All Other Plastics Product Manufacturing

1997

Issued November 1999

EC97M-3261L

1997 Economic Census

Manufacturing

Industry Series

U S C E N S U S B U R E A U

Helping You Make Informed Decisions

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU

ACKNOWLEDGMENTS

The staff of the Manufacturing and Construction Division prepared this report. **Judy M. Dodds,** Assistant Chief for Census and Related Programs, was responsible for the overall planning, management, and coordination. **Kenneth Hansen,** Chief, Manufactured Durables Branch, assisted by **Mike Brown, Renee Coley, Raphael Corrado,** and **Milbren Thomas,** Section Chiefs, **Michael Zampogna,** Former Chief, Manufactured Nondurables Branch, assisted by **Allen Foreman, Robert Miller, Robert Reinard,** and **Nat Shelton,** Section Chiefs, and **Tom Lee, Robert Rosati,** and **Tom Flood,** Special Assistants, performed the planning and implementation. **Stephanie Angel, Brian Appert, Stanis Batton, Carol Beasley, Chris Blackburn, Larry Blumberg, Vera Harris-Bourne, Brenda Campbell, Suzanne Conard, Vance Davis, Mary Ellickson, Matt Gaines, Merry Glascoe, Kay Hanks, Karen Harshbarger, Nancy Higgins, James Hinckley, Walter Hunter, Jim Jamski, Evelyn Jordan, Robert Lee, John Linehan, Paul Marck, Keith McKenzie, Philippe Morris, Joanna Nguyen, Betty Pannell, Joyce Pomeroy, Venita Powell, Cynthia Ramsey, Chris Savage, Aronda Stovall, Sue Sundermann, Thanos Theodoropoulos, Dora Thomas, Ann Truffa, Ronanne Vinson, Keeley Voor, Denneth Wallace, Tempie Whittington, Lissene Witt,** and **Mike Yamaner** provided primary staff assistance.

Brian Greenberg, Assistant Chief for Research and Methodology Programs, assisted by **Stacey Cole,** Chief, Manufacturing Programs Methodology Branch, and **Robert Struble,** Section Chief, provided the mathematical and statistical techniques as well as the coverage operations. **Jeffrey Dalzell** and **Cathy Ritenour** provided primary staff assistance.

Mendel D. Gayle, Chief, Forms, Publications, and Customer Services Branch, assisted by **Julius Smith Jr.** and **Baruti Taylor,** Section Chiefs, performed overall coordination of the publication process. **Kim Credito, Patrick Duck, Chip Murph, Wanda Sledd,** and **Veronica White** provided primary staff assistance.

The Economic Planning and Coordination Division, **Lawrence A. Blum,** Assistant Chief for Collection Activities and **Shirin A. Ahmed,** Assistant Chief for Post-Collection Processing, assisted by **Dennis Shoemaker,** Chief, Post-Collection Census Processing Branch, **Brandy Yarbrough,** Section Chief, **Sheila Proudfoot, Richard Williamson, Andrew W. Hait,** and **Jennifer E. Lins,** was responsible for developing the systems and procedures for data collection, editing, review, correction and dissemination

The staff of the National Processing Center, **Judith N. Petty,** Chief, performed mailout preparation and receipt operations, clerical and analytical review activities, data keying, and geocoding review.

The Geography Division staff developed geographic coding procedures and associated computer programs.

The Economic Statistical Methods and Programming Division, **Charles P. Pautler Jr.,** Chief, developed and coordinated the computer processing systems. **Martin S. Harahush,** Assistant Chief for Quinquennial Programs, assisted by **Barbara Lambert** and **Christina Arledge** were responsible for design and implementation of the computer systems. **Gary T. Sheridan,** Chief, Manufacturing and Construction Branch, **Lori A. Guido** and **Roy A. Smith**, Section Chiefs, supervised the preparation of the computer programs.

Computer Services Division, **Debra Williams,** Chief, performed the computer processing.

The staff of the Administrative and Customer Services Division, **Walter C. Odom,** Chief, performed planning, design, composition, editorial review, and printing planning and procurement for publications, Internet products, and report forms. **Cynthia G. Brooks** provided publication coordination and editing.

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-- 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
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	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	301-457-4673
Service Sector Statistics Division	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/econguide. 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:

A	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 revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.
V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.

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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

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, semi-independent 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 or SIC code	Industry	Companies[1]	All establishments[2]	All employees		Production workers			Value added by manufacture ($1,000)	Cost of materials ($1,000)	Value of shipments ($1,000)	Total capital expenditures ($1,000)
				Number	Payroll ($1,000)	Number	Hours (1,000)	Wages ($1,000)				
326199	**All other plastics product mfg**	**7 528**	**8 608**	**526 333**	**14 067 328**	**413 461**	**805 729**	**8 951 204**	**35 639 380**	**30 479 048**	**66 013 760**	**3 464 199**
308920	Plastics products, n.e.c. (pt)	N	8 468	523 192	13 989 931	411 194	801 702	8 909 541	35 453 442	30 344 499	65 694 519	3 449 409
399955	Manufacturing industries, n.e.c. (pt)	N	140	3 141	77 397	2 267	4 027	41 663	185 938	134 549	319 241	14 790

[1]For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.
[2]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]

Industry and geographic area	E[1]	All establishments		All employees		Production workers			Value added by manufacture ($1,000)	Cost of materials ($1,000)	Value of shipments ($1,000)	Total capital expenditures ($1,000)
		Total	With 20 employees or more	Number	Payroll ($1,000)	Number	Hours (1,000)	Wages ($1,000)				
326199, ALL OTHER PLASTICS PRODUCT MFG												
United States	**1**	**8 608**	**4 694**	**526 333**	**14 067 328**	**413 461**	**805 729**	**8 951 204**	**35 639 380**	**30 479 048**	**66 013 760**	**3 464 199**
Alabama	1	73	42	5 325	133 652	4 210	8 110	84 303	284 279	367 790	653 807	38 139
Arizona	1	123	51	5 212	129 921	4 088	7 965	88 331	326 554	321 490	650 714	34 145
Arkansas	–	80	49	5 267	119 250	4 269	8 278	80 824	338 532	297 348	634 380	35 620
California	2	1 039	509	49 685	1 467 367	38 067	72 651	821 110	3 775 028	2 607 051	6 359 594	318 460
Colorado	–	135	57	5 538	166 735	3 922	7 471	91 906	448 921	299 304	745 575	39 065
Florida	2	349	131	11 209	258 239	8 438	14 947	156 605	662 931	474 305	1 137 335	58 991
Georgia	–	154	85	8 940	215 703	7 270	14 087	143 308	590 984	638 248	1 223 524	59 558
Illinois	1	555	322	37 282	1 058 826	29 853	59 931	676 113	2 741 385	2 344 273	5 066 019	255 077
Indiana	1	331	225	28 105	712 076	22 912	46 065	491 380	1 752 207	1 608 820	3 361 101	187 860
Kentucky	1	110	78	10 486	259 552	8 569	17 105	180 221	676 242	672 479	1 342 006	82 063
Louisiana	1	41	13	1 235	29 289	1 042	2 241	21 538	67 491	65 709	131 930	13 105
Maine	1	21	12	1 292	31 448	965	1 668	18 689	94 559	52 946	147 533	10 188
Massachusetts	2	275	148	12 728	405 861	9 805	20 094	249 381	964 438	754 850	1 726 819	88 774
Michigan	1	637	400	51 277	1 434 776	40 000	79 335	928 015	3 537 970	3 262 198	6 808 137	305 356
Minnesota	1	232	114	13 530	409 908	9 862	19 209	234 722	952 040	711 283	1 654 073	103 925
Missouri	–	172	99	11 563	266 364	9 196	16 659	170 953	739 122	597 601	1 330 104	83 891
New York	2	429	234	23 206	597 782	18 102	33 269	363 293	1 368 628	1 130 183	2 498 947	104 887
North Carolina	1	213	137	15 039	368 315	11 937	22 748	235 027	969 393	790 978	1 758 082	99 004
Ohio	1	580	360	48 110	1 239 889	38 331	77 642	831 132	3 107 249	2 868 592	5 971 513	348 917
Oregon	1	117	42	4 442	107 673	3 382	5 935	63 871	261 890	268 296	526 694	19 217
Pennsylvania	–	424	251	27 848	799 767	21 837	43 446	514 819	1 924 929	1 653 403	3 559 901	222 605
South Carolina	1	101	55	7 242	191 622	5 887	11 970	130 867	510 044	464 152	1 019 752	76 486
Tennessee	1	163	104	11 961	274 351	9 638	18 798	182 965	788 502	843 698	1 626 158	77 440
Texas	1	474	241	25 020	597 543	19 307	36 728	391 128	1 642 526	1 469 096	3 082 551	175 309
Virginia	–	82	50	8 232	218 383	6 424	12 490	142 924	715 241	682 556	1 389 443	58 704
Washington	2	140	68	6 684	176 781	5 010	9 940	111 434	390 945	316 442	702 137	36 563
Wisconsin	–	270	159	18 637	513 766	14 668	28 297	343 131	1 312 416	1 018 676	2 336 441	123 835

* 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.

[1]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
326199, ALL OTHER PLASTICS PRODUCT MFG	
Companies[1] ..... number..	7 528
All establishments ..... number..	8 608
Establishments with 1 to 19 employees ..... number..	3 914
Establishments with 20 to 99 employees ..... number..	3 186
Establishments with 100 employees or more ..... number..	1 508
All employees ..... number..	526 333
Total compensation[2] ..... $1,000..	17 403 995
Annual payroll ..... $1,000..	14 067 328
Total fringe benefits ..... $1,000..	3 336 667
Production workers, average for year ..... number..	413 461
Production workers on March 12 ..... number..	410 422
Production workers on May 12 ..... number..	413 874
Production workers on August 12 ..... number..	414 127
Production workers on November 12 ..... number..	415 421
Production-worker hours ..... 1,000..	805 729
Production-worker wages ..... $1,000..	8 951 204
Total cost of materials ..... $1,000..	30 479 048
Cost of materials, parts, containers, etc., consumed ..... $1,000..	26 503 716
Cost of resales ..... $1,000..	1 697 751
Cost of fuels ..... $1,000..	185 013
Cost of purchased electricity ..... $1,000..	1 166 555
Cost of contract work ..... $1,000..	926 013
Quantity of electricity purchased for heat and power ..... 1,000 kWh..	19 826 065
Quantity of electricity generated less sold for heat and power ... 1,000 kWh..	28 054
Total value of shipments ..... $1,000..	66 013 760
Primary products value of shipments ..... $1,000..	59 342 876
Secondary products value of shipments ..... $1,000..	3 869 839
Total miscellaneous receipts ..... $1,000..	2 801 045
Value of resales ..... $1,000..	2 429 187
Contract receipts ..... $1,000..	237 442
Other miscellaneous receipts ..... $1,000..	134 416
Primary products specialization ratio ..... percent..	93
Value of primary products shipments made in all industries ..... $1,000..	62 126 408
Value of primary products shipments made in this industry ..... $1,000..	59 342 876
Value of primary products shipments made in other industries ..... $1,000..	2 783 532
Coverage ratio ..... percent..	95

Item	Value
326199, ALL OTHER PLASTICS PRODUCT MFG—Con.	
Value added ..... $1,000..	35 639 380
Total inventories, beginning of year ..... $1,000..	6 553 892
Finished goods inventories, beginning of year ..... $1,000..	2 906 517
Work-in-process inventories, beginning of year ..... $1,000..	869 803
Materials and supplies inventories, beginning of year ..... $1,000..	2 777 572
Total inventories, end of year ..... $1,000..	6 779 744
Finished goods inventories, end of year ..... $1,000..	2 981 579
Work-in-process inventories, end of year ..... $1,000..	899 409
Materials and supplies inventories, end of year ..... $1,000..	2 898 756
Gross book value of total assets at beginning of year ..... $1,000..	27 023 537
Total capital expenditures (new and used) ..... $1,000..	3 464 199
Capital expenditures for buildings and other structures (new and used) ..... $1,000..	475 870
Capital expenditures for machinery and equipment (new and used) ..... $1,000..	2 988 329
Total retirements[2] ..... $1,000..	866 666
Gross book value of total assets at end of year ..... $1,000..	29 621 070
Total depreciation during year[2] ..... $1,000..	2 190 001
Total rental payments[2] ..... $1,000..	889 023
Buildings and other structures rental payments[2] ..... $1,000..	525 585
Machinery and equipment rental payments[2] ..... $1,000..	363 438
Cost of purchased services for the repair of buildings and other structures[3] ..... $1,000..	117 785
Response coverage ratio[4] ..... percent..	78
Cost of purchased services for the repair of machinery and equipment[3] ..... $1,000..	569 075
Response coverage ratio[4] ..... percent..	78
Cost of purchased communications services[3] ..... $1,000..	138 496
Response coverage ratio[4] ..... percent..	78
Cost of purchased legal services[3] ..... $1,000..	112 315
Response coverage ratio[4] ..... percent..	78
Cost of purchased accounting and bookkeeping services[3] ..... $1,000..	66 528
Response coverage ratio[4] ..... percent..	78
Cost of purchased advertising services[3] ..... $1,000..	206 202
Response coverage ratio[4] ..... percent..	78
Cost of purchased software and other data processing services[3] ..... $1,000..	65 992
Response coverage ratio[4] ..... percent..	78
Cost of purchased refuse removal (including hazardous waste) services[3] ..... $1,000..	70 926
Response coverage ratio[4] ..... percent..	78

[1]For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.
[2]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.
[3]Based on ASM sample data.
[4]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.

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

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

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

Employment size class	E[1]	All establishments		All employees		Production workers			Value added by manufacture ($1,000)	Cost of materials ($1,000)	Value of shipments ($1,000)	Total capital expenditures ($1,000)
		Total	With 20 employees or more	Number	Payroll ($1,000)	Number	Hours (1,000)	Wages ($1,000)				
326199, ALL OTHER PLASTICS PRODUCT MFG												
All establishments	**1**	**8 608**	**4 694**	**526 333**	**14 067 328**	**413 461**	**805 729**	**8 951 204**	**35 639 380**	**30 479 048**	**66 013 760**	**3 464 199**
Establishments with 1 to 4 employees	7	1 550	–	3 325	80 050	2 707	4 247	53 542	188 319	168 661	359 852	31 682
Establishments with 5 to 9 employees	6	982	–	6 758	169 495	5 238	8 634	110 021	392 360	342 832	736 251	42 146
Establishments with 10 to 19 employees	3	1 382	–	19 338	513 390	14 754	26 254	320 265	1 207 842	932 578	2 139 457	117 074
Establishments with 20 to 49 employees	2	1 983	1 983	63 993	1 651 593	49 530	92 109	996 260	4 061 307	3 232 683	7 277 719	371 382
Establishments with 50 to 99 employees	1	1 203	1 203	85 710	2 205 046	66 892	127 906	1 369 495	5 322 869	4 472 413	9 769 566	523 852
Establishments with 100 to 249 employees	1	1 093	1 093	169 263	4 435 527	134 325	266 888	2 893 985	11 099 733	9 896 012	20 967 284	1 047 433
Establishments with 250 to 499 employees	1	331	331	110 213	2 954 630	87 056	172 910	1 926 521	7 954 594	7 102 472	14 998 593	794 290
Establishments with 500 to 999 employees	1	66	66	43 603	1 184 841	34 678	71 156	786 314	3 109 986	2 474 696	5 620 003	336 999
Establishments with 1,000 to 2,499 employees	–	17	17	D	D	D	D	D	D	D	D	D
Establishments with 2,500 employees or more	–	1	1	D	D	D	D	D	D	D	D	D
Administrative records[2]	9	1 887	–	11 253	224 332	9 136	13 137	150 813	493 683	451 700	947 206	55 047

[1]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 industry or product class code	Industry or primary product class	All establishments	All employees		Production workers			Value added by manufacture ($1,000)	Cost of materials ($1,000)	Value of shipments ($1,000)	Total capital expenditures ($1,000)
			Number	Payroll ($1,000)	Number	Hours (1,000)	Wages ($1,000)				
326199	**All other plastics product mfg**	**8 608**	**526 333**	**14 067 328**	**413 461**	**805 729**	**8 951 204**	**35 639 380**	**30 479 048**	**66 013 760**	**3 464 199**
3261991	Transportation fabricated plastics products (except foam and reinforced plastics)	834	109 940	2 850 377	87 751	178 934	1 934 299	7 049 930	6 768 038	13 824 222	668 904
3261992	Electrical and electronic fabricated plastics products (except foam and reinforced plastics)	540	54 119	1 560 942	42 216	82 394	925 419	3 588 468	2 837 265	6 387 909	354 125
3261993	Industrial machinery plastics products, except foam (including gears, bearings, bushings, cams, and other components)	283	10 282	300 306	7 872	16 010	186 534	739 467	529 820	1 260 408	68 023
3261994	Plastics packaging (except film and sheet, foam, and bottles)	580	60 218	1 743 239	47 749	97 859	1 142 389	4 944 003	4 009 899	8 921 260	586 046
3261995	Plastics dinnerware, tableware, kitchenware, and oven-microwave ware (except foam and cups)	71	11 038	275 625	9 329	18 631	191 954	841 234	731 667	1 610 504	89 871
3261996	Consumer, institutional, and commercial fabricated plastics products (except foam and wire coated), nec	1 481	119 935	3 219 523	93 995	179 254	1 968 950	8 378 436	6 332 438	14 681 432	798 689
3261997	Plastics furniture components and furnishings (except foam and reinforced plastics)	85	5 858	149 428	4 549	8 192	91 370	343 111	308 426	661 509	25 877
3261998	Building and construction fabricated plastics products (except foam, plumbing fixtures, hardware, or reinforced plastics)	611	48 201	1 270 178	36 244	71 889	763 907	3 599 470	3 184 998	6 739 011	313 433
3261999	Plastics shoe products, including taps, soling slabs, and quarterlinings	10	1 187	25 757	1 052	1 761	19 132	73 641	95 935	168 364	969
326199A	Reinforced and fiberglass plastics products, nec	545	38 955	1 079 830	29 896	60 466	688 826	2 511 291	2 531 945	5 032 273	190 645

Table 6a. **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]

NAICS product code	Product	1997				1992			
		Number of companies with shipments of $100,000 or more	Quantity of production for all purposes	Product shipments		Number of companies with shipments of $100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value ($1,000)			Quantity	Value ($1,000)
326199	**All other plastics products**	**N**	**X**	**X**	**62 126 408**	**N**	**X**	**X**	**N**
3261991	Transportation fabricated plastics products (except foam and reinforced plastics)	N	X	X	13 140 173	N	X	X	8 167 794
32619911	Transportation fabricated plastics products (except foam and reinforced plastics)	N	X	X	12 025 675	N	X	X	N
3261991111	Fabricated plastics components, housings, accessories, and parts for motor vehicles (except foam and reinforced plastics)	728	X	X	10 742 933	661	X	X	7 125 998
3261991121	Fabricated plastics components, housings, accessories, and parts for aircraft, space equipment and missiles (except foam and reinforced plastics)	122	X	X	522 245	119	X	X	429 780
3261991131	Fabricated plastics components, housings, accessories, and parts for other transportation equipment (except foam and reinforced plastics)	226	X	X	760 497	184	X	X	255 410
3261991Y	Transportation fabricated plastics products (except foam and reinforced plastics), nsk	N	X	X	1 114 498	N	X	X	N
3261991YWV	Transportation fabricated plastics products (except foam and reinforced plastics), nsk	N	X	X	1 114 498	N	X	X	356 606
3261992	Electrical and electronic fabricated plastics products (except foam and reinforced plastics)	N	X	X	5 334 435	N	X	X	3 244 856
32619921	Electrical and electronic fabricated plastics products (except foam and reinforced plastics)	N	X	X	4 768 598	N	X	X	N
3261992111	Electrical and electronic fabricated plastics products for office, computing and accounting machines, cash registers, and data processing machines (except foam and reinforced plastics)	264	X	X	1 093 597	254	X	X	770 140
3261992121	Electrical and electronic fabricated plastics products for household and commercial appliances (except foam and reinforced plastics)	302	X	X	1 418 494	237	X	X	816 406
3261992131	Electrical and electronic fabricated plastics products for communications equipment (except foam and reinforced plastics)	190	X	X	641 629	145	X	X	335 387
3261992191	Other electrical and electronic fabricated plastics products, including wiring devices and parts (except foam and reinforced plastics)	437	X	X	1 614 878	389	X	X	1 034 212
3261992Y	Electrical and electronic fabricated plastics (except foam and reinforced plastics), nsk	N	X	X	565 837	N	X	X	N
3261992YWV	Electrical and electronic fabricated plastics (except foam and reinforced plastics), nsk	N	X	X	565 837	N	X	X	288 711
3261993	Industrial machinery plastics products, except foam (including gears, bearings, bushings, cams, and other components)	N	X	X	1 256 974	N	X	X	933 391
32619931	Industrial machinery plastics products, except foam (including gears, bearings, bushings, cams, and other components)	N	X	X	1 256 974	N	X	X	N
3261993100	Industrial machinery plastics products, except foam (including gears, bearings, bushings, cams, and other components)	496	X	X	1 256 974	452	X	X	933 391
3261994	Plastics packaging (except film and sheet, foam, and bottles)	N	X	X	8 375 122	N	X	X	6 048 659
32619941	Plastics packaging (except film and sheet, foam, and bottles)	N	X	X	7 648 230	N	X	X	N
3261994111	Plastics pails and drums, more than 3 gallons	56	X	X	1 146 746	50	X	X	684 497
3261994115	Plastics tubs (for food products)	36	X	X	550 788	46	X	X	689 134
3261994121	Plastics jars (for toilet goods, cosmetics, and food products)	43	X	X	242 247	53	X	X	346 675
3261994125	Plastics blister and bubble formed packaging	64	X	X	281 370	71	X	X	268 022
3261994131	Plastics shipping boxes and cases	75	X	X	460 293	78	X	X	264 409
3261994135	Plastics food trays (baskets, shipping boxes, and cases) (except foam)	62	X	X	582 454	59	X	X	404 322
3261994141	Plastics pallets	32	X	X	156 138	23	X	X	38 723
3261994145	Plastics nonpressure child-resistant closures, for prescription products	10	X	X	86 093	9	X	X	63 866
3261994151	Plastics nonpressure child-resistant closures, for all other products, including nonprescription products	20	X	X	189 189	30	X	X	96 869
3261994155	Plastics nonpressure nonchild-resistant closures, including dispensing and nondispensing	61	X	X	917 330	75	X	X	864 854

See footnotes at end of table.

Table 6a. **Products Statistics: 1997 and 1992**—Con.

[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]

NAICS product code	Product	1997				1992			
		Number of companies with shipments of $100,000 or more	Quantity of production for all purposes	Product shipments		Number of companies with shipments of $100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value ($1,000)			Quantity	Value ($1,000)
326199	**All other plastics products**—Con.								
3261994	Plastics packaging (except film and sheet, foam, and bottles)—Con.								
32619941	Plastics packaging (except film and sheet, foam, and bottles)—Con.								
3261994161	Plastics closures for glass, metal, or plastics pressure containers	63	X	X	596 323	63	X	X	549 929
3261994191	Other plastics packaging	225	X	X	2 439 259	231	X	X	1 546 684
3261994Y	Plastics packaging (except film and sheet, foam, and bottles), nsk	N	X	X	726 892	N	X	X	N
3261994YWV	Plastics packaging (except film and sheet, foam, and bottles), nsk	N	X	X	726 892	N	X	X	230 675
3261995	Plastics dinnerware, tableware, kitchenware, and oven-microwave ware (except foam and cups)	N	X	X	1 676 510	N	X	X	1 298 822
32619951	Plastics dinnerware, tableware, kitchenware and oven/microwave ware (except foam and cups)	N	X	X	1 549 979	N	X	X	N
3261995111	Plastics dinnerware and tableware (except foam)	57	X	X	877 681	67	X	X	657 991
3261995121	Plastics kitchenware (except foam and cups)	64	X	X	609 431	55	X	X	473 547
3261995131	Plastics oven/microwave ware (for use in conventional and microwave ovens) (except foam and cups)	14	X	X	62 867	27	X	X	132 938
3261995Y	Plastics dinnerware, tableware, kitchenware, and oven-microwave ware (except foam and cups), nsk	N	X	X	126 531	N	X	X	N
3261995YWV	Plastics dinnerware, tableware, kitchenware, and oven-microwave ware (except foam and cups), nsk	N	X	X	126 531	N	X	X	34 346
3261996	Consumer, institutional, and commercial fabricated plastics products (except foam and wire coated), nec @	N	X	X	13 147 805	N	X	X	N
32619961	Consumer, institutional, and commercial fabricated plastics products (except foam and wire coated), nec	N	X	X	12 025 618	N	X	X	N
3261996111	Plastics cups (except foam, including vending machines, over-the-counter, carryout, etc.)	40	X	X	710 504	57	X	X	482 790
3261996115	Plastics sinkware (flatware or dish drainers, drainer trays and mats, sink mats, sink strainers, dustpans, soapdishes, etc.) (except foam and wire coated)	22	X	X	45 929	20	X	X	78 869
3261996121	Plastics bathware (shower and bath caddies, shower and bathmats, tissue holders, toothbrush holders, toilet bowl brushes, etc.) (except foam and wire coated)	53	X	X	255 999	55	X	X	166 486
3261996125	Plastics utility containers (including buckets, pails, laundry baskets, vegetable bins, dishpans, etc.) (except foam)	75	X	X	743 443	78	X	X	324 566
3261996131	Plastics organizers and holders for closets, drawers, and shelves including paper towel holders, dust mop and broom holders, etc. (except foam and wire coated)	71	X	X	651 929	66	X	X	272 202
3261996135	Plastics wastebaskets (except foam)	31	X	X	88 236	24	X	X	80 910
3261996141	Plastics garbage and trash containers (excluding trash bags) (except foam)	31	X	X	232 567	44	X	X	268 900
3261996145	Plastics grower flowerpots and accessories (except foam and wire coated)	38	X	X	237 961	37	X	X	131 030
3261996151	Plastics decorative flowerpots, flower boxes, planters, and accessories (except foam and wire coated)	48	X	X	185 402	47	X	X	130 806
3261996155	Plastics picnic jugs, cooler chests, and ice buckets (except foam)	24	X	X	388 380	21	X	X	305 135
3261996161	Plastics hardware (including clamps, handles, hinges, locks, casters, knobs, nails, etc.) (except foam and wire coated)	126	X	X	297 914	117	X	X	212 970
3261996165	Plastics hospitalware (including pitchers, wash basins, trays, bedpans, etc.) (except foam and wire coated)	87	X	X	419 503	103	X	X	333 029
3261996171	Plastics laboratory ware (including petri dishes, flasks, funnels, etc.) (except foam and wire coated)	73	X	X	429 900	66	X	X	340 322
3261996175	Plastics individual packing boxes and cases for consumer products (except foam)	77	X	X	444 910	84	X	X	414 949
3261996181	Plastics sponges and scrubbing pads (except foam)	20	X	X	96 333	26	X	X	110 621
3261996185	Other consumer, institutional, and commercial plastics products (except foam and wire coated)	1 575	X	X	6 796 708	N	X	X	N

See footnotes at end of table.

Table 6a. **Products Statistics: 1997 and 1992**—Con.

[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]

NAICS product code	Product	1997				1992			
		Number of companies with shipments of $100,000 or more	Quantity of production for all purposes	Product shipments		Number of companies with shipments of $100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value ($1,000)			Quantity	Value ($1,000)
326199	**All other plastics products**—Con.								
3261996	Consumer, institutional, and commercial fabricated plastics products (except foam and wire coated), nec @—Con.								
3261996Y	Consumer, institutional, and commercial fabricated plastics products (except foam and wire coated), nec, nsk	N	X	X	1 122 187	N	X	X	N
3261996YWV	Consumer, institutional, and commercial fabricated plastics products (except foam and wire coated), nec, nsk	N	X	X	1 122 187	N	X	X	N
3261997	Plastics furniture components and furnishings (except foam and reinforced plastics)	N	X	X	752 800	N	X	X	N
32619971	Plastics furniture components and furnishings (excluding foam and reinforced plastics)	N	X	X	752 339	N	X	X	N
3261997111	Plastics furniture components, accessories, and parts (except foam and reinforced plastics)	187	X	X	542 102	164	X	X	449 298
3261997121	Other plastics furniture components and furnishings (including fixtures, mirror and picture frames, etc.) (except foam and reinforced plastics)	74	X	X	210 237	N	X	X	N
3261997Y	Plastics furniture components and furnishings (excluding foam and reinforced plastics), nsk	N	X	X	461	N	X	X	N
3261997YWV	Plastics furniture components and furnishings (excluding foam and reinforced plastics), nsk	N	X	X	461	N	X	X	N
3261998	Building and construction fabricated plastics products (except foam, plumbing fixtures, hardware, or reinforced plastics)	N	X	X	6 747 267	N	X	X	N
32619981	Building and construction fabricated plastics products	N	X	X	6 678 984	N	X	X	N
3261998111	Plastics corrugated and flat panels (except foam and reinforced plastics)	31	X	X	176 354	23	X	X	151 443
3261998131	Plastics doors, partitions, moldings, windows and frames, and decorative trim (except foam, hardware, and reinforced plastics)	378	X	X	3 271 141	275	X	X	1 411 449
3261998141	Plastics siding and accessories (including soffit, fascia, and skirts) (except foam and reinforced plastics)	50	X	X	1 466 175	36	X	X	1 001 513
3261998152	Building and construction plastics fittings and unions, other than pipe (except foam, plumbing fixtures, hardware, and reinforced plastics)	39	X	X	260 083	N	X	X	N
3261998171	Plastics wall and counter coverings, including wall and ceiling tile (except foam and reinforced plastics)	95	X	X	261 652	N	X	X	N
3261998181	Plastics swimming pool liners and covers (except foam and reinforced plastics)	24	X	X	81 975	26	X	X	58 038
3261998191	Other building and construction plastics products (except foam and reinforced plastics)	283	X	X	1 161 604	N	X	X	N
3261998Y	Building and construction fabricated plastics products, nsk	N	X	X	68 283	N	X	X	N
3261998YWV	Building and construction fabricated plastics products, nsk	N	X	X	68 283	N	X	X	N
3261999	Plastics shoe products, including taps, soling slabs, and quarterlinings	N	X	X	179 030	N	X	X	115 724
32619991	Plastics shoe products, including taps, soling slabs, and quarterlinings	N	X	X	179 030	N	X	X	N
3261999100	Plastics shoe products, including taps, soling slabs, and quarterlinings	19	X	X	179 030	33	X	X	115 724
326199A	Reinforced and fiberglass plastics products, nec	N	X	X	4 897 865	N	X	X	3 878 836
326199A1	Reinforced and fiberglass plastics products, nec	N	X	X	4 205 353	N	X	X	N
326199A111	Transportation reinforced and fiberglass plastics products	126	X	X	1 256 301	148	X	X	1 404 466
326199A121	Electrical and electronic reinforced and fiberglass plastics products	108	X	X	714 656	99	X	X	577 244
326199A131	Building and construction reinforced and fiberglass plastics products	121	X	X	860 853	126	X	X	674 158
326199A141	Other fabricated fiberglass and reinforced products (except furniture)	326	X	X	1 373 543	288	X	X	1 041 440
326199AY	Reinforced and fiberglass plastics products, nec, nsk	N	X	X	692 512	N	X	X	N
326199AYWV	Reinforced and fiberglass plastics products, nec, nsk	N	X	X	692 512	N	X	X	181 528

See footnotes at end of table.

Table 6a. **Products Statistics: 1997 and 1992**—Con.

[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]

NAICS product code	Product	1997				1992			
		Number of companies with shipments of $100,000 or more	Quantity of production for all purposes	Product shipments		Number of companies with shipments of $100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value ($1,000)			Quantity	Value ($1,000)
326199	**All other plastics products**—Con.								
326199W	All other plastics products, nsk, total	N	X	X	6 618 427	N	X	X	N
326199WY	All other plastics products, nsk, total	N	X	X	6 618 427	N	X	X	N
326199WYWW	All other plastics products, nsk, for nonadministrative-record establishments	N	X	X	5 728 983	N	X	X	N
326199WYWY	All other plastics products, nsk, for administrative-record establishments	N	X	X	889 444	N	X	X	N

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.

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.

Table 6b. **Product Class Shipments for Selected States: 1997 and 1992**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than $2 million in product class shipments or they disclose data for individual companies in 1997. For meaning of abbreviations and symbols, see introductory text. For explanations of terms, see appendixes]

NAICS product class code	Product class and geographic area	Value of product shipments ($1,000)	
		1997	1992
3261991	**TRANSPORTATION FABRICATED PLASTICS PRODUCTS (EXCEPT FOAM AND REINFORCED PLASTICS)**		
	United States	**13 140 173**	**8 167 794**
	Alabama	35 595	16 991
	Arkansas	71 686	N
	California	529 013	381 072
	Colorado	9 451	10 641
	Connecticut	53 072	21 762
	Delaware	3 788	N
	Florida	140 217	88 812
	Georgia	163 282	82 129
	Idaho	5 972	N
	Illinois	699 680	375 022
	Indiana	1 074 674	525 225
	Iowa	154 819	46 617
	Kansas	39 170	8 146
	Kentucky	395 836	236 639
	Maryland	36 085	N
	Massachusetts	147 794	17 589
	Michigan	4 267 118	3 075 058
	Minnesota	102 415	57 825
	Missouri	264 605	93 661
	Nebraska	45 394	17 449
	Nevada	5 186	N
	New Jersey	14 502	28 603
	New York	212 731	190 194
	North Carolina	198 462	92 568
	Ohio	1 996 905	1 217 053
	Oklahoma	10 581	N
	Oregon	18 382	14 846
	Pennsylvania	364 028	122 528
	Rhode Island	23 339	10 257
	South Carolina	203 802	N
	Tennessee	609 153	255 681
	Texas	255 872	157 181
	Utah	16 629	N
	Washington	71 121	95 132
	Wisconsin	246 454	241 977

See footnotes at end of table.

Table 6b. **Product Class Shipments for Selected States: 1997 and 1992**—Con.

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than $2 million in product class shipments or they disclose data for individual companies in 1997. For meaning of abbreviations and symbols, see introductory text. For explanations of terms, see appendixes]

NAICS product class code	Product class and geographic area	Value of product shipments ($1,000)	
		1997	1992
3261992	**ELECTRICAL AND ELECTRONIC FABRICATED PLASTICS PRODUCTS (EXCEPT FOAM AND REINFORCED PLASTICS)**		
	United States	**5 334 435**	**3 244 856**
	Alabama	6 747	12 036
	Arizona	127 065	86 854
	Arkansas	102 368	69 422
	California	747 810	392 498
	Colorado	149 640	59 776
	Connecticut	94 167	52 331
	Delaware	7 456	N
	Florida	146 080	64 980
	Georgia	103 350	50 872
	Illinois	430 909	293 616
	Indiana	356 317	221 069
	Iowa	66 381	26 872
	Kansas	10 872	N
	Kentucky	209 100	141 515
	Louisiana	19 257	N
	Maryland	24 219	5 388
	Massachusetts	133 249	75 270
	Michigan	191 970	130 019
	Minnesota	153 198	104 978
	Mississippi	6 284	7 726
	Missouri	38 021	25 883
	New Hampshire	21 712	9 562
	New Jersey	142 213	124 452
	New York	155 012	117 311
	North Carolina	203 218	145 896
	Ohio	353 680	257 097
	Oklahoma	32 779	10 850
	Oregon	83 942	53 282
	Pennsylvania	243 252	197 292
	Rhode Island	51 758	30 281
	South Carolina	119 213	66 670
	Tennessee	152 001	77 194
	Texas	246 975	109 250
	Virginia	37 952	22 853
	Washington	74 723	9 235
	Wisconsin	231 465	140 433
3261993	**INDUSTRIAL MACHINERY PLASTICS PRODUCTS, EXCEPT FOAM (INCLUDING GEARS, BEARINGS, BUSHINGS, CAMS, AND OTHER COMPONENTS)**		
	United States	**1 256 974**	**933 391**
	Arizona	4 810	N
	California	118 159	77 242
	Colorado	25 544	5 817
	Connecticut	34 894	27 980
	Florida	20 239	51 860
	Georgia	2 613	N
	Illinois	103 023	76 572
	Indiana	32 292	17 869
	Iowa	47 627	65 927
	Kentucky	65 100	13 117
	Maryland	4 434	N
	Massachusetts	36 369	32 575
	Michigan	69 234	19 911
	Minnesota	34 447	41 385
	Missouri	19 187	11 241
	Nevada	13 470	N
	New Hampshire	2 408	4 340
	New Jersey	58 979	23 872
	New York	27 082	38 119
	North Carolina	48 082	23 251
	Ohio	80 881	114 524
	Oklahoma	17 518	4 884
	Oregon	7 939	8 716
	Pennsylvania	84 271	50 854
	South Carolina	50 190	40 243
	Tennessee	2 941	11 410
	Texas	32 698	53 621
	Utah	34 646	N
	Washington	10 444	4 654
	Wisconsin	89 501	54 816
3261994	**PLASTICS PACKAGING (EXCEPT FILM AND SHEET, FOAM, AND BOTTLES)**		
	United States	**8 375 122**	**6 048 659**
	Alabama	87 934	N
	Arizona	58 825	N
	Arkansas	69 404	12 156
	California	782 220	502 614
	Colorado	86 743	19 592
	Connecticut	130 202	154 536
	Delaware	36 517	N
	Florida	100 789	75 004
	Georgia	235 230	145 561
	Illinois	892 473	724 572

See footnotes at end of table.

Table 6b. **Product Class Shipments for Selected States: 1997 and 1992**—Con.

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than $2 million in product class shipments or they disclose data for individual companies in 1997. For meaning of abbreviations and symbols, see introductory text. For explanations of terms, see appendixes]

NAICS product class code	Product class and geographic area	Value of product shipments ($1,000)	
		1997	1992
3261994	**PLASTICS PACKAGING (EXCEPT FILM AND SHEET, FOAM, AND BOTTLES)**—Con.		
	Indiana	514 566	342 923
	Iowa	120 427	107 681
	Kansas	22 068	27 892
	Kentucky	243 251	141 091
	Louisiana	33 099	N
	Maryland	126 792	97 783
	Massachusetts	223 064	129 987
	Michigan	358 000	191 466
	Minnesota	317 954	156 690
	Mississippi	86 081	N
	Missouri	251 437	206 540
	Nevada	71 630	66 141
	New Jersey	494 650	399 947
	New York	283 151	266 856
	North Carolina	272 339	194 199
	Ohio	506 508	389 599
	Oklahoma	55 382	36 360
	Oregon	39 581	28 243
	Pennsylvania	579 909	537 150
	Rhode Island	125 964	117 512
	South Carolina	124 795	78 670
	Tennessee	58 622	145 274
	Texas	282 659	149 331
	Virginia	274 572	106 853
	Washington	22 320	26 482
	West Virginia	38 639	N
	Wisconsin	292 676	223 265
3261995	**PLASTICS DINNERWARE, TABLEWARE, KITCHENWARE, AND OVEN-MICROWAVE WARE (EXCEPT FOAM AND CUPS)**		
	United States	**1 676 510**	**1 298 822**
	Alabama	8 018	14 469
	Arizona	10 524	N
	California	187 576	89 608
	Connecticut	4 743	11 484
	Florida	5 216	N
	Illinois	227 449	172 862
	Massachusetts	150 266	109 311
	Michigan	12 028	N
	Mississippi	20 117	18 172
	New Jersey	26 639	43 623
	New York	53 095	42 845
	Ohio	93 184	43 704
	Pennsylvania	77 101	49 204
	Texas	105 790	59 857
	Wisconsin	54 319	33 656
3261996	**CONSUMER, INSTITUTIONAL, AND COMMERCIAL FABRICATED PLASTICS PRODUCTS (EXCEPT FOAM AND WIRE COATED), NEC @**		
	United States	**13 147 805**	**N**
	Alabama	134 205	N
	Arizona	211 072	N
	Arkansas	133 404	N
	California	1 294 060	N
	Colorado	232 028	N
	Connecticut	213 075	N
	Delaware	128 687	N
	Florida	266 214	N
	Georgia	197 978	N
	Idaho	23 791	N
	Illinois	1 337 435	N
	Indiana	324 093	N
	Iowa	175 929	N
	Kansas	358 400	N
	Kentucky	111 851	N
	Louisiana	28 556	N
	Maryland	157 663	N
	Massachusetts	473 094	N
	Michigan	317 660	N
	Minnesota	378 894	N
	Mississippi	95 411	N
	Missouri	406 184	N
	Nebraska	77 643	N
	Nevada	42 533	N
	New Hampshire	68 452	N
	New Jersey	374 258	N
	New York	742 024	N
	North Carolina	440 243	N
	Ohio	1 295 803	N
	Oklahoma	101 260	N
	Oregon	71 119	N
	Pennsylvania	691 077	N
	Rhode Island	47 793	N
	South Carolina	159 406	N
	Tennessee	277 868	N

See footnotes at end of table.

Table 6b. **Product Class Shipments for Selected States: 1997 and 1992**—Con.

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than $2 million in product class shipments or they disclose data for individual companies in 1997. For meaning of abbreviations and symbols, see introductory text. For explanations of terms, see appendixes]

NAICS product class code	Product class and geographic area	Value of product shipments ($1,000)	
		1997	1992
3261996	**CONSUMER, INSTITUTIONAL, AND COMMERCIAL FABRICATED PLASTICS PRODUCTS (EXCEPT FOAM AND WIRE COATED), NEC @**—Con.		
	Texas	855 345	N
	Utah	39 439	N
	Vermont	42 349	N
	Virginia	72 047	N
	Washington	59 071	N
	Wisconsin	598 110	N
3261997	**PLASTICS FURNITURE COMPONENTS AND FURNISHINGS (EXCEPT FOAM AND REINFORCED PLASTICS)**		
	United States	**752 800**	**N**
	Arkansas	22 936	N
	California	60 229	N
	Florida	5 825	N
	Illinois	21 799	N
	Indiana	31 164	N
	Iowa	19 345	N
	Kansas	3 542	N
	Massachusetts	53 259	N
	Michigan	130 853	N
	Minnesota	8 199	N
	Missouri	15 358	N
	New Jersey	34 956	N
	New York	74 556	N
	North Carolina	47 832	N
	Ohio	41 937	N
	Pennsylvania	64 321	N
	Tennessee	14 270	N
	Texas	3 420	N
	Virginia	3 355	N
	Washington	5 170	N
	Wisconsin	31 606	N
3261998	**BUILDING AND CONSTRUCTION FABRICATED PLASTICS PRODUCTS (EXCEPT FOAM, PLUMBING FIXTURES, HARDWARE, OR REINFORCED PLASTICS)**		
	United States	**6 747 267**	**N**
	Alabama	59 764	N
	Arizona	43 455	N
	Arkansas	32 888	N
	California	325 910	N
	Colorado	39 485	N
	Connecticut	71 042	N
	Delaware	17 705	N
	Florida	125 768	N
	Georgia	151 081	N
	Illinois	235 065	N
	Indiana	187 749	N
	Iowa	124 333	N
	Kentucky	76 158	N
	Louisiana	8 409	N
	Maine	8 046	N
	Maryland	177 482	N
	Massachusetts	82 704	N
	Michigan	451 210	N
	Minnesota	96 495	N
	Mississippi	166 968	N
	Missouri	134 496	N
	Nebraska	27 606	N
	Nevada	13 869	N
	New Hampshire	65 430	N
	New Jersey	361 185	N
	New York	183 472	N
	North Carolina	191 883	N
	Ohio	503 825	N
	Oklahoma	24 866	N
	Oregon	72 356	N
	Pennsylvania	791 974	N
	Rhode Island	16 020	N
	South Carolina	52 358	N
	Tennessee	243 387	N
	Texas	455 520	N
	Utah	68 352	N
	Virginia	229 536	N
	Washington	189 911	N
	West Virginia	162 824	N
	Wisconsin	201 559	N
3261999	**PLASTICS SHOE PRODUCTS, INCLUDING TAPS, SOLING SLABS, AND QUARTERLININGS**		
	United States	**179 030**	**115 724**

See footnotes at end of table.

Table 6b. **Product Class Shipments for Selected States: 1997 and 1992**—Con.

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than $2 million in product class shipments or they disclose data for individual companies in 1997. For meaning of abbreviations and symbols, see introductory text. For explanations of terms, see appendixes]

NAICS product class code	Product class and geographic area	Value of product shipments ($1,000)	
		1997	1992
326199A	**REINFORCED AND FIBERGLASS PLASTICS PRODUCTS, NEC**		
	United States	**4 897 865**	**3 878 836**
	Alabama	161 192	170 808
	Arizona	57 882	N
	Arkansas	179 558	103 319
	California	576 047	432 690
	Colorado	16 056	14 989
	Connecticut	56 458	41 994
	Delaware	48 994	N
	Florida	71 126	28 217
	Georgia	74 027	35 034
	Illinois	317 547	200 242
	Indiana	537 213	454 373
	Iowa	13 714	32 691
	Kansas	32 960	26 776
	Kentucky	108 147	10 561
	Louisiana	12 723	15 430
	Maine	7 310	4 482
	Massachusetts	54 902	38 450
	Michigan	205 820	219 118
	Minnesota	181 408	141 788
	Mississippi	6 209	16 801
	Missouri	64 314	35 368
	Nebraska	18 997	9 066
	New Jersey	28 356	26 604
	New York	175 943	79 554
	North Carolina	61 397	166 255
	Ohio	476 852	449 381
	Oklahoma	16 996	10 470
	Oregon	30 112	28 685
	Pennsylvania	293 723	310 778
	Rhode Island	11 006	8 134
	South Carolina	71 879	37 623
	Tennessee	85 309	78 562
	Texas	328 362	255 172
	Utah	4 027	12 227
	Virginia	164 432	N
	Washington	71 801	60 030
	Wisconsin	164 600	123 655

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.

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 material code	Material consumed	1997		1992	
		Quantity	Delivered cost ($1,000)	Quantity	Delivered cost ($1,000)
326199	**ALL OTHER PLASTICS PRODUCT MFG**				
32121909	Hardboard	X	63 587	X	N
325000A3	Industrial inorganic chemicals	X	84 615	X	N
32513107	Inorganic pigments	X	169 530	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	9 431 339	X	N
325100A1	Industrial organic and synthetic organic chemicals, including plasticizers (except synthetic dyes, pigments, and toners)	X	333 416	X	N
32513200	Synthetic dyes, pigments, lakes, and toners	X	246 896	X	N
32500043	All other chemical and allied products	X	344 913	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	2 490 571	X	N
32599100	Custom compounded plastics resins (purchased)	X	468 169	X	N
32721209	Textile-type glass fiber	X	444 078	X	N
31321017	Broadwoven fabrics	X	122 040	X	N
32210015	Paper and paperboard products except paperboard boxes, containers, and corrugated paperboard	X	206 760	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	763 338	X	N
33322000	Parts and attachments specially designed for plastics working machinery	X	302 598	X	N
00999803	Spent or post-consumer plastics (purchased)	X	142 698	X	N
00970099	All other materials and components, parts, containers, and supplies	X	5 168 685	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	5 720 483	X	N

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.

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:

1. 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.
2. Cost of products bought and sold in the same condition.
3. 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

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 company-operated 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 company-owned 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.

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

326199 ALL OTHER PLASTICS PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

The data published with NAICS code 326199 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)
3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326199 include establishments primarily engaged in the manufacture of plastic furniture parts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

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:

1. 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.

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.

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 SIC-based 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.

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

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, complete-coverage 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.

Appendix D. Geographic Notes

Not applicable for this report.

Appendix E.
Metropolitan Areas

Not applicable for this report.

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

Part 1. **Products Statistics (Tables 6a and 6b)**

NAICS product code	Footnote
@3261996	For additional detail, see Current Industrial Report MA315D, Gloves and Mittens.

Part 2. **Materials Consumed by Kind (Table 7)**

Not applicable.

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

1997 published	1997 collected	1992 published
3261111	26732	26732
3261111111	2673211	2673211
3261111215	2673212	2673212
3261111321	2673214	2673214
3261111431	2673217	2673217
3261111541	2673213	2673213
3261111551	2673215	2673215
3261111561	2673216	2673216
3261111571	2673218	2673218
3261111681	2673221	2673221
3261111791	2673223	2673223
3261111YWV	2673200	2673200
3261113	26733 pt	26733 pt
3261113100 pt	2673300 pt	2673300 pt
3261113100 pt	2673309	2673314 pt
326111W	26730 pt	26730 pt
326111WYWW	2673000 pt	2673000 pt
326111WYWY	2673002 pt	2673002 pt
3261121	26712	26712
3261121111	2671211	2671211
3261121221	2671212	2671212
3261121YWV	2671200	2671200
3261123	26716	26714 pt
3261123111	2671612	2671412
3261123221	2671615	2671415
3261123331	2671617	2671417
3261123341	2671621	2671421
3261123YWV	2671600	2671400 pt
326112W	26710 pt	26710 pt
326112WYWW	2671000 pt	2671000 pt
326112WYWY	2671002 pt	2671002 pt
3261130	30810	30810
3261130121	3081020	3081020
3261130231	3081030	3081030
3261130341	3081040	3081040
3261130449	3081010	3081010
3261130451	3081045	3081050 pt
3261130453	3081060	3081050 pt
3261130YWW	3081000	3081000
3261130YWY	3081002	3081002
3261210	30820	30820
3261210111	3082010	3082010
3261210231	3082030	3082030
3261210341	3082040	3082040
3261210451	3082050	3082050
3261210561	3082060	3082060
3261210681	3082080	3082080
3261210787	3082020	3082020
3261210789	3082070	3082070
3261210791	3082090	3082090
3261210YWW	3082000	3082000
3261210YWY	3082002	3082002
3261221	30840 pt	30840 pt
3261221112	3084001	3084011 pt
3261221114	3084004	3084011 pt
3261221116	3084006	3084011 pt
3261221321	3084021	3084014 pt
3261221323	3084023	3084014 pt
3261221325	3084025	3084014 pt
3261221327	3084027	3084014 pt
3261221531	3084031	3084015 pt
3261221533	3084033	3084015 pt
3261221535	3084035	3084015 pt
3261221641	3084012	3084012
3261221751	3084013	3084013
3261221991	3084089	3084019
3261221YWV	3084000 pt	3084000 pt
3261223	30898 pt	30898 pt
3261223100 pt	3089800 pt	3089800 pt
3261223100 pt	3089815	3089805 pt
32612W pt	30840 pt	30840 pt
32612W pt	30890 pt	30890 pt
32612WYWW pt	3084000 pt	3084000 pt
32612WYWW pt	3089000 pt	3089000 pt
32612WYWY pt	3084002	3084002
32612WYWY pt	3089002 pt	3089002 pt
3261300	30830	30830
3261300111	3083011	3083011
3261300221	3083013	3083013
3261300391	3083019	3083019
3261300YWW	3083000	3083000
3261300YWY	3083002	3083002
3261401	3086A	30861 pt
3261401100	3086A00	3086100 pt
3261402	3086C	30862 pt
3261402125	3086C25	3086220 pt
3261402255	3086C15	3086210 pt
3261402295	3086C95	3086290 pt
3261402YWV	3086C00	3086200 pt
3261403	3086E	30863 pt
3261403115	3086E15	3086310 pt
3261403195	3086E95	3086390 pt
3261403YWV	3086E00	3086300 pt
3261404	3086H	30864 pt
3261404100 pt	3086H00 pt	3086400 pt
3261404100 pt	3086H00 pt	3086490 pt
3261405	3086J	30865 pt
3261405115	3086J15	3086510
3261405225	3086J25	3086520
3261405235	3086J35	3086530
3261405245	3086J45	3086540
3261405295	3086J95	3086590 pt
3261405YWV	3086J00	3086500 pt
3261406	3086L	30866 pt
3261406115	3086L15	3086610 pt
3261406195	3086L95	3086690 pt
3261406YWV	3086L00	3086600 pt
326140W	30860 pt	30860 pt
326140WYWW	3086000 pt	3086000 pt
326140WYWY	3086002	3086002 pt
3261501	3086B	30861 pt
3261501101	3086B01	3086100 pt
3261501102	3086B02	3086100 pt
3261501103	3086B03	3086100 pt
3261501YWV	3086B00	3086100 pt
3261502	3086D	30862 pt
3261502116	3086D16	3086210 pt
3261502126	3086D26	3086210 pt
3261502196	3086D96	3086210 pt
3261502YWV	3086D00	3086200 pt
3261503	3086F	30863 pt
3261503116	3086F16	3086310 pt
3261503196	3086F96	3086390 pt
3261503YWV	3086F00	3086300 pt
3261504	3086G	30864 pt
3261504110	3086G25	3086420 pt
3261504215	3086G15	3086410 pt
3261504216	3086G16	3086410 pt
3261504227	3086G27	3086430 pt
3261504228	3086G28	3086430 pt
3261504237	3086G37	3086490 pt
3261504YWV	3086G00	3086400 pt
3261505	3086K	30865 pt
3261505100 pt	3086K00 pt	3086500 pt
3261505100 pt	3086K00 pt	3086590 pt
3261506	3086M	30866 pt
3261506116	3086M16	3086610 pt
3261506196	3086M96	3086690 pt
3261506YWV	3086M00	3086600 pt
3261509 pt	3086N pt	30861 pt
3261509 pt	3086N pt	30862 pt
3261509 pt	3086N pt	30863 pt
3261509 pt	3086N pt	30864 pt
3261509 pt	3086N pt	30865 pt
3261509 pt	3086N pt	30866 pt
3261509100 pt	3086N00 pt	3086100 pt
3261509100 pt	3086N00 pt	3086200 pt
3261509100 pt	3086N00 pt	3086210 pt
3261509100 pt	3086N00 pt	3086220 pt
3261509100 pt	3086N00 pt	3086290 pt
3261509100 pt	3086N00 pt	3086300 pt
3261509100 pt	3086N00 pt	3086310 pt
3261509100 pt	3086N00 pt	3086390 pt
3261509100 pt	3086N00 pt	3086400 pt
3261509100 pt	3086N00 pt	3086410 pt
3261509100 pt	3086N00 pt	3086420 pt
3261509100 pt	3086N00 pt	3086430 pt
3261509100 pt	3086N00 pt	3086490 pt
3261509100 pt	3086N00 pt	3086500 pt
3261509100 pt	3086N00 pt	3086590 pt
3261509100 pt	3086N00 pt	3086600 pt
3261509100 pt	3086N00 pt	3086610 pt
3261509100 pt	3086N00 pt	3086690 pt
326150W	30860 pt	30860 pt
326150WYWW	3086000 pt	3086000 pt
326150WYWY	3086000 pt	3086002 pt
3261600	30850	30850
3261600100	3085000 pt	3085000 pt
3261600YWW	3085000 pt	3085000 pt
3261600YWY	3085002	3085002
3261910	30880	30880
3261910000	3088000 pt	3088000 pt
3261910YWW	3088000 pt	3088000 pt
3261910YWY	3088002	3088002
3261920 pt	30690 pt	30690 pt
3261920 pt	30694 pt	30694 pt
3261920 pt	39960	39960
3261920110 pt	3069428 pt	3069421 pt
3261920110 pt	3069428 pt	3069425 pt
3261920110 pt	3069428 pt	3069426 pt
3261920110 pt	3996001	3996000 pt
3261920120 pt	3069429 pt	3069421 pt
3261920120 pt	3069429 pt	3069425 pt
3261920120 pt	3069429 pt	3069426 pt
3261920120 pt	3996004	3996000 pt
3261920YWW pt	3069000 pt	3069000 pt
3261920YWW pt	3069400 pt	3069400 pt
3261920YWW pt	3996000	3996000 pt
3261920YWY pt	3069002 pt	3069002 pt
3261920YWY pt	3996002	3996002
3261991	30891	30891
3261991111	3089101	3089101
3261991121	3089103	3089103
3261991131	3089109	3089109
3261991YWV	3089100	3089100
3261992	30892	30892
3261992111	3089210	3089210
3261992121	3089220	3089220
3261992131	3089230	3089230
3261992191	3089290	3089290
3261992YWV	3089200	3089200
3261993	30893	30893
3261993100	3089300	3089300
3261994	30894	30894
3261994111	3089401	3089401
3261994115	3089402	3089402
3261994121	3089403	3089403
3261994125	3089405	3089405
3261994131	3089406	3089406
3261994135	3089407	3089407
3261994141	3089408	3089408
3261994145	3089410	3089410
3261994151	3089420	3089420
3261994155	3089430	3089430
3261994161	3089440	3089440
3261994191	3089490	3089490
3261994YWV	3089400	3089400
3261995	30895	30895
3261995111	3089501	3089501
3261995121	3089502	3089502
3261995131	3089503	3089503
3261995YWV	3089500	3089500
3261996 pt	30896	30896
3261996 pt	39999 pt	39999 pt
3261996111	3089611	3089611
3261996115	3089612	3089612
3261996121	3089613	3089613
3261996125	3089614	3089614
3261996131	3089615	3089615
3261996135	3089616	3089616
3261996141	3089617	3089617
3261996145	3089618	3089618
3261996151	3089619	3089619
3261996155	3089621	3089621
3261996161	3089622	3089622
3261996165	3089623	3089623
3261996171	3089624	3089624
3261996175	3089625	3089625
3261996181	3089626	3089626
3261996185 pt	3089627	3089627
3261996185 pt	3999993 pt	3999913 pt
3261996185 pt	3999993 pt	3999942 pt
3261996185 pt	3999993 pt	3999944 pt
3261996185 pt	3999993 pt	3999999 pt
3261996YWV pt	3089600	3089600
3261996YWV pt	3999900 pt	3999900 pt
3261997	30897 pt	30897 pt
3261997111	3089701	3089701
3261997121	3089719	3089709 pt
3261997YWV	3089700 pt	3089700 pt

1997 published	1997 collected	1992 published
3261998	30898 pt	30898 pt
3261998111	3089801	3089801
3261998131	3089803	3089803
3261998141	3089804	3089804
3261998152	3089816	3089805 pt
3261998171 pt	3089817 pt	3089806
3261998171 pt	3089817 pt	3089807
3261998181	3089818	3089808
3261998191 pt	3089819 pt	3089802
3261998191 pt	3089819 pt	3089809
3261998YWV	3089800 pt	3089800 pt
3261999	30899	30899
3261999100	3089900	3089900
326199A	3089A	3089A
326199A111	3089A11	3089A11
326199A121	3089A12	3089A12
326199A131	3089A14	3089A14
326199A141	3089A18	3089A18
326199AYWV	3089A00	3089A00
326199W pt	30890 pt	30890 pt
326199W pt	39990 pt	39990 pt
326199WYWW pt	3089000 pt	3089000 pt
326199WYWW pt	3999000 pt	3999000 pt
326199WYWY pt	3089002 pt	3089002 pt
326199WYWY pt	3999002 pt	3999002 pt
3262111	30111	30111
3262111112	3011112	3011112
3262111115	3011115	3011115
3262111YWV	3011100	3011100
3262113	30112	30112
3262113111	3011211	3011211
3262113212	3011212	3011212
3262113221	3011221	3011221
3262113222	3011222	3011222
3262113231	3011231	3011231
3262113232	3011232	3011232
3262113YWV	3011200	3011200
3262117	30117	30117
3262117100	3011700	3011700
3262119	30118	30118
3262119100	3011800	3011800
326211B	30119	30119
326211B100 pt	3011900 pt	3011900
326211B100 pt	3011900 pt	3011921
326211B100 pt	3011900 pt	3011922
326211B100 pt	3011900 pt	3011925
326211D	3011A	3011A
326211D139	3011A39	3011A39
326211D152	3011A52	3011A52
326211DYWV	3011A00	3011A00
326211F	3011C	3011C
326211F121	3011C21	3011C21
326211F123	3011C23	3011C23
326211F127 pt	3011C27 pt	3011C25
326211F127 pt	3011C27 pt	3011C29
326211FYWV	3011C00	3011C00
326211H	3011D	3011D
326211H111	3011D11	3011D11
326211H231	3011D31	3011D31
326211H239	3011D39	3011D39
326211HYWV	3011D00	3011D00
326211W	30110	30110
326211WYWW	3011000	3011000
326211WYWY	3011002	3011002

1997 published	1997 collected	1992 published
3262120	75340	75340
3262120100	7534000 pt	7534000 pt
3262120YWW	7534000 pt	7534000 pt
3262120YWY	7534002	7534000 pt
3262201	30521	30521
3262201141	3052141	3052141
3262201143	3052143	3052143
3262201151 pt	3052151 pt	3052145
3262201151 pt	3052151 pt	3052149
3262201YWV	3052100	3052100
3262202	30522	30522
3262202125	3052225	3052225
3262202231	3052231	3052231
3262202245 pt	3052245 pt	3052241
3262202245 pt	3052245 pt	3052251
3262202245 pt	3052245 pt	3052289
3262202YWV	3052200	3052200
3262203	3052A	3052A
3262203101	3052A01	3052A01
3262203105	3052A02	3052A02
3262203YWV	3052A00	3052A00
3262204	3052B	3052B
3262204100	3052B00	3052B00
3262205	3052C	3052C
3262205100	3052C00	3052C00
3262206	3052D	3052D
3262206101	3052D01	3052D01
3262206105	3052D02	3052D02
3262206YWV	3052D00	3052D00
3262207	3052F	3052F
3262207125 pt	3052F25 pt	3052F10
3262207125 pt	3052F25 pt	3052F20
3262207145 pt	3052F45 pt	3052F30
3262207145 pt	3052F45 pt	3052F40
3262207YWV	3052F00	3052F00
3262208	3052G	3052G
3262208125 pt	3052G25 pt	3052G10
3262208125 pt	3052G25 pt	3052G20
3262208145 pt	3052G45 pt	3052G30
3262208145 pt	3052G45 pt	3052G40
3262208YWV	3052G00	3052G00
326220W	30520	30520
326220WYWW	3052000	3052000
326220WYWY	3052002	3052002
3262911	30611	30611
3262911100	3061100	3061100
3262912	30612	30612
3262912100	3061200	3061200
3262913	30613	30613
3262913100	3061300	3061300
3262914	30614	30614
3262914100	3061400	3061400
3262915	30615	30615
3262915100	3061500	3061500
3262916	30616	30616
3262916100	3061600	3061600
3262917	30617	30617
3262917100	3061700	3061700
326291W	30610	30610
326291WYWW	3061000	3061000
326291WYWY	3061002	3061002

1997 published	1997 collected	1992 published
3262991	30693	30693
3262991111	3069317	3069317
3262991115	3069323	3069323
3262991121	3069351	3069351
3262991125	3069368	3069368
3262991231	3069373	3069373
3262991235	3069374	3069374
3262991241	3069375	3069375
3262991245	3069377	3069377
3262991251	3069382	3069382
3262991255	3069383	3069383
3262991261	3069384	3069384
3262991YWV	3069300	3069300
3262993	30694 pt	30694 pt
3262993121	3069422	3069421 pt
3262993131	3069423	3069423
3262993141	3069424	3069425 pt
3262993151	3069427	3069426 pt
3262993YWV	3069400 pt	3069400 pt
3262994	30696	30696
3262994111	3069615	3069615
3262994121	3069651	3069651
3262994131	3069661	3069661
3262994YWV	3069600	3069600
3262995 pt	3069F pt	30695
3262995 pt	3069F pt	30698
3262995131	3069F31	3069831
3262995151 pt	3069F41 pt	3069851
3262995151 pt	3069F41 pt	3069861
3262995181 pt	3069F81 pt	3069500
3262995181 pt	3069F81 pt	3069871
3262995YWV	3069F00	3069800
3262996	30699	30699
3262996100	3069900	3069900
3262997	3069C	3069C
3262997111	3069C11	3069C11
3262997115	3069C12	3069C12
3262997125	3069C15	3069C15
3262997131	3069C16	3069C16
3262997135	3069C17	3069C17
3262997137	3069C14	3069C14
3262997141	3069C23	3069C23
3262997145	3069C24	3069C24
3262997151	3069C30	3069C30
3262997155	3069C44	3069C44
3262997YWV	3069C00	3069C00
3262998	3069D pt	3069D pt
3262998111	3069D41	3069D41
3262998121	3069D42	3069D42
3262998YWV	3069D00 pt	3069D00 pt
3262999	3069E	3069E
3262999111	3069E13	3069E13
3262999115	3069E19	3069E19
3262999121	3069E20	3069E20
3262999125	3069E21	3069E21
3262999131	3069E22	3069E22
3262999135	3069E23	3069E23
3262999141	3069E28	3069E28
3262999145	3069E26	3069E26
3262999151	3069E27	3069E27
3262999155	3069E29	3069E29
3262999YWV	3069E00	3069E00
326299W	30690 pt	30690 pt
326299WYWW	3069000 pt	3069000 pt
326299WYWY	3069002 pt	3069002 pt