 3469000 pt         |                |  |                    |                    |
| \$46211   \$46216   \$46216   \$46216   \$321170   \$46606   \$46606   \$321170   \$46606   \$321170   \$46606   \$321170   \$46606   \$321170   \$46606   \$4660 | 3321113101               | 3462611            | 3462611            |                |                    | ·              | 3322127199                               | 3423698            | 3423698            |
| 3221115/W 346200 346270 32211700 340000 32211700 340000 32211700 340000 0 3221100 0 340000 0 3221100 0 3400000 0 340000 0 340000 0 340000 0 340000 0 340000 0 340000 0 3400000 0 340000 0 340000 0 340000 0 340000 0 340000 0 340000 0 3400000 0 340000 0 340000 0 340000 0 340000 0 340000 0 340000 0 3400000 0 340000 0 340000 0 340000 0 340000 0 340000 0 340000 0 3400000 0 340000 0 340000 0 340000 0 340000 0 340000 0 340000 0 3400000 0 340000 0 340000 0 340000 0 340000 0 340000 0 340000 0 3400000 0 340000 0 340000 0 340000 0 340000 0 340000 0 340000 0 3400000 0 340000 0 340000 0 340000 0 340000 0 340000 0 340000 0 3400000 0 340000 0 340000 0 340000 0 340000 0 340000 0 340000 0 3400000 0 340000 0 340000 0 340000 0 340000 0 340000 0 340000 0 3400000 0 340000 0 340000 0 340000 0 340000 0 340000 0 340000 0 3400000 0 340000 0 340000 0 340000 0 340000 0 340000 0 340000 0 34000  | 3321113111               |                    | 3462616            | ·              | ·                  | ·              |  |                    |                    |
| 30211   10   34077   34070   34070   34070   34070   34070   34071  | 3321113YWV               | 3462600            | 3462600            | 3321170106     | 3499633            |                | 3322127YWV pt                            | 3524100 pt         | 3524100 pt         |
| 30211100   346276   346276   3321110461   346911   346911   346916   3321129   346928   346  |                          |                    |                    | 3321170211     | 3499655            |                |  | •                  |                    |
| Section   Sect  | 3321115106               | 3462716            |                    | 3321170401     | 3499611            |                |  | 35455              | 35455              |
| 322111700   | 3321115YWV               | 3462700            | 3462700            |                |                    |                | 3322129 pt                               |                    |                    |
| 3221117/06. 3462616 3462616 32211170/WY 5499002 pt 3422116 3422116 3422116 342666 342666 34221170/WY 346000 3460000 332211 pt 32211 pt 322  | 3321117                  |                    |                    | 3321170YWW pt  | 3499000 pt         | 3499000 pt     | 3322129106                               | 3545513            | 3545513            |
| 32211 W 34620 346200 332211 M 3421 33221313 345656 354656 35211 M 3421 M 3422 M 34  | 3321117106               |                    |                    |                |                    |                | 3322129111                               | 3545515<br>3545517 |                    |
| 3221119/WWW 3462000 3462000 3462000 3462000 3462000 3462000 3462000 3462000 3462000 3462000 3462000 3462000 3462000 3462000 3462  |                          | 3462800            | 3462800            |                | ·                  | ·              | 3322129121                               | 3545521            | 3545521            |
| 322111/10 346307 34630 346307 3221110 33446 33447 1 3221204   | 332111W                  |                    |                    | ·              |                    |                | 3322129126                               | 3545565            |                    |
| 3321121   34650   34650   34650   3421110   342444   34470   1 32212024   34650   3465  | 332111WYWY               |                    |                    | 3322111 pt     | 39141 pt           | 39141 pt       | 3322129146                               | 3545577            | 3545577            |
| 33211101  | 3321121                  |                    |                    | 3322111 pt     | 39142 pt           |                | 3322129236                               | 3545571            | 3545571            |
| 323112311   | 3321121101               |                    |                    | 3322111103     | 3914245            | 3914270 pt     | 3322129341                               |                    |                    |
| 3321127WW 3465500 346550 346550 33221137W 342155 34211  | 3321121311               | 3463525            | 3463525            |                | 3914155            | 3914170 pt     | 3322129YWV pt                            | 3545500            | 3545500            |
| 3221122.  | 3321121316<br>3321121YWV |                    |                    | 3322111222     | 3421130            | 3421130        |  | •                  |                    |
| 322112010   |                          |                    |                    | 3322111331     | 3421153<br>3421155 |                | 332212W pt                               |                    |                    |
| 3221129/11 3463936 346390 3322111WV p 34100 p 342110 342110 342120 342120 p 35450 p 35450 p 35450 p 35450 p 35450 p 36450 p 36  | 3321122101               | 3463915            | 3463915            | 3322111336     | 3421157            | 3421157        | 332212W pt                               | 35230 pt           | 35230 pt           |
| 322112WW 346300 346300 322111WW pt 342100 32212W pt 36900 pt 36900 pt 32212WW 346300 332211WW 346300 332211WW 346300 332211WW 346300 332211WW 346300 332211WW 346300 346300 332211WW 346300 346300 332211WW 346300 346300 346300 332211W 3462105 342205 332212W pt 37900 pt 37900 pt 322140 pt 3460 pt 3460 pt 3460 pt 3460 pt 322110 pt 3460   |                          |                    |                    | 3322111455     | 3421180            | 3421180        | 332212W pt                               | 35240 pt           | 35240 pt           |
| 3321140/WWY 3463002 3463002 3322113101 3421205 3421205 332212W pt. 37990 pt 37990 pt 3321140 pt. 3463002 34213010 3421210 3421  |                          |                    |                    | 3322111YWV pt  |                    |                | 332212W pt                               | 35450 pt           | 35450 pt           |
| 3321140 pt. 34480 pt. 343202 332213101 342126 3421210 332212W pt. 37990 pt. 39990 pt. 332140 pt. 34480 pt. 3421310 3421216 3421216 3421210 332213W pt. 37990 pt. 39990 pt. 332140 pt. 342100 3421200 3421200 3421200 342200  | 332112W                  |                    |                    | ·              |                    | ·              | 332212W pt                               | 36990 pt           | 36990 pt           |
| 3221140 P. 34490 pt 332213116 3421216 3421216 332212W 39800 pt 39800 pt 30800 pt 3214001 344811 344811 34211401 3421216 3421216 332212W pt 39800 pt 30800 pt 3214001 34481  |                          |                    | 3463000<br>3463002 |                |                    |                |  | ·                  |                    |
| 3221140 pt. 34498   34498   3322113 Wpt. 342100   342100   332212 WWW pt. 3423000   3423000 pt. 33231400206   3449813   3449813   3449813   3449813   3449813   3449813   3449815   3449815   3449815   3449815   3449815   3449815   3449815   3449815   3449815   3449815   3449815   3449816   33221 Wpt. 39140 pt. 39140 pt. 33221 WWW pt. 3524000  |                          |                    |                    | 3322113106     | 3421210            | 3421210        |  | ·                  |                    |
| 3321140010 3448811 3448811 34211  | 3321140 pt               | 34498              | 34498              | 3322113YWV     | 3421200            |                | 332212WYWW pt                            |                    |                    |
| 3321140/46  | 3321140101               | 3449811            | 3449811            | 332211W pt     | 34210              | 34210          | 332212VV Y VV VV pt                      | 3523000 pt         |                    |
| 3321140/46  | 3321140311               | 3449815            |                    | 332211W pt     | 39140 pt           | 39140 pt       | 332212WYWW pt                            | 3545000 pt         | 3545000 pt         |
| 3321140/WW pt 344900  |                          |                    |                    | 332211WYWW pt  | 3421000            | 3421000        | 1 332212WYWW pt                          | 3699000 pt         |                    |
| 321150 pt. 34660 34660 332212 pt. 34231 34231 332212WV pt 3524002 pt 3524002 pt 321150 pt. 34661 34661 332212V pt. 39990 pt 39990 pt 332212WV pt 3524002 pt 3624002 pt 321150 pt. 346610 34661 332212 pt. 39990 pt 39990 pt 332212WV pt 3799002 pt 3699002 pt 321150 pt. 346610 346610 346610 346610 346610 346610 346610 346610 346610 346610 346610 346610 346620 pt 3466200 pt 3466000 346600  | 3321140YWW pt            | 3449800            | 3449800            | 332211WYWY pt  | 3421002            |                | 1 332212\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | 3999000 pt         | 3999000 pt         |
| 3321150 pt. 34661 34661 34661 322121 pt. 34231 34231 332212W/WY pt 3542002 pt. 3545002 pt. 3545002 pt. 3321150 pt. 34661 34661 322121 pt. 3999 pt. 3321150 pt. 34661 34661 34261 322121 pt. 34231 32212W/WY pt. 3545002 pt. 3545002 pt. 3321150 pt. 3466105 3466105 3466105 322121206 34231 342311 332212W/WY pt. 3799002 pt. 3799002 pt. 3221150 pt. 3466105 3466105 342600 pt. 3466105 322121206 342311 342311 332212W/WY pt. 399902 pt. 3999002 pt. 3221150103 pt. 3466200 pt. 3466230 3322121361 3423141 3423141 3322130 34250 34250 3321150103 pt. 3466200 pt. 3466230 3322121361 342315 3423141 3322130 34250 342501 342511 3423115 pt. 342511 342315 3423  |                          | ·                  | ·                  | 332211WYWY pt  | 3914002 pt         | 3914002 pt     | 1 332212WYWY nt                          | 3523002 pt         |                    |
| 3321150 pt. 34662 34662 332212101 342311 33221133 332212WWY pt. 3699002 pt. 3799002 pt. 37  | ·                        |                    |                    | 3322121 pt     | 34231              | 34231          | 332212WYWY pt                            | 3524002 pt         |                    |
| 3321150101 3466105 3466105 3466200 pt 3466230 3322121351 3423121 3221301 3221301 342501 342501 3425010 342501 3425010 pt 3466200 pt 3466230 3322121355 3423141 3423141 32213010 3425011 3425011 3425016 3426100 pt 3466200 pt 3466230 3322121356 3423151 3423151 332213010 3425011 3425013 322113010 3425010 3425013 322113010 3425010  | ·                        |                    |                    |                | 39999 pt           |                | 332212WYWY pt                            | 3699002 pt         | 3699002 pt         |
| 3321150103 pt   | 3321150 pt               |                    |                    |                | 3423112            |                | 332212WYWY pt                            | 3799002 pt         |                    |
| 3321150103 pt 3466200 pt 3466123 pt 3466120 3322121366 3423155 3423155 3423150 32213010 3425013 3425013 3321150106 pt 3466123 pt 3466120 3322121365 399971 399999 pt 322130111 3425016 3425018 322150106 pt 3466123 pt 3466100 3466000 3322121396 399971 399999 pt 322130111 3425016 3425018 32215019 pt 3466100 3466000 3466000 332212146 342313 342313 322130122 3425019 3425019 32215097W pt 3466000 3466000 332212146 342313 342313 332130122 3425019 3425019 32215097W pt 3466002 332214146 342313 342313 3322130122 3425019 3425031 332115097W pt 3466002 332214142 3423133 3423131 3322130122 3425019 3425031 332116101 346921 346921 346921 346921 3322121426 3423136 3423136 3322130231 3425035 3425035 3425035 332116110 3469201 3469201 3322121421 3423137 3423137 3322130231 3425035 3425036 332116115 346921 346921 3322121444 3423139 3423137 3322130244 3425039 3425039 332116115 346921 346921 346921 3322121444 3423139 342313 3322130255 3425041 342  | 3321150103 pt            | 3466200 pt         | 3466200            | 3322121311     | 3423121            | 3423121        |  | •                  |                    |
| 3321150106 pt 3466123 pt 3466122 pt 3466122 3322121361 3423155 3399971 399999 pt 3322130111 3425016 3425016 3321150VW pt 3466000 3466000 3322121399 3423197 3423197 332213011 3425016 3425018 3321150VW pt 3466000 3466000 3322121399 3423197 3423131 3423131 322130026 3425013 3425013 3321150VW pt 3466000 3466000 3322121416 3423131 3423131 3322130026 3425035 3425035 3321150VW pt 3466000 3466000 3322121416 3423131 3423131 3322130026 3425035 3425035 3321150VW pt 3466000 3466000 3322121416 3423136 3423136 3422136 3422136 3425035   |                          |                    |                    |                | 3423141            |                | 3322130101                               | 3425011            | 3425011            |
| 3321150YWW pt 3466100   | 3321150106 pt            | 3466123 pt         | 3466120            | 3322121361     | 3423155            | 3423155        |  |                    | 3425013<br>3425016 |
| 3321150YWP 3466000 3466002 3322121416 3423131 3423131 3322130225 3425031 3425031 3321150YWP 3466002 3466020 34  | 3321150YWW pt            | 3466000            | 3466000            | 3322121399     | 3423197            | 3423197        | 3322130116                               | 3425018            | 3425018            |
| 3321161. 34692. 34692. 3322121426. 3423136. 3423136. 3322130231. 3425036. 3425036. 332161101. 3469201. 3469201. 3322121431. 3423137. 3423137. 3322130244. 3425039. 3425039. 332161115. 3469215. 3469205. 3469205. 3322121443. 3423139. 3423138. 3322130244. 3425039. 3425034. 332161311. 3469211. 3469211. 33221217444. 3423139. 3423139. 3322130365. 3425041. 332161311. 3469231. 3469231. 33221217444. 3423139. 3423100. 3423100. 3322130361. 3425043. 3425043. 332161331. 3469252. 3469252. 3469252. 3469252. 3469252. 3469252. 3469253. 33221217444. 3423139. 3423100. 3322130365. 3452645. 3425045. 332161352. 3469253. 3469253. 3469253. 33221237444. 3423149. 3423149. 33221303065. 3425045. 3425045. 332161354. 3469253. 3469253. 3469253. 33221237444. 3423149. 342344. 33221307444. 3425000. 3425000. 332161388. 3469288. 3469288. 3469288. 3469288. 3469288. 332212374. 3469240. 3469240. 3469240. 3469240. 3469240. 3469240. 3469240. 3469240. 3469240. 3469240. 3469240. 3469240. 3469240. 3469240. 3469240. 3469240. 3469241. 3322123110. 3423444. 3423444. 3423444. 332214111. 3469441. 3469411. 3469411. 3321161561. 3469261. 3469261. 3322123744. 3423498. 3423498. 3423498. 3322141231. 3469417. 3469417. 3469417. 3469241. 3322123744. 3469260. 3469926. 3469926. 3469926. 3469926. 3469926. 3469926. 3469926. 3469926. 3469926. 3469926.  | 3321150YWW pt            |                    |                    |                | 3423131            |                | 3322130226                               | 3425031            | 3425031            |
| 3321161101  |                          |                    |                    |                |                    |                | 3322130231                               | 3425035            | 3425035            |
| 3321161321 3469205 3469205 3469205 33221214W4 3423139 3423109 3322130361 3425043 3425043 3321161331 3469231 3469231 3322121YWV pt 3423100 3423100 3322130365 3425045 3425045 3321161352 3469252 3469252 3469252 3469253 3469253 3469261 3322121YW pt 342310 342344 34234 3322130377 3425000 3425000 3321161364 346928 3469288 3469288 3469288 3469288 3469288 3469289 346920 3322123101 3423414 3423414 3423414 3423414 3429411 346941 346941 3322123101 3423444 342344 332214111 346941 346941 3321161525 346925 3469261 3322123121 3423444 3423444 332214121 3469414 3469414 3469414 346941 3321161525 3469261 3469261 3322123121 3423444 3423444 332214121 3469414 3469417 3321161561 3469261 3469261 3469261 3469271 3423400 3423400 3423400 3322141241 3469429 3469400 3321161584 3469284 3469284 3469280 346920 342930 342930 3321161584 3469261 3469261 3469261 3469261 3469271 3469271 3423409 3423400 3423400 3423400 3423400 332214111 3469400 3321161561 3469261 3469261 3469261 3469271 3469270 3423400 34  | 3321161101               | 3469201            | 3469201            | 3322121431     | 3423137            | 3423137        | 3322130244                               | 3425039            | 3425039            |
| 3321161331 3469211 3469213 3469252 3469252 3469252 3469252 322121YWV pt 399990 pt 3999900 pt 3322130365 3425043 3425045 3425045 3321161352 3469252 3469252 3469253 3322137 3425049 3425000 3425000 3321161388 3469288 3469288 3469288 3469288 3322137 pt 3523E pt 3523E pt 3521161398 3469298 3469298 3322133161 3423414 3423414 3423414 3422111 346941 3469411 3469411 3469411 3469411 3322123110 3423444 342344 342344 332214111 3469411 3469411 3321161525 3469225 3469225 3322123121 342348 342348 332214121 3469417 3469417 3321161525 3469225 3469225 3322123121 342348 342348 342348 332214121 3469417 3469417 3321161521 3469271 3469271 3469271 3469271 3423400 3423400 3423400 33221417WV 3469400 3469400 3469400 3321161510 346920 3469200 3469200 3322125101 3423511 3423511 3423511 3423511 3423512 342351 3469507 3469507 3469507 3469507 3321165101 3469941 3469941 3423521 342351 342351 332214321 3469509 3469509 3321165101 3469941 3469941 3322125101 3423511 3423511 3423512 332214321 3469509 3469509 332116521 3469948 3469948 3322125101 3423511 3423521 342352 332214321 3469509 3469509 332116521 3469948 3469948 3322125104 342352 342351 332214321 3469509 3469509 332116521 3469948 3469948 33221251WV 3423500 3423500 332214321 3469599 pt 3469527 332116521 3469948 3469948 3322125510 3423521 3423521 3423521 332214321 3469599 pt 3469527 3321165231 3469948 3469948 3322125510 3423521 3423521 3423521 3322143241 3469599 pt 3469527 3321165231 3469948 3469948 3322125510 3423521 3423521 3423521 3322143241 3469599 pt 3469527 3321165231 3469948 3469948 3322125510 3423521 3423521 3423521 33221437WV 3469000 pt 3469000 pt  | 3321161205               | 3469215<br>3469205 |                    |                |                    |                |  |                    |                    |
| 3321161352   3469252   3469252   3469252   3469252   3469253   3469253   3469288   3469288   3469288   3469288   3469288   3469298   3322139t   342341   3423414   3423414   3469411   3469411   3469414   332213111   342344   342344   332214311   3469411   3469414   3321161561   346925   346925   346925   346925   346925   346925   346925   346925   346926   332212310   342344   342344   332214111   3469411   3469414   3321161561   346921   346941   332212316   3523880   346928   332212310   3423498   3423498   332214311   3469417   3469417   3469417   3469417   3469417   3469417   3469417   3469417   3469417   3469417   3469417   3469418   3469418   3469418   3469419   3469419   3469419   3469400   3423400   3423400   3423400   3322141241   3469400   3469400   3321161561   346928   346928   332212310   346920   346920   3321161574   3469241   332212316   3523880   3523800 pt   369500  | 3321161311               | 3469211            | 3469211            | 3322121YWV pt  | 3423100            | 3423100        |  |                    |                    |
| 3321161354  | 3321161352               | 3469252            | 3469252            |                |                    | ·              | 3322130377                               | 3425049            | 3425049            |
| 3321161398   3469298   3469208   3469208   3322123 pt. 3523E pt. 3523E pt. 3321161421   346920   3469220   3469220   3322123101   3423414   3423414   3423414   3322141111   3469411   3469411   3469411   3322123106   3423433   3423433   3322141111   3469411   3469411   3469411   3322123111   3423444   3423444   332214211   3469414   3469414   3469417   332116525   3469225   3322123111   3423444   3423444   332214211   3469414   3469417   3321161525   3469261   3469261   3322123216   3523E80   3523E00 pt   3322141241   3469429   3469429   3321161571   3469271   3469271   3322123YW pt   3423400   3423400   3322141241   3469429   3469429   3321161571   3469200   3469200   3469200   33221253101   3423510   3423510   3322143211   3469507   3469507   3321163   34696   34696   346960   3322125101   3423511   3423511   3423511   3322143211   3469509   3469509   3321165101   3469941   3469941   3322125316   342352   342352   3322143211   3469557   3469524   332116521   3469948   3469948   3322125313   3423521   342351   3423521   3322143241   3469559 pt   3469527   332116521   3469948   3469948   3322125333   342351   342350   342350   3322143241 pt   3469509 pt   3469507   332116521   3469951   3469959 pt   3469527   332116521   3469951   3469951   3469950   3322125313   3423521   342351   342351   3322143241 pt   3469525 pt   3469527   332116521   3469948   3469948   3322125333   3423521   342351   342351   3322143241 pt   3469509 pt   3469507   332116521   3469951   3469959 pt   3469508   332116521   3469951   3469951   3469950   3469500   3321165241   3469961   3469969   3469969   332212579W   342360   342360   3322143241 pt   3469500   3469000 pt   3321165241   3469969   3469969   332212579W   342360   342360   332214W   3469000 pt  | 3321161354               | 3469253            | 3469253            | 3322123 pt     | 34234              | 34234          | 3322130YWW<br>3322130YWY                 |                    |                    |
| 3321161441 3469241 3469241 3469241 3423444 3423444 3423444 3322143211 3469414 3469414 3469417 3321161525 3469255 3469225 3322123121 3423498 3423498 3322141231 3469417 3469417 3469417 3321161561 3469261 3469261 3322123216 3523E80 3523E00 pt 3322141241 3469429 3469429 3469429 3321161584 3469271 3469271 3423400 3423400 322143241 3469400 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469501 3469941 3469941 3469941 3469948 3469948 3469948 3469948 3469948 3469948 3469948 3469948 3469948 3469948 3469948 3469959 3469950 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469950 3469950 3469950 3469950 3469960 3469960 3469960 33221257 pt. 34236 34236 34236 34236 34236 34236 34236 34236 34236 342360 3  | 3321161398               | 3469298            | 3469298            |                | 3523E pt           |                |  |                    |                    |
| 3321161441 3469241 3469241 3469241 3423444 3423444 3423444 3322143211 3469414 3469414 3469417 3321161525 3469255 3469225 3322123121 3423498 3423498 3322141231 3469417 3469417 3469417 3321161561 3469261 3469261 3322123216 3523E80 3523E00 pt 3322141241 3469429 3469429 3469429 3321161584 3469271 3469271 3423400 3423400 322143241 3469400 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469501 3469941 3469941 3469941 3469948 3469948 3469948 3469948 3469948 3469948 3469948 3469948 3469948 3469948 3469948 3469959 3469950 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469500 3469950 3469950 3469950 3469950 3469960 3469960 3469960 33221257 pt. 34236 34236 34236 34236 34236 34236 34236 34236 34236 342360 3  |                          |                    |                    | 3322123106     | 3423433            | 3423433        | 3322141111                               | 3469411            | 3469411            |
| 3321161561 3469261 3469261 3322123216 3523E80 3523E00 pt 3322141241 3469429 3469429 3321161571 3469271 3469271 33221237WV pt 3423400 3423400 33221417WV 3469400 3469400 3321161584 3469284 3469284 33221237WV pt 3523E00 pt 3522E00 pt   | 3321161441<br>3321161525 | 3469241            |                    | 3322123111     | 3423444            | 3423444        | 3322141221                               | 3469414            |                    |
| 3321161584 3469284 3469284 3469284 3322123YWV pt. 3523E00 pt. 3523E00 pt. 33221433  | 3321161561               | 3469261            | 3469261            | 3322123216     | 3523E80            | 3523E00 pt     | 3322141241                               | 3469429            | 3469429            |
| 3321163. 34696 34696 3322125101 342351 342351 3322143221 3469509 3469509 3321163100 3469600 3469600 322125206 3423512 3423512 3322143221 3469515 3469515 322125311 3423521 3423512 3322143221 3469515 3469521 3321165. 34699 34699 3322125311 3423521 3423521 3322143231 pt 3469525 pt 3469521 3321165101 3469941 3469941 3322125316 3423522 3423522 3423522 3322143231 pt 3469525 pt 3469524 3321165211 3469948 3469941 3322125321 342351 3423521 3423521 3322143231 pt 3469525 pt 3469527 3321165221 3469948 3469948 3322125331 3423531 3423531 3322143241 pt 3469599 pt 3469597 3321165221 3469951 3469959 3469969 3322125321 3423500 3423500 3322143241 pt 3469500 3469500 3321165231 3469961 3469969 33221257 pt 34236 34236 34236 332214W. 346900 pt 3469000 pt   | 3321161584               | 3469284            |                    | 3322123YWV pt  | 3423400            |                |  |                    |                    |
| 3321163.1 34696 34696 34696 346960 346960 3322125101 3423511 3423511 3322143211 3469509 3469509 3321163100 3469600 3469600 3322125206 3423512 3423512 3322143221 3423515 3469515 3469515 3469515 3322125311 3423521 3423521 3322143231 pt 3469525 pt 3469521 3321165101 3469941 3469941 3322125316 3423522 3423522 3322143231 pt 3469525 pt 3469524 3321165211 3469948 3469948 3322125313 3423531 3423531 3423531 3322143241 pt 3469599 pt 3469527 332116521 3469951 3469951 342351 342351 342351 342351 3322143241 pt 3469599 pt 3469598 332116521 3469951 3469959 3469959 3469959 3469959 3321165241 3469961 3469961 3469969 3469969 33221257 pt 34236 34236 34236 342360 3469960 pt 3469000 pt  | 3321161YWV               | 3469200            |                    | ·              | ·                  | •              | 3322143101                               | 34695              |                    |
| 3321165 34699 34699 34699 34699 346994 3469941 3469941 3469948 3469948 3469948 3469959 3469959 3469959 3321165221 3469959 3469959 3469959 3469959 3469959 3469959 346959 3   |                          | 34696              |                    | 3322125101     | 3423511            | 3423511        | 3322143211                               | 3469509            | 3469509            |
| 3321165         34699         34699         346994         3469523         3423522         3322143231 pt         3469525 pt         3469524           3321165010         3469941         3469941         3322125321         3423531         3423531         3322143241 pt         3469599 pt         3469527           332116521         3469951         3469951         3322125333         3423541         3423541         3322143241 pt         3469599 pt         3469598           3321165231         3469959         3469959         3469959         3469950         3469960         3469961         3469961         3469969         3469969         346990         34236         332214W         346900 pt         346900 pt         346900 pt           3321165251         3469969         3469900 pt         3469000 pt         3469000 pt         3469000 pt   |                          |                    |                    | 3322125206     | 3423512            |                | 3322143231 pt                            | 3469525 pt         |                    |
| 332116521   | 3321165                  |                    |                    | 3322125316     | 3423522            | 3423522        | 3322143231 pt                            | 3469525 pt         | 3469524            |
| 3321165221 3469951 3469951 3469951 3469959 3469500 3423500 342  | 3321165211               | 3469948            | 3469948            | 3322125333     | 3423541            | 3423541        | 3322143241 pt                            | 3469599 pt         | 3469598            |
| 3321165241 3469961 3469969 3321127 pt 34236 34236 332214W 34690 pt 346900 pt 3469000 pt   | 3321165231               |                    |                    | 3322125YWV     |                    |                | 3322143YWV                               | 3469500            |                    |
| 3321165271 3469985 3469985 3322127 pt 35241 pt 332214WYWY 3469002 pt 3469002 pt   | 3321165241               | 3469961            | 3469961            | 3322127 pt     | 34236              | 34236          | 332214W                                  |                    |                    |
|   |                          |                    |                    | 3322127 pt     | 35241 pt           | 35241 pt       | 332214WYWY                               |                    |                    |

| 1997 published                                  | 1997 collected                      | 1992 published                      | 1997 published                                  | 1997 collected                      | 1992 published                      | 1997 published                                       | 1997 collected                         | 1992 published                      |
|---|-------------------------------------|-------------------------------------|---|-------------------------------------|-------------------------------------|--|--|-------------------------------------|
| 3323111<br>3323111106                           | 34481<br>3448117                    | 34481<br>3448117                    | 3323213251<br>3323213306                        | 3442298<br>3442221                  | 3442298<br>3442221                  | 3323233YWV pt<br>3323233YWV pt                       | 3446200<br>3449600                     | 3446200<br>3449600                  |
| 3323111111<br>3323111201<br>3323111YWV          | 3448118<br>3448115<br>3448100       | 3448118<br>3448115<br>3448100       | 3323213YWV<br>3323215 pt                        | 3442200<br>24991 pt                 | 3442200<br>24991 pt                 | 3323235<br>3323235101                                | 34463                                  | 34463<br>3446310                    |
| 3323113<br>3323113101                           | 34482<br>3448211                    | 34482<br>3448211                    | 3323215 pt                                      | 34423<br>34497                      | 34423<br>34497                      | 3323235106<br>3323235211<br>3323235216<br>3323235YWV | 3446312<br>3446320<br>3446322          | 3446312<br>3446320<br>3446322       |
| 3323113106<br>3323113111<br>3323113216          | 3448214<br>3448215<br>3448216       | 3448214<br>3448215<br>3448216       | 3323215101 pt<br>3323215101 pt                  | 3442321<br>3449773                  | 3442321<br>3449773                  | 3323237  | 3446300<br>34464                       | 3446300<br>34464                    |
| 3323113221<br>3323113226                        | 3448217<br>3448218                  | 3448217<br>3448218                  | 3323215106 pt<br>3323215106 pt<br>3323215106 pt | 2499141<br>3442325<br>3449775       | 2499141<br>3442325<br>3449775       | 3323237101<br>3323237106<br>3323237111               | 3446410<br>3446413<br>3446416          | 3446410<br>3446413<br>3446416       |
| 3323113231<br>3323113236<br>3323113241          | 3448226<br>3448227<br>3448254       | 3448226<br>3448227<br>3448254       | 3323215111 pt<br>3323215111 pt<br>3323215YWV pt | 3442351                             | 3442351<br>3449779<br>2499100 pt    | 3323237116<br>3323237YWV                             | 3446418<br>3446400                     | 3446418<br>3446400                  |
| 3323113YWV<br>332311W                           | 3448200                             | 3448200<br>34480                    | 3323215YWV pt<br>3323215YWV pt                  | 3442300                             | 3442300<br>3449700                  | 3323239 pt   | 34465                                  | 34465<br>3523E pt                   |
| 332311WYWW                                      | 3448000<br>3448002                  | 3448000<br>3448002                  | 3323217   | 34424                               | 34424<br>3442411                    | 3323239106<br>3323239111                             | 3446512<br>3446530                     | 3446512<br>3446530                  |
| 3323121 pt                                      | 34411                               | 34494                               | 3323217106<br>3323217111<br>3323217YWV          | 3442412<br>3442413<br>3442400       | 3442412<br>3442413<br>3442400       | 3323239201<br>3323239311<br>3323239YWV pt            | 3446510<br>3523E84<br>3446500          | 3446510<br>3523E00 pt<br>3446500    |
| 3323121101 pt<br>3323121101 pt<br>3323121206 pt | 3441141                             | 3441141<br>3449443<br>3441142       | 3323219<br>3323219101                           | 34425<br>3442511                    | 34425<br>3442511                    | 3323239YWV pt<br>332323W pt                          | 3523E00 pt                             | 3523E00 pt<br>34460                 |
| 3323121206 pt<br>3323121211 pt                  | 3449447<br>3441143                  | 3449447<br>3441143                  | 3323219106<br>3323219111<br>3323219YWV          | 3442512<br>3442551<br>3442500       | 3442512<br>3442551<br>3442500       | 332323W pt   | 34490 pt                               | 34490 pt                            |
| 3323121211 pt<br>3323121216<br>3323121221       | 3449452<br>3441144<br>3441146       | 3449452<br>3441144<br>3441146       | 332321W pt                                      | 24990 pt                            | 24990 pt                            | 332323W pt<br>332323WYWW pt<br>332323WYWW pt         | 35230 pt<br>3446000<br>3449000 pt      | 35230 pt<br>3446000<br>3449000 pt   |
| 3323121226<br>3323121231<br>3323121YWV pt       | 3441147<br>3441171<br>3441100       | 3441147<br>3441171<br>3441100       | 332321W pt                                      | 34420                               | 34420<br>34490 pt                   | 332323WYWW pt<br>332323WYWY pt<br>332323WYWY pt      | 3523000 pt                             | 3523000 pt<br>3446002<br>3449002 pt |
| 3323121YWV pt                                   | 3449400<br>34412                    | 3449400<br>34412                    | 332321WYWW pt<br>332321WYWW pt<br>332321WYWW pt | 2499000 pt<br>3442000<br>3449000 pt | 2499000 pt<br>3442000<br>3449000 pt | 332323WYWY pt  | 3523002 pt                             | 3523002 pt<br>34431                 |
| 3323123100<br>3323125                           | 3441200<br>34413                    | 3441200<br>34413                    | 332321WYWY pt<br>332321WYWY pt<br>332321WYWY pt | 2499002 pt<br>3442002<br>3449002 pt | 2499002 pt<br>3442002<br>3449002 pt | 3324101101<br>3324101206                             | 3443113<br>3443118<br>3443155          | 3443113<br>3443118<br>3443155       |
| 3323125106<br>3323125111<br>3323125116          | 3441320<br>3441323                  | 3441320<br>3441323<br>3441326       | 3323221<br>3323221101                           | 34441                               | 34441<br>3444121                    | 3324101311<br>3324101YWV<br>3324105                  | 3443100                                | 3443100<br>34433                    |
| 3323125121<br>3323125126<br>3323125131          | 3441329<br>3441359                  | 3441329<br>3441359<br>3441384       | 3323221106<br>3323221211                        | 3444123<br>3444127                  | 3444123<br>3444127                  | 3324105101<br>3324105106 pt                          | 3443308                                | 3443308<br>3443310                  |
| 3323125136<br>3323125201                        | 3441384<br>3441398<br>3441316       | 3441398<br>3441316                  | 3323221216<br>3323221YWV                        |                                     | 3444129<br>3444100                  | 3324105106 pt<br>3324105111 pt<br>3324105111 pt      | 3443331 pt<br>3443332 pt<br>3443332 pt | 3443315<br>3443324                  |
| 3323125YWV<br>332312W pt                        |                                     | 3441300<br>34410                    | 3323223<br>3323223101<br>3323223106             | 34442                               | 34442<br>3444213<br>3444215         | 3324105126 pt<br>3324105126 pt<br>3324105131 pt      | 3443333 pt                             | 3443326<br>3443330<br>3443328       |
| 332312W pt                                      | 34490 pt<br>3441000                 | 34490 pt<br>3441000                 | 3323223111<br>3323223YWV                        | 3444219<br>3444200                  | 3444219<br>3444200                  | 3324105131 pt<br>3324105146                          | 3443336 pt                             | 3443334                             |
| 332312WYWW pt<br>332312WYWY pt<br>332312WYWY pt | 3449000 pt<br>3441002<br>3449002 pt | 3449000 pt<br>3441002<br>3449002 pt | 3323227<br>3323227101<br>3323227206             | 3444411<br>3444417                  | 34444<br>3444411<br>3444417         | 3324105151 pt<br>3324105151 pt<br>3324105161 pt      | 3443342 pt<br>3443342 pt<br>3443343 pt |                                     |
| 3323130 pt                                      | 34430 pt                            | 34430 pt<br>34432 pt                | 3323227211<br>3323227216<br>3323227221          | 3444423<br>3444429<br>3444431       | 3444423<br>3444429<br>3444431       | 3324105161 pt<br>3324105171 pt                       | 3443343 pt                             | 3443344<br>3443346                  |
| 3323130 pt<br>3323130111<br>3323130116          | 3443244<br>3443246                  | 3443244<br>3443246                  | 3323227YWV                                      | 3444400                             | 3444400<br>34445                    | 3324105171 pt<br>3324105181<br>3324105186            | 3443345 pt<br>3443348<br>3443351       | 3443348<br>3443351                  |
| 3323130121<br>3323130226<br>3323130231          | 3443248<br>3443252<br>3443254       | 3443248<br>3443252<br>3443254       | 3323229106<br>3323229111<br>3323229116          | 3444516<br>3444517<br>3444518       | 3444516<br>3444517<br>3444518       | 3324105291<br>3324105YWV                             | 3443352<br>3443300<br>34430 pt         | 3443352<br>3443300<br>34430 pt      |
| 3323130236<br>3323130301<br>3323130346          | 3443256<br>3443221<br>3443299       | 3443256<br>3443221<br>3443298 pt    | 3323229121<br>3323229201<br>3323229YWV          | 3444519<br>3444505<br>3444500       | 3444519<br>3444505<br>3444500       | 332410W  | 3443000 pt<br>3443002 pt               | 3443000 pt<br>3443002 pt            |
| 3323130406<br>3323130YWW pt<br>3323130YWW pt    | 3443236<br>3443000 pt<br>3443200    |                                     | 332322A<br>332322A101                           | 34447                               | 34447                               | 3324207<br>3324207101                                | 34434                                  | 3443414                             |
| 3323130YWY<br>3323211                           |                                     | 3443002 pt<br>34421                 | 332322A106<br>332322A111<br>332322A116          | 3444725<br>3444731                  | 3444725<br>3444731<br>3444741       | 3324207106<br>3324207YWV<br>3324209                  | 3443416<br>3443400<br>34435            | 3443416<br>3443400<br>34435         |
| 3323211110<br>3323211113<br>3323211116          | 3442111                             | 3442111<br>3442116                  | 332322AT10<br>332322AYWV                        | 3444741<br>3444700<br>34448         | 3444700<br>34448                    | 3324209101<br>3324209106                             | 3443520<br>3443535                     | 3443520<br>3443535                  |
| 3323211119<br>3323211201                        | 3442121<br>3442105                  | 3442121<br>3442105                  | 332322C101<br>332322C206<br>332322C311          | 3444811<br>3444813                  | 3444811<br>3444813<br>3444819       | 3324209111<br>3324209YWV                             | 3443542<br>3443500                     | 3443500                             |
| 3323211204<br>3323211207<br>3323211222          | 3442109<br>3442122                  | 3442109<br>3442122                  | 332322CYWV<br>332322E                           | 3444819<br>3444800<br>34449         | 3444800<br>34449                    | 332420A<br>332420A100                                | 34436<br>3443600                       |                                     |
| 3323211225<br>3323211328                        | 3442124                             | 3442124                             | 332322E101<br>332322E106                        | 3444931<br>3444941                  | 3444931<br>3444941                  | 332420C<br>332420C101<br>332420C106                  | 34437<br>3443712<br>3443715            | 34437<br>3443712<br>3443715         |
| 3323211331<br>3323211334<br>3323211440          | 3442125<br>3442126<br>3442128       | 3442125<br>3442126<br>3442128       | 332322E211<br>332322E321<br>332322E326          | 3444953<br>3444955<br>3444962       | 3444953<br>3444955<br>3444962       | 332420C111<br>332420C116<br>332420C121               | 3443717<br>3443719<br>3443748          | 3443717<br>3443719<br>3443748       |
| 3323211443<br>3323211446<br>3323211549          | 3442130<br>3442131<br>3442132       | 3442130<br>3442131<br>3442132       | 332322E331<br>332322E336<br>332322EYWV          | 3444965<br>3444998<br>3444900       | 3444965<br>3444998<br>3444900       | 332420C126<br>332420CYWV                             | 3443750<br>3443700                     | 3443750<br>3443700                  |
| 3323211552<br>3323211555                        | 3442134<br>3442136                  | 3442134<br>3442136                  | 332322W   | 34440 pt<br>3444000 pt              | 34440 pt<br>3444000 pt              | 332420E<br>332420E101<br>332420E106                  | 34438                                  | 34438<br>3443803<br>3443805         |
| 3323211661<br>3323211664                        | 3442142<br>3442143                  | 3442142<br>3442143                  | 332322WYWY                                      | 3444002 pt                          | 3444002 pt<br>34461                 | 332420E211<br>332420E216                             | 3443808<br>3443813                     | 3443808<br>3443813                  |
| 3323211667<br>3323211758<br>3323211770          | 3442144                             | 3442144<br>3442139<br>3442145       | 3323231106<br>3323231111<br>3323231116          | 3446112<br>3446115<br>3446117       | 3446112<br>3446115<br>3446117       | 332420E221<br>332420E226<br>332420EYWV               | 3443820<br>3443822<br>3443800          | 3443820<br>3443822<br>3443800       |
| 3323211837<br>3323211YWV                        | 3442127<br>3442100                  | 3442127<br>3442100                  | 3323231201<br>3323231YWV                        | 3446110<br>3446100                  | 3446110<br>3446100                  | 332420G<br>332420G101                                | 34439                                  | 3443915                             |
| 3323213<br>3323213101<br>3323213111             | 3442222                             | 34422<br>3442220<br>3442222         | 3323233 pt                                      | 34462<br>34496                      | 34462<br>34496                      | 332420G106<br>332420G111<br>332420G116               | 3443917<br>3443919<br>3443923          | 3443917<br>3443919<br>3443923       |
| 3323213116<br>3323213121<br>3323213226          | 3442224<br>3442230                  | 3442224<br>3442230                  | 3323233101 pt<br>3323233101 pt<br>3323233106 pt | 3446210<br>3449611                  | 3446210<br>3449611<br>3446212       | 332420G121   | 3443931<br>3443932<br>3443933          | 3443931<br>3443932<br>3443933       |
| 3323213231<br>3323213236                        | 3442241<br>3442242                  | 3442241<br>3442242                  | 3323233106 pt<br>3323233211                     | 3449632                             | 3449632<br>3446220                  | 332420G136   | 3443934<br>3443936                     | 3443934<br>3443936                  |
| 3323213241<br>3323213246                        | 3442243<br>3442249                  |                                     | 3323233216<br>3323233221                        | 3446222<br>3446226                  | 3446222<br>3446226                  | 332420G246   | 3443951<br>3443953                     |                                     |

| 1997 published                                  | 1997 collected                | 1992 published                      | 1997 published                                  | 1997 collected                 | 1992 published                         | 1997 published                                  | 1997 collected                      | 1992 published                   |
|---|-------------------------------|-------------------------------------|---|--------------------------------|--|---|-------------------------------------|----------------------------------|
| 332420G356                                      |                               |                                     | 3325105<br>3325105100                           | 34296                          | 34296<br>3429600                       | 332618BYWV                                      |                                     |                                  |
| 332420W   | 34430 pt                      | 34430 pt                            | 3325107   | 34297<br>3429711               | 34297                                  | 332618W pt                                      | 33150 pt                            | •                                |
| 332420WYWW<br>332420WYWY                        | •                             | 3443002 pt                          | 3325107101<br>3325107106<br>3325107111          | 3429731                        |  | 332618W pt                                      | 34960                               | 34960                            |
| 3324311<br>3324311101                           | 34111                         |                                     | 3325107YWV                                      | 3429700                        | 3429700                                | 332618WYWW pt<br>332618WYWW pt<br>332618WYWW pt | 3315000 pt                          | 3399000 pt                       |
| 3324311206<br>3324311YWV                        | 3411191<br>3411100            | 3411191<br>3411100                  | 3325109<br>3325109101<br>3325109106             | 34298 pt<br>3429812<br>3429822 | 3429812                                | 332618WYWY pt<br>332618WYWY pt                  | 3315002 pt<br>3399002 pt            | 3315002 pt                       |
| 3324313<br>3324313100                           | 34112<br>3411200              |                                     | 3325109100<br>3325109111                        | 3429852                        | 3429852                                | 332618WYWY pt                                   | 3496002                             | 3496002                          |
| 332431W   | 34110<br>3411000              | 34110<br>3411000                    | 3325109199                                      | 3429898                        | 3429898                                | 3327100 pt                                      | 35990 pt                            | 35995                            |
| 332431WYWY                                      | 3411002                       | 3411002                             | 332510W pt                                      | •                              | 34290 pt                               | 3327100000<br>3327100YWW                        | 3599500                             | 3599000 pt                       |
| 3324391 pt                                      | 34121                         |                                     | 332510W pt<br>332510WYWW pt                     | 34990 pt<br>3429000 pt         | 34990 pt<br>3429000 pt                 | 3327100YWY                                      | 3599002 pt                          | ·                                |
| 3324391100<br>3324391306                        | 3412100 pt                    | 3412100 pt<br>3499821               | 332510WYWW pt<br>332510WYWY pt<br>332510WYWY pt | 3499000 pt                     | 3499000 pt<br>3429002 pt<br>3499002 pt | 3327211100                                      |                                     |                                  |
| 3324391311<br>3324391YWV pt<br>3324391YWV pt    | 3499825<br>3412100 pt         | 3412100 pt                          | 3326111   | 34931                          | 34931                                  | 3327215<br>3327215111<br>3327215222             | 34512                               | 3451231                          |
| 3324393   | 34122                         | 34122                               | 3326111101<br>3326111106                        | 3493106                        | 3493106                                | 3327215333<br>3327215444                        | 3451252<br>3451257                  | 3451252                          |
| 3324393100                                      | 3412200                       |                                     | 3326111216<br>3326111221<br>3326111311          | 3493157                        | 3493157                                | 3327215555                                      | 3451262                             | 3451262<br>3451239               |
| ·   | 34293                         |                                     | 3326111326<br>3326111YWV                        | 3493199                        | 3493199                                | 3327215699<br>3327215YWV                        | 3451298<br>3451200                  | 3451299 pt<br>3451200            |
| 3324395 pt<br>3324395101 pt                     |                               | 34443<br>3412313                    | 3326113<br>3326113101                           | 34932                          | 34932<br>3493210                       | 332721W<br>332721WYWW                           | 34510<br>3451000                    | 34510<br>3451000                 |
| 3324395101 pt<br>3324395106 pt                  | 3444314<br>3429300            | 3444314<br>3429300                  | 3326113106<br>3326113YWV                        | 3493220                        | 3493220                                | 332721WYWY                                      | 3451002                             | 3451002                          |
| 3324395106 pt<br>3324395199<br>3324395YWV pt    |                               | 3412319                             | 332611W   | 34930                          | 34930<br>3493000                       | 3327221<br>3327221101<br>3327221106             | 34527<br>3452701<br>3452706         | 3452701                          |
| 3324395YWV pt                                   | 3444300                       | 3444300                             | 332611WYWY                                      | 3493002                        | 3493002                                | 3327221115                                      | 3452715<br>3452745                  | 3452715                          |
| 3324397<br>3324397100                           | 35373 pt<br>3537334           | 35373 pt<br>3537300 pt              | 3326122   | 34952                          | 34952<br>3495215                       | 3327221159<br>3327221172                        | 3452759<br>3452761                  | 3452759<br>3452761               |
| •   | 34120                         |                                     | 3326122116<br>3326122201<br>3326122206          | 3495217<br>3495212<br>3495214  | 3495217<br>3495212<br>3495214          | 3327221178<br>3327221184<br>3327221YWV          | 3452762                             | 3452763                          |
| 332439W pt                                      | ·                             | 34290 pt<br>34440 pt                | 3326122YWV                                      | 3495200                        | 3495200                                | 3327223   | 34524                               |                                  |
| 332439W pt                                      | 34990 pt                      | 34990 pt                            | 3326124<br>3326124111<br>3326124201             | 34953 pt<br>3495317<br>3495311 | 34953 pt<br>3495317<br>3495311         | 3327223111                                      | 3452411<br>3452412                  | 3452411<br>3452412               |
| 332439W pt<br>332439WYWW pt                     | 35370 pt<br>3412000           | 35370 pt<br>3412000                 | 3326124216<br>3326124221 pt                     | 3495318                        | 3495318<br>3495313                     | 3327223133<br>3327223144<br>3327223155          | 3452419<br>3452439<br>3452445       | 3452439                          |
| 332439WYWW pt<br>332439WYWW pt                  | 3429000 pt                    | 3429000 pt<br>3444000 pt            | 3326124221 pt<br>3326124226                     | 3495320 pt                     | 3495319<br>3495321                     | 3327223199<br>3327223YWV                        | 3452489<br>3452400                  | 3452489                          |
| 332439WYWW pt<br>332439WYWW pt                  | 3499000 pt                    | 3537000 pt                          | 3326124231                                      | 3495399<br>3495300 pt          | 3495398 pt<br>3495300 pt               | 3327225   | 34525                               | 34525                            |
| 332439WYWY pt<br>332439WYWY pt<br>332439WYWY pt | 3412002                       | 3412002<br>3429002 pt<br>3444002 pt | 332612W   | 34950 pt<br>3495000 pt         | 34950 pt<br>3495000 pt                 | 3327225104<br>3327225129<br>3327225189          | 3452504<br>3452529<br>3452589       | 3452504<br>3452529<br>3452589    |
| 332439WYWY pt<br>332439WYWY pt                  | 3499002 pt                    | 3499002 pt                          | 332612WYWY                                      | 3495002 pt                     | 3495002 pt<br>34961                    | 3327225YWV                                      | 3452500                             | 3452500                          |
| 3325101<br>3325101101                           | 34292                         | 34292<br>3429212                    | 3326181101<br>3326181103                        | 3496113                        | 3496115                                | 3327227<br>3327227109<br>3327227115             | 34526<br>3452609<br>3452615         | 3452609                          |
| 3325101106<br>3325101111                        | 3429213                       | 3429213<br>3429214                  | 3326181105<br>3326181107<br>3326181YWV          | 3496152                        | 3496134<br>3496152<br>3496100          | 3327227113<br>3327227135<br>3327227179          | 3452635<br>3452679                  | 3452635                          |
| 3325101116<br>3325101121                        | 3429253                       | 3429253                             | 3326182   | 33992                          | 33992                                  | 3327227YWV                                      | 3452600                             | 3452600                          |
| 3325101133<br>3325101YWV                        | 3429255<br>3429200            | 3429255<br>3429200                  | 3326182101<br>3326182106<br>3326182YWV          | 3399298                        | 3399211<br>3399298<br>3399200          | 3327229<br>3327229105<br>3327229115             | 34528                               | 34528<br>3452831<br>3452811      |
| 3325103 pt                                      |                               | 34294                               | 3326183   | 3399200<br>34964               | 34964                                  | 3327229135<br>3327229199                        | 3452821<br>3452898                  |                                  |
| 3325103 pt<br>3325103101<br>3325103111 pt       | 3429412<br>3429415 pt         | 34991<br>3429412<br>3429413         | 3326183100                                      | 3496400<br>34965               | 3496400<br>34965                       | 3327229YWV                                      | 3452800                             | 3452800                          |
| 3325103111 pt<br>3325103121                     | 3429415 pt<br>3429417         | 3429414<br>3429417                  | 3326185100                                      | 3496500                        | 3496500                                | 332722W   | 34520<br>3452000<br>3452002         | 34520<br>3452000<br>3452002      |
| 3325103125<br>3325103126                        | 3499117<br>3429418            | 3499117<br>3429418                  | 3326187<br>3326187101<br>3326187103             | 34966                          | 34966<br>3496613<br>3496621            | 3328110   | 33980                               | 33980                            |
| 3325103128<br>3325103129<br>3325103131          | 3499143<br>3499141<br>3429419 | 3499198 pt<br>3499141<br>3429419    | 3326187103<br>3326187105<br>3326187107          | 3496635<br>3496671             | 3496635<br>3496671                     | 3328110100<br>3328110YWW<br>3328110YWY          | 3398000 pt<br>3398000 pt<br>3398002 | 3398000 pt                       |
| 3325103133                                      | 3429422                       | 3429422                             | 3326187YWV                                      | 3496600                        | 3496600                                | 3328120   | 34790 pt                            | 34790 pt                         |
| 3325103137<br>3325103216                        | 3499199<br>3429416            | 3499198 pt<br>3429416<br>3429423    | 3326189<br>3326189101<br>3326189103             | 33152 pt<br>3315202<br>3315204 | 33152 pt<br>3315201 pt<br>3315203 pt   | 3328120101<br>3328120106                        | 3479010                             | 3479011                          |
| 3325103336<br>3325103341<br>3325103346          | 3429423<br>3429424<br>3429427 | 3429423<br>3429424<br>3429427       | 3326189103<br>3326189105<br>3326189107          | 3315206<br>3315208             | 3315205 pt<br>3315207 pt               | 3328120111<br>3328120116<br>3328120141          | 3479013                             | 3479013<br>3479021 pt<br>3479081 |
| 3325103361<br>3325103363                        | 3429437<br>3429442            | 3429437<br>3429442                  | 3326189109<br>3326189111 pt                     | 3315211<br>3315212 pt          | 3315209 pt<br>3315210 pt               | 3328120146<br>3328120221                        | 3479077<br>3479031                  | 3479077<br>3479031               |
| 3325103365<br>3325103367                        | 3429443<br>3429444            | 3429443<br>3429444                  | 3326189111 pt<br>3326189113<br>3326189115       | 3315212 pt                     | 3315213 pt<br>3315216 pt               | 3328120326<br>3328120431                        | 3479061<br>3479073                  | 3479061<br>3479073               |
| 3325103451<br>3325103456                        | 3429433<br>3429436            | 3429433<br>3429436                  | 3326189115<br>3326189117<br>3326189119          | 3315224<br>3315226             | 3315222 pt<br>3315223 pt<br>3315225 pt | 3328120536<br>3328120YWW<br>3328120YWY          | 3479075                             | 3479000 pt                       |
| 3325103569<br>3325103571                        | 3429452<br>3429453            | 3429452<br>3429453                  | 3326189121<br>3326189YWV                        | 3315231<br>3315200 pt          | 3315230 pt<br>3315200 pt               | 3328130   | 34710                               | 34710                            |
| 3325103573<br>3325103575                        | 3429454<br>3429461            | 3429454<br>3429461<br>3429462       | 332618B<br>332618B105                           | 34968<br>3496855               | 34968<br>3496855                       | 3328130100<br>3328130YWW<br>3328130YWY          | 3471000 pt                          | 3471000 pt                       |
| 3325103579<br>3325103581<br>3325103583          | 3429462<br>3429464<br>3429466 | 3429462<br>3429464<br>3429466       | 332618B217<br>332618B319                        | 3496883<br>3496885             | 3496883<br>3496885                     | 3328130YWY                                      | 3471002                             |                                  |
| 3325103685<br>3325103687                        | 3429471<br>3429473            | 3429471<br>3429473                  | 332618B401<br>332618B403                        | 3496842<br>3496851             | 3496842<br>3496851                     | 3329111101<br>3329111103                        | 3491111                             | 3491111<br>3491121               |
| 3325103689<br>3325103691                        | 3429481<br>3429491            | 3429481<br>3429491                  | 332618B407<br>332618B409                        | 3496863<br>3496871             | 3496863<br>3496871<br>3496873          | 3329111105<br>3329111107<br>3329111109          | 3491123<br>3491134                  | 3491134                          |
| 3325103699<br>3325103YWV pt                     | 3429498<br>3429400            | 3429498                             | 332618B411<br>332618B413<br>332618B415          | 3496873<br>3496875<br>3496881  | 3496873<br>3496875<br>3496881          | 3329111111                                      | 3491138                             | 3491143                          |
| 3325103YWV pt                                   | 3499100                       | 3499100                             | 332618B421                                      | 3496898                        | 3496898                                | 3329111YWV                                      | 3491100                             | 3491100                          |

| 1997 published                         | 1997 collected                         | 1992 published                    | 1997 published                                  | 1997 collected                      | 1992 published                      | 1997 published                         | 1997 collected                | 1992 published                |
|--|--|-----------------------------------|---|-------------------------------------|-------------------------------------|--|-------------------------------|-------------------------------|
| 3329113<br>3329113101                  | 34912<br>3491201                       | 34912<br>3491201                  | 332912L<br>332912L100                           | 3492M                               | 3492M<br>3492M00                    | 332919W pt                             | 34940 pt                      | 34940 pt                      |
| 3329113103<br>3329113105               | 3491211                                | 3491211<br>3491221                | 332912N   | 3492N                               | 3492N                               | 332919W pt                             | 34990 pt                      | 34990 pt<br>3429000 pt        |
| 3329113107<br>3329113109               | 3491223                                | 3491223<br>3491231                | 332912N100                                      | 3492N00                             | 3492N00                             | 332919WYWW pt<br>332919WYWW pt         | 3494000 pt<br>3499000 pt      | 3494000 pt<br>3499000 pt      |
| 3329113111<br>3329113113               | 3491235<br>3491241                     | 3491235<br>3491241                | 332912W pt                                      | 34920                               | 34920<br>37280 pt                   | 332919WYWY pt<br>332919WYWY pt         | 3429002 pt<br>3494002 pt      | 3429002 pt<br>3494002 pt      |
| 3329113215<br>3329113YWV               | 3491243                                | 3491243                           | 332912WYWW pt<br>332912WYWW pt                  | 3492000                             | 3492000                             | 332919WYWY pt                          | 3499002 pt                    | 3499002 pt<br>35621           |
| 3329115                                | 34913                                  | 34913                             | 332912WYWY pt<br>332912WYWY pt                  | 3492002                             | 3492002                             | 3329911<br>3329911000                  | 35621<br>3562100              | 3562100                       |
| 3329115101<br>3329115103               | 3491311                                | 3491311<br>3491323                | 3329131   | 34321                               | 34321                               | 3329913<br>3329913000                  | 35622<br>3562200              | 35622<br>3562200              |
| 3329115105<br>3329115107               | 3491335<br>3491347                     | 3491335<br>3491347                | 3329131101<br>3329131206                        | 3432102                             | 3432102<br>3432105<br>3432108       | 3329915<br>3329915000                  | 35623                         | 35623                         |
| 3329115109<br>3329115211<br>3329115YWV | 3491359<br>3491361<br>3491300          | 3491359<br>3491361<br>3491300     | 3329131211<br>3329131316<br>3329131321          | 3432108<br>3432110<br>3432112       | 3432110<br>3432112                  | 3329917                                | 3562300                       | 3562300<br>35624              |
| 3329117                                | 34914                                  | 34914                             | 3329131326 pt<br>3329131326 pt                  | 3432111 pt                          | 3432113<br>3432114                  | 3329917000                             | 3562400                       | 3562400                       |
| 3329117101<br>3329117103               | 3491411<br>3491413                     | 3491411<br>3491413                | 3329131431<br>3329131436                        | 3432115<br>3432117                  | 3432115<br>3432117                  | 3329919<br>3329919000                  | 35629<br>3562900              | 35629<br>3562900              |
| 3329117105<br>3329117107               | 3491415                                | 3491415<br>3491417                | 3329131441                                      | 3432118                             | 3432118                             | 332991W                                | 35620<br>3562000              | 35620<br>3562000              |
| 3329117109<br>3329117111               | 3491421<br>3491423                     | 3491421<br>3491423                | 3329131446                                      | 3432120<br>3432122                  | 3432120<br>3432122                  | 332991WYWY                             | 3562002                       | 3562002                       |
| 3329117113<br>3329117115               | 3491425<br>3491431                     | 3491425<br>3491431<br>3491461     | 3329131456<br>3329131461<br>3329131466          | 3432125<br>3432128                  | 3432125<br>3432128                  | 3329920<br>3329920101<br>3329920206    | 34820                         | 34820<br>3482025<br>3482035   |
| 3329117217<br>3329117YWV               | 3491461<br>3491400                     | 3491400                           | 3329131468 pt<br>3329131468 pt                  | 3432130                             | 3432130<br>3432132<br>3432134       | 3329920206<br>3329920311<br>3329920416 | 3482035<br>3482045<br>3482055 | 3482045<br>3482055            |
| 3329119<br>3329119101                  | 34915<br>3491511                       | 34915<br>3491511                  | 3329131468 pt<br>3329131YWV                     | 3432133 pt                          | 3432136<br>3432100                  | 3329920521<br>3329920626               | 3482061<br>3482069            | 3482061<br>3482069            |
| 3329119103<br>3329119105               | 3491523<br>3491535                     | 3491523<br>3491535                | 3329133   | 34322                               | 34322                               | 3329920731<br>3329920YWW               | 3482098<br>3482000            | 3482098<br>3482000            |
| 3329119107<br>3329119209               | 3491547<br>3491561                     | 3491547<br>3491561                | 3329133131<br>3329133136                        | 3432227                             | 3432224<br>3432227                  | 3329920YWY                             | 3482002                       | 3482002                       |
| 3329119YWV<br>332911B                  | 3491500<br>34916                       | 3491500<br>34916                  | 3329133141<br>3329133146                        | 3432233                             | 3432230<br>3432233                  | 3329931<br>3329931101                  | 3483111                       |                               |
| 332911B101<br>332911B103               | 3491611<br>3491623                     | 3491611<br>3491623                | 3329133151<br>3329133201 pt                     | 3432202 pt                          | 3432236<br>3432201                  | 3329931106<br>3329931111               | 3483135                       | 3483135<br>3483151            |
| 332911B105<br>332911B107               | 3491631<br>3491633                     | 3491631<br>3491633                | 3329133201 pt<br>3329133206 pt<br>3329133206 pt | 3432202 pt                          | 3432203<br>3432205<br>3432207       | 3329931116<br>3329931121<br>3329931YWV | 3483171<br>3483181<br>3483100 | 3483171<br>3483181<br>3483100 |
| 332911B109<br>332911B111               | 3491641<br>3491653                     | 3491641<br>3491653                | 3329133211                                      | 3432212                             |                                     | 3329933                                | 34833                         | 34833                         |
| 332911B113<br>332911B115               | 3491665<br>3491678                     | 3491665<br>3491678                | 3329133216<br>3329133221                        | 3432215<br>3432218                  | 3432215<br>3432218                  | 3329933101                             | 3483311                       | 3483311<br>3483331            |
| 332911B117                             | 3491698<br>3491600                     | 3491698<br>3491600                | 3329133226<br>3329133256                        | 3432221<br>3432239                  | 3432221<br>3432239                  | 3329933YWV<br>332993W                  | 3483300                       | 3483300<br>34830              |
| 332911D<br>332911D101                  | 34917                                  | 34917<br>3491711                  | 3329133261<br>3329133266                        | 3432245<br>3432250                  | 3432245<br>3432250                  | 332993WYWW<br>332993WYWY               | 34830                         | 3483000<br>3483002            |
| 332911D103<br>332911D105               | 3491713<br>3491715                     | 3491713<br>3491715                | 3329133YWV                                      | 3432200                             | 3432200<br>34323 pt                 | 3329941                                | 34841                         | 34841                         |
| 332911D107<br>332911D109               | 3491727<br>3491731                     | 3491727<br>3491731                | 3329137101<br>3329137106                        | 3432302<br>3432305                  | 3432302<br>3432305                  | 3329941100                             | 3484100                       | 3484100<br>34842              |
| 332911D111                             | 3491739                                | 3491739<br>3491798                | 3329137111<br>3329137116 pt                     | 3432311                             | 3432311<br>3432314                  | 3329943101<br>3329943206               | 3484211<br>3484213            | 3484211<br>3484213            |
| 332911DYWV                             | 3491700<br>34918                       | 3491700<br>34918                  | 3329137116 pt<br>3329137121 pt                  | 3432315 pt                          | 3432317<br>3432320                  | 3329943311<br>3329943416               | 3484216<br>3484221            | 3484216<br>3484221            |
| 332911F100                             | 3491800                                | 3491800                           | 3329137121 pt<br>3329137131                     | 3432321 pt                          | 3432323<br>3432327                  | 3329943421<br>3329943426               | 3484223<br>3484226            | 3484223<br>3484226            |
| 332911H<br>332911H100                  | 34919                                  | 34919<br>3491900                  | 3329137141 pt<br>3329137141 pt<br>3329137224    | 3432331 pt<br>3432331 pt<br>3432324 | 3432308<br>3432332 pt<br>3432325 pt | 3329943431<br>3329943536               | 3484254<br>3484265            | 3484254<br>3484265            |
| 332911W                                | 34910<br>3491000                       | 34910<br>3491000                  | 3329137226<br>3329137YWV                        | 3432326<br>3432300 pt               | 3432325 pt<br>3432300 pt            | 3329943541<br>3329943546<br>3329943YWV | 3484274<br>3484281            | 3484274<br>3484281            |
| 332911WYWY                             | 3491002                                | 3491002                           | 332913W   | 34320 pt                            | 34320 pt                            | 332994W                                | 3484200<br>34840              | 3484200<br>34840              |
| 3329121 pt                             | 3492A                                  | 3492A<br>37284 pt                 | 332913WYWW<br>332913WYWY                        | 3432000 pt<br>3432002 pt            | 3432000 pt<br>3432002 pt            | 332994WYWW                             | 3484000<br>3484002            | 3484000<br>3484002            |
| 3329121100 pt<br>3329121100 pt         | 3492A00                                | 3492A00<br>3728400 pt             | 3329191 pt                                      | 34944                               | 34944                               | 3329951                                | 34891                         | 34891                         |
| 3329121100 pt<br>3329121100 pt         | 3728401 pt                             | 3728473 pt                        | 3329191 pt<br>3329191101 pt                     | 34998 pt                            | 34998 pt<br>3494421                 | 3329951106<br>3329951111               | 3489121<br>3489151            | 3489121<br>3489151            |
| 3329123 pt                             | 3492B                                  | 3492B                             | 3329191101 pt<br>3329191203                     | 3499831<br>3494431                  | 3499831<br>3494431                  | 3329951116<br>3329951YWV               | 3489171<br>3489100            | 3489171<br>3489100            |
| 3329123 pt<br>3329123100 pt            |  |                                   | 3329191205<br>3329191207                        | 3494441<br>3494451                  | 3494441<br>3494451                  | 3329952<br>3329952100                  | 34892                         | 34892<br>3489200              |
| 3329123100 pt<br>3329123100 pt         | 3728400 pt                             | 3728400 pt<br>3728483 pt          | 3329191209<br>3329191YWV pt                     | 3494499<br>3494400                  | 3494499<br>3494400<br>3499800 pt    | 332995W                                | 34890                         | 34890                         |
| 3329123100 pt<br>3329125               | 3728402 pt                             | 3728485 pt                        | 3329191YWV pt                                   | 3499800 pt                          | 3499800 pt<br>34298 pt              | 332995WYWW<br>332995WYWY               | 3489000<br>3489002            | 3489000<br>3489002            |
| 3329125100                             | 3492C00                                | 3492C00                           | 3329193 pt                                      | 34945 pt                            | 34945 pt                            | 3329961<br>3329961100                  | 33534<br>3353400              | 33534<br>3353400              |
| 3329127<br>3329127100                  | 3492D                                  | 3492D<br>3492D00                  | 3329193101<br>3329193103                        | 3494511                             | 3494511<br>3494512                  | 3329963                                | 34980                         | 34980                         |
| 3329129                                | 3492E                                  | 3492E<br>3492E00                  | 3329193105<br>3329193107                        | 3494513                             | 3494513<br>3494514                  | 3329963101                             | 3498013<br>3498015            | 3498013<br>3498015            |
| 332912B                                | 3492F                                  | 3492F                             | 3329193109<br>3329193111                        | 3494515<br>3494516                  | 3494515<br>3494516<br>3494517       | 3329963205<br>3329963207               | 3498017<br>3498019            | 3498017<br>3498019            |
| 332912B100                             |  | 3492F00<br>3492G                  | 3329193113<br>3329193215<br>3329193217          | 3494517<br>3494518<br>3494519       | 3494517<br>3494518<br>3494519       | 3329963YWV<br>332996W                  | 3498000 pt                    | 3498000 pt<br>33530 pt        |
| 332912D100                             | 3492G00                                | 3492G00                           | 3329193319                                      | 3494521                             | 3494521                             | 332996WYWW pt<br>332996WYWW pt         | 3353000 pt<br>3498000 pt      | 3353000 pt<br>3498000 pt      |
| 332912F pt                             |  | 3492H                             | 3329193321<br>3329193323                        | 3494523<br>3494532                  | 3494523<br>3494532                  | 332996WYWY pt<br>332996WYWY pt         | 3353002 pt<br>3498002         | 3353002 pt<br>3498002         |
| 332912F pt<br>332912F100 pt            | 37284 pt                               | 37284 pt<br>3492H00<br>3728400 pt | 3329193325<br>3329193327                        | 3494534<br>3494537                  | 3494534<br>3494537                  | 3329970                                | 35430                         | 35430                         |
| 332912F100 pt                          | 3728400 pt<br>3728403 pt<br>3728403 pt | 3728473 pt<br>3728475 pt          | 3329193329<br>3329193331                        | 3494542                             | 3494542<br>3494544                  | 3329970101<br>3329970206               | 3543011<br>3543098            | 3543011<br>3543098            |
| 332912F100 pt<br>332912F100 pt         | 3728403 pt                             | 3728483 pt<br>3728485 pt          | 3329193333<br>3329193335                        | 3494547<br>3494585                  | 3494547<br>3494585                  | 3329970YWW<br>3329970YWY               | 3543000<br>3543002            | 3543000<br>3543002            |
| 332912H                                | 3492J                                  | 3492J                             | 3329193336<br>3329193337                        | 3429862<br>3494599                  | 3429862<br>3494599<br>3429800 pt    | 3329980                                | 34310<br>3431010              | 34310<br>3431010              |
| 332912H100<br>332912J                  | 3492J00                                | 3492J00<br>3492K                  | 3329193YWV pt                                   | 3429800 pt<br>3494500 pt            | 3429800 pt<br>3494500 pt            | 3329980290<br>3329980YWW               | 3431098                       | 3431098                       |
|  | 3492K00                                |                                   | 332919W pt                                      | 34290 pt                            | 34290 pt                            | 3329980YWY                             | 3431002                       | 3431002                       |

| 1997 published           | 1997 collected        | 1992 published     | 1997 published                 | 1997 collected     | 1992 published           | 1997 published                 | 1997 collected           | 1992 published           |
|--------------------------|-----------------------|--------------------|--------------------------------|--------------------|--------------------------|--------------------------------|--------------------------|--------------------------|
| 3329991                  |                       | 34971              | 332999AYWV                     | 3499500            | 3499500                  | 332999GYWV pt                  | 3999900 pt               | 3999900 pt               |
| 3329991101<br>3329991106 |                       | 3497132<br>3497133 | 332999G pt                     | 32918 pt           | 32918 pt                 | 332999W pt                     | 32910 pt                 | 32910 pt                 |
| 3329991111               |                       |                    | 332999G pt                     | 34323 pt           | 34323 pt                 | 332999W pt                     | 34320 pt                 | 34320 pt                 |
| 3329993                  |                       |                    | 332999G pt                     | 34945 pt           | 34945 pt                 | 332999W pt                     | 34940 pt                 | 34940 pt                 |
| 3329993101<br>3329993106 | 3497352               | 3497352<br>3497354 | 332999G pt                     | 34998 pt           | 34998 pt                 | 332999W pt                     | 34970 pt                 | 34970 pt                 |
| 3329993111               | 3497358               | 3497358            | 332999G pt                     | 35373 pt           | 35373 pt                 | 332999W pt                     | 34990 pt                 | 34990 pt                 |
| 3329993YWV               |                       |                    | 332999G pt                     |                    |                          | 332999W pt                     | 35370 pt                 | 35370 pt                 |
| 3329994<br>3329994101    | 3599411               | 3599411            | 332999G101                     | 3499811            |                          | 332999W pt                     | 35990 pt                 | 35990 pt                 |
|                          | 3599413<br>3599415    | 3599413<br>3599415 | 332999G189                     | 3494571<br>3499829 | 3494571<br>3499829       | 332999W pt                     | 39990 pt                 | 39990 pt<br>3291000 pt   |
| 3329994116               | 3599416               |                    | 332999G303                     | 3499839            | 3499839                  | 332999WYWW pt                  | 3432000 pt               | 3432000 pt               |
|                          | 3599425<br>3599400 pt |                    | 332999G305                     | 3537331            | 3537331<br>3999913 pt    | 332999WYWW pt<br>332999WYWW pt | 3494000 pt               | 3494000 pt<br>3497000 pt |
| 3329997                  |                       |                    | 332999G306 pt                  | 3999991 pt         | 3999942 pt<br>3999944 pt | 332999WYWW pt<br>332999WYWW pt |                          | 3499000 pt<br>3537000 pt |
| 3329997101<br>3329997106 |                       |                    | 332999G306 pt                  | 3999991 pt         | 3999999 pt               | 332999WYWW pt<br>332999WYWW pt | 3599000 pt               | 3599000 pt               |
| 3329997YWV               |                       | 3499200            | 332999G313                     | 3291831            |                          | 332999WYWY pt                  | 3999000 pt<br>3291002 pt | 3999000 pt<br>3291002 pt |
| 3329999                  |                       | 34993<br>3499300   | 332999G316                     | 3291835<br>3432329 |                          | 332999WYWY pt                  | 3432002 pt               | 3432002 pt               |
| 332999A                  |                       | 34995              | 332999G399 pt                  | 3499898            |                          | 332999WYWY pt                  | 3494002 pt<br>3497002 pt | 3494002 pt<br>3497002 pt |
| 332999A101<br>332999A106 | 3499511               | 3499511<br>3499521 | 332999GYWV pt<br>332999GYWV pt | 3432300 pt         | 3432300 pt               | 332999WYWY pt<br>332999WYWY pt | 3499002 pt               | 3499002 pt<br>3537002 pt |
| 332999A111               | 3499531               | 3499531            | 332999GYWV pt                  | 3499800 pt         | 3499800 pt               | 332999WYWY pt                  | 3599002 pt               | 3599002 pt               |
| 332999A116               | 3499539               | 3499539            | 332999GYWV pt                  | 3537300 pt         | 3537300 pt               | 332999WYWY pt                  | 3999002 pt               | 3999002 pt               |