

Rhode Island: 2002

Issued September 2005

EC02-31A-RI (RV)

2002 Economic Census

Manufacturing

Geographic Area Series



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ACKNOWLEDGMENTS

This report was prepared in the Manufacturing and Construction Division under the direction of **Mendel D. Gayle**, Assistant Division Chief for Census and Related Programs who was responsible for the overall planning, management, and coordination. **Mendel D. Gayle**, Chief, Census and Related Programs Support Branch, assisted by **Arminta Quash** Section Chief, **Robert Reinard**, Chief, Consumer Goods Industries Branch, assisted by **Suzanne Conard**, **Susan DiCola**, and **James Hinckley**, Section Chiefs, **Kenneth Hansen**, Chief, Investment Goods Industries Branch, assisted by **Chris Blackburn**, **Jazmin Rose** and **Wanda Sledd**, Section Chiefs, **Nathaniel Shelton**, Chief, Primary Goods Industries Branch, assisted by **Walter Hunter**, **Joanna Nguyen**, and **Athanasios Theodoropoulos**, Section Chiefs, and **Raphael Corrado**, **Tom Flood**, **Robert Miller**, and **Robert Rosati**, Special Assistants, performed the planning and implementation. **Bill Baldwin**, **Luis Blanco**, **Larry Blumberg**, **Phillip Brown**, **Brenda Campbell**, **Catherine Cooper**, **Paul Corey**, **Mary Kim Corley**, **Theresa Crowley**, **Chris Cunningham**, **Vance Davis**, **Jesse Dawson**, **Kellie Friedrich**, **Dennis Gosier**, **Vera Harris-Bourne**, **Karen Harshbarger**, **Nancy Higgins**, **Steven Hood**, **Rachael Horwitz**, **Tom Ickes**, **Evelyn Jordan**, **Daphne Kelly**, **Cathy Knudsen**, **Kristen Lauziere**, **Mai Ngan Le**, **Jennifer Lee**, **Robert Lee**, **Jennifer Leotta**, **John Linehan**, **Keith McKenzie**, **Blynda Metcalf**, **Stanley Montgomery**, **Philippe Morris**, **Madelyn Nieves**, **Betty Pannell**, **Bridgett Parker-Bell**, **Dorothy Parsons**, **Gloria Peebles-Butler**, **Michael Perkinson**, **Deanna Pickerall**, **Dana Sklut**, **LaTanya Steele**, **Susan Sundermann**, **Myss Sykes-Stephens**, **Betty Sutter**, **Dora Thomas**, **Ronanne Vinson**, **Keeley Voor**, **Denneth Wallace**, **Hilda Ward**, **Edward Watkins III**, **Tempie Whittington**, **Ernest Wilson Jr.**, **Barbara Wongus**, and **Kevin Younes**, provided primary staff assistance.

Mendel D. Gayle, Chief, Census and Related Programs Support Branch, assisted by **Arlinda Allen**, **Kimberly DePhillip**, and **Baruti Taylor**, Section Chiefs, performed overall coordination of the publication process. **Patrick Duck**, **Michael Flaherty**, **Taylor C. Murph**, and **Veronica White** provided primary staff assistance.

Mathematical and statistical techniques as well as the coverage operations were provided by **Paul Hsen**, Assistant Division Chief for Research and Methodology Programs, assisted by **Stacey Cole**, Chief, Manufacturing Methodology Branch, and **Robert Struble**, Section Chief and **Jeffrey Dalzell** and **Cathy Gregor** provided primary staff assistance.

Eddie J. Salyers, Assistant Division Chief of Economic Planning and Coordination Division, was responsible for overseeing the editing and tabulation procedures and the interactive analytical software. **Dennis Shoemaker** and **Kim Wortman**, Special Assistants, **John D. Ward**, Chief, Analytical Branch, and **Brandy L. Yarbrough**, Chief, Edit Branch, were responsible for developing the systems and procedures for data collection, editing, review, and correction. **Donna L. Hambric**, Chief of the Economic Planning Staff, was responsible for overseeing the systems and information for dissemination. **Douglas J. Miller**, Chief, Tables and Dissemination Branch, assisted by **Lisa Aispuro**, **Jamie Fleming**, **Keith Fuller**, **Andrew W. Hait**, and **Kathy G. Padgett** were responsible for developing the data dissemination systems and procedures.

The Geography Division staff, **Robert LaMacchia**, Chief, developed geographic coding procedures and associated computer programs.

The Economic Statistical Methods and Programming Division, **Howard R. Hogan**, Chief, developed and coordinated the computer processing systems. **Barry F. Sessamen**, Assistant Division Chief for Post Collection, was responsible for design and implementation of the processing system and computer programs. **Gary T. Sheridan**, Chief, Macro Analytical Branch, assisted by **Apparao V. Katikineni** and **Edward F. Johnson** provided computer programming and implementation.

The Systems Support Division provided the table composition system. **Robert Joseph Brown**, Table Image Processing System (TIPS) Senior Software Engineer, was responsible for the design and development of the TIPS, under the supervision of **Robert J. Bateman**, Assistant Division Chief, Information Systems.

The staff of the National Processing Center performed mailout preparation and receipt operations, clerical and analytical review activities, and data entry.

Margaret A. Smith, **Bernadette J. Beasley**, and **Michael T. Browne** of the Administrative and Customer Services Division, **Walter C. Odom**, Chief, provided publication and printing management, graphics design and composition, and editorial review for print and electronic media. General direction and production management were provided by **James R. Clark**, Assistant Division Chief, and **Susan L. Rappa**, Chief, Publications Services Branch.

Special acknowledgment is also due the many businesses whose cooperation contributed to the publication of these data.

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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 to 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.

INDUSTRY CLASSIFICATIONS

Data from the 2002 Economic Census are published primarily according to the 2002 North American Industry Classification System (NAICS). NAICS was first adopted in the United States, Canada, and Mexico in 1997. The 2002 Economic Census covers 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 Food Services
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), largely covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 100 subsectors (three-digit codes), 317 industry groups (four-digit codes), and, as implemented in the United States, 1,179 industries (six-digit codes).

RELATIONSHIP TO HISTORICAL INDUSTRY CLASSIFICATIONS

Prior to the 1997 Economic Census, data were published according to the Standard Industrial Classification (SIC) system. 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 1997 Economic Census *Bridge Between NAICS and SIC* demonstrates the relationships between NAICS and SIC industries. Where changes are significant, it may not be possible to construct time series that include data for points both before and after 1997.

Most industry classifications remained unchanged between 1997 and 2002, but NAICS 2002 includes substantial revisions within the construction and wholesale trade sectors, and a number of revisions for the retail trade and information sectors. These changes are noted in industry definitions and will be demonstrated in the *Bridge Between NAICS 2002 and NAICS 1997*.

For 2002, data for enterprise support establishments (those functioning primarily to support the activities of their company's operating establishments, such as a warehouse or a research and development laboratory) are included in the industry that reflects their activities (such as warehousing). For 1997, such establishments were termed auxiliaries and were excluded from industry totals.

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. (For selected industries, only payroll, employment, and classification are collected for individual establishments, while other data are collected on a consolidated basis.)

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for states, metropolitan and micropolitan statistical areas, counties, and corporate municipalities (places) including cities, towns, townships, 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 administrative sources is used as a basis for coding.

AVAILABILITY OF ADDITIONAL DATA

All results of the 2002 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on digital versatile discs (DVD-ROMs) for sale by the Census Bureau. The American FactFinder system at the Internet site allows selective retrieval and downloading of the data. For more information, including a description of reports being issued, see the Internet site, write to the U.S. Census Bureau, Washington, DC 20233-6100, or call Customer Services at 301-763-4100.

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 service trades in 1933. Censuses of construction, manufacturing, and the other business 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 and 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 report forms.

The range of industries covered in the economic census expanded between 1967 and 2002. 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. New for 2002 is coverage of four industries classified in the agriculture, forestry, and fishing sector under the SIC system: landscape architectural services, landscaping services, veterinary services, and pet care services.

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. Reports for 1997 were published primarily on the Internet and copies of 1992 reports are also available there. CD-ROMs issued from the 1987, 1992, and 1997 Economic Censuses contain databases that include all or 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 the 2002 Economic Census and related surveys is published in the *Guide to the 2002 Economic Census* at www.census.gov/econ/census02/guide. More information on the methodology, procedures, and history of the census will be published in the *History of the 2002 Economic Census* at www.census.gov/econ/www/history.html.

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Manufacturing

SCOPE

The Manufacturing sector (sector 31-33) comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying, as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership. The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing; and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are

considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations); as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Exclusions. There are activities that are sometimes considered manufacturing, but for NAICS are classified in another sector. These activities include logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting is considered a harvesting operation; the beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining; the construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction; establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

The tabulations for this sector do not include central administrative offices, warehouses, or other establishments that serve manufacturing establishments within the same organization. Data for such establishments are classified according to the nature of the service they provide. For example, separate headquarters establishments are reported in NAICS Sector 55, Management of Companies and Enterprises.

The reports described below exclude establishments of firms with no paid employees. These “nonemployers,” typically self-employed individuals or partnerships operating businesses that they have not chosen to incorporate, are reported separately in Nonemployer Statistics. The contribution of nonemployers, relatively small for this sector, may be examined at www.census.gov/nonemployerimpact.

The reports described below cover all manufacturing establishments with one or more paid employees.

Definitions. Industry categories are defined in Appendix B, NAICS Codes, Titles, and Descriptions. Other terms are defined in Appendix A, Explanation of Terms.

REPORTS

The following reports provide statistics on this sector:

Industry Series. There are 473 reports, each covering a single NAICS industry (six-digit code). 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. The industry reports also include data for states with 100 employees or more in the industry. The data in industry reports are preliminary and subject to change in the following reports.

Geographic Area Series. There are 51 separate reports, one for each state and the District of Columbia. Each state report presents similar statistics at the “all manufacturing” level for each state and its metropolitan and micropolitan areas 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.

Subject Series:

- **Industry-Product Analysis Summary.** This report presents value of shipments, value of product shipments, percentage of product shipments of the total value of shipments, and percentage of distribution of value of product shipments on the NAICS six-digit industry level and by the six- and seven-digit product code levels. It also includes miscellaneous receipts at the six- and seven-digit product code levels by NAICS six-digit industry levels.
- **General Summary.** This 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.
- **Product Summary.** This report summarizes the products data published in the industry reports. This report also includes a table with data for products that are primary to more than one industry, which are not in the industry reports.
- **Materials Summary.** This report summarizes the materials data published in the industry reports.
- **Concentration Ratio Summary.** This report publishes data on the percentage of value of shipments and value added accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Herfindahl-Herschmann indexes for each industry.
- **Location of Manufacturing Plants Summary.** This report contains 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.

ZIP Code Statistics. This report contains statistics on the number of establishments for the three- and six-digit NAICS industry by employment-size of the establishment by ZIP Code.

Other reports. Data for this sector are also included in reports with multisector coverage, including Nonemployer Statistics, Comparative Statistics, Bridge Between 2002 NAICS and 1997 NAICS, Business Expenses, and the Survey of Business Owners reports.

GEOGRAPHIC AREAS COVERED

The level of geographic detail varies by report. Maps are available at www.census.gov/econ2002maps. Notes specific to areas in the state are included in Appendix D, Geographic Notes.

1. The United States as a whole.
2. States and the District of Columbia.
3. Metropolitan and micropolitan statistical areas with 250 employees or more. A core based statistical areas (CBSA) contains a core area with a substantial population nucleus, together with adjacent communities having a high degree of social and economic integration with that core. CBSAs are differentiated into metropolitan and micropolitan statistical areas based on size criteria. Both metropolitan and micropolitan areas are defined in terms of entire counties, and are listed in Appendix E, Metropolitan and Micropolitan Statistical Areas.
 - a. Metropolitan Statistical Areas (metro areas). Metro areas have at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.
 - b. Micropolitan Statistical Areas (micro areas). Micro areas have at least one urban cluster of at least 10,000 but less than 50,000 population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.
 - c. Metropolitan Divisions (metro divisions). If specified criteria are met, a metro area containing a single core with a population of 2.5 million or more may be subdivided to form smaller groupings of counties referred to as Metropolitan Divisions.

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- d. Combined Statistical Areas (combined areas). If specified criteria are met, adjacent metro and micro areas, in various combinations, may become the components of a new set of areas called Combined Statistical Areas. The areas that combine retain their own designations as metro or micro areas within the larger combined area.
4. Counties and county equivalents defined as of January 1, 2002, with 500 employees or more. Counties are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs, census areas, and city and boroughs. Maryland, Missouri, Nevada, and Virginia have one place or more that is independent of any county organization and constitutes primary divisions of their states. These places are treated as counties and as places.
 5. Economic places with 500 employees or more.
 - a. Municipalities of 2,500 inhabitants or more defined as of January 1, 2002. These are areas of significant population incorporated as cities, boroughs, villages, or towns according to the 2000 Census of Population. For the economic census, boroughs and census areas in Alaska and boroughs in New York are not included in this category.
 - b. Consolidated cities defined as of January 1, 2002. Consolidated cities are consolidated governments that consist of separately incorporated municipalities.
 - c. Townships in Michigan, New Jersey, and Pennsylvania, and towns in New York, Wisconsin, and the six New England states with 10,000 inhabitants or more (according to the 2000 Census of Population).
 - d. Balance of county. Areas outside the entities listed above, including incorporated municipalities with populations of fewer than 2,500, town and townships not qualifying as noted above, and the remainders of counties outside places are categorized as "Balance of county."

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 2002 data are expressed in 2002 dollars, and 1997 data, in 1997 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.

COMPARABILITY OF THE 1997 AND 2002 ECONOMIC CENSUSES

Both the 2002 Economic Census and the 1997 Economic Census present data based on the North American Industry Classification System (NAICS). While there were revisions to selected industries for 2002, this sector is not affected by those revisions.

For 2002, there have been several additional data tables added, which did not exist in 1997. These tables for 2002 include products primary to more than one industry, industry-product analysis, e-commerce value of shipments, and leased and nonleased detail employment statistics by subsectors.

RELIABILITY OF DATA

All data compiled for this sector are subject to nonsampling errors. Nonsampling errors can be attributed to many sources: inability to identify all cases in the actual universe; definition and classification difficulties; differences in the interpretation of questions; errors in recording or coding the data obtained; and other errors of collection, response, coverage, processing, and estimation for missing or misreported data. Selected data in tables titled "Detailed Statistics" are based on the Annual Survey of Manufactures and are subject to sampling errors as well as nonsampling errors.

No direct measurement of these effects has been obtained except for estimation for missing or misreported data, as by the percentages shown in the tables. Precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize the effects of nonsampling errors. More information on the reliability of the data is included in Appendix C, Methodology.

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 in a specific industry or geographic area is not considered a disclosure; therefore, this information may be released even though other information is withheld. Techniques employed to limit disclosure are discussed at www.census.gov/epcd/ec02/disclosure.htm.

The disclosure analysis for "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. Nonetheless, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures, which 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 55,000 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 the Current Industrial Reports (CIR) program. The CIR program publishes selected detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. 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.

In addition, the County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county, and Statistics of U.S. Businesses provides annual statistics classified by the employment size of the enterprise, further classified by industry for the United States, and by broader categories for states and metropolitan areas.

CONTACTS FOR DATA USERS

Questions about these data may be directed to the U.S. Census Bureau, Manufacturing & Construction Division, Information Services Center, 301-763-4673 or ask.census.gov.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with these 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
S	Withheld because estimates did not meet publication standards
X	Not applicable
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
nsk	Not specified by kind
-	Represents zero (page image/print only)
(CC)	Consolidated city
(IC)	Independent city

Table 1. Industry Statistics for the State: 2002

[Includes data for industry groups and industries with 100 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments ²			All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
RHODE ISLAND													
31-33	Manufacturing	2	2 131	586	62 285	'2 294 561	'42 829	85 197	'1 231 685	6 148 634	4 696 259	10 818 058	306 180
311	Food manufacturing	4	166	28	2 491	67 321	1 654	2 972	39 655	199 147	203 026	400 699	8 596
3115	Dairy product manufacturing	7	10	1	133	4 097	106	153	2 740	14 361	20 609	35 008	884
31151	Dairy product (except frozen) manufacturing	7	6	1	c	D	D	D	D	D	D	D	D
3116	Animal slaughtering and processing	2	12	2	273	9 801	194	451	6 182	33 219	37 436	69 252	683
31161	Animal slaughtering and processing	2	12	2	273	9 801	194	451	6 182	33 219	37 436	69 252	683
311612	Meat processed from carcasses	1	10	2	e	D	D	D	D	D	D	D	D
3117	Seafood product preparation and packaging	1	7	3	276	7 530	166	323	2 144	35 956	32 185	68 141	1 048
31171	Seafood product preparation and packaging	1	7	3	276	7 530	166	323	2 144	35 956	32 185	68 141	1 048
311712	Fresh and frozen seafood processing	1	5	3	e	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing	3	99	17	1 285	30 845	803	1 294	19 690	62 939	28 240	91 270	1 674
31181	Bread and bakery product manufacturing	3	89	17	1 255	29 721	778	1 245	18 880	59 523	24 919	84 533	1 535
311811	Retail bakeries	5	67	9	f	D	D	D	D	D	D	D	530
311812	Commercial bakeries	2	21	8	690	21 772	525	900	15 042	43 676	15 720	59 449	D
3119	Other food manufacturing	3	19	4	327	8 767	226	427	4 616	29 414	27 460	56 675	1 410
31192	Coffee and tea manufacturing	2	3	1	c	D	D	D	D	D	D	D	D
311920	Coffee and tea manufacturing	2	3	1	c	D	D	D	D	D	D	D	D
31199	All other food manufacturing	3	12	2	c	D	D	D	D	D	D	D	617
311991	Perishable prepared food manufacturing	-	4	2	c	D	D	D	D	D	D	D	446
312	Beverage and tobacco product manufacturing	-	15	4	309	17 271	100	199	3 825	85 251	112 846	198 323	6 608
3121	Beverage manufacturing	-	15	4	309	17 271	100	199	3 825	85 251	112 846	198 323	6 608
31211	Soft drink and ice manufacturing	-	11	3	e	D	D	D	D	D	D	D	6 321
312111	Soft drink manufacturing	-	4	2	c	D	D	D	D	D	D	D	D
313	Textile mills	4	73	38	3 621	108 441	2 928	5 898	75 838	226 059	249 008	480 370	8 691
3131	Fiber, yarn, and thread mills	2	10	4	255	6 974	217	443	4 637	14 647	18 127	31 277	692
31311	Fiber, yarn, and thread mills	2	10	4	255	6 974	217	443	4 637	14 647	18 127	31 277	692
313112	Yarn texturizing, throwing, and twisting mills	-	4	2	141	4 024	118	252	2 439	7 193	8 966	16 353	D
3132	Fabric mills	2	36	21	1 868	55 241	1 510	3 035	39 679	125 442	136 773	268 484	4 182
31322	Narrow fabric mills and schiffli machine embroidery	4	16	9	715	18 151	625	1 264	14 055	31 006	24 558	55 258	872
313221	Narrow fabric mills	4	13	9	708	17 990	621	1 257	13 969	30 763	24 415	54 872	865
31323	Nonwoven fabric mills	3	5	3	366	11 688	295	540	8 517	30 721	31 048	60 604	725
313230	Nonwoven fabric mills	3	5	3	366	11 688	295	540	8 517	30 721	31 048	60 604	725
31324	Knit fabric mills	-	10	7	707	22 304	543	1 120	15 343	58 656	71 524	130 888	2 531
313249	Other knit fabric and lace mills	-	9	6	f	D	D	D	D	D	D	D	2 531
3133	Textile and fabric finishing and fabric coating mills	8	27	13	1 498	46 226	1 201	2 420	31 522	85 970	94 108	180 609	3 817
31331	Textile and fabric finishing mills	8	21	10	947	29 452	724	1 465	19 339	55 411	51 879	106 530	2 230
313311	Broadwoven fabric finishing mills	8	16	7	831	25 912	614	1 238	16 262	47 945	45 402	92 887	2 039
313312	Textile and fabric finishing (except broadwoven fabric) mills	6	5	3	116	3 540	110	227	3 077	7 466	6 477	13 643	191
31332	Fabric coating mills	9	6	3	551	16 774	477	955	12 183	30 559	42 229	74 079	1 587
313320	Fabric coating mills	9	6	3	551	16 774	477	955	12 183	30 559	42 229	74 079	1 587
314	Textile product mills	3	55	11	820	19 975	650	1 194	13 116	39 668	33 247	72 699	D
3141	Textile furnishings mills	3	19	7	465	9 949	397	713	7 180	20 731	18 940	39 561	D
31411	Carpet and rug mills	2	5	3	275	6 280	229	425	4 683	14 154	9 743	23 841	600
314110	Carpet and rug mills	2	5	3	275	6 280	229	425	4 683	14 154	9 743	23 841	600
31412	Curtain and linen mills	5	14	4	190	3 669	168	288	2 497	6 577	9 197	15 720	D
314121	Curtain and drapery mills	4	10	2	136	2 327	119	190	1 456	3 668	6 124	9 712	48
3149	Other textile product mills	2	36	4	355	10 026	253	481	5 936	18 937	14 307	33 138	D
31491	Textile bag and canvas mills	5	21	-	106	3 320	73	139	1 917	5 449	4 256	9 690	D
31499	All other textile product mills	1	15	4	249	6 706	180	342	4 019	13 488	10 051	23 448	D
314999	All other miscellaneous textile product mills	2	12	2	c	D	D	D	D	D	D	D	D
315	Apparel manufacturing	8	17	2	c	D	D	D	D	D	D	D	73

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RHODE ISLAND—Con.													
316	Leather and allied product manufacturing	1	13	7	371	9 437	258	523	6 545	12 774	9 139	22 143	D
3169	Other leather and allied product manufacturing	1	12	7	e	D	D	D	D	D	D	D	D
31699	Other leather and allied product manufacturing	1	12	7	e	D	D	D	D	D	D	D	D
316993	Personal leather goods (except women's handbag and purse) manufacturing ..	2	6	4	266	6 853	174	355	4 769	9 637	4 548	14 271	218
321	Wood product manufacturing	2	45	12	701	19 700	540	990	12 237	42 131	94 363	139 794	1 842
3211	Sawmills and wood preservation ..	1	8	1	118	4 431	74	159	2 069	9 679	67 257	80 773	D
32111	Sawmills and wood preservation	1	8	1	118	4 431	74	159	2 069	9 679	67 257	80 773	D
3219	Other wood product manufacturing	4	35	11	f	D	D	D	D	D	D	D	D
32191	Millwork	4	13	4	c	D	D	D	D	D	D	D	505
321911	Wood window and door manufacturing	3	5	2	c	D	D	D	D	D	D	D	345
32192	Wood container and pallet manufacturing	4	9	3	154	3 644	115	214	2 303	6 188	6 723	12 831	309
321920	Wood container and pallet manufacturing	4	9	3	154	3 644	115	214	2 303	6 188	6 723	12 831	309
32199	All other wood product manufacturing	5	13	4	c	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product manufacturing	5	12	4	199	5 422	169	327	3 888	13 506	8 553	21 505	635
322	Paper manufacturing	1	38	21	1 641	'61 640	'1 131	2 171	'32 260	145 451	118 650	258 761	6 034
3222	Converted paper product manufacturing	1	35	20	g	D	D	D	D	D	D	D	D
32221	Paperboard container manufacturing	2	19	12	990	'35 075	'688	1 370	'19 611	76 577	69 540	146 093	D
322211	Corrugated and solid fiber box manufacturing	2	6	4	318	14 207	209	476	7 072	30 852	42 334	73 245	2 247
322212	Folding paperboard box manufacturing	—	4	2	239	9 591	145	299	5 429	20 654	10 146	30 770	622
322213	Setup paperboard box manufacturing	1	6	5	350	'9 179	'273	486	'5 822	19 328	11 136	30 426	412
32222	Paper bag and coated and treated paper manufacturing ..	1	12	7	f	D	D	D	D	D	D	D	D
322222	Coated and laminated paper manufacturing	—	11	6	508	22 073	326	575	9 887	60 425	41 839	96 978	D
323	Printing and related support activities	3	171	30	2 305	84 695	1 586	3 074	47 550	174 375	111 707	285 167	7 398
3231	Printing and related support activities	3	171	30	2 305	84 695	1 586	3 074	47 550	174 375	111 707	285 167	7 398
32311	Printing	3	157	28	2 082	75 135	1 409	2 730	41 115	152 601	105 510	257 197	6 792
323110	Commercial lithographic printing	5	67	12	746	28 139	518	1 006	17 135	55 207	37 311	92 717	3 661
323113	Commercial screen printing ..	—	19	7	561	17 770	381	751	8 884	40 664	37 413	76 826	950
323114	Quick printing	5	40	1	177	6 419	115	220	3 587	13 736	4 783	18 507	D
323116	Manifold business forms printing	—	3	2	218	9 790	129	257	4 154	17 208	10 841	28 049	D
323117	Books printing	2	2	2	c	D	D	D	D	D	D	D	D
32312	Support activities for printing ..	9	14	2	223	9 560	177	344	6 435	21 774	6 197	27 970	606
323122	Prepress services	9	8	1	129	6 782	96	189	4 317	13 455	2 610	16 064	358
325	Chemical manufacturing	1	67	30	2 600	133 600	1 374	2 960	56 993	527 283	411 077	917 975	48 391
3251	Basic chemical manufacturing ...	—	7	6	418	20 364	189	435	9 519	177 397	139 349	288 200	3 856
32513	Synthetic dye and pigment manufacturing	—	2	2	c	D	D	D	D	D	D	D	D
325132	Synthetic organic dye and pigment manufacturing ...	—	2	2	c	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical manufacturing	—	2	2	c	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical manufacturing	—	1	1	c	D	D	D	D	D	D	D	D
3252	Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	—	6	4	114	5 474	77	172	2 882	10 601	14 234	24 862	238
32521	Resin and synthetic rubber manufacturing	—	6	4	114	5 474	77	172	2 882	10 601	14 234	24 862	238
325211	Plastics material and resin manufacturing	—	4	4	c	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing	8	4	2	c	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing	8	4	2	c	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation manufacturing	9	2	1	c	D	D	D	D	D	D	D	D
3255	Paint, coating, and adhesive manufacturing	1	13	3	c	D	D	D	D	D	D	D	D
32551	Paint and coating manufacturing	1	11	3	178	9 926	76	143	2 407	15 482	18 944	34 349	D
325510	Paint and coating manufacturing	1	11	3	178	9 926	76	143	2 407	15 482	18 944	34 349	D

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			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
RHODE ISLAND—Con.													
325 3256	Chemical manufacturing—Con. Soap, cleaning compound, and toilet preparation manufacturing . . .	1	12	5	324	16 213	231	503	10 740	86 443	52 171	138 484	D
32561	Soap and cleaning compound manufacturing	1	9	3	200	9 983	141	291	6 807	76 999	45 951	122 802	D
325611	Soap and other detergent manufacturing	1	3	1	c	D	D	D	D	D	D	D	D
32562	Toilet preparation manufacturing	—	3	2	124	6 230	90	212	3 933	9 444	6 220	15 682	D
325620	Toilet preparation manufacturing	—	3	2	124	6 230	90	212	3 933	9 444	6 220	15 682	D
3259	Other chemical product and preparation manufacturing	—	23	10	1 385	72 393	757	1 626	30 080	178 878	178 160	363 049	D
32599	All other chemical product and preparation manufacturing . . .	—	22	9	g	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resins	—	12	4	f	D	D	D	D	D	D	D	2 313
325992	Photographic film, paper, plate, and chemical manufacturing	—	3	2	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product and preparation manufacturing . . .	—	7	3	378	16 298	261	525	9 861	69 851	49 995	119 852	D
326	Plastics and rubber products manufacturing	1	86	41	3 988	147 365	2 981	6 277	90 152	359 753	304 528	667 224	23 737
3261	Plastics product manufacturing . .	1	79	39	3 918	144 399	2 940	6 195	88 597	353 906	300 280	657 168	23 444
32611	Plastics packaging materials and un laminated film and sheet manufacturing	1	11	5	1 033	49 507	719	1 653	30 457	157 483	173 354	331 752	D
326112	Plastics packaging film and sheet (including laminated) manufacturing	—	2	2	f	D	D	D	D	D	D	D	D
326113	Un laminated plastics film and sheet (except packaging) manufacturing	6	6	2	c	D	D	D	D	D	D	D	1 671
32615	Urethane and other foam product (except polystyrene) manufacturing	—	4	2	c	D	D	D	D	D	D	D	D
326150	Urethane and other foam product (except polystyrene) manufacturing	—	4	2	c	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	2	54	27	2 520	81 929	1 948	3 996	50 994	172 684	108 195	283 038	15 536
326199	All other plastics product manufacturing	2	54	27	2 520	81 929	1 948	3 996	50 994	172 684	108 195	283 038	15 536
327	Nonmetallic mineral product manufacturing	1	53	9	943	36 041	716	1 341	24 347	86 263	58 655	147 385	5 423
3272	Glass and glass product manufacturing	1	17	3	459	19 428	361	693	14 005	37 957	23 382	63 411	807
32721	Glass and glass product manufacturing	1	17	3	459	19 428	361	693	14 005	37 957	23 382	63 411	807
327212	Other pressed and blown glass and glassware manufacturing	—	7	1	e	D	D	D	D	D	D	D	324
327215	Glass product manufacturing made of purchased glass . . .	2	10	2	c	D	D	D	D	D	D	D	483
3273	Cement and concrete product manufacturing	2	24	4	e	D	D	D	D	D	D	D	3 703
32732	Ready-mix concrete manufacturing	3	9	2	c	D	D	D	D	D	D	D	D
327320	Ready-mix concrete manufacturing	3	9	2	c	D	D	D	D	D	D	D	D
32733	Concrete pipe, brick, and block manufacturing	—	6	2	117	3 369	79	92	1 803	8 037	7 867	16 110	724
3279	Other nonmetallic mineral product manufacturing	1	8	2	161	5 310	114	235	3 224	19 698	10 809	30 699	857
32799	All other nonmetallic mineral product manufacturing	1	8	2	161	5 310	114	235	3 224	19 698	10 809	30 699	857
327991	Cut stone and stone product manufacturing	—	5	2	142	4 608	99	202	2 697	16 166	9 303	25 644	D
331	Primary metal manufacturing	1	71	19	1 514	61 097	1 087	2 284	35 901	214 658	184 835	405 628	5 529
3312	Steel product manufacturing from purchased steel	—	3	2	c	D	D	D	D	D	D	D	D
33122	Rolling and drawing of purchased steel	—	3	2	c	D	D	D	D	D	D	D	D
331222	Steel wire drawing	—	2	1	c	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)					Wages (\$1,000)
RHODE ISLAND—Con.													
331 3314	Primary metal manufacturing—Con. Nonferrous metal (except aluminum) production and processing	1	28	11	865	38 952	548	1 164	20 392	172 955	147 462	326 662	4 079
33142	Copper rolling, drawing, extruding, and alloying	2	5	3	323	14 203	228	496	8 634	25 554	48 692	75 817	1 228
331421	Copper rolling, drawing, and extruding	—	3	1	c	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing	9	1	1	c	D	D	D	D	D	D	D	D
33149	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and alloying	1	19	8	516	23 641	306	639	11 254	142 906	95 208	242 559	2 591
331491	Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding	1	9	4	330	14 532	205	433	7 389	55 925	53 709	111 727	1 890
331492	Secondary smelting, refining, and alloying of nonferrous metal (except copper and aluminum)	1	10	4	186	9 109	101	206	3 865	86 981	41 499	130 832	701
3315	Foundries	2	38	6	434	15 101	339	649	9 775	29 332	18 850	48 567	549
33151	Ferrous metal foundries	3	8	2	129	4 113	111	191	3 309	7 677	3 373	11 040	190
33152	Nonferrous metal foundries	2	30	4	305	10 988	228	458	6 466	21 655	15 477	37 527	359
331522	Nonferrous (except aluminum) die-casting foundries	1	7	2	126	5 217	94	205	2 818	7 681	9 415	17 210	52
331528	Other nonferrous foundries (except die-casting)	3	15	1	104	3 438	81	153	2 222	7 668	4 180	12 013	207
332	Fabricated metal product manufacturing	1	385	83	9 236	325 930	7 072	13 872	216 554	823 351	474 832	1 295 008	35 369
3321	Forging and stamping	4	43	12	727	29 638	538	1 045	17 308	57 202	47 645	102 462	3 080
33211	Forging and stamping	4	43	12	727	29 638	538	1 045	17 308	57 202	47 645	102 462	3 080
332116	Metal stamping	5	37	9	573	22 854	422	813	13 051	47 800	35 376	80 355	2 742
3322	Cutlery and handtool manufacturing	3	14	3	c	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing	3	14	3	c	D	D	D	D	D	D	D	D
332212	Hand and edge tool manufacturing	2	11	2	164	5 983	112	216	2 881	13 668	7 117	20 689	198
3323	Architectural and structural metals manufacturing	—	42	9	2 761	107 981	2 168	4 372	77 762	345 552	188 420	534 907	11 252
33231	Plate work and fabricated structural product manufacturing	—	14	5	g	D	D	D	D	D	D	D	8 081
332312	Fabricated structural metal manufacturing	—	13	4	g	D	D	D	D	D	D	D	D
33232	Ornamental and architectural metal products manufacturing	1	28	4	f	D	D	D	D	D	D	D	3 171
332321	Metal window and door manufacturing	—	3	2	c	D	D	D	D	D	D	D	169
332322	Sheet metal work manufacturing	1	17	2	377	12 974	287	512	8 541	26 165	27 827	55 438	2 896
3324	Boiler, tank, and shipping container manufacturing	—	5	1	f	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) manufacturing	—	2	1	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) manufacturing	—	2	1	f	D	D	D	D	D	D	D	D
3325	Hardware manufacturing	5	6	2	139	4 735	95	194	2 119	14 630	3 947	18 411	605
33251	Hardware manufacturing	5	6	2	139	4 735	95	194	2 119	14 630	3 947	18 411	605
332510	Hardware manufacturing	5	6	2	139	4 735	95	194	2 119	14 630	3 947	18 411	605
3326	Spring and wire product manufacturing	4	14	3	337	9 980	274	592	6 878	18 860	12 142	30 952	280
33261	Spring and wire product manufacturing	4	14	3	337	9 980	274	592	6 878	18 860	12 142	30 952	280
332618	Other fabricated wire product manufacturing	4	13	3	e	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	1	122	22	1 458	52 746	1 114	2 223	35 977	107 331	48 981	156 793	10 922
33271	Machine shops	1	85	12	892	33 394	707	1 384	24 070	69 866	32 234	101 951	8 295
332710	Machine shops	1	85	12	892	33 394	707	1 384	24 070	69 866	32 234	101 951	8 295
33272	Turned product and screw, nut, and bolt manufacturing	2	37	10	566	19 352	407	839	11 907	37 465	16 747	54 842	2 627
332721	Precision turned product manufacturing	2	23	3	183	6 390	148	313	4 572	11 090	4 615	15 798	908
332722	Bolt, nut, screw, rivet, and washer manufacturing	1	14	7	383	12 962	259	526	7 335	26 375	12 132	39 044	1 719

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			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
RHODE ISLAND—Con.													
332	Fabricated metal product manufacturing—Con.												
3328	Coating, engraving, heat treating, and allied activities	2	105	19	1 803	53 986	1 452	2 807	36 697	106 378	51 582	157 146	D
33281	Coating, engraving, heat treating, and allied activities ..	2	105	19	1 803	53 986	1 452	2 807	36 697	106 378	51 582	157 146	D
332812	Metal coating, engraving (except jewelry and silverware), and allied services to manufacturers ..	1	28	4	498	13 527	402	801	9 141	28 725	13 301	42 031	918
332813	Electroplating, plating, polishing, anodizing, and coloring	2	69	15	1 256	38 813	1 016	1 942	26 660	72 963	35 580	107 934	2 676
3329	Other fabricated metal product manufacturing	2	34	12	1 245	39 175	859	1 712	23 455	89 205	63 855	152 029	D
33299	All other fabricated metal product manufacturing	2	31	10	1 148	34 974	799	1 597	21 580	72 409	58 897	130 452	D
332999	All other miscellaneous fabricated metal product manufacturing	1	24	9	1 094	32 876	757	1 518	20 239	67 769	55 305	122 205	1 850
333	Machinery manufacturing	3	147	41	3 573	148 050	2 325	4 756	77 548	307 442	294 548	614 801	D
3332	Industrial machinery manufacturing	1	33	7	479	21 468	246	523	8 605	41 923	34 884	77 694	D
33329	Other industrial machinery manufacturing	1	28	6	393	16 993	220	469	7 663	29 549	21 673	52 116	D
333292	Textile machinery manufacturing	—	8	1	117	5 009	52	113	1 613	8 764	7 155	16 588	226
333293	Printing machinery and equipment manufacturing ..	1	3	2	c	D	D	D	D	D	D	D	466
333298	All other industrial machinery manufacturing	2	14	2	141	5 641	87	178	2 867	10 043	5 154	15 178	222
3334	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	1	6	2	179	4 187	155	334	2 864	17 229	9 168	27 120	384
33341	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	1	6	2	179	4 187	155	334	2 864	17 229	9 168	27 120	384
333414	Heating equipment (except warm air furnaces) manufacturing	—	3	2	168	3 794	147	317	2 625	16 356	8 348	25 427	360
3335	Metalworking machinery manufacturing	2	71	18	1 232	53 687	802	1 550	31 955	87 265	54 127	142 910	D
33351	Metalworking machinery manufacturing	2	71	18	1 232	53 687	802	1 550	31 955	87 265	54 127	142 910	D
333511	Industrial mold manufacturing	1	16	4	229	7 990	194	370	5 674	17 470	5 058	22 471	180
333512	Machine tool (metal cutting types) manufacturing	—	4	2	c	D	D	D	D	D	D	D	244
333514	Special die and tool, die set, jig, and fixture manufacturing	1	29	4	268	11 088	176	330	6 145	22 090	7 144	30 029	1 519
333515	Cutting tool and machine tool accessory manufacturing ..	2	17	6	516	23 271	292	543	13 637	31 152	23 118	54 979	670
333518	Other metalworking machinery manufacturing ..	7	3	2	c	D	D	D	D	D	D	D	D
3339	Other general purpose machinery manufacturing	4	26	11	1 563	62 148	1 060	2 212	31 576	143 173	185 855	338 315	D
33391	Pump and compressor manufacturing	9	3	2	e	D	D	D	D	D	D	D	D
333911	Pump and pumping equipment manufacturing ..	9	3	2	e	D	D	D	D	D	D	D	D
33399	All other general purpose machinery manufacturing	2	19	9	g	D	D	D	D	D	D	D	D
333991	Power-driven handtool manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general purpose machinery manufacturing	5	11	5	448	19 822	225	436	6 915	57 521	23 434	82 541	1 554
334	Computer and electronic product manufacturing	1	66	28	5 594	300 634	2 798	5 526	96 550	640 183	475 000	1 100 151	43 131
3341	Computer and peripheral equipment manufacturing	2	4	3	f	D	D	D	D	D	D	D	7 600
33411	Computer and peripheral equipment manufacturing	2	4	3	f	D	D	D	D	D	D	D	7 600
334119	Other computer peripheral equipment manufacturing ..	2	3	3	545	31 776	202	416	5 909	96 808	136 288	225 781	7 600

Table 1. Industry Statistics for the State: 2002—Con.

[Includes data for industry groups and industries with 100 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
RHODE ISLAND—Con.													
334	Computer and electronic product manufacturing—Con.												
3344	Semiconductor and other electronic component manufacturing	1	23	14	1 916	84 550	1 138	2 218	34 119	81 621	96 737	183 023	24 758
33441	Semiconductor and other electronic component manufacturing	1	23	14	1 916	84 550	1 138	2 218	34 119	81 621	96 737	183 023	24 758
334413	Semiconductor and related device manufacturing	—	3	2	g	D	D	D	D	D	D	D	D
334415	Electronic resistor manufacturing	—	2	2	c	D	D	D	D	D	D	D	D
334417	Electronic connector manufacturing	1	4	2	208	5 661	147	309	2 236	5 588	13 161	19 058	102
334418	Printed circuit assembly (electronic assembly) manufacturing	—	4	2	183	5 351	124	217	2 364	11 321	8 911	20 383	D
334419	Other electronic component manufacturing	3	7	6	383	14 616	262	549	7 679	33 147	11 287	44 660	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	—	32	9	3 052	179 685	1 420	2 816	55 266	450 850	235 700	674 222	10 589
33451	Navigational, measuring, electromedical, and control instruments manufacturing	—	32	9	3 052	179 685	1 420	2 816	55 266	450 850	235 700	674 222	10 589
334511	Search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing	—	4	4	g	D	D	D	D	D	D	D	D
334512	Automatic environmental control manufacturing for residential, commercial, and appliance use	—	3	3	534	18 360	375	863	10 706	29 141	22 889	52 493	D
334519	Other measuring and controlling device manufacturing	—	3	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	—	39	18	5 397	183 545	3 582	7 698	100 905	870 270	494 432	1 365 832	29 149
3351	Electric lighting equipment manufacturing	—	11	6	520	15 707	338	789	7 666	53 999	48 511	100 069	784
33512	Lighting fixture manufacturing	—	11	6	520	15 707	338	789	7 666	53 999	48 511	100 069	784
335121	Residential electric lighting fixture manufacturing	—	2	1	c	D	D	D	D	D	D	D	D
335122	Commercial, industrial, and institutional electric lighting fixture manufacturing	2	8	4	e	D	D	D	D	D	D	D	D
3353	Electrical equipment manufacturing	1	8	1	146	5 373	90	228	2 139	15 511	6 632	23 030	554
33531	Electrical equipment manufacturing	1	8	1	146	5 373	90	228	2 139	15 511	6 632	23 030	554
335314	Relay and industrial control manufacturing	1	8	1	146	5 373	90	228	2 139	15 511	6 632	23 030	554
3359	Other electrical equipment and component manufacturing	—	20	11	4 731	162 465	3 154	6 681	91 100	800 760	439 289	1 242 733	27 811
33592	Communication and energy wire and cable manufacturing	—	8	4	g	D	D	D	D	D	D	D	D
335929	Other communication and energy wire manufacturing	—	7	4	1 719	57 953	1 287	2 731	39 681	69 987	288 405	362 533	D
33593	Wiring device manufacturing	—	4	3	f	D	D	D	D	D	D	D	10 361
335931	Current-carrying wiring device manufacturing	—	4	3	f	D	D	D	D	D	D	D	10 361
33599	All other electrical equipment and component manufacturing	1	8	4	g	D	D	D	D	D	D	D	D
335991	Carbon and graphite product manufacturing	—	2	1	c	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment and component manufacturing	1	6	3	g	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	3	50	18	1 842	60 936	1 488	2 936	43 433	131 302	97 093	228 312	8 851
3363	Motor vehicle parts manufacturing	—	9	1	e	D	D	D	D	D	D	D	D
33636	Motor vehicle seating and interior trim manufacturing	—	1	1	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating and interior trim manufacturing	—	1	1	e	D	D	D	D	D	D	D	D
3366	Ship and boat building	3	32	15	g	D	D	D	D	D	D	D	6 978
33661	Ship and boat building	3	32	15	g	D	D	D	D	D	D	D	6 978
336611	Ship building and repairing	—	9	5	f	D	D	D	D	D	D	D	4 193
336612	Boat building	4	23	10	924	29 479	714	1 396	20 388	63 577	55 715	119 292	2 785

Table 1. Industry Statistics for the State: 2002—Con.

[Includes data for industry groups and industries with 100 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
RHODE ISLAND—Con.													
337	Furniture and related product manufacturing	1	68	23	2 071	66 340	1 518	3 021	42 013	135 508	92 758	226 216	4 499
3371	Household and institutional furniture and kitchen cabinet manufacturing	1	34	7	e	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet and countertop manufacturing	3	19	2	159	4 989	129	277	3 638	8 722	8 922	17 434	215
337110	Wood kitchen cabinet and countertop manufacturing ..	3	19	2	159	4 989	129	277	3 638	8 722	8 922	17 434	215
33712	Household and institutional furniture manufacturing	-	15	5	e	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture manufacturing	-	8	3	c	D	D	D	D	D	D	D	568
3372	Office furniture (including fixtures) manufacturing	2	33	15	1 255	41 132	871	1 715	25 237	80 770	43 766	123 991	2 181
33721	Office furniture (including fixtures) manufacturing	2	33	15	1 255	41 132	871	1 715	25 237	80 770	43 766	123 991	2 181
337211	Wood office furniture manufacturing	7	3	2	119	3 804	97	198	2 854	7 527	4 315	11 893	528
337212	Custom architectural woodwork and millwork manufacturing	-	11	6	582	23 439	405	779	14 280	41 891	20 194	62 046	1 109
337215	Showcase, partition, shelving, and locker manufacturing	3	19	7	554	13 889	369	738	8 103	31 352	19 257	50 052	544
3379	Other furniture related product manufacturing	-	1	1	e	D	D	D	D	D	D	D	D
33792	Blind and shade manufacturing	-	1	1	e	D	D	D	D	D	D	D	D
337920	Blind and shade manufacturing	-	1	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	2	503	123	13 131	439 566	8 929	17 297	214 130	1 121 141	868 260	1 976 669	44 485
3391	Medical equipment and supplies manufacturing	5	64	11	1 549	61 584	902	1 715	26 048	174 991	87 982	262 346	8 346
33911	Medical equipment and supplies manufacturing	5	64	11	1 549	61 584	902	1 715	26 048	174 991	87 982	262 346	8 346
339111	Laboratory apparatus and furniture manufacturing	9	3	1	c	D	D	D	D	D	D	D	D
339112	Surgical and medical instrument manufacturing ..	3	7	4	226	9 576	142	268	4 206	19 127	8 071	27 662	930
339113	Surgical appliance and supplies manufacturing	-	10	2	432	17 246	173	317	3 816	44 649	33 663	77 319	2 804
339115	Ophthalmic goods manufacturing	8	7	3	575	23 516	393	772	12 036	88 865	35 370	124 141	D
339116	Dental laboratories	4	35	1	126	3 940	91	169	3 003	6 448	1 475	7 920	187
3399	Other miscellaneous manufacturing	2	439	112	11 582	377 982	8 027	15 582	188 082	946 150	780 278	1 714 323	36 139
33991	Jewelry and silverware manufacturing	2	319	80	8 213	259 942	5 677	10 915	126 742	660 312	595 568	1 246 479	23 569
339911	Jewelry (except costume) manufacturing	-	109	35	3 658	113 755	2 667	5 039	65 393	385 025	379 726	756 620	14 592
339912	Silverware and holloware manufacturing	4	6	3	202	6 785	132	284	3 964	22 042	10 665	32 488	447
339913	Jewelers' material and lapidary work manufacturing	4	57	8	1 254	36 625	892	1 802	18 901	54 087	79 653	132 843	2 835
339914	Costume jewelry and novelty manufacturing	4	147	34	3 099	102 777	1 986	3 790	38 484	199 158	125 524	324 528	5 695
33992	Sporting and athletic goods manufacturing	2	12	1	114	3 913	90	161	2 628	9 835	6 824	16 455	93
339920	Sporting and athletic goods manufacturing	2	12	1	114	3 913	90	161	2 628	9 835	6 824	16 455	93
33993	Doll, toy, and game manufacturing	2	6	3	359	12 088	257	573	6 023	45 636	32 058	76 221	D
339931	Doll and stuffed toy manufacturing	-	1	1	c	D	D	D	D	D	D	D	D
339932	Game, toy, and children's vehicle manufacturing	6	5	2	c	D	D	D	D	D	D	D	636
33994	Office supplies (except paper) manufacturing	-	7	4	800	31 050	551	1 131	15 315	80 235	35 808	115 422	D
339941	Pen and mechanical pencil manufacturing	-	4	4	786	30 605	540	1 111	15 057	79 276	35 400	114 050	D
33995	Sign manufacturing	1	29	10	828	26 338	570	1 197	13 247	46 831	33 006	79 525	2 396
339950	Sign manufacturing	1	29	10	828	26 338	570	1 197	13 247	46 831	33 006	79 525	2 396
33999	All other miscellaneous manufacturing	1	66	14	1 268	44 651	882	1 605	24 127	103 301	77 014	180 221	D
339991	Gasket, packing, and sealing device manufacturing	-	6	4	398	20 460	230	439	10 651	37 370	16 086	53 069	2 153
339993	Fastener, button, needle, and pin manufacturing	4	8	3	184	4 537	153	295	3 058	7 783	4 463	12 587	278
339999	All other miscellaneous manufacturing	2	45	7	636	18 223	462	819	9 716	54 630	53 602	108 157	D

¹Some 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.

²Includes establishments with payroll at any time during the year.

Table 1. Industry Statistics for the State: 2002—Con.

³Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text.]

NAICS code	Geographic area and industry	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)					Wages (\$1,000)
PROVIDENCE-NEW BEDFORD-FALL RIVER, RI-MA METROPOLITAN STATISTICAL AREA													
31-33	Manufacturing	2	3 014	894	103 563	3 783 691	71 551	143 096	2 021 563	10 143 334	8 057 111	18 216 736	527 513
311	Food manufacturing	2	260	49	4 993	141 456	3 391	6 559	81 386	451 874	532 822	984 125	18 807
3116	Animal slaughtering and processing	2	21	4	377	12 381	270	605	8 001	40 489	53 800	93 072	1 007
31161	Animal slaughtering and processing	2	21	4	377	12 381	270	605	8 001	40 489	53 800	93 072	1 007
311612	Meat processed from carcasses	2	17	4	e	D	D	D	D	D	D	D	D
3117	Seafood product preparation and packaging	2	29	14	g	D	D	D	D	D	D	D	D
31171	Seafood product preparation and packaging	2	29	14	g	D	D	D	D	D	D	D	D
311712	Fresh and frozen seafood processing	2	23	14	g	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing	1	142	20	2 214	62 548	1 321	2 318	34 713	181 494	76 580	258 224	7 860
31181	Bread and bakery product manufacturing	1	132	20	2 184	61 424	1 296	2 269	33 903	178 078	73 259	251 487	7 721
311811	Retail bakeries	5	96	10	695	9 888	318	443	4 851	19 108	10 802	29 928	D
311812	Commercial bakeries	-	35	10	1 487	51 457	977	1 824	29 023	158 244	61 807	220 165	D
3119	Other food manufacturing	3	28	5	415	11 663	275	530	5 809	35 690	31 798	66 982	D
312	Beverage and tobacco product manufacturing	1	19	5	346	18 523	123	247	4 549	89 491	115 558	205 275	D
3121	Beverage manufacturing	1	19	5	346	18 523	123	247	4 549	89 491	115 558	205 275	D
31211	Soft drink and ice manufacturing	-	14	4	e	D	D	D	D	D	D	D	D
313	Textile mills	3	106	57	8 997	273 551	7 350	15 626	194 742	556 669	617 774	1 180 431	54 126
3131	Fiber, yarn, and thread mills	2	13	5	e	D	D	D	D	D	D	D	D
31311	Fiber, yarn, and thread mills	2	13	5	e	D	D	D	D	D	D	D	D
3132	Fabric mills	-	51	29	5 560	171 642	4 569	9 899	123 320	357 277	390 986	755 332	D
31321	Broadwoven fabric mills	-	11	5	h	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills	-	11	5	h	D	D	D	D	D	D	D	D
31322	Narrow fabric mills and schiffli machine embroidery	3	22	12	f	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	3	19	12	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills	4	6	4	e	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills	4	6	4	e	D	D	D	D	D	D	D	D
31324	Knit fabric mills	-	12	8	f	D	D	D	D	D	D	D	D
313249	Other knit fabric and lace mills	-	10	7	f	D	D	D	D	D	D	D	D
3133	Textile and fabric finishing and fabric coating mills	8	42	23	h	D	D	D	D	D	D	D	D
31331	Textile and fabric finishing mills	8	33	17	2 462	71 737	1 979	4 093	51 569	143 027	152 238	293 749	D
313311	Broadwoven fabric finishing mills	8	25	13	g	D	D	D	D	D	D	D	D
31332	Fabric coating mills	7	9	6	f	D	D	D	D	D	D	D	D
313320	Fabric coating mills	7	9	6	f	D	D	D	D	D	D	D	D
314	Textile product mills	2	90	26	2 303	55 275	1 882	3 525	39 502	151 423	101 563	249 752	9 311
3141	Textile furnishings mills	2	36	18	1 335	28 889	1 146	2 110	21 152	97 999	62 749	157 267	D
31411	Carpet and rug mills	2	5	3	275	6 280	229	425	4 683	14 154	9 743	23 841	600
314110	Carpet and rug mills	2	5	3	275	6 280	229	425	4 683	14 154	9 743	23 841	600
31412	Curtain and linen mills	2	31	15	1 060	22 609	917	1 685	16 469	83 845	53 006	133 426	D
314121	Curtain and drapery mills	2	23	10	783	16 043	695	1 271	12 186	71 907	42 782	111 293	D
314129	Other household textile product mills	1	8	5	277	6 566	222	414	4 283	11 938	10 224	22 133	D
3149	Other textile product mills	1	54	8	968	26 386	736	1 415	18 350	53 424	38 814	92 485	D
31499	All other textile product mills	-	27	8	842	22 510	648	1 247	16 106	47 142	33 786	81 182	D
314991	Rope, cordage, and twine mills	-	6	3	e	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills	1	21	5	f	D	D	D	D	D	D	D	D
315	Apparel manufacturing	5	68	26	2 583	56 577	2 155	3 823	40 228	87 147	110 603	199 502	D

See footnotes at end of table.

Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text.]

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
	PROVIDENCE-NEW BEDFORD-FALL RIVER, RI-MA METROPOLITAN STATISTICAL AREA—Con.												
315	Apparel manufacturing—Con.												
3152	Cut and sew apparel manufacturing	5	53	21	g	D	D	D	D	D	D	D	D
31521	Cut and sew apparel contractors	4	30	8	f	D	D	D	D	D	D	D	D
315212	Women's, girls', and infants' cut and sew apparel contractors	6	25	6	398	5 311	364	588	4 352	7 307	1 148	8 455	D
31522	Men's and boys' cut and sew apparel manufacturing	6	6	6	g	D	D	D	D	D	D	D	D
315222	Men's and boys' cut and sew suit, coat, and overcoat manufacturing	7	3	3	f	D	D	D	D	D	D	D	D
315228	Men's and boys' cut and sew other outerwear manufacturing	—	2	2	e	D	D	D	D	D	D	D	D
31523	Women's and girls' cut and sew apparel manufacturing	4	11	5	e	D	D	D	D	D	D	D	D
316	Leather and allied product manufacturing	—	17	11	f	D	D	D	D	D	D	D	D
3169	Other leather and allied product manufacturing	—	16	11	f	D	D	D	D	D	D	D	D
31699	Other leather and allied product manufacturing	—	16	11	f	D	D	D	D	D	D	D	D
316993	Personal leather goods (except women's handbag and purse) manufacturing ..	2	6	4	266	6 853	174	355	4 769	9 637	4 548	14 271	218
321	Wood product manufacturing	3	70	15	1 242	37 647	951	1 859	23 722	72 041	119 434	194 261	5 525
3219	Other wood product manufacturing	3	52	13	f	D	D	D	D	D	D	D	4 495
32191	Millwork	2	22	5	463	14 826	336	658	8 645	24 382	20 291	43 933	D
321911	Wood window and door manufacturing	1	9	3	359	12 231	248	524	6 816	20 011	13 725	32 925	D
32192	Wood container and pallet manufacturing	2	11	4	e	D	D	D	D	D	D	D	D
321920	Wood container and pallet manufacturing	2	11	4	e	D	D	D	D	D	D	D	D
32199	All other wood product manufacturing	5	19	4	e	D	D	D	D	D	D	D	D
322	Paper manufacturing	1	53	32	2 516	'95 077	'1 780	3 542	'51 518	218 427	196 781	408 595	13 488
3222	Converted paper product manufacturing	1	50	31	2 476	'93 935	'1 747	3 483	'50 774	215 960	194 871	404 250	13 405
32221	Paperboard container manufacturing	1	28	19	1 672	'61 357	'1 188	2 486	'34 847	128 750	132 850	260 102	10 009
322211	Corrugated and solid fiber box manufacturing	1	10	7	f	D	D	D	D	D	D	D	D
322212	Folding paperboard box manufacturing	—	5	3	f	D	D	D	D	D	D	D	D
322213	Setup paperboard box manufacturing	—	8	7	e	D	D	D	D	D	D	D	D
32222	Paper bag and coated and treated paper manufacturing ..	—	15	10	f	D	D	D	D	D	D	D	D
322222	Coated and laminated paper manufacturing	—	14	9	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	4	240	47	3 591	127 803	2 531	4 861	73 324	276 976	144 973	420 848	14 173
3231	Printing and related support activities	4	240	47	3 591	127 803	2 531	4 861	73 324	276 976	144 973	420 848	14 173
32311	Printing	4	220	44	3 313	116 353	2 305	4 464	65 363	252 356	138 192	389 424	13 543
323110	Commercial lithographic printing	4	94	20	1 174	44 372	817	1 582	27 233	85 477	53 956	139 488	8 466
323113	Commercial screen printing ..	—	28	8	663	20 656	441	858	10 365	46 271	38 293	83 312	1 139
323117	Books printing	8	6	5	f	D	D	D	D	D	D	D	D
32312	Support activities for printing...	8	20	3	278	11 450	226	397	7 961	24 620	6 781	31 424	630
325	Chemical manufacturing	1	89	40	3 598	172 672	2 059	4 370	76 488	623 208	552 402	1 160 012	55 834
3251	Basic chemical manufacturing ...	—	10	8	f	D	D	D	D	D	D	D	D
32513	Synthetic dye and pigment manufacturing	—	3	3	e	D	D	D	D	D	D	D	D
325132	Synthetic organic dye and pigment manufacturing	—	3	3	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing	7	6	3	e	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing	7	6	3	e	D	D	D	D	D	D	D	D
3255	Paint, coating, and adhesive manufacturing	1	18	4	e	D	D	D	D	D	D	D	D

See footnotes at end of table.

Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.

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		E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)					Wages (\$1,000)
PROVIDENCE-NEW BEDFORD-FALL RIVER, RI-MA METROPOLITAN STATISTICAL AREA—Con.													
325 3256	Chemical manufacturing—Con. Soap, cleaning compound, and toilet preparation manufacturing .	1	16	8	f	D	D	D	D	D	D	D	
32561	Soap and cleaning compound manufacturing	1	11	4	e	D	D	D	D	D	D	D	
32562	Toilet preparation manufacturing	—	5	4	e	D	D	D	D	D	D	D	
325620	Toilet preparation manufacturing	—	5	4	e	D	D	D	D	D	D	D	
3259	Other chemical product and preparation manufacturing	—	30	13	g	D	D	D	D	D	D	D	
32599	All other chemical product and preparation manufacturing	—	28	11	g	D	D	D	D	D	D	D	
325991	Custom compounding of purchased resins	—	15	5	f	D	D	D	D	D	D	D	
325992	Photographic film, paper, plate, and chemical manufacturing	—	5	3	f	D	D	D	D	D	D	D	
325998	All other miscellaneous chemical product and preparation manufacturing	—	8	3	e	D	D	D	D	D	D	D	
326	Plastics and rubber products manufacturing	2	121	52	5 444	196 694	4 046	8 526	119 002	483 785	378 300	868 816	28 339
3261	Plastics product manufacturing	1	100	45	4 485	162 886	3 383	7 050	100 793	412 279	333 087	748 550	27 038
32611	Plastics packaging materials and unlaminated film and sheet manufacturing	1	13	6	g	D	D	D	D	D	D	D	
326112	Plastics packaging film and sheet (including laminated) manufacturing	—	2	2	f	D	D	D	D	D	D	D	
32615	Urethane and other foam product (except polystyrene) manufacturing	—	5	3	e	D	D	D	D	D	D	D	
326150	Urethane and other foam product (except polystyrene) manufacturing	—	5	3	e	D	D	D	D	D	D	D	
32619	Other plastics product manufacturing	2	67	30	h	D	D	D	D	D	D	17 830	
326199	All other plastics product manufacturing	2	67	30	h	D	D	D	D	D	D	17 830	
3262	Rubber product manufacturing	2	21	7	959	33 808	663	1 476	18 209	71 506	45 213	120 266	1 301
32629	Other rubber product manufacturing	2	19	7	f	D	D	D	D	D	D	D	
326291	Rubber product manufacturing for mechanical use	2	5	3	640	24 580	428	978	12 607	51 036	28 924	83 529	D
326299	All other rubber product manufacturing	4	14	4	e	D	D	D	D	D	D	D	
327	Nonmetallic mineral product manufacturing	2	82	20	1 616	61 156	1 248	2 430	42 249	151 284	93 496	248 088	13 662
3272	Glass and glass product manufacturing	1	21	4	f	D	D	D	D	D	D	D	
32721	Glass and glass product manufacturing	1	21	4	f	D	D	D	D	D	D	D	
327212	Other pressed and blown glass and glassware manufacturing	1	9	1	e	D	D	D	D	D	D	D	
3273	Cement and concrete product manufacturing	2	37	11	654	24 773	513	967	17 509	70 526	46 670	118 187	9 514
32732	Ready-mix concrete manufacturing	2	15	7	307	13 493	258	547	10 364	40 950	28 478	69 723	5 964
327320	Ready-mix concrete manufacturing	2	15	7	307	13 493	258	547	10 364	40 950	28 478	69 723	5 964
3279	Other nonmetallic mineral product manufacturing	2	15	4	e	D	D	D	D	D	D	D	
331	Primary metal manufacturing	1	92	34	3 163	125 426	2 228	4 562	77 733	376 126	517 129	900 076	9 815
3312	Steel product manufacturing from purchased steel	—	5	4	f	D	D	D	D	D	D	D	
33122	Rolling and drawing of purchased steel	—	5	4	f	D	D	D	D	D	D	D	
331221	Rolled steel shape manufacturing	—	2	2	e	D	D	D	D	D	D	D	

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Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.

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	PROVIDENCE-NEW BEDFORD-FALL RIVER, RI-MA METROPOLITAN STATISTICAL AREA—Con.												
331 3314	Primary metal manufacturing—Con. Nonferrous metal (except aluminum) production and processing	1	38	19	1 792	72 918	1 211	2 450	43 385	259 079	362 267	626 439	6 495
33142	Copper rolling, drawing, extruding, and alloying	1	8	6	f	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, and extruding	—	4	2	e	D	D	D	D	D	D	D	1 058
331422	Copper wire (except mechanical) drawing	1	3	3	e	D	D	D	D	D	D	D	D
33149	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and alloying	1	25	13	1 178	47 670	761	1 473	27 291	196 933	225 790	427 369	4 375
331491	Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding	1	12	7	f	D	D	D	D	D	D	D	D
331492	Secondary smelting, refining, and alloying of nonferrous metal (except copper and aluminum)	1	13	6	e	D	D	D	D	D	D	D	D
3315	Foundries	2	45	9	727	25 905	577	1 140	17 594	48 033	28 272	76 681	D
33151	Ferrous metal foundries	1	11	3	e	D	D	D	D	D	D	D	D
331511	Iron foundries	1	8	2	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	3	34	6	e	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	1	'534	124	'13 015	'463 391	'10 095	'20 259	'308 666	'1 057 324	'640 996	'1 710 645	'47 198
3321	Forging and stamping	3	61	19	1 481	58 502	1 142	2 238	35 900	111 934	83 159	192 697	D
33211	Forging and stamping	3	61	19	1 481	58 502	1 142	2 238	35 900	111 934	83 159	192 697	D
332116	Metal stamping	3	54	16	g	D	D	D	D	D	D	D	D
3322	Cutlery and handtool manufacturing	3	20	5	e	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing	3	20	5	e	D	D	D	D	D	D	D	D
332212	Hand and edge tool manufacturing	2	17	4	e	D	D	D	D	D	D	D	D
3323	Architectural and structural metals manufacturing	—	'72	20	'3 383	'134 844	'2 607	'5 260	'93 575	'378 841	'229 042	'625 000	'15 794
33231	Plate work and fabricated structural product manufacturing	—	26	9	2 414	97 025	1 910	3 880	71 911	323 403	159 996	481 698	D
332312	Fabricated structural metal manufacturing	—	22	7	g	D	D	D	D	D	D	D	D
33232	Ornamental and architectural metal products manufacturing	1	'46	11	'969	'37 819	'697	'1 380	'21 664	'55 438	'69 046	'143 302	D
332322	Sheet metal work manufacturing	2	28	7	600	20 334	441	814	12 958	40 069	37 685	79 213	3 466
3324	Boiler, tank, and shipping container manufacturing	—	8	2	f	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) manufacturing	—	2	1	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) manufacturing	—	2	1	f	D	D	D	D	D	D	D	D
3326	Spring and wire product manufacturing	3	23	4	g	D	D	D	D	D	D	D	D
33261	Spring and wire product manufacturing	3	23	4	g	D	D	D	D	D	D	D	D
332618	Other fabricated wire product manufacturing	3	22	4	g	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	2	174	28	g	D	D	D	D	D	D	D	D
33271	Machine shops	3	131	16	1 402	54 956	1 111	2 197	38 665	110 873	49 374	159 994	10 095
332710	Machine shops	3	131	16	1 402	54 956	1 111	2 197	38 665	110 873	49 374	159 994	10 095
33272	Turned product and screw, nut, and bolt manufacturing	1	43	12	f	D	D	D	D	D	D	D	D
332722	Bolt, nut, screw, rivet, and washer manufacturing	1	18	9	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, and allied activities	2	122	25	2 123	64 772	1 698	3 308	43 978	127 722	61 354	188 359	4 193

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Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.

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	PROVIDENCE-NEW BEDFORD-FALL RIVER, RI-MA METROPOLITAN STATISTICAL AREA—Con.												
332	Fabricated metal product manufacturing—Con.												
3328	Coating, engraving, heat treating, and allied activities—Con.												
33281	Coating, engraving, heat treating, and allied activities ..	2	122	25	2 123	64 772	1 698	3 308	43 978	127 722	61 354	188 359	4 193
332812	Metal coating, engraving (except jewelry and silverware), and allied services to manufacturers ..	1	31	6	576	15 876	461	886	10 787	33 562	15 970	49 671	D
332813	Electroplating, plating, polishing, anodizing, and coloring	2	80	19	1 480	46 622	1 191	2 332	31 873	88 271	42 378	130 007	3 010
3329	Other fabricated metal product manufacturing	2	45	17	g	D	D	D	D	D	D	D	D
33299	All other fabricated metal product manufacturing	2	40	14	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product manufacturing	2	32	13	g	D	D	D	D	D	D	D	D
333	Machinery manufacturing	4	204	55	5 286	224 429	3 463	6 870	120 511	485 506	418 819	913 789	18 674
3332	Industrial machinery manufacturing	5	43	11	1 275	64 259	728	1 472	30 650	150 332	105 888	251 670	3 730
33322	Plastics and rubber industry machinery manufacturing	—	6	2	e	D	D	D	D	D	D	D	D
333220	Plastics and rubber industry machinery manufacturing ..	—	6	2	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery manufacturing	6	36	9	g	D	D	D	D	D	D	D	D
333295	Semiconductor machinery manufacturing	9	3	1	e	D	D	D	D	D	D	D	D
3333	Commercial and service industry machinery manufacturing	5	14	5	481	19 731	323	603	11 095	45 909	36 657	83 362	D
33331	Commercial and service industry machinery manufacturing	5	14	5	481	19 731	323	603	11 095	45 909	36 657	83 362	D
333312	Commercial laundry, drycleaning, and pressing machine manufacturing	8	2	2	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	—	10	4	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	—	10	4	e	D	D	D	D	D	D	D	D
333414	Heating equipment (except warm air furnaces) manufacturing	—	5	3	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery manufacturing	2	95	21	g	D	D	D	D	D	D	D	3 748
33351	Metalworking machinery manufacturing	2	95	21	g	D	D	D	D	D	D	D	3 748
333514	Special die and tool, die set, jig, and fixture manufacturing	1	38	4	e	D	D	D	D	D	D	D	1 765
333515	Cutting tool and machine tool accessory manufacturing...	3	25	8	f	D	D	D	D	D	D	D	D
3339	Other general purpose machinery manufacturing	4	36	12	g	D	D	D	D	D	D	D	D
33391	Pump and compressor manufacturing	9	4	2	e	D	D	D	D	D	D	D	D
333911	Pump and pumping equipment manufacturing ..	9	4	2	e	D	D	D	D	D	D	D	D
33399	All other general purpose machinery manufacturing	2	25	10	g	D	D	D	D	D	D	D	D
333991	Power-driven handtool manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general purpose machinery manufacturing	5	14	6	e	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	1	111	48	9 552	477 542	4 525	8 889	143 987	908 875	984 929	1 894 475	76 443
3341	Computer and peripheral equipment manufacturing	2	9	4	f	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	2	9	4	f	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment manufacturing ..	2	6	4	f	D	D	D	D	D	D	D	D

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334	Computer and electronic product manufacturing—Con.												
3342	Communications equipment manufacturing	—	5	3	g	D	D	D	D	D	D	D	D
33422	Radio and television broadcasting and wireless communications equipment manufacturing	—	5	3	g	D	D	D	D	D	D	D	D
334220	Radio and television broadcasting and wireless communications equipment manufacturing	—	5	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	1	46	30	h	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	1	46	30	h	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	1	8	5	g	D	D	D	D	D	D	D	D
334414	Electronic capacitor manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
334415	Electronic resistor manufacturing	—	5	5	e	D	D	D	D	D	D	D	D
334417	Electronic connector manufacturing	—	6	3	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) manufacturing	1	7	4	f	D	D	D	D	D	D	D	D
334419	Other electronic component manufacturing	3	12	10	643	24 435	416	838	12 985	47 674	21 111	71 396	1 423
3345	Navigational, measuring, electromedical, and control instruments manufacturing	—	47	11	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing	—	47	11	h	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing	—	7	4	g	D	D	D	D	D	D	D	D
334512	Automatic environmental control manufacturing for residential, commercial, and appliance use	—	3	3	534	18 360	375	863	10 706	29 141	22 889	52 493	D
334519	Other measuring and controlling device manufacturing	—	7	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	—	69	33	7 357	255 025	5 159	11 177	151 821	1 134 654	718 558	1 851 930	35 116
3351	Electric lighting equipment manufacturing	—	18	11	1 321	43 493	1 053	2 439	30 784	213 022	102 881	313 071	D
33512	Lighting fixture manufacturing ..	—	17	11	g	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture manufacturing	6	4	3	e	D	D	D	D	D	D	D	D
335122	Commercial, industrial, and institutional electric lighting fixture manufacturing	—	12	7	f	D	D	D	D	D	D	D	D
3353	Electrical equipment manufacturing	2	15	5	e	D	D	D	D	D	D	D	D
33531	Electrical equipment manufacturing	2	15	5	e	D	D	D	D	D	D	D	D
335314	Relay and industrial control manufacturing	3	13	3	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing	—	33	16	i	D	D	D	D	D	D	D	D
33592	Communication and energy wire and cable manufacturing ..	—	11	7	g	D	D	D	D	D	D	D	D
335929	Other communication and energy wire manufacturing ..	—	10	7	g	D	D	D	D	D	D	D	D
33593	Wiring device manufacturing	—	8	5	g	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device manufacturing	—	8	5	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment and component manufacturing	1	14	4	g	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment and component manufacturing ..	1	12	3	g	D	D	D	D	D	D	D	D

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336	Transportation equipment manufacturing	1	77	29	4 536	187 657	2 751	5 325	66 075	521 891	323 672	847 624	D
3363	Motor vehicle parts manufacturing	—	16	4	h	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical and electronic equipment manufacturing	—	6	1	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical and electronic equipment manufacturing	—	6	1	g	D	D	D	D	D	D	D	D
33636	Motor vehicle seating and interior trim manufacturing	—	2	1	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating and interior trim manufacturing	—	2	1	e	D	D	D	D	D	D	D	D
3366	Ship and boat building	3	48	20	g	D	D	D	D	D	D	D	D
33661	Ship and boat building	3	48	20	g	D	D	D	D	D	D	D	D
336611	Ship building and repairing	1	15	8	f	D	D	D	D	D	D	D	D
336612	Boat building	4	33	12	g	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	2	91	25	2 292	73 730	1 684	3 342	46 419	148 456	101 360	247 680	D
3371	Household and institutional furniture and kitchen cabinet manufacturing	2	50	8	572	15 852	448	903	11 078	33 749	22 654	56 214	D
33712	Household and institutional furniture manufacturing	—	22	6	357	9 263	277	547	6 443	22 340	11 560	33 911	D
3372	Office furniture (including fixtures) manufacturing	3	40	16	1 377	45 546	962	1 892	27 752	88 503	48 793	136 750	D
33721	Office furniture (including fixtures) manufacturing	3	40	16	1 377	45 546	962	1 892	27 752	88 503	48 793	136 750	D
337212	Custom architectural woodwork and millwork manufacturing	1	16	7	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, and locker manufacturing	4	20	7	f	D	D	D	D	D	D	D	D
3379	Other furniture related product manufacturing	—	1	1	e	D	D	D	D	D	D	D	D
33792	Blind and shade manufacturing	—	1	1	e	D	D	D	D	D	D	D	D
337920	Blind and shade manufacturing	—	1	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	2	614	164	20 387	716 561	13 628	26 270	346 758	2 297 833	1 348 504	3 641 421	79 729
3391	Medical equipment and supplies manufacturing	1	95	25	3 904	175 983	2 168	4 300	71 723	675 974	242 879	930 230	27 194
33911	Medical equipment and supplies manufacturing	1	95	25	3 904	175 983	2 168	4 300	71 723	675 974	242 879	930 230	27 194
339112	Surgical and medical instrument manufacturing	—	18	13	g	D	D	D	D	D	D	D	D
339113	Surgical appliance and supplies manufacturing	—	16	5	g	D	D	D	D	D	D	D	D
339115	Ophthalmic goods manufacturing	8	12	5	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing	3	519	139	16 483	540 578	11 460	21 970	275 035	1 621 859	1 105 625	2 711 191	52 535
33991	Jewelry and silverware manufacturing	1	363	99	10 745	341 165	7 431	13 990	166 285	881 555	848 121	1 720 435	D
339911	Jewelry (except costume) manufacturing	—	129	44	4 618	145 232	3 322	6 013	79 377	525 649	448 010	965 392	D
339912	Silverware and hollowware manufacturing	2	10	6	f	D	D	D	D	D	D	D	D
339913	Jewelers' material and lapidary work manufacturing	2	65	12	g	D	D	D	D	D	D	D	D
339914	Costume jewelry and novelty manufacturing	4	159	37	h	D	D	D	D	D	D	D	D
33992	Sporting and athletic goods manufacturing	9	16	2	g	D	D	D	D	D	D	D	D
339920	Sporting and athletic goods manufacturing	9	16	2	g	D	D	D	D	D	D	D	D
33993	Doll, toy, and game manufacturing	2	7	3	e	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) manufacturing	—	9	5	f	D	D	D	D	D	D	D	D
339941	Pen and mechanical pencil manufacturing	—	5	5	f	D	D	D	D	D	D	D	D
33995	Sign manufacturing	1	42	12	f	D	D	D	D	D	D	D	D
339950	Sign manufacturing	1	42	12	f	D	D	D	D	D	D	D	D

See footnotes at end of table.

Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
	PROVIDENCE-NEW BEDFORD-FALL RIVER, RI-MA METROPOLITAN STATISTICAL AREA—Con.												
339	Miscellaneous manufacturing—Con.												
3399	Other miscellaneous manufacturing—Con.												
33999	All other miscellaneous manufacturing	3	82	18	g	D	D	D	D	D	D	D	D
339991	Gasket, packing, and sealing device manufacturing	—	8	4	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous manufacturing	4	57	11	g	D	D	D	D	D	D	D	D

¹Some 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.

²Includes establishments with payroll at any time during the year.

³Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Industry Statistics for Counties: 2002

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
BRISTOL													
31-33	Manufacturing	2	104	31	2 540	89 171	1 760	3 272	49 644	201 122	126 061	326 006	13 238
336	Transportation equipment manufacturing	7	11	6	576	18 026	452	843	12 804	41 378	36 985	78 341	1 495
3366	Ship and boat building	7	10	6	f	D	D	D	D	D	D	D	D
33661	Ship and boat building	7	10	6	f	D	D	D	D	D	D	D	D
336612	Boat building	8	9	5	f	D	D	D	D	D	D	D	D
KENT													
31-33	Manufacturing	1	322	95	9 707	390 172	6 253	12 301	189 158	1 400 994	897 119	2 308 071	90 773
325	Chemical manufacturing	2	10	7	602	34 001	283	614	14 291	166 315	87 757	256 438	D
332	Fabricated metal product manufacturing	1	59	14	1 400	51 835	1 066	1 870	31 528	137 279	104 107	242 784	5 646
3324	Boiler, tank, and shipping container manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery manufacturing	-	35	10	1 075	38 900	846	1 757	24 773	62 244	136 040	206 851	5 758
3339	Other general purpose machinery manufacturing	-	3	1	f	D	D	D	D	D	D	D	D
33399	All other general purpose machinery manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
333991	Power-driven handtool manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	1	23	11	g	D	D	D	D	D	D	D	24 696
3341	Computer and peripheral equipment manufacturing	2	3	3	545	31 776	202	416	5 909	96 808	136 288	225 781	7 600
33411	Computer and peripheral equipment manufacturing	2	3	3	545	31 776	202	416	5 909	96 808	136 288	225 781	7 600
334119	Other computer peripheral equipment manufacturing ..	2	3	3	545	31 776	202	416	5 909	96 808	136 288	225 781	7 600
3344	Semiconductor and other electronic component manufacturing	-	9	6	g	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	-	9	6	g	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	-	6	4	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
33593	Wiring device manufacturing ...	-	2	2	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	2	63	18	1 470	50 518	1 042	1 976	26 729	109 199	128 655	239 555	4 642
3399	Other miscellaneous manufacturing	2	52	17	1 380	47 114	980	1 861	24 937	101 206	125 086	227 984	4 314
33991	Jewelry and silverware manufacturing	4	38	11	868	28 349	631	1 227	15 002	42 273	83 190	126 981	D
NEWPORT													
31-33	Manufacturing	1	97	18	3 241	164 939	2 007	3 645	67 948	454 732	195 491	634 377	13 489
334	Computer and electronic product manufacturing	-	6	3	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	4	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing ...	-	4	2	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	-	17	7	657	22 943	517	1 076	16 173	42 773	30 021	72 794	4 890
3366	Ship and boat building	-	16	7	f	D	D	D	D	D	D	D	4 890
33661	Ship and boat building	-	16	7	f	D	D	D	D	D	D	D	4 890

See footnotes at end of table.

Table 3. Industry Statistics for Counties: 2002—Con.

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
PROVIDENCE													
31-33	Manufacturing	2	1 436	391	38 583	1 327 445	27 100	54 036	1 735 317	3 204 400	2 694 667	5 874 984	155 376
311	Food manufacturing	5	107	22	1 716	50 152	1 160	2 252	31 512	134 254	141 669	274 437	6 650
3118	Bakeries and tortilla manufacturing	2	64	13	874	24 588	526	1 000	15 460	48 294	19 476	67 829	1 204
31181	Bread and bakery product manufacturing	2	57	13	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	1	16	7	531	19 585	368	783	12 949	37 808	13 541	51 402	D
313	Textile mills	5	48	26	2 358	68 522	1 926	3 839	47 717	138 009	139 808	282 278	4 205
3132	Fabric mills	3	26	16	1 318	36 744	1 099	2 203	26 942	76 723	74 189	156 270	D
31322	Narrow fabric mills and schiffli machine embroidery	4	14	8	f	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	4	12	8	f	D	D	D	D	D	D	D	D
3133	Textile and fabric finishing and fabric coating mills	8	16	8	927	28 849	729	1 448	18 594	53 924	56 050	110 768	D
31332	Fabric coating mills	9	4	3	f	D	D	D	D	D	D	D	D
313320	Fabric coating mills	9	4	3	f	D	D	D	D	D	D	D	D
314	Textile product mills	2	27	7	505	11 273	411	721	7 735	25 110	23 504	48 358	418
322	Paper manufacturing	2	29	16	g	D	D	D	D	D	D	D	D
3222	Converted paper product manufacturing	2	28	15	g	D	D	D	D	D	D	D	D
32221	Paperboard container manufacturing	2	15	9	f	D	D	D	D	D	D	D	D
32222	Paper bag and coated and treated paper manufacturing ..	1	9	5	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	3	108	21	1 507	56 303	1 040	2 022	31 419	109 965	76 980	186 209	5 136
3231	Printing and related support activities	3	108	21	1 507	56 303	1 040	2 022	31 419	109 965	76 980	186 209	5 136
32311	Printing	2	99	20	g	D	D	D	D	D	D	D	D
325	Chemical manufacturing	-	50	19	1 858	93 563	1 001	2 146	39 839	346 396	307 991	631 707	D
3259	Other chemical product and preparation manufacturing	-	18	6	g	D	D	D	D	D	D	D	D
32599	All other chemical product and preparation manufacturing ..	-	17	5	g	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resins	-	9	2	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	2	58	29	2 607	86 248	1 986	4 083	51 772	181 991	125 369	309 481	10 274
3261	Plastics product manufacturing ..	2	55	28	h	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	2	39	20	g	D	D	D	D	D	D	D	D
326199	All other plastics product manufacturing	2	39	20	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	1	33	6	646	26 537	516	968	18 618	52 971	36 414	91 829	2 841
331	Primary metal manufacturing	2	58	13	1 131	44 933	826	1 783	27 346	149 631	110 657	266 827	D
3314	Nonferrous metal (except aluminum) production and processing	2	19	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	2	279	62	5 336	175 330	4 043	8 041	113 327	358 059	215 424	569 250	21 606
3321	Forging and stamping	5	34	9	f	D	D	D	D	D	D	D	D
33211	Forging and stamping	5	34	9	f	D	D	D	D	D	D	D	D
332116	Metal stamping	5	31	8	f	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	1	70	17	1 130	40 875	865	1 756	28 501	84 613	34 729	119 515	D
33271	Machine shops	1	42	8	657	25 035	531	1 078	19 044	53 741	20 966	74 286	7 789
332710	Machine shops	1	42	8	657	25 035	531	1 078	19 044	53 741	20 966	74 286	7 789
3328	Coating, engraving, heat treating, and allied activities	2	97	19	g	D	D	D	D	D	D	D	3 657
33281	Coating, engraving, heat treating, and allied activities ..	2	97	19	g	D	D	D	D	D	D	D	3 657
332813	Electroplating, plating, polishing, anodizing, and coloring	2	65	15	g	D	D	D	D	D	D	D	2 656
3329	Other fabricated metal product manufacturing	1	24	6	f	D	D	D	D	D	D	D	1 777
33299	All other fabricated metal product manufacturing	1	22	5	832	23 672	577	1 178	15 223	45 038	44 467	88 498	D
332999	All other miscellaneous fabricated metal product manufacturing	1	17	5	f	D	D	D	D	D	D	D	D

See footnotes at end of table.

Table 3. Industry Statistics for Counties: 2002—Con.

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
PROVIDENCE—Con.													
333	Machinery manufacturing	4	88	20	1 918	84 386	1 080	2 186	38 674	195 776	120 931	319 469	5 255
3335	Metalworking machinery manufacturing	2	44	8	712	31 374	449	858	19 501	46 123	33 277	80 229	1 561
33351	Metalworking machinery manufacturing	2	44	8	712	31 374	449	858	19 501	46 123	33 277	80 229	1 561
3339	Other general purpose machinery manufacturing	7	17	7	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	1	25	10	g	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	2	11	7	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	2	11	7	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	—	9	3	558	19 957	378	867	11 177	27 910	21 346	49 633	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing	—	9	3	558	19 957	378	867	11 177	27 910	21 346	49 633	D
335	Electrical equipment, appliance, and component manufacturing	1	22	8	2 773	90 775	1 985	4 266	54 701	136 916	321 250	463 451	11 674
3359	Other electrical equipment and component manufacturing	1	13	6	g	D	D	D	D	D	D	D	D
33592	Communication and energy wire and cable manufacturing	—	7	4	1 719	57 953	1 287	2 731	39 681	69 987	288 405	362 533	D
335929	Other communication and energy wire manufacturing	—	7	4	1 719	57 953	1 287	2 731	39 681	69 987	288 405	362 533	D
33599	All other electrical equipment and component manufacturing	9	4	1	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment and component manufacturing	9	3	1	f	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	3	34	16	1 123	33 525	784	1 605	20 805	68 503	39 963	107 928	2 097
3372	Office furniture (including fixtures) manufacturing	3	21	11	775	23 476	512	1 014	13 683	46 515	26 509	72 584	1 437
33721	Office furniture (including fixtures) manufacturing	3	21	11	775	23 476	512	1 014	13 683	46 515	26 509	72 584	1 437
339	Miscellaneous manufacturing	2	395	97	10 963	363 750	7 462	14 512	177 612	962 802	716 596	1 666 332	37 757
3391	Medical equipment and supplies manufacturing	6	37	9	1 373	54 669	791	1 511	22 604	161 328	82 067	242 506	7 875
33911	Medical equipment and supplies manufacturing	6	37	9	1 373	54 669	791	1 511	22 604	161 328	82 067	242 506	7 875
339115	Ophthalmic goods manufacturing	9	4	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing	1	358	88	9 590	309 081	6 671	13 001	155 008	801 474	634 529	1 423 826	29 882
33991	Jewelry and silverware manufacturing	1	275	67	7 189	226 342	4 991	9 591	111 007	613 541	509 802	1 112 412	21 395
339911	Jewelry (except costume) manufacturing	—	94	30	3 362	102 101	2 449	4 638	58 434	363 118	339 636	693 790	13 892
339913	Jewelers' material and lapidary work manufacturing	2	53	7	f	D	D	D	D	D	D	D	D
339914	Costume jewelry and novelty manufacturing	4	122	27	h	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) manufacturing	—	5	3	f	D	D	D	D	D	D	D	D
339941	Pen and mechanical pencil manufacturing	—	3	3	f	D	D	D	D	D	D	D	D
33995	Sign manufacturing	2	19	7	566	17 851	387	807	9 801	28 905	27 167	56 407	D
339950	Sign manufacturing	2	19	7	566	17 851	387	807	9 801	28 905	27 167	56 407	D
33999	All other miscellaneous manufacturing	4	46	8	728	24 547	513	954	13 392	37 618	33 096	71 124	D
WASHINGTON													
31-33	Manufacturing	1	172	51	8 214	322 834	5 709	11 943	189 618	887 386	782 921	1 674 620	33 304
313	Textile mills	3	10	5	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	1	10	5	923	43 784	656	1 511	27 711	140 142	155 813	296 961	6 405
3261	Plastics product manufacturing	1	10	5	923	43 784	656	1 511	27 711	140 142	155 813	296 961	6 405
32611	Plastics packaging materials and unlaminated film and sheet manufacturing	1	4	2	f	D	D	D	D	D	D	D	D
326112	Plastics packaging film and sheet (including laminated) manufacturing	—	1	1	f	D	D	D	D	D	D	D	D

See footnotes at end of table.

Table 3. Industry Statistics for Counties: 2002—Con.

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)					Wages (\$1,000)
WASHINGTON—Con.													
332	Fabricated metal product manufacturing	—	22	5	2 284	90 307	1 807	3 675	66 969	312 804	142 758	455 358	D
3323	Architectural and structural metals manufacturing	—	5	1	g	D	D	D	D	D	D	D	D
33231	Plate work and fabricated structural product manufacturing	—	3	1	g	D	D	D	D	D	D	D	D
332312	Fabricated structural metal manufacturing	—	3	1	g	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	1	8	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	—	5	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing ...	—	5	1	f	D	D	D	D	D	D	D	D
334519	Other measuring and controlling device manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	—	7	5	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing	—	5	3	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment and component manufacturing	—	4	3	g	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment and component manufacturing ..	—	3	2	g	D	D	D	D	D	D	D	D

¹Some 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.

²Includes establishments with payroll at any time during the year.

³Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 4. Industry Statistics for Places: 2002

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
BRISTOL													
31-33	Manufacturing	1	55	17	1 112	40 064	819	1 636	24 903	83 672	50 696	134 770	8 705
BURRILLVILLE													
31-33	Manufacturing	3	20	9	599	22 311	422	911	12 758	57 834	57 049	113 038	2 182
CENTRAL FALLS													
31-33	Manufacturing	2	36	12	1 070	37 511	867	1 661	26 523	70 377	46 160	118 390	1 978
COVENTRY													
31-33	Manufacturing	5	43	8	680	27 889	417	866	13 984	103 856	43 070	149 362	D
CRANSTON													
31-33	Manufacturing	2	210	58	6 173	232 220	3 755	7 414	100 727	720 445	534 579	1 229 364	29 122
332	Fabricated metal product manufacturing	1	32	9	632	22 326	460	952	13 212	59 077	24 367	82 640	3 051
333	Machinery manufacturing	7	13	4	560	24 053	331	729	10 432	73 433	62 371	135 894	2 324
339	Miscellaneous manufacturing	3	68	16	2 594	95 052	1 513	2 850	33 879	198 660	128 605	326 880	6 165
3399	Other miscellaneous manufacturing	4	59	15	g	D	D	D	D	D	D	D	D
33991	Jewelry and silverware manufacturing	5	43	9	1 646	58 487	1 001	1 873	19 204	127 600	74 592	202 756	1 910
339911	Jewelry (except costume) manufacturing	-	15	4	565	15 838	350	609	8 182	54 311	38 716	93 995	313
339914	Costume jewelry and novelty manufacturing	9	19	4	983	39 960	582	1 127	9 749	70 368	28 398	98 402	1 434
CUMBERLAND													
31-33	Manufacturing	-	49	20	1 999	68 298	1 542	3 119	43 494	304 713	268 158	568 641	13 069
EAST GREENWICH													
31-33	Manufacturing	1	29	7	2 011	85 266	1 388	2 726	42 857	94 588	216 983	322 038	9 813
333	Machinery manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
3339	Other general purpose machinery manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
33399	All other general purpose machinery manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
333991	Power-driven handtool manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
EAST PROVIDENCE													
31-33	Manufacturing	1	124	44	3 504	129 704	2 272	4 311	63 991	293 345	224 173	517 457	10 607
339	Miscellaneous manufacturing	1	29	13	1 448	48 856	952	1 793	24 082	96 880	89 952	183 101	4 085
3399	Other miscellaneous manufacturing	1	25	13	1 411	47 505	927	1 757	23 624	94 074	88 736	179 005	D
33991	Jewelry and silverware manufacturing	1	23	13	g	D	D	D	D	D	D	D	3 991
339911	Jewelry (except costume) manufacturing	2	7	6	625	20 575	419	711	11 609	35 882	41 719	75 407	1 817
JOHNSTON													
31-33	Manufacturing	2	108	19	1 686	49 947	1 271	2 394	30 351	115 149	76 647	188 033	4 364
LINCOLN													
31-33	Manufacturing	-	56	27	3 134	109 875	2 220	4 565	60 983	301 758	216 409	519 458	18 268
332	Fabricated metal product manufacturing	-	13	6	536	19 433	411	824	13 536	40 573	20 147	60 973	7 486
339	Miscellaneous manufacturing	-	7	4	982	34 826	733	1 495	19 304	95 689	41 894	137 146	5 023
3399	Other miscellaneous manufacturing	-	6	3	f	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
339941	Pen and mechanical pencil manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
MIDDLETOWN													
31-33	Manufacturing	7	26	6	608	21 566	360	526	9 001	44 096	24 813	68 824	1 714

See footnotes at end of table.

Table 4. Industry Statistics for Places: 2002—Con.

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
NORTH KINGSTOWN													
31-33	Manufacturing	—	56	22	4 501	191 176	3 051	6 502	111 766	538 644	448 230	994 828	17 612
326	Plastics and rubber products manufacturing	1	4	2	f	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing ..	1	4	2	f	D	D	D	D	D	D	D	D
32611	Plastics packaging materials and unlaminated film and sheet manufacturing	1	3	2	f	D	D	D	D	D	D	D	D
326112	Plastics packaging film and sheet (including laminated) manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	—	9	3	g	D	D	D	D	D	D	D	D
3323	Architectural and structural metals manufacturing	—	2	1	g	D	D	D	D	D	D	D	D
33231	Plate work and fabricated structural product manufacturing	—	2	1	g	D	D	D	D	D	D	D	D
332312	Fabricated structural metal manufacturing	—	2	1	g	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	—	3	1	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	—	3	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing ...	—	3	1	f	D	D	D	D	D	D	D	D
334519	Other measuring and controlling device manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
NORTH PROVIDENCE													
31-33	Manufacturing	3	54	10	633	19 399	444	862	11 083	28 883	30 943	67 008	1 438
NORTH SMITHFIELD													
31-33	Manufacturing	2	31	5	605	21 573	450	956	12 665	46 574	26 503	72 866	3 933
PAWTUCKET													
31-33	Manufacturing	2	170	62	7 894	265 670	5 834	12 032	160 412	437 583	635 250	1 078 680	28 667
313	Textile mills	6	12	9	1 294	36 356	1 097	2 166	27 031	75 684	72 375	147 125	1 930
3132	Fabric mills	4	8	7	f	D	D	D	D	D	D	D	D
3133	Textile and fabric finishing and fabric coating mills	8	3	2	f	D	D	D	D	D	D	D	D
322	Paper manufacturing	2	7	6	612	26 389	401	871	12 398	49 847	60 693	109 668	4 055
3222	Converted paper product manufacturing	2	7	6	612	26 389	401	871	12 398	49 847	60 693	109 668	4 055
325	Chemical manufacturing	—	7	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing	—	5	1	f	D	D	D	D	D	D	D	D
32599	All other chemical product and preparation manufacturing ...	—	5	1	f	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resins	—	3	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	1	35	7	1 173	33 661	862	1 682	21 651	60 431	49 785	109 717	2 407
3329	Other fabricated metal product manufacturing	—	3	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product manufacturing	—	3	1	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product manufacturing	—	2	1	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	—	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	—	4	3	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing	—	2	2	g	D	D	D	D	D	D	D	D
33592	Communication and energy wire and cable manufacturing .	—	2	2	g	D	D	D	D	D	D	D	D
335929	Other communication and energy wire manufacturing .	—	2	2	g	D	D	D	D	D	D	D	D

See footnotes at end of table.

Table 4. Industry Statistics for Places: 2002—Con.

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
PAWTUCKET—Con.													
339	Miscellaneous manufacturing	2	34	12	845	24 887	626	1 251	13 846	61 229	49 623	112 117	2 954
3399	Other miscellaneous manufacturing	1	32	10	f	D	D	D	D	D	D	D	D
PORTSMOUTH													
31-33	Manufacturing	—	22	9	2 214	129 769	1 321	2 570	49 766	384 630	157 698	526 567	10 131
334	Computer and electronic product manufacturing	—	4	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	—	2	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing ...	—	2	1	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing	—	1	1	g	D	D	D	D	D	D	D	D
PROVIDENCE													
31-33	Manufacturing	2	397	80	7 015	220 846	4 936	9 751	126 324	485 509	337 328	818 021	23 173
332	Fabricated metal product manufacturing	4	80	17	1 301	43 435	1 009	2 027	28 241	85 928	45 405	129 628	3 376
3328	Coating, engraving, heat treating, and allied activities	5	43	7	553	17 055	437	892	11 611	34 820	11 210	46 063	757
33281	Coating, engraving, heat treating, and allied activities ..	5	43	7	553	17 055	437	892	11 611	34 820	11 210	46 063	757
339	Miscellaneous manufacturing	1	144	29	2 884	83 313	2 099	4 103	44 105	209 429	150 618	354 589	5 806
3399	Other miscellaneous manufacturing	1	137	28	2 796	79 850	2 044	4 000	42 528	200 748	147 768	343 058	5 472
33991	Jewelry and silverware manufacturing	1	108	22	2 383	67 895	1 754	3 422	36 199	172 097	128 421	297 017	4 686
339911	Jewelry (except costume) manufacturing	—	37	12	1 327	39 657	985	1 960	20 774	111 334	85 695	194 423	2 160
339914	Costume jewelry and novelty manufacturing	1	43	5	640	16 076	485	893	8 801	35 217	19 899	54 353	1 048
SMITHFIELD													
31-33	Manufacturing	6	77	20	1 628	67 376	1 138	2 232	38 258	182 538	89 231	273 460	12 270
339	Miscellaneous manufacturing	8	16	5	794	32 067	533	1 071	16 289	111 128	48 170	159 115	4 683
3391	Medical equipment and supplies manufacturing	9	4	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment and supplies manufacturing	9	4	2	f	D	D	D	D	D	D	D	D
SOUTH KINGSTOWN													
31-33	Manufacturing	—	34	6	1 709	62 871	1 188	2 452	33 113	175 447	142 538	315 105	8 339
335	Electrical equipment, appliance, and component manufacturing	—	2	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing	—	2	2	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment and component manufacturing	—	2	2	g	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment and component manufacturing ..	—	2	2	g	D	D	D	D	D	D	D	D
WARREN													
31-33	Manufacturing	3	39	13	1 375	47 794	911	1 586	23 950	114 879	73 795	187 099	4 430

See footnotes at end of table.

Table 4. Industry Statistics for Places: 2002—Con.

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
WARWICK													
31-33	Manufacturing	1	196	59	5 281	198 295	3 289	6 602	95 481	940 834	390 941	1 332 124	36 944
332	Fabricated metal product manufacturing	2	35	7	632	23 339	462	888	13 484	54 070	47 445	102 885	2 353
334	Computer and electronic product manufacturing	-	15	7	604	27 557	264	573	7 318	67 530	46 796	113 018	15 424
335	Electrical equipment, appliance, and component manufacturing	-	5	4	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
33593	Wiring device manufacturing...	-	2	2	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	3	48	15	1 200	42 768	843	1 623	22 496	75 939	98 233	175 829	3 624
3399	Other miscellaneous manufacturing	3	41	14	1 122	39 878	790	1 525	21 117	68 891	94 947	165 485	D
33991	Jewelry and silverware manufacturing	4	30	10	f	D	D	D	D	D	D	D	D
WESTERLY													
31-33	Manufacturing	4	30	9	862	29 500	607	1 226	18 013	67 679	81 830	150 382	1 694
313	Textile mills	3	4	3	585	19 063	416	853	11 896	44 011	63 467	107 949	741
WEST WARWICK													
31-33	Manufacturing	2	42	15	1 430	63 482	940	1 708	31 206	208 560	153 758	362 855	8 530
332	Fabricated metal product manufacturing	-	8	2	f	D	D	D	D	D	D	D	2 383
3324	Boiler, tank, and shipping container manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
WOONSOCKET													
31-33	Manufacturing	4	80	24	2 479	78 078	1 817	3 575	44 721	150 366	143 636	292 343	5 896
335	Electrical equipment, appliance, and component manufacturing	9	2	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing	9	2	1	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment and component manufacturing	9	1	1	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment and component manufacturing ..	9	1	1	f	D	D	D	D	D	D	D	D
BALANCE OF WASHINGTON COUNTY													
31-33	Manufacturing	3	41	13	1 075	36 581	818	1 678	25 591	100 829	102 049	201 244	5 523

¹Some 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.

²Includes establishments with payroll at any time during the year.

³Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 5. Detailed Statistics for the State: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
RHODE ISLAND	
Companies ¹	N
All establishments ²	2 131
Establishments with 1 to 19 employees	1 545
Establishments with 20 to 99 employees	451
Establishments with 100 employees or more	135
All employees ³	62 285
Total compensation	\$1,000.. 2 822 572
Annual payroll	\$1,000.. 2 294 561
Total fringe benefits	\$1,000.. 528 011
Production workers, average for year	number.. 42 829
Production workers on March 12	number.. 42 745
Production workers on May 12	number.. 43 017
Production workers on August 12	number.. 43 156
Production workers on November 12	number.. 42 294
Production worker hours	1,000.. 85 197
Production worker wages	\$1,000.. 1 231 685
Total cost of materials	\$1,000.. 4 696 259
Materials, parts, containers, packaging, etc., used	\$1,000.. 4 044 466
Resales	\$1,000.. 335 990
Purchased fuels	\$1,000.. 54 678
Purchased electricity	\$1,000.. 103 757
Contract work	\$1,000.. 157 368
Quantity of electricity purchased for heat and power	1,000 kWh.. 1 271 610
Quantity of electricity generated less sold for heat and power	1,000 kWh.. D
Total value of shipments	\$1,000.. 10 818 058
Value of resales	\$1,000.. 448 171
Value added	\$1,000.. 6 148 634
Total inventories, beginning of year	\$1,000.. 1 448 137
Finished goods inventories	\$1,000.. 612 892
Work-in-process inventories	\$1,000.. 318 411
Materials and supplies inventories	\$1,000.. 516 834
Total inventories, end of year	\$1,000.. 1 482 975
Finished goods inventories	\$1,000.. 625 506
Work-in-process inventories	\$1,000.. 336 798
Materials and supplies inventories	\$1,000.. 520 671
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. 4 478 802
Total capital expenditures (new and used)	\$1,000.. 306 180
Buildings and other structures (new and used)	\$1,000.. 50 719
Machinery and equipment (new and used)	\$1,000.. 255 461
Automobiles, trucks, etc., for highway use	\$1,000.. 12 536
Computers and peripheral data processing equipment	\$1,000.. 28 597
All other expenditures for machinery and equipment	\$1,000.. 214 328
Total retirements	\$1,000.. 169 235
Gross value of depreciable assets at end of year	\$1,000.. 4 615 747
Depreciation charges during year	\$1,000.. 292 703
Total rental payments	\$1,000.. 144 312
Buildings and other structures	\$1,000.. 86 254
Machinery and equipment	\$1,000.. 58 058

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

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Appendix A.

Explanation of Terms

COMPANY

A company or “enterprise” is comprised of all the establishments that operate under the ownership or control of a single organization. A company may be a business, service, or membership organization; consist of one or several establishments; and operate at one or several locations. It includes all subsidiary organizations, all establishments that are majority-owned by the company or any subsidiary, and all the establishments that can be directed or managed by the company or any subsidiary.

A company may have one or many establishments. Examples include product and service sales offices (retail and wholesale), industrial production plants, processing or assembly operations, mines or well sites, and support operations (such as an administrative office, warehouse, customer service center, or regional headquarters). Each establishment should receive, complete, and return a separate census form.

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.

Establishment

An establishment is a single physical location where business is conducted or where services or industrial operations are performed. Data in this sector includes those establishments where manufacturing is performed. A separate report was required for each manufacturing establishment (plant) with one employee or more that was in operation at any time during the year.

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).

TOTAL FRINGE BENEFITS

This item is the employer's costs for social security tax, unemployment tax, workmen's compensation insurance, state disability insurance pension plans, stock purchase plans, union-negotiated benefits, life insurance premiums, and insurance premiums on hospital and medical plans for employees.

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.

NUMBER OF 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 that included the 12th of the months specified on the report form. Included are employees on paid sick leave, paid holidays, and paid vacations; not included are proprietors and partners of unincorporated businesses.

These individuals consist of all full-time and part-time employees who are on the payrolls of establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November.

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

The "production workers" number 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

The "other employees" 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.

PRODUCTION-WORKER HOURS

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

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 that 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.

QUANTITY OF ELECTRICITY PURCHASED 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.

TOTAL VALUE OF SHIPMENTS

Includes the received or receivable net selling values, "Free on Board" (FOB) 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 bought and sold without further manufacture, processing, or assembly; and
3. other miscellaneous receipts — includes repair work, installation, sales of scrap, etc.

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

1. primary product value of shipments;
2. secondary product value of shipments; and
3. total miscellaneous receipts.

Primary product shipments is used in the calculations of industry specialization ratio and industry coverage ratio.

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 the paper manufacturing 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 that 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 ratio

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 ratio have been developed to measure the relationship of primary product shipments to the data on shipments for a particular industry.

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.

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.

TOTAL END-OF-YEAR INVENTORIES

This item is comprised of:

- a. Finished products
- b. Work-in-process
- c. Materials, supplies, fuels, etc.

Beginning in 1982, respondents were asked to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior years in which respondents were permitted to value their inventories using any generally accepted accounting method. Therefore, 1982 through 2002 data for inventories are not strictly comparable to prior-year data.

In addition, total beginning-of-year inventories is the sum of several different types of inventory valuations.

Inventory valuations include:

1. Subject to Last-in, first-out (LIFO) costing (including LIFO reserve and value)
2. Not subject to LIFO costing
3. Valuation method not reported, and
4. Amount subject to LIFO reported without associated reserve and value.

GROSS VALUE OF DEPRECIABLE/DEPLETABLE ASSETS AT BEGINNING OF YEAR

Gross value of depreciable/depletable assets includes all fixed depreciable/depletable assets contained in accounting records of establishments. The values shown (gross book value) represent the actual cost of assets at the time they were acquired. Included are all costs incurred in making the assets usable (such as transportation and installation)

Gross value of depreciable/depletable assets includes:

1. Buildings and other structures (new and used).
2. Machinery and equipment (new and used), including automobiles, trucks, etc. for highway use and computers and peripheral data processing equipment.
3. Retirements.

Excluded are nondepreciable capital assets including inventories and intangible assets.

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.

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.

CAPITAL EXPENDITURES FOR NEW AND USED PLANT AND EQUIPMENT

Represents the total new and used capital expenditures reported by establishments in operation and any known plants under construction.

These data include expenditures for:

1. Permanent additions and major alterations to manufacturing and mining establishments.
2. New and used machinery and equipment used for replacement and additions to plant capacity, if they are of the type for which depreciation, depletion, or (for mining establishments) Office of Minerals Exploration accounts are ordinarily maintained. In addition, for mining establishments, these data include expenditures made during the year for development and exploration of mineral properties. For manufacturing establishments, these data are broken down into three types.
 - a. Automobiles, trucks, etc. for highway use. These include vehicles acquired under a lease-purchase agreement and excludes vehicles leased or normally designed to transport materials, property, or equipment on mining, construction, petroleum development, and similar projects. These vehicles are of such size or weight as to be normally restricted by state laws or regulations from operating on public highways. It also excludes purchases of vehicles that are purchased by a company for highway use.
 - b. Computers and peripheral data processing equipment. This item includes all purchases of computers and related equipment.
 - c. All other expenditures for machinery and equipment excluding automobiles and computer equipment.

Capital expenditures include work done by contract, as well as by the establishment's own workforce.

These data exclude expenditures for land and mineral rights and cost of maintenance and repairs charged as current operating expenses.

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.

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.

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.

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership. The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: Milk bottling and pasteurizing; Water bottling and processing;

Fresh fish packaging (oyster shucking, fish filleting); Apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; Printing and related activities; Ready-mixed concrete production; Leather converting; Grinding of lenses to prescription; Wood preserving; Electroplating, plating, metal heat treating, and polishing for the trade; Lapidary work for the trade; Fabricating signs and advertising displays; Rebuilding or remanufacturing machinery (i.e., automotive parts) Ship repair and renovation; Machine shops; and Tire retreading. Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing).

They include: (1) Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting is considered a harvesting operation; (2) The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining; (3) The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction; (4) Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and (5) Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 FOOD MANUFACTURING

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 ANIMAL FOOD MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

31111 ANIMAL FOOD MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 DOG AND CAT FOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

311119 OTHER ANIMAL FOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

3112 GRAIN AND OILSEED MILLING

This industry group comprises establishments primarily engaged in one or more of the following:

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1. Milling flour or meal from grains or vegetables;
 2. Preparing flour mixes or doughs from flour milled in the same establishment;
 3. Milling, cleaning, and polishing rice; and
 4. Manufacturing malt from barley, rye, or other grains.

31121 FLOUR MILLING AND MALT MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. Milling flour or meal from grains or vegetables
2. Preparing flour mixes or doughs from flour milled in the same establishment
3. Milling, cleaning, and polishing rice; and
4. Manufacturing malt from barley, rye, or other grains.

311211 FLOUR MILLING

This U.S. industry comprises establishments primarily engaged in the following:

1. Milling flour or meal from grains (except rice) or vegetables and/or
2. Milling flour and preparing flour mixes or doughs.

311212 RICE MILLING

This U.S. industry comprises establishments primarily engaged in one of the following:

1. milling rice;
2. cleaning and polishing rice; or
3. milling, cleaning, and polishing rice.

The establishments in this industry may package the rice they mill with other ingredients.

311213 MALT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

31122 STARCH AND VEGETABLE FATS AND OILS MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. Wet milling corn and vegetables;
2. Crushing oilseeds and tree nuts;
3. Refining and/or blending vegetable oils;
4. Manufacturing shortening and margarine; and
5. Blending purchased animal fats with vegetable fats.

311221 WET CORN MILLING

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

311222 SOYBEAN PROCESSING

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

311223 OTHER OILSEED PROCESSING

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

311225 FATS AND OILS REFINING AND BLENDING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. Manufacturing shortening and margarine from purchased fats and oils;
2. Refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and
3. Blending purchased animal fats with purchased vegetable fats.

31123 BREAKFAST CEREAL MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 BREAKFAST CEREAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

3113 SUGAR AND CONFECTIONERY PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in one of the following:

1. Process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate), and
2. Those that begin with sugar and chocolate and process these further.

31131 SUGAR MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 SUGARCANE MILLS

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

311312 CANE SUGAR REFINING

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

311313 BEET SUGAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

31132 CHOCOLATE AND CONFECTIONERY MANUFACTURING FROM CACAO BEANS

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

311320 CHOCOLATE AND CONFECTIONERY MANUFACTURING FROM CACAO BEANS

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

31133 CONFECTIONERY MANUFACTURING FROM PURCHASED CHOCOLATE

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 CONFECTIONERY MANUFACTURING FROM PURCHASED CHOCOLATE

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

31134 NONCHOCOLATE CONFECTIONERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 NONCHOCOLATE CONFECTIONERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

3114 FRUIT AND VEGETABLE PRESERVING AND SPECIALTY FOOD MANUFACTURING

This industry group comprises establishments primarily engaged in the following:

1. Those that freeze food and
2. Those that use preservation processes, such as pickling, canning, and dehydrating.

Both types begin their production process with inputs of vegetable or animal origin.

31141 FROZEN FOOD MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 FROZEN FRUIT, JUICE, AND VEGETABLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, ades, drinks, cocktail mixes and concentrates.

311412 FROZEN SPECIALTY FOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

31142 FRUIT AND VEGETABLE CANNING, PICKLING, AND DRYING

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 FRUIT AND VEGETABLE CANNING

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

311422 SPECIALTY CANNING

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

311423 DRIED AND DEHYDRATED FOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one of the following:

1. Drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or
2. Drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

3115 DAIRY PRODUCT MANUFACTURING

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 DAIRY PRODUCT (EXCEPT FROZEN) MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. Manufacturing dairy products (except frozen) from raw milk and/or processed milk products;
2. Manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and
3. Manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 FLUID MILK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. Manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or
2. Manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

311512 CREAMERY BUTTER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

311513 CHEESE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or
2. manufacturing cheese substitutes from soybean and other nondairy substances.

311514 DRY, CONDENSED, AND EVAPORATED DAIRY PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

31152 ICE CREAM AND FROZEN DESSERT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 ICE CREAM AND FROZEN DESSERT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

3116 ANIMAL SLAUGHTERING AND PROCESSING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Slaughtering animals;
2. Preparing processed meats and meat byproducts; and
3. Rendering and/or refining animal fat, bones, and meat scraps.

This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

31161 ANIMAL SLAUGHTERING AND PROCESSING

This industry comprises establishments primarily engaged in one or more of the following:

1. Slaughtering animals;
2. Preparing processed meats and meat byproducts; and
3. Rendering and/or refining animal fat, bones, and meat scraps.

This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 ANIMAL (EXCEPT POULTRY) SLAUGHTERING

This U.S. industry comprises establishments primarily engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

311612 MEAT PROCESSED FROM CARCASSES

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

311613 RENDERING AND MEAT BYPRODUCT PROCESSING

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

311615 POULTRY PROCESSING

This U.S. industry comprises establishments primarily engaged in:

1. slaughtering poultry and small game and/or
2. preparing processed poultry and small game meat and meat byproducts.

3117 SEAFOOD PRODUCT PREPARATION AND PACKAGING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Canning seafood (including soup);
2. Smoking, salting, and drying seafood;
3. Eviscerating fresh fish by removing heads, fins, scales, bones, and entrails;
4. Shucking and packing fresh shellfish;
5. Processing marine fats and oils; and
6. Freezing seafood.

Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are also included in this industry group.

31171 SEAFOOD PRODUCT PREPARATION AND PACKAGING

This industry comprises establishments primarily engaged in one or more of the following:

1. Canning seafood (including soup);
2. Smoking, salting, and drying seafood;
3. Eviscerating fresh fish by removing heads, fins, scales, bones, and entrails;
4. Shucking and packing fresh shellfish;
5. Processing marine fats and oils; and
6. Freezing seafood.

Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are also included in this industry.

311711 SEAFOOD CANNING

This U.S. industry comprises establishments primarily engaged in one of the following:

1. Canning seafood (including soup) and marine fats and oils and/or
2. Smoking, salting, and drying seafood.

Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are also included in this industry.

311712 FRESH AND FROZEN SEAFOOD PROCESSING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. Eviscerating fresh fish by removing heads, fins, scales, bones, and entrails;
2. Shucking and packing fresh shellfish;

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3. Manufacturing frozen seafood; and
 4. Processing fresh and frozen marine fats and oils.

3118 BAKERIES AND TORTILLA MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Bread and bakery product manufacturing;
2. Cookie, cracker, and pasta manufacturing; and
3. Tortilla manufacturing.

31181 BREAD AND BAKERY PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 RETAIL BAKERIES

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

311812 COMMERCIAL BAKERIES

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

311813 FROZEN CAKES, PIES, AND OTHER PASTRIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

31182 COOKIE, CRACKER, AND PASTA MANUFACTURING

This industry comprises establishments primarily engaged in one of the following:

1. Manufacturing cookies and crackers;
2. Preparing flour and dough mixes and dough from flour ground elsewhere; and
3. Manufacturing dry pasta.

The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 COOKIE AND CRACKER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

311822 FLOUR MIXES AND DOUGH MANUFACTURING FROM PURCHASED FLOUR

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

311823 DRY PASTA MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 COOKIE AND CRACKER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

311822 FLOUR MIXES AND DOUGH MANUFACTURING FROM PURCHASED FLOUR

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

311823 DRY PASTA MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

31183 TORTILLA MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 TORTILLA MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

3119 OTHER FOOD MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 SNACK FOOD MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. Salting, roasting, drying, cooking, or canning nuts;
2. Processing grains or seeds into snacks;
3. Manufacturing peanut butter; and
4. Manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 ROASTED NUTS AND PEANUT BUTTER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. Salting, roasting, drying, cooking, or canning nuts;
2. Processing grains or seeds into snacks; and
3. Manufacturing peanut butter.

311919 OTHER SNACK FOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

31192 COFFEE AND TEA MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

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1. Roasting coffee;
 2. Manufacturing coffee and tea concentrates (including instant and freeze-dried);
 3. Blending tea;
 4. Manufacturing herbal tea; and
 5. Manufacturing coffee extracts, flavorings, and syrups.

311920 COFFEE AND TEA MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. Roasting coffee;
2. Manufacturing coffee and tea concentrates (including instant and freeze-dried);
3. Blending tea;
4. Manufacturing herbal tea; and
5. Manufacturing coffee extracts, flavorings, and syrups.

31193 FLAVORING SYRUP AND CONCENTRATE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 FLAVORING SYRUP AND CONCENTRATE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

31194 SEASONING AND DRESSING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. Manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies);
2. Manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and
3. Manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 MAYONNAISE, DRESSING, AND OTHER PREPARED SAUCE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

311942 SPICE AND EXTRACT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one of the following:

1. Manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or
2. Manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

31199 ALL OTHER FOOD MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 PERISHABLE PREPARED FOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

311999 ALL OTHER MISCELLANEOUS FOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakery and tortillas products; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

312 BEVERAGE AND TOBACCO PRODUCT MANUFACTURING

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments:

1. Those that manufacture nonalcoholic beverages;
2. Those that manufacture alcoholic beverages through the fermentation process; and
3. Those that produce distilled alcoholic beverages.

Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments:

1. Those engaged in redrying and stemming tobacco and,
2. Those that manufacture tobacco products, such as cigarettes and cigars.

3121 BEVERAGE MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing soft drinks; ice; bottled water; breweries; wineries; and/or distilleries.

31211 SOFT DRINK AND ICE MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. Manufacturing soft drinks;

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2. Manufacturing ice; and
 3. Purifying and bottling water.

312111 SOFT DRINK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

312112 BOTTLED WATER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

312113 ICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

31212 BREWERIES

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 BREWERIES

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

31213 WINERIES

This industry comprises establishments primarily engaged in one or more of the following:

1. Growing grapes and manufacturing wine and brandies;
2. Manufacturing wine and brandies from grapes and other fruits grown elsewhere; and
3. Blending wines and brandies.

312130 WINERIES

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. Growing grapes and manufacturing wine and brandies;
2. Manufacturing wine and brandies from grapes and other fruits grown elsewhere; and
3. Blending wines and brandies.

31214 DISTILLERIES

This industry comprises establishments primarily engaged in one or more of the following:

1. Distilling potable liquors (except brandies);
2. Distilling and blending liquors; and
3. Blending and mixing liquors and other ingredients.

312140 DISTILLERIES

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. Distilling potable liquors (except brandies);
2. Distilling and blending liquors; and
3. Blending and mixing liquors and other ingredients.

3122 TOBACCO MANUFACTURING

This industry group comprises establishments primarily engaged in the stemming and redrying of tobacco, and in the manufacturing of tobacco products.

31221 TOBACCO STEMMING AND REDRYING

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 TOBACCO STEMMING AND REDRYING

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

31222 TOBACCO PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 CIGARETTE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

312229 OTHER TOBACCO PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

313 TEXTILE MILLS

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fiber.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 FIBER, YARN, AND THREAD MILLS

This NAICS Industry Group include establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 FIBER, YARN, AND THREAD MILLS

This industry comprises establishments primarily engaged in one or more of the following:

1. spinning yarn

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2. manufacturing thread of any fiber
 3. texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments
 4. producing hemp yarn and further processing into rope or bags.

313111 YARN SPINNING MILLS

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

313112 YARN TEXTURIZING, THROWING, AND TWISTING MILLS

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

313113 THREAD MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

3132 FABRIC MILLS

This industry group comprises establishments primarily engaged in one or more of the following:

1. Broadwoven fabric mills;
2. Narrow fabric mills and schiffli machine embroidery;
3. Nonwoven fabric mills; and
4. Knit fabric mills.

31321 BROADWOVEN FABRIC MILLS

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 BROADWOVEN FABRIC MILLS

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

31322 NARROW FABRIC MILLS AND SCHIFFLI MACHINE EMBROIDERY

This industry comprises establishments primarily engaged in one or more of the following:

1. weaving or braiding narrow fabrics
2. manufacturing Schiffli machine embroideries
3. making fabric-covered elastic yarn and thread.

313221 NARROW FABRIC MILLS

This U.S. industry comprises establishments primarily engaged in:

1. weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or
2. making fabric-covered elastic yarn and thread.

Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products.

313222 SCHIFFLI MACHINE EMBROIDERY

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

31323 NONWOVEN FABRIC MILLS

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 NONWOVEN FABRIC MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

31324 KNIT FABRIC MILLS

This industry comprises establishments primarily engaged in one of the following:

1. knitting weft (i.e., circular) and warp (i.e., flat) fabric
2. knitting and finishing weft and warp fabric
3. manufacturing lace
4. manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 WEFT KNIT FABRIC MILLS

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313249 OTHER KNIT FABRIC AND LACE MILLS

This U.S. industry comprises establishments primarily engaged in one of the following:

1. knitting warp (i.e., flat) fabric;
2. knitting and finishing warp fabric;
3. manufacturing lace; or
4. manufacturing, dyeing, or finishing lace and lace goods.

Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

3133 TEXTILE AND FABRIC FINISHING AND FABRIC COATING MILLS

This industry group comprises establishments primarily engaged in one or more of the following:

1. Textile and fabric finishing mills and
2. Fabric coating mills.

31331 TEXTILE AND FABRIC FINISHING MILLS

This industry comprises:

1. establishments primarily engaged in finishing of textiles, fabrics, and apparel
2. establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include:

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- a. bleaching
 - b. dyeing
 - c. printing (e.g., roller, screen, flock, plisse)
 - d. stonewashing
 - e. other mechanical finishing (preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock).

313311 BROADWOVEN FABRIC FINISHING MILLS

This U.S. industry comprises:

1. Establishments primarily engaged in finishing broadwoven fabrics
2. Establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

313312 TEXTILE AND FABRIC FINISHING (EXCEPT BROADWOVEN FABRIC) MILLS

This U.S. industry comprises:

1. Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven)
2. Establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

31332 FABRIC COATING MILLS

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 FABRIC COATING MILLS

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

314 TEXTILE PRODUCT MILLS

Industries in the Textile Product Mills subsector group establishments that make textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 TEXTILE FURNISHINGS MILLS

This industry group comprises establishments primarily engaged in one or more of the following:

1. Carpet and rug mills and
2. Curtain and linen mills.

31411 CARPET AND RUG MILLS

This industry comprises establishments primarily engaged in one or more of the following:

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1. Manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or
 2. Finishing carpets and rugs.

314110 CARPET AND RUG MILLS

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or
2. finishing carpets and rugs.

31412 CURTAIN AND LINEN MILLS

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 CURTAIN AND DRAPERY MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

314129 OTHER HOUSEHOLD TEXTILE PRODUCT MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

3149 OTHER TEXTILE PRODUCT MILLS

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 TEXTILE BAG AND CANVAS MILLS

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 TEXTILE BAG MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

314912 CANVAS AND RELATED PRODUCT MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

31499 ALL OTHER TEXTILE PRODUCT MILLS

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

314991 ROPE, CORDAGE, AND TWINE MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

314992 TIRE CORD AND TIRE FABRIC MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

314999 ALL OTHER MISCELLANEOUS TEXTILE PRODUCT MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cords and tire fabrics) from purchased materials.

315 APPAREL MANUFACTURING

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes:

1. Cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment), and
2. The manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment.

The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 APPAREL KNITTING MILLS

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 HOSIERY AND SOCK MILLS

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 SHEER HOSIERY MILLS

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

315119 OTHER HOSIERY AND SOCK MILLS

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

31519 OTHER APPAREL KNITTING MILLS

This industry comprises establishments primarily engaged in one of the following:

1. knitting underwear, outerwear, and/or nightwear;

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2. knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or
 3. knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 OUTERWEAR KNITTING MILLS

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. knitting outerwear;
2. knitting fabric and manufacturing outerwear; and
3. knitting, manufacturing, and finishing knit outerwear.

Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

315192 UNDERWEAR AND NIGHTWEAR KNITTING MILLS

This U.S. industry comprises establishments primarily engaged in one of the following:

1. knitting underwear and nightwear;
2. knitting fabric and manufacturing underwear and nightwear; or
3. knitting, manufacturing, and finishing knit underwear and nightwear.

Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

3152 CUT AND SEW APPAREL MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 CUT AND SEW APPAREL CONTRACTORS

This industry comprises establishments commonly referred to as contractors primarily engaged in one of the following:

1. cutting materials owned by others for apparel and accessories and/or
2. sewing materials owned by others for apparel and accessories.

315211 MEN'S AND BOYS' CUT AND SEW APPAREL CONTRACTORS

This U.S. industry comprises establishments (commonly referred to as contractors) primarily engaged in:

1. cutting materials owned by others for men's and boys' apparel and/or
2. sewing materials owned by others for men's and boys' apparel.

315212 WOMEN'S, GIRLS', AND INFANTS' CUT AND SEW APPAREL CONTRACTORS

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in one of the following:

1. cutting materials owned by others for women's, girls', and infants' apparel and accessories and/or
2. sewing materials owned by others for women's, girls', and infants' apparel and accessories.

31522 MEN'S AND BOYS' CUT AND SEW APPAREL MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 MEN'S AND BOYS' CUT AND SEW UNDERWEAR AND NIGHTWEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

315222 MEN'S AND BOYS' CUT AND SEW SUIT, COAT, AND OVERCOAT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315223 MEN'S AND BOYS' CUT AND SEW SHIRT (EXCEPT WORK SHIRT) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

315224 MEN'S AND BOYS' CUT AND SEW TROUSER, SLACK, AND JEAN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315225 MEN'S AND BOYS' CUT AND SEW WORK CLOTHING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

315228 MEN'S AND BOYS' CUT AND SEW OTHER OUTERWEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweatpants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

31523 WOMEN'S AND GIRLS' CUT AND SEW APPAREL MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 WOMEN'S AND GIRLS' CUT AND SEW LINGERIE, LOUNGEWEAR, AND NIGHTWEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

315232 WOMEN'S AND GIRLS' CUT AND SEW BLOUSE AND SHIRT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315233 WOMEN'S AND GIRLS' CUT AND SEW DRESS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315234 WOMEN'S AND GIRLS' CUT AND SEW SUIT, COAT, TAILORED JACKET, AND SKIRT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315239 WOMEN'S AND GIRLS' CUT AND SEW OTHER OUTERWEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

31529 OTHER CUT AND SEW APPAREL MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 INFANTS' CUT AND SEW APPAREL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 FUR AND LEATHER APPAREL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315299 ALL OTHER CUT AND SEW APPAREL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 APPAREL ACCESSORIES AND OTHER APPAREL MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 APPAREL ACCESSORIES AND OTHER APPAREL MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who

perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 HAT, CAP, AND MILLINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

315992 GLOVE AND MITTEN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

315993 MEN'S AND BOYS' NECKWEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

315999 OTHER APPAREL ACCESSORIES AND OTHER APPAREL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, and suspenders.

316 LEATHER AND ALLIED PRODUCT MANUFACTURING

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 LEATHER AND HIDE TANNING AND FINISHING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Tanning, currying, and finishing hides and skins;
2. Having others process hides and skins on a contract basis; and
3. Dyeing or dressing furs.

31611 LEATHER AND HIDE TANNING AND FINISHING

This industry comprises establishments primarily engaged in one or more of the following:

1. tanning, currying, and finishing hides and skins;
2. having others process hides and skins on a contract basis; and
3. dyeing or dressing furs.

316110 LEATHER AND HIDE TANNING AND FINISHING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. tanning, currying, and finishing hides and skins;
2. having others process hides and skins on a contract basis; and
3. dyeing or dressing furs.

3162 FOOTWEAR MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

31621 FOOTWEAR MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 RUBBER AND PLASTICS FOOTWEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

316212 HOUSE SLIPPER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

316213 MEN'S FOOTWEAR (EXCEPT ATHLETIC) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

316214 WOMEN'S FOOTWEAR (EXCEPT ATHLETIC) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

316219 OTHER FOOTWEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

3169 OTHER LEATHER AND ALLIED PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

31699 OTHER LEATHER AND ALLIED PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 LUGGAGE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

316992 WOMEN'S HANDBAG AND PURSE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

316993 PERSONAL LEATHER GOOD (EXCEPT WOMEN'S HANDBAG AND PURSE) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

316999 ALL OTHER LEATHER GOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

321 WOOD PRODUCT MANUFACTURING

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers. The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 SAWMILLS AND WOOD PRESERVATION

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 SAWMILLS AND WOOD PRESERVATION

This industry comprises establishments primarily engaged in one or more of the following:

1. sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts;
2. sawing round wood poles, pilings, and posts and treating them with preservatives; and
3. treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects.

Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 SAWMILLS

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321114 WOOD PRESERVATION

This U.S. industry comprises establishments primarily engaged in:

1. treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives, such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or
2. sawing round wood poles, pilings, and posts and treating them with preservatives.

3212 VENEER, PLYWOOD, AND ENGINEERED WOOD PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Manufacturing veneer and/or plywood;
2. Manufacturing engineered wood members; and
3. Manufacturing reconstituted wood products.

This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

32121 VENEER, PLYWOOD, AND ENGINEERED WOOD PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing veneer and/or plywood;
2. manufacturing engineered wood members; and
3. manufacturing reconstituted wood products.

This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 HARDWOOD VENEER AND PLYWOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

321212 SOFTWOOD VENEER AND PLYWOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

321213 ENGINEERED WOOD MEMBER (EXCEPT TRUSS) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

321214 TRUSS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

321219 RECONSTITUTED WOOD PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

3219 OTHER WOOD PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 MILLWORK

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 WOOD WINDOW AND DOOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

321912 CUT STOCK, RESAWING LUMBER, AND PLANING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing dimension lumber from purchased lumber;
2. manufacturing dimension stock (i.e., shapes) or cut stock;
3. resawing the output of sawmills; and
4. planing purchased lumber.

These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321918 OTHER MILLWORK (INCLUDING FLOORING)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

32192 WOOD CONTAINER AND PALLET MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

321920 WOOD CONTAINER AND PALLET MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

32199 ALL OTHER WOOD PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 MANUFACTURED HOME (MOBILE HOME) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

321992 PREFABRICATED WOOD BUILDING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

321999 ALL OTHER MISCELLANEOUS WOOD PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

322 PAPER MANUFACTURING

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film. The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 PULP, PAPER, AND PAPERBOARD MILLS

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 PULP MILLS

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 PULP MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

32212 PAPER MILLS

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 PAPER (EXCEPT NEWSPRINT) MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

322122 NEWSPRINT MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

32213 PAPERBOARD MILLS

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 PAPERBOARD MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

3222 CONVERTED PAPER PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 PAPERBOARD CONTAINER MANUFACTURING

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 CORRUGATED AND SOLID FIBER BOX MANUFACTURING

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

322212 FOLDING PAPERBOARD BOX MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

322213 SETUP PAPERBOARD BOX MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

322214 FIBER CAN, TUBE, DRUM, AND SIMILAR PRODUCTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

322215 NONFOLDING SANITARY FOOD CONTAINER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

32222 PAPER BAG AND COATED AND TREATED PAPER MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. cutting and coating paper and paperboard;
2. cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film);
3. manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film;
4. manufacturing laminated aluminum and other converted metal foils from purchased foils; and
5. surface coating paper or paperboard.

322221 COATED AND LAMINATED PACKAGING PAPER AND PLASTICS FILM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. cutting and coating paper and

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2. cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates).

The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

322222 COATED AND LAMINATED PAPER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging:

1. cutting and coating paper;
2. cutting and laminating paper and other flexible materials (except plastics film to plastics film); and
3. laminating aluminum and other metal foils for nonpackaging uses from purchased foils.

The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

322223 PLASTICS, FOIL, AND COATED PAPER BAG MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

322224 UNCOATED PAPER AND MULTIWALL BAG MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

322225 LAMINATED ALUMINUM FOIL MANUFACTURING FOR FLEXIBLE PACKAGING USES

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

322226 SURFACE-COATED PAPERBOARD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

32223 STATIONERY PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 DIE-CUT PAPER AND PAPERBOARD OFFICE SUPPLIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

322232 ENVELOPE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

322233 STATIONERY, TABLET, AND RELATED PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., looseleaf fillers, notebooks, pads, stationery, and tablets).

32229 OTHER CONVERTED PAPER PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in one of the following:

1. converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or
2. converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes.

Processes used include laminating or lining purchased paper or paperboard.

322291 SANITARY PAPER PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

322299 ALL OTHER CONVERTED PAPER PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

323 PRINTING AND RELATED SUPPORT ACTIVITIES

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, labels, business cards, stationery, business forms, and other materials, and perform support activities, such as data imaging, platemaking services, and bookbinding. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, film, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly “drive” the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries (except Internet). Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 PRINTING AND RELATED SUPPORT ACTIVITIES

This industry group comprises establishments primarily engaged in one or more of the following:

1. Printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods) and/or
2. Performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

32311 PRINTING

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as folding, cutting, or laminating the materials they print, and mailing.

323110 COMMERCIAL LITHOGRAPHIC PRINTING

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

323111 COMMERCIAL GRAVURE PRINTING

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

323112 COMMERCIAL FLEXOGRAPHIC PRINTING

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

323113 COMMERCIAL SCREEN PRINTING

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

323114 QUICK PRINTING

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

323115 DIGITAL PRINTING

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

323116 MANIFOLD BUSINESS FORMS PRINTING

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

323117 BOOKS PRINTING

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

323118 BLANKBOOK, LOOSELEAF BINDERS, AND DEVICES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

323119 OTHER COMMERCIAL PRINTING

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

32312 SUPPORT ACTIVITIES FOR PRINTING

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 TRADEBINDING AND RELATED WORK

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. tradebinding;
2. sample mounting; and
3. postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

323122 PREPRESS SERVICES

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. prepress services, such as imagesetting or typesetting, for printers and
2. preparing film or plates for printing purposes.

324 PETROLEUM AND COAL PRODUCTS MANUFACTURING

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 PETROLEUM AND COAL PRODUCTS MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Petroleum refineries manufacturing;
2. Asphalt paving, roofing, and saturated materials manufacturing; and/or
3. Other petroleum and coal products manufacturing.

32411 PETROLEUM REFINERIES

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities:

1. fractionation;
2. straight distillation of crude oil; and
3. cracking.

324110 PETROLEUM REFINERIES

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities:

1. fractionation;
2. straight distillation of crude oil; and
3. cracking.

32412 ASPHALT PAVING, ROOFING, AND SATURATED MATERIALS MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or
2. saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 ASPHALT PAVING MIXTURE AND BLOCK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

324122 ASPHALT SHINGLE AND COATING MATERIALS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and
2. manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

32419 OTHER PETROLEUM AND COAL PRODUCTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

324191 PETROLEUM LUBRICATING OIL AND GREASE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

324199 ALL OTHER PETROLEUM AND COAL PRODUCTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

325 CHEMICAL MANUFACTURING

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 BASIC CHEMICAL MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 PETROCHEMICAL MANUFACTURING

This industry comprises establishments primarily engaged in one of the following:

1. manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or
2. manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 PETROCHEMICAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one of the following:

1. manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or
2. manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

32512 INDUSTRIAL GAS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 INDUSTRIAL GAS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

32513 SYNTHETIC DYE AND PIGMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 INORGANIC DYE AND PIGMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

325132 SYNTHETIC ORGANIC DYE AND PIGMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

32518 OTHER BASIC INORGANIC CHEMICAL MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 ALKALIES AND CHLORINE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

325182 CARBON BLACK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

325188 ALL OTHER BASIC INORGANIC CHEMICAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

32519 OTHER BASIC ORGANIC CHEMICAL MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 GUM AND WOOD CHEMICAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

325192 CYCLIC CRUDE AND INTERMEDIATE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

325193 ETHYL ALCOHOL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

325199 ALL OTHER BASIC ORGANIC CHEMICAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

3252 RESIN, SYNTHETIC RUBBER, AND ARTIFICIAL AND SYNTHETIC FIBERS AND FILAMENTS MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Resin and synthetic rubber manufacturing and
2. Artificial and synthetic fibers and filaments manufacturing.

32521 RESIN AND SYNTHETIC RUBBER MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis;
2. manufacturing noncustomized synthetic resins; and
3. manufacturing synthetic rubber.

325211 PLASTICS MATERIAL AND RESIN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in

1. manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or
2. manufacturing noncustomized synthetic resins.

325212 SYNTHETIC RUBBER MANUFACTURING

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

32522 ARTIFICIAL AND SYNTHETIC FIBERS AND FILAMENTS MANUFACTURING

This industry comprises establishments primarily engaged in one of the following:

1. manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or
2. manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 CELLULOSIC ORGANIC FIBER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one of the following:

1. manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or
2. manufacturing and texturizing cellulosic fibers and filaments.

325222 NONCELLULOSIC ORGANIC FIBER MANUFACTURING

This U.S. industry consists of establishments primarily engaged in one of the following:

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1. manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow, or
 2. manufacturing and texturizing noncellulosic fibers and filaments.

3253 PESTICIDE, FERTILIZER, AND OTHER AGRICULTURAL CHEMICAL MANUFACTURING

This industry group includes establishments classified in one of the following:

1. Fertilizer manufacturing and/or
2. Pesticide and other agricultural chemical manufacturing.

32531 FERTILIZER MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing nitrogenous or phosphatic fertilizer materials;
2. manufacturing fertilizers from sewage or animal waste;
3. manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and
4. mixing ingredients made elsewhere into fertilizers.

325311 NITROGENOUS FERTILIZER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing nitrogenous fertilizer materials and mixing ingredients into fertilizers;
2. manufacturing fertilizers from sewage or animal waste; and
3. manufacturing nitrogenous materials and mixing them into fertilizers.

325312 PHOSPHATIC FERTILIZER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing phosphatic fertilizer materials or
2. manufacturing phosphatic materials and mixing them into fertilizers.

325314 FERTILIZER (MIXING ONLY) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

32532 PESTICIDE AND OTHER AGRICULTURAL CHEMICAL MANUFACTURING

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 PESTICIDE AND OTHER AGRICULTURAL CHEMICAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

3254 PHARMACEUTICAL AND MEDICINE MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Manufacturing biological and medicinal products;
2. Processing (i.e., grading, grinding, and milling) botanical drugs and herbs;

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3. Isolating active medicinal principals from botanical drugs and herbs; and
 4. Manufacturing pharmaceutical products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

32541 PHARMACEUTICAL AND MEDICINE MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing biological and medicinal products;
2. processing (i.e., grading, grinding, and milling) botanical drugs and herbs;
3. isolating active medicinal principals from botanical drugs and herbs; and
4. manufacturing pharmaceutical products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 MEDICINAL AND BOTANICAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one of the following:

1. manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or
2. grading, grinding, and milling uncompounded botanicals.

325412 PHARMACEUTICAL PREPARATION MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325413 IN-VITRO DIAGNOSTIC SUBSTANCE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

325414 BIOLOGICAL PRODUCT (EXCEPT DIAGNOSTIC) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

3255 PAINT, COATING, AND ADHESIVE MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Paint and coating manufacturing and/or
2. Adhesive manufacturing.

32551 PAINT AND COATING MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or

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2. manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 PAINT AND COATING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry and/or
2. manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

32552 ADHESIVE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 ADHESIVE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

3256 SOAP, CLEANING COMPOUND, AND TOILET PREPARATION MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Soap and cleaning compound manufacturing and/or
2. Toilet preparation manufacturing.

32561 SOAP AND CLEANING COMPOUND MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 SOAP AND OTHER DETERGENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

325612 POLISH AND OTHER SANITATION GOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

325613 SURFACE ACTIVE AGENT MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one or more of the following:

1. manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or
2. manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

32562 TOILET PREPARATION MANUFACTURING

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 TOILET PREPARATION MANUFACTURING

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

3259 OTHER CHEMICAL PRODUCT AND PREPARATION MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 PRINTING INK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 PRINTING INK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

32592 EXPLOSIVES MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 EXPLOSIVES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

32599 ALL OTHER CHEMICAL PRODUCT AND PREPARATION MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 CUSTOM COMPOUNDING OF PURCHASED RESINS

This U.S. industry group comprises establishments primarily engaged in one or more of the following:

1. custom mixing and blending plastics resins made elsewhere or
2. reformulating plastics resins from recycled plastics products.

325992 PHOTOGRAPHIC FILM, PAPER, PLATE, AND CHEMICAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

325998 ALL OTHER MISCELLANEOUS CHEMICAL PRODUCT AND PREPARATION MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

326 PLASTICS AND RUBBER PRODUCTS MANUFACTURING

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hoses and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 PLASTICS PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 PLASTICS PACKAGING MATERIALS AND UNLAMINATED FILM AND SHEET MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. converting plastics resins into unsupported plastics film and sheet and/or
2. forming, coating or laminating plastics film and sheet into plastics bags.

326111 PLASTICS BAG MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one of the following:

1. converting plastics resins into plastics bags or

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2. forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags.

Establishments in this industry may print on the bags they manufacture.

326112 PLASTICS PACKAGING FILM AND SHEET (INCLUDING LAMINATED) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

326113 UNLAMINATED PLASTICS FILM AND SHEET (EXCEPT PACKAGING) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and un laminated sheet (except packaging).

32612 PLASTICS PIPE, PIPE FITTING, AND UNLAMINATED PROFILE SHAPE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 UNLAMINATED PLASTICS PROFILE SHAPE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

326122 PLASTICS PIPE AND PIPE FITTING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

32613 LAMINATED PLASTICS PLATE, SHEET (EXCEPT PACKAGING), AND SHAPE MANUFACTURING

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 LAMINATED PLASTICS PLATE, SHEET (EXCEPT PACKAGING), AND SHAPE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

32614 POLYSTYRENE FOAM PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 POLYSTYRENE FOAM PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

32615 URETHANE AND OTHER FOAM PRODUCT (EXCEPT POLYSTYRENE) MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 URETHANE AND OTHER FOAM PRODUCT (EXCEPT POLYSTYRENE) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

32616 PLASTICS BOTTLE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 PLASTICS BOTTLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

32619 OTHER PLASTICS PRODUCT MANUFACTURING

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

326191 PLASTICS PLUMBING FIXTURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

326192 RESILIENT FLOOR COVERING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

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).

3262 RUBBER PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in processing natural, and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 TIRE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 TIRE MANUFACTURING (EXCEPT RETREADING)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

326212 TIRE RETREADING

This U.S. industry comprises establishments primarily engaged in retreading or rebuilding tires.

32622 RUBBER AND PLASTICS HOSES AND BELTING MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 RUBBER AND PLASTICS HOSES AND BELTING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

32629 OTHER RUBBER PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 RUBBER PRODUCT MANUFACTURING FOR MECHANICAL USE

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

326299 ALL OTHER RUBBER PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

327 NONMETALLIC MINERAL PRODUCT MANUFACTURING

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications. The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily beneficiate mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 CLAY PRODUCT AND REFRACTORY MANUFACTURING

This industry group comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials and/or shaping, molding, baking, burning, or hardening clay refractories, non-clay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

32711 POTTERY, CERAMICS, AND PLUMBING FIXTURE MANUFACTURING

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 VITREOUS CHINA PLUMBING FIXTURE AND CHINA AND EARTHENWARE BATHROOM ACCESSORIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

327112 VITREOUS CHINA, FINE EARTHENWARE, AND OTHER POTTERY PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

327113 PORCELAIN ELECTRICAL SUPPLY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

32712 CLAY BUILDING MATERIAL AND REFRACTORIES MANUFACTURING

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 BRICK AND STRUCTURAL CLAY TILE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

327122 CERAMIC WALL AND FLOOR TILE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

327123 OTHER STRUCTURAL CLAY PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

327124 CLAY REFRACTORY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

327125 NONCLAY REFRACTORY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

3272 GLASS AND GLASS PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

32721 GLASS AND GLASS PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 FLAT GLASS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing flat glass by melting silica sand or cullet; or
2. manufacturing both flat glass and laminated glass by melting silica sand or cullet.

327212 OTHER PRESSED AND BLOWN GLASS AND GLASSWARE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

327213 GLASS CONTAINER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

327215 GLASS PRODUCT MANUFACTURING MADE OF PURCHASED GLASS

This U.S. industry comprises establishments primarily engaged in coating, laminating, tempering, or shaping purchased glass.

3273 CEMENT AND CONCRETE PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Cement manufacturing;
2. Ready-mix concrete manufacturing;
3. Concrete pipe, brick, and block manufacturing; and/or
4. Other concrete product manufacturing.

32731 CEMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 CEMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

32732 READY-MIX CONCRETE MANUFACTURING

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 READY-MIX CONCRETE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing concrete delivered to a purchaser, such as batch plants or mix plants, in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

32733 CONCRETE PIPE, BRICK, AND BLOCK MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block.

327331 CONCRETE BLOCK AND BRICK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

327332 CONCRETE PIPE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

32739 OTHER CONCRETE PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 OTHER CONCRETE PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

3274 LIME AND GYPSUM PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells and/or gypsum products such as wallboard, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work.

32741 LIME MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 LIME MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

32742 GYPSUM PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wallboard, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 GYPSUM PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products such as wallboard, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

3279 OTHER NONMETALLIC MINERAL PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 ABRASIVE PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

327910 ABRASIVE PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

32799 ALL OTHER NONMETALLIC MINERAL PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 CUT STONE AND STONE PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

327992 GROUND OR TREATED MINERAL AND EARTH MANUFACTURING

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

327993 MINERAL WOOL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

327999 ALL OTHER MISCELLANEOUS NONMETALLIC MINERAL PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

331 PRIMARY METAL MANUFACTURING

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 IRON AND STEEL MILLS AND FERROALLOY MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Direct reduction of iron ore;
2. Manufacturing pig iron in molten or solid form;
3. Converting pig iron into steel;
4. Manufacturing ferroalloys;
5. Making steel;
6. Making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, and wire); and
7. Making steel and forming pipe and tube.

33111 IRON AND STEEL MILLS AND FERROALLOY MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. direct reduction of iron ore;
2. manufacturing pig iron in molten or solid form;
3. converting pig iron into steel;
4. manufacturing ferroalloys;
5. making steel;
6. making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, and wire); and
7. making steel and forming pipe and tube.

331111 IRON AND STEEL MILLS

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. direct reduction of iron ore;

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2. manufacturing pig iron in molten or solid form;
 3. converting pig iron into steel;
 4. making steel;
 5. making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and
 6. making steel and forming tube and pipe.

331112 ELECTROMETALLURGICAL FERROALLOY PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

3312 STEEL PRODUCT MANUFACTURING FROM PURCHASED STEEL

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe; drawing steel wire; and rolling or drawing shapes from purchased iron or steel.

33121 IRON AND STEEL PIPE AND TUBE MANUFACTURING FROM PURCHASED STEEL

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 IRON AND STEEL PIPE AND TUBE MANUFACTURING FROM PURCHASED STEEL

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

33122 ROLLING AND DRAWING OF PURCHASED STEEL

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 ROLLED STEEL SHAPE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

331222 STEEL WIRE DRAWING

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

3313 ALUMINA AND ALUMINUM PRODUCTION AND PROCESSING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Refining alumina;
2. Making (i.e., the primary production) aluminum from alumina;
3. Recovering aluminum from scrap or dross;
4. Alloying purchased aluminum; and
5. Manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, and wire).

33131 ALUMINA AND ALUMINUM PRODUCTION AND PROCESSING

This industry comprises establishments primarily engaged in one or more of the following:

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1. refining alumina;
 2. making (i.e., the primary production) aluminum from alumina;
 3. recovering aluminum from scrap or dross;
 4. alloying purchased aluminum; and
 5. manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, and wire).

331311 ALUMINA REFINING

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

331312 PRIMARY ALUMINUM PRODUCTION

This U.S. industry comprises establishments primarily engaged in:

1. making aluminum from alumina and/or
2. making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, and strip).

Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

331314 SECONDARY SMELTING AND ALLOYING OF ALUMINUM

This U.S. industry comprises establishments primarily engaged in:

1. recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or
2. manufacturing alloys, powder, paste, or flake from purchased aluminum.

331315 ALUMINUM SHEET, PLATE, AND FOIL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or
2. recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

331316 ALUMINUM EXTRUDED PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum and/or
2. recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

331319 OTHER ALUMINUM ROLLING AND DRAWING

This U.S. industry comprises establishments primarily engaged in:

1. rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or
2. recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

3314 NONFERROUS METAL (EXCEPT ALUMINUM) PRODUCTION AND PROCESSING

This industry group comprises establishments primarily engaged in one of the following:

1. Nonferrous metal (except aluminum) smelting and refining;
2. Copper rolling, drawing, extruding, and alloying; and/or
3. Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and alloying.

33141 NONFERROUS METAL (EXCEPT ALUMINUM) SMELTING AND REFINING

This industry comprises establishments primarily engaged in:

1. smelting ores into nonferrous metals and/or
2. the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 PRIMARY SMELTING AND REFINING OF COPPER

This U.S. industry comprises establishments primarily engaged in one of the following:

1. smelting copper ore and/or
2. the primary refining of copper by electrolytic methods or other processes.

Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

331419 PRIMARY SMELTING AND REFINING OF NONFERROUS METAL (EXCEPT COPPER AND ALUMINUM)

This U.S. industry comprises establishments primarily engaged in:

1. making (primary production) nonferrous metals by smelting ore and/or
2. the primary refining of nonferrous metals by electrolytic methods or other processes.

33142 COPPER ROLLING, DRAWING, EXTRUDING, AND ALLOYING

This industry comprises establishments primarily engaged in one or more of the following:

1. recovering copper or copper alloys from scraps;
2. alloying purchased copper;
3. rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, wire) from purchased copper; and
4. recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, wire).

331421 COPPER ROLLING, DRAWING, AND EXTRUDING

This U.S. industry comprises establishments primarily engaged in:

1. rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, and tube (except bare or insulated copper communication or energy wire)) from purchased copper and/or
2. recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, and tube (except bare or insulated copper communication or energy wire) in integrated mills.

331422 COPPER WIRE (EXCEPT MECHANICAL) DRAWING

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

331423 SECONDARY SMELTING, REFINING, AND ALLOYING OF COPPER

This U.S. industry comprises establishments primarily engaged in:

1. recovering copper and copper alloys from scrap and/or
2. alloying purchased copper.

Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

33149 NONFERROUS METAL (EXCEPT COPPER AND ALUMINUM) ROLLING, DRAWING, EXTRUDING, AND ALLOYING

This industry comprises establishments primarily engaged in one or more of the following:

1. recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap;
2. alloying purchased nonferrous metals (except copper and aluminum);
3. rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and
4. recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 NONFERROUS METAL (EXCEPT COPPER AND ALUMINUM) ROLLING, DRAWING, AND EXTRUDING

This U.S. industry comprises establishments primarily engaged in:

1. rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, and tube) from purchased nonferrous metals and/or
2. recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, and tube) in integrated mills.

331492 SECONDARY SMELTING, REFINING, AND ALLOYING OF NONFERROUS METAL (EXCEPT COPPER AND ALUMINUM)

This U.S. industry comprises establishments primarily engaged in:

1. alloying purchased nonferrous metals and/or
2. recovering nonferrous metals from scrap.

Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, and wire) using smelting or refining processes.

3315 FOUNDRIES

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping, threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 FERROUS METAL FOUNDRIES

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 IRON FOUNDRIES

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings (e.g., cast iron manhole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

331512 STEEL INVESTMENT FOUNDRIES

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

331513 STEEL FOUNDRIES (EXCEPT INVESTMENT)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

33152 NONFERROUS METAL FOUNDRIES

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 ALUMINUM DIE-CASTING FOUNDRIES

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

331522 NONFERROUS (EXCEPT ALUMINUM) DIE-CASTING FOUNDRIES

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331524 ALUMINUM FOUNDRIES (EXCEPT DIE-CASTING)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

331525 COPPER FOUNDRIES (EXCEPT DIE-CASTING)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

331528 OTHER NONFERROUS FOUNDRIES (EXCEPT DIE-CASTING)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous (except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

332 FABRICATED METAL PRODUCT MANUFACTURING

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 FORGING AND STAMPING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Manufacturing forgings from purchased metals;
2. Manufacturing metal custom roll forming products;
3. Manufacturing metal stamped and spun products (except automotive, cans, and coins); and
4. Manufacturing powder metallurgy products.

Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining and assembling) a specific manufactured product are classified in the industry of the finished product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

33211 FORGING AND STAMPING

This industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing forgings from purchased metals;
2. manufacturing metal custom roll forming products;
3. manufacturing metal stamped and spun products (except automotive, cans, and coins); and
4. manufacturing powder metallurgy products.

Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining and assembling) a specific manufactured product are classified in the industry of the finished product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 IRON AND STEEL FORGING

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

332112 NONFERROUS FORGING

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

332114 CUSTOM ROLL FORMING

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

332115 CROWN AND CLOSURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

332116 METAL STAMPING

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332117 POWDER METALLURGY PART MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

3322 CUTLERY AND HANDTOOL MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Manufacturing nonprecious and precious plated metal cutlery and flatware;
2. Manufacturing nonpowered hand and edge tools;
3. Manufacturing nonpowered handsaws;
4. Manufacturing saw blades, all types (including those for sawing machines); and

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5. Manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

33221 CUTLERY AND HANDTOOL MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing nonprecious and precious plated metal cutlery and flatware;
2. manufacturing nonpowered hand and edge tools;
3. manufacturing nonpowered handsaws;
4. manufacturing saw blades, all types (including those for sawing machines); and
5. manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 CUTLERY AND FLATWARE (EXCEPT PRECIOUS) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

332212 HAND AND EDGE TOOL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

332213 SAW BLADE AND HANDSAW MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing nonpowered handsaws and/or
2. manufacturing saw blades, all types (including those for power sawing machines).

332214 KITCHEN UTENSIL, POT, AND PAN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

3323 ARCHITECTURAL AND STRUCTURAL METALS MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing one or more of the following:

1. Plate work and fabricated structural product manufacturing and
2. Ornamental and architectural metal products manufacturing.

33231 PLATE WORK AND FABRICATED STRUCTURAL PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing one or more of the following:

1. prefabricated metal buildings, panels and sections;
2. structural metal products; and
3. metal plate work products.

332311 PREFABRICATED METAL BUILDING AND COMPONENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

332312 FABRICATED STRUCTURAL METAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

332313 PLATE WORK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

33232 ORNAMENTAL AND ARCHITECTURAL METAL PRODUCTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing one or more of the following:

1. metal framed windows (i.e., typically using purchased glass) and metal doors;
2. sheet metal work; and
3. ornamental and architectural metal products.

332321 METAL WINDOW AND DOOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (typically using purchased glass) and metal doors. Examples of products made by these establishments are: metal door frames; metal framed window and door screens; and metal molding and trim (except automotive).

332322 SHEET METAL WORK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

332323 ORNAMENTAL AND ARCHITECTURAL METAL WORK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

3324 BOILER, TANK, AND SHIPPING CONTAINER MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Power boiler and heat exchanger manufacturing;
2. Metal tank (heavy gauge) manufacturing; and
3. Metal can, box, and other metal container (light gauge) manufacturing.

33241 POWER BOILER AND HEAT EXCHANGER MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 POWER BOILER AND HEAT EXCHANGER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

33242 METAL TANK (HEAVY GAUGE) MANUFACTURING

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 METAL TANK (HEAVY GAUGE) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

33243 METAL CAN, BOX, AND OTHER METAL CONTAINER (LIGHT GAUGE) MANUFACTURING

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 METAL CAN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

332439 OTHER METAL CONTAINER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

3325 HARDWARE MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated and time locks).

33251 HARDWARE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated and time locks).

332510 HARDWARE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated and time locks).

3326 SPRING AND WIRE PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in:

1. Manufacturing steel springs by forming, such as cutting, bending, and heat winding, metal rod or strip stock, and/or
2. Manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

33261 SPRING AND WIRE PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in:

1. manufacturing steel springs by forming, such as cutting, bending, and heat winding, metal rod or strip stock, and/or
2. manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 SPRING (HEAVY GAUGE) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding, rod or strip stock.

332612 SPRING (LIGHT GAUGE) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

332618 OTHER FABRICATED WIRE PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

3327 MACHINE SHOPS; TURNED PRODUCT; AND SCREW, NUT, AND BOLT MANUFACTURING

This industry group comprises establishments primarily engaged in:

1. Machine shops and/or
2. Turned product and screw, nut, and bolt manufacturing.

33271 MACHINE SHOPS

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

332710 MACHINE SHOPS

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

33272 TURNED PRODUCT AND SCREW, NUT, AND BOLT MANUFACTURING

This industry comprises establishments primarily engaged in:

1. machining precision turned products or
2. manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners.

Included in this industry are establishments primarily engaged in manufacturing parts for machinery and equipment on a customized basis.

332721 PRECISION TURNED PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in machining precision products of all materials on a job or order basis (known as precision turned manufacturers). Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

332722 BOLT, NUT, SCREW, RIVET, AND WASHER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

3328 COATING, ENGRAVING, HEAT TREATING, AND ALLIED ACTIVITIES

This industry group comprises establishments primarily engaged in one or more of the following:

1. Heat treating metals and metal products;
2. Enameling, lacquering, and varnishing metals and metal products;
3. Hot dip galvanizing metals and metal products;
4. Engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates);
5. Powder coating metals and metal products;
6. Electroplating, plating, anodizing, coloring, and finishing metals and metal products; and
7. Providing other metal surfacing services for the trade.

Included in this industry are establishments that coat engravings and heat treat metals and metal formed products fabricated elsewhere.

33281 COATING, ENGRAVING, HEAT TREATING, AND ALLIED ACTIVITIES

This industry comprises establishments primarily engaged in one or more of the following:

1. heat treating metals and metal products;
2. enameling, lacquering, and varnishing metals and metal products;
3. hot dip galvanizing metals and metal products;
4. engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates);
5. powder coating metals and metal products;
6. electroplating, plating, anodizing, coloring, and finishing metals and metal products; and
7. providing other metal surfacing services for the trade.

Included in this industry are establishments that coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 METAL HEAT TREATING

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing metals and metal products for the trade.

332812 METAL COATING, ENGRAVING (EXCEPT JEWELRY AND SILVERWARE), AND ALLIED SERVICES TO MANUFACTURERS

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. enameling, lacquering, and varnishing metals and metal products;
2. hot dip galvanizing metals and metal products;
3. engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates);
4. powder coating metals and metal products; and
5. providing other metal surfacing services for the trade.

332813 ELECTROPLATING, PLATING, POLISHING, ANODIZING, AND COLORING

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

3329 OTHER FABRICATED METAL PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 METAL VALVE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves:

1. industrial valves;
2. fluid power valves and hose fittings;
3. plumbing fixture fittings and trim; and
4. other metal valves and pipe fittings.

332911 INDUSTRIAL VALVE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

332912 FLUID POWER VALVE AND HOSE FITTING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

332913 PLUMBING FIXTURE FITTING AND TRIM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

332919 OTHER METAL VALVE AND PIPE FITTING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

33299 ALL OTHER FABRICATED METAL PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 BALL AND ROLLER BEARING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

332992 SMALL ARMS AMMUNITION MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

332993 AMMUNITION (EXCEPT SMALL ARMS) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

332994 SMALL ARMS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

332995 OTHER ORDNANCE AND ACCESSORIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

332996 FABRICATED PIPE AND PIPE FITTING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in fabricating, such as cutting, threading, and bending metal pipes and pipe fittings made from purchased metal pipe.

332997 INDUSTRIAL PATTERN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

332998 ENAMELED IRON AND METAL SANITARY WARE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

332999 ALL OTHER MISCELLANEOUS FABRICATED METAL PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

333 MACHINERY MANUFACTURING

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special purpose machinery). Three industry groups consist of special purpose machinery--Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery

Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General Purpose Machinery Manufacturing.

3331 AGRICULTURE, CONSTRUCTION, AND MINING MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Agricultural implement manufacturing;
2. Construction machinery manufacturing; and
3. Mining and oil and gas field machinery manufacturing.

33311 AGRICULTURAL IMPLEMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 FARM MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

333112 LAWN AND GARDEN TRACTOR AND HOME LAWN AND GARDEN EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

33312 CONSTRUCTION MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 CONSTRUCTION MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

33313 MINING AND OIL AND GAS FIELD MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 MINING MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, and rock drills and
2. manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

333132 OIL AND GAS FIELD MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

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1. manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks; and
 2. manufacturing water well drilling machinery.

3332 INDUSTRIAL MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Sawmill and woodworking machinery manufacturing;
2. Plastics and rubber industry machinery manufacturing; and
3. Other industrial machinery manufacturing.

33321 SAWMILL AND WOODWORKING MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing sawmill and wood-working machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 SAWMILL AND WOODWORKING MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

33322 PLASTICS AND RUBBER INDUSTRY MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 PLASTICS AND RUBBER INDUSTRY MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

33329 OTHER INDUSTRIAL MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 PAPER INDUSTRY MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

333292 TEXTILE MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

333293 PRINTING MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, typesetting machinery, and bindery machinery.

333294 FOOD PRODUCT MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, and ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, and pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

333295 SEMICONDUCTOR MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

333298 ALL OTHER INDUSTRIAL MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

3333 COMMERCIAL AND SERVICE INDUSTRY MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and dry-cleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

33331 COMMERCIAL AND SERVICE INDUSTRY MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and dry-cleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 AUTOMATIC VENDING MACHINE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing coin, token, currency, or magnetic card operated vending machines; and/or
2. manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

333312 COMMERCIAL LAUNDRY, DRYCLEANING, AND PRESSING MACHINE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

333313 OFFICE MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mailhandling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

333314 OPTICAL INSTRUMENT AND LENS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing optical instruments and lens, such as binoculars, microscopes (except electron and proton), telescopes, prisms, and lenses (except ophthalmic);
2. coating or polishing lenses (except ophthalmic); and
3. mounting lenses (except ophthalmic).

333315 PHOTOGRAPHIC AND PHOTOCOPYING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, and digital), projectors, film developing equipment, photocopying equipment, and microfilm equipment.

333319 OTHER COMMERCIAL AND SERVICE INDUSTRY MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

3334 VENTILATION, HEATING, AIR-CONDITIONING, AND COMMERCIAL REFRIGERATION EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing ventilation, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

33341 VENTILATION, HEATING, AIR-CONDITIONING, AND COMMERCIAL REFRIGERATION EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing ventilation, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 AIR PURIFICATION EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

333412 INDUSTRIAL AND COMMERCIAL FAN AND BLOWER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

333414 HEATING EQUIPMENT (EXCEPT WARM AIR FURNACES) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

333415 AIR-CONDITIONING AND WARM AIR HEATING EQUIPMENT AND COMMERCIAL AND INDUSTRIAL REFRIGERATION EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or
2. manufacturing commercial and industrial refrigeration and freezer equipment.

3335 METALWORKING MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

33351 METALWORKING MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 INDUSTRIAL MOLD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

333512 MACHINE TOOL (METAL CUTTING TYPES) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

333513 MACHINE TOOL (METAL FORMING TYPES) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging, and die-casting machines.

333514 SPECIAL DIE AND TOOL, DIE SET, JIG, AND FIXTURE MANUFACTURING

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

333515 CUTTING TOOL AND MACHINE TOOL ACCESSORY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

333516 ROLLING MILL MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

333518 OTHER METALWORKING MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

3336 ENGINE, TURBINE, AND POWER TRANSMISSION EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive, gasoline, and aircraft).

33361 ENGINE, TURBINE, AND POWER TRANSMISSION EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive, gasoline, and aircraft).

333611 TURBINE AND TURBINE GENERATOR SET UNITS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft) and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

333612 SPEED CHANGER, INDUSTRIAL HIGH-SPEED DRIVE, AND GEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

333613 MECHANICAL POWER TRANSMISSION EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

333618 OTHER ENGINE EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

3339 OTHER GENERAL PURPOSE MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Pump and compressor manufacturing;
2. Material handling equipment manufacturing; and
3. All other general purpose machinery manufacturing.

33391 PUMP AND COMPRESSOR MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general purpose air and gas compressors, nonagricultural spraying and dusting equipment, general purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 PUMP AND PUMPING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing general purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps, and sump pumps.

333912 AIR AND GAS COMPRESSOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing general purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

333913 MEASURING AND DISPENSING PUMP MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

33392 MATERIAL HANDLING EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 ELEVATOR AND MOVING STAIRWAY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

333922 CONVEYOR AND CONVEYING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

333923 OVERHEAD TRAVELING CRANE, HOIST, AND MONORAIL SYSTEM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

333924 INDUSTRIAL TRUCK, TRACTOR, TRAILER, AND STACKER MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type), such as forklifts, pallet loaders and unloaders, and portable loading docks.

33399 ALL OTHER GENERAL PURPOSE MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing general purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 POWER-DRIVEN HANDTOOL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, and pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

333992 WELDING AND SOLDERING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

333993 PACKAGING MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

333994 INDUSTRIAL PROCESS FURNACE AND OVEN MANUFACTURING

This U.S. Industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, and wood).

333995 FLUID POWER CYLINDER AND ACTUATOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

333996 FLUID POWER PUMP AND MOTOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

333997 SCALE AND BALANCE (EXCEPT LABORATORY) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

333999 ALL OTHER MISCELLANEOUS GENERAL PURPOSE MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing general purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

334 COMPUTER AND ELECTRONIC PRODUCT MANUFACTURING

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically-related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment, are brought together. As new activities emerge, they are less likely therefore, to cross the subsector boundaries of the classification.

3341 COMPUTER AND PERIPHERAL EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following:

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1. Store the processing program or programs and the data immediately necessary for the execution of the program;
 2. Can be freely programmed in accordance with the requirements of the user;
 3. Perform arithmetical computations specified by the user; and
 4. Execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run.

Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

33411 COMPUTER AND PERIPHERAL EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following:

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4. execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run.

Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 ELECTRONIC COMPUTER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following:

1. store the processing program or programs and the data immediately necessary for the execution of the program;
2. can be freely programmed in accordance with the requirements of the user;
3. perform arithmetical computations specified by the user; and
4. execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run.

Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

334112 COMPUTER STORAGE DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

334113 COMPUTER TERMINAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

334119 OTHER COMPUTER PERIPHERAL EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

3342 COMMUNICATIONS EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Telephone apparatus manufacturing;
2. Radio and television broadcasting and wireless communications equipment manufacturing; and
3. Other communications equipment manufacturing.

33421 TELEPHONE APPARATUS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be standalone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, LAN modems, multi-user modems, and other data communications equipment, such as bridges, routers, and gateways.

334210 TELEPHONE APPARATUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

33422 RADIO AND TELEVISION BROADCASTING AND WIRELESS COMMUNICATIONS EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 RADIO AND TELEVISION BROADCASTING AND WIRELESS COMMUNICATIONS EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

33429 OTHER COMMUNICATIONS EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 OTHER COMMUNICATIONS EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

3343 AUDIO AND VIDEO EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

33431 AUDIO AND VIDEO EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 AUDIO AND VIDEO EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

3344 SEMICONDUCTOR AND OTHER ELECTRONIC COMPONENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

33441 SEMICONDUCTOR AND OTHER ELECTRONIC COMPONENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 ELECTRON TUBE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

334412 BARE PRINTED CIRCUIT BOARD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

334413 SEMICONDUCTOR AND RELATED DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells and other optoelectronic devices.

334414 ELECTRONIC CAPACITOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

334415 ELECTRONIC RESISTOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

334416 ELECTRONIC COIL, TRANSFORMER, AND OTHER INDUCTOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

334417 ELECTRONIC CONNECTOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial; cylindrical; rack and panel; pin and sleeve; printed circuit; and fiber optic.

334418 PRINTED CIRCUIT ASSEMBLY (ELECTRONIC ASSEMBLY) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

334419 OTHER ELECTRONIC COMPONENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers, and other inductors; connectors; and loaded printed circuit boards).

3345 NAVIGATIONAL, MEASURING, ELECTROMEDICAL, AND CONTROL INSTRUMENTS MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

33451 NAVIGATIONAL, MEASURING, ELECTROMEDICAL, AND CONTROL INSTRUMENTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 ELECTROMEDICAL AND ELECTROTHERAPEUTIC APPARATUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

334511 SEARCH, DETECTION, NAVIGATION, GUIDANCE, AERONAUTICAL, AND NAUTICAL SYSTEM AND INSTRUMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

334512 AUTOMATIC ENVIRONMENTAL CONTROL MANUFACTURING FOR RESIDENTIAL, COMMERCIAL, AND APPLIANCE USE

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration, and appliances.

334513 INSTRUMENTS AND RELATED PRODUCTS MANUFACTURING FOR MEASURING, DISPLAYING, AND CONTROLLING INDUSTRIAL PROCESS VARIABLES

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display, or control (i.e., monitor and analyze) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

334514 TOTALIZING FLUID METER AND COUNTING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

334515 INSTRUMENT MANUFACTURING FOR MEASURING AND TESTING ELECTRICITY AND ELECTRICAL SIGNALS

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

334516 ANALYTICAL LABORATORY INSTRUMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

334517 IRRADIATION APPARATUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, and research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

334518 WATCH, CLOCK, AND PART MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling: clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

334519 OTHER MEASURING AND CONTROLLING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

3346 MANUFACTURING AND REPRODUCING MAGNETIC AND OPTICAL MEDIA

This industry group comprises establishments primarily engaged in:

1. Manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or
2. Mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

33461 MANUFACTURING AND REPRODUCING MAGNETIC AND OPTICAL MEDIA

This industry comprises establishments primarily engaged in:

1. manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or;
2. mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 SOFTWARE REPRODUCING

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software, they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

334612 PRERECORDED COMPACT DISC (EXCEPT SOFTWARE), TAPE, AND RECORD REPRODUCING

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

334613 MAGNETIC AND OPTICAL RECORDING MEDIA MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

335 ELECTRICAL EQUIPMENT, APPLIANCE, AND COMPONENT MANUFACTURING

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric Lighting Equipment Manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household

Appliance Manufacturing establishments make both small and major electrical appliances and parts. Electrical Equipment Manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other Electrical Equipment and Component Manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 ELECTRIC LIGHTING EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Electric lamp bulb and part manufacturing and/or
2. Lighting fixture manufacturing.

33511 ELECTRIC LAMP BULB AND PART MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 ELECTRIC LAMP BULB AND PART MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

33512 LIGHTING FIXTURE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics), and lighting fixture components (except current-carrying wiring devices).

335121 RESIDENTIAL ELECTRIC LIGHTING FIXTURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

335122 COMMERCIAL, INDUSTRIAL, AND INSTITUTIONAL ELECTRIC LIGHTING FIXTURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

335129 OTHER LIGHTING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular) and nonelectric lighting equipment.

3352 HOUSEHOLD APPLIANCE MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Small electrical appliance manufacturing and/or
2. Major appliance manufacturing.

33521 SMALL ELECTRICAL APPLIANCE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 ELECTRIC HOUSEWARES AND HOUSEHOLD FAN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

335212 HOUSEHOLD VACUUM CLEANER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

33522 MAJOR APPLIANCE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 HOUSEHOLD COOKING APPLIANCE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

335222 HOUSEHOLD REFRIGERATOR AND HOME FREEZER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

335224 HOUSEHOLD LAUNDRY EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

335228 OTHER MAJOR HOUSEHOLD APPLIANCE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric and non-electric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

3353 ELECTRICAL EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

33531 ELECTRICAL EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 POWER, DISTRIBUTION, AND SPECIALTY TRANSFORMER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

335312 MOTOR AND GENERATOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

335313 SWITCHGEAR AND SWITCHBOARD APPARATUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

335314 RELAY AND INDUSTRIAL CONTROL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

3359 OTHER ELECTRICAL EQUIPMENT AND COMPONENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 BATTERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 STORAGE BATTERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

335912 PRIMARY BATTERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

33592 COMMUNICATION AND ENERGY WIRE AND CABLE MANUFACTURING

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 FIBER OPTIC CABLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

335929 OTHER COMMUNICATION AND ENERGY WIRE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

33593 WIRING DEVICE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 CURRENT-CARRYING WIRING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

335932 NONCURRENT-CARRYING WIRING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

33599 ALL OTHER ELECTRICAL EQUIPMENT AND COMPONENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 CARBON AND GRAPHITE PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

335999 ALL OTHER MISCELLANEOUS ELECTRICAL EQUIPMENT AND COMPONENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

336 TRANSPORTATION EQUIPMENT MANUFACTURING

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 MOTOR VEHICLE MANUFACTURING

This industry group comprises establishments primarily engaged in:

1. Automobile and light duty motor vehicle manufacturing and/or
2. Heavy duty truck manufacturing.

33611 AUTOMOBILE AND LIGHT DUTY MOTOR VEHICLE MANUFACTURING

This industry comprises establishments primarily engaged in:

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1. manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or
 2. manufacturing chassis only.

336111 AUTOMOBILE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing complete automobiles (i.e., body and chassis or unibody) or
2. manufacturing automobile chassis only.

336112 LIGHT TRUCK AND UTILITY VEHICLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or
2. manufacturing light truck and utility vehicle chassis only.

Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

33612 HEAVY DUTY TRUCK MANUFACTURING

This industry comprises establishments primarily engaged in:

1. manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special purpose heavy duty motor vehicles for highway use or
2. manufacturing heavy duty truck chassis only.

336120 HEAVY DUTY TRUCK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special purpose heavy duty motor vehicles for highway use or
2. manufacturing heavy duty truck chassis only.

3362 MOTOR VEHICLE BODY AND TRAILER MANUFACTURING

This industry group comprises establishments primarily engaged in:

1. Manufacturing motor vehicle bodies and cabs or
2. Manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies, and detachable trailer chassis.

The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

33621 MOTOR VEHICLE BODY AND TRAILER MANUFACTURING

This industry comprises establishments primarily engaged in:

1. manufacturing motor vehicle bodies and cabs or
2. manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies, and detachable trailer chassis.

The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 MOTOR VEHICLE BODY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

336212 TRUCK TRAILER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

336213 MOTOR HOME MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in:

1. manufacturing motor homes on purchased chassis and/or
2. manufacturing conversion vans on an assembly line basis.

Motor homes are units where the motor and the living quarters are integrated in the same unit.

336214 TRAVEL TRAILER AND CAMPER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing travel trailers and campers designed to attach to motor vehicles;
2. manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and
3. manufacturing automobile, utility, and light-truck trailers.

Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

3363 MOTOR VEHICLE PARTS MANUFACTURING

This industry group comprises establishments primarily engaged in:

1. Motor vehicle gasoline engine and engine parts manufacturing;
2. Motor vehicle electrical and electronic equipment manufacturing;
3. Motor vehicle steering and suspension components (except spring) manufacturing;
4. Motor vehicle brake system manufacturing;
5. Motor vehicle transmission and power train parts manufacturing;
6. Motor vehicle seating and interior trim manufacturing;
7. Motor vehicle metal stamping; and/or
8. Other motor vehicle parts manufacturing.

33631 MOTOR VEHICLE GASOLINE ENGINE AND ENGINE PARTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines, and engine parts, whether or not for vehicular use.

336311 CARBURETOR, PISTON, PISTON RING, AND VALVE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

336312 GASOLINE ENGINE AND ENGINE PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

33632 MOTOR VEHICLE ELECTRICAL AND ELECTRONIC EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in:

1. manufacturing vehicular lighting and/or
2. manufacturing and/or rebuilding motor vehicle electrical and electronic equipment.

The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, and ships).

336321 VEHICULAR LIGHTING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

336322 OTHER MOTOR VEHICLE ELECTRICAL AND ELECTRONIC EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

33633 MOTOR VEHICLE STEERING AND SUSPENSION COMPONENTS (EXCEPT SPRING) MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 MOTOR VEHICLE STEERING AND SUSPENSION COMPONENTS (EXCEPT SPRING) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

33634 MOTOR VEHICLE BRAKE SYSTEM MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 MOTOR VEHICLE BRAKE SYSTEM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

33635 MOTOR VEHICLE TRANSMISSION AND POWER TRAIN PARTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 MOTOR VEHICLE TRANSMISSION AND POWER TRAIN PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

33636 MOTOR VEHICLE SEATING AND INTERIOR TRIM MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 MOTOR VEHICLE SEATING AND INTERIOR TRIM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

33637 MOTOR VEHICLE METAL STAMPING

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 MOTOR VEHICLE METAL STAMPING

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

33639 OTHER MOTOR VEHICLE PARTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 MOTOR VEHICLE AIR-CONDITIONING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

336399 ALL OTHER MOTOR VEHICLE PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

3364 AEROSPACE PRODUCT AND PARTS MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Manufacturing complete aircraft, missiles, or space vehicles;
2. Manufacturing aerospace engines, propulsion units, auxiliary equipment or parts;
3. Developing and making prototypes of aerospace products;
4. Aircraft conversion (i.e., major modifications to systems); and
5. Complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

33641 AEROSPACE PRODUCT AND PARTS MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing complete aircraft, missiles, or space vehicles;
2. manufacturing aerospace engines, propulsion units, auxiliary equipment or parts;
3. developing and making prototypes of aerospace products;
4. aircraft conversion (i.e., major modifications to systems); and
5. complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 AIRCRAFT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing or assembling complete aircraft;
2. developing and making aircraft prototypes;
3. aircraft conversion (i.e., major modifications to systems); and
4. complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336412 AIRCRAFT ENGINE AND ENGINE PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing aircraft engines and engine parts;
2. developing and making prototypes of aircraft engines and engine parts;
3. aircraft propulsion system conversion (i.e., major modifications to systems); and
4. aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

336413 OTHER AIRCRAFT PARTS AND AUXILIARY EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or
2. developing and making prototypes of aircraft parts and auxiliary equipment.

Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

336414 GUIDED MISSILE AND SPACE VEHICLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing complete guided missiles and space vehicles and/or
2. developing and making prototypes of guided missile or space vehicles.

336415 GUIDED MISSILE AND SPACE VEHICLE PROPULSION UNIT AND PROPULSION UNIT PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or

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2. developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

336419 OTHER GUIDED MISSILE AND SPACE VEHICLE PARTS AND AUXILIARY EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or
2. developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

3365 RAILROAD ROLLING STOCK MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Manufacturing and/or rebuilding locomotives, locomotive frames, and parts;
2. Manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and
3. Manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

33651 RAILROAD ROLLING STOCK MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing and/or rebuilding locomotives, locomotive frames, and parts;
2. manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and
3. manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 RAILROAD ROLLING STOCK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing and/or rebuilding locomotives, locomotive frames, and parts;
2. manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and
3. manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

3366 SHIP AND BOAT BUILDING

This industry group comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

33661 SHIP AND BOAT BUILDING

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for

other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 SHIP BUILDING AND REPAIRING

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336612 BOAT BUILDING

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

3369 OTHER TRANSPORTATION EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 OTHER TRANSPORTATION EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 MOTORCYCLE, BICYCLE, AND PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment, and parts.

336992 MILITARY ARMORED VEHICLE, TANK, AND TANK COMPONENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

336999 ALL OTHER TRANSPORTATION EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, and armored vehicles and tanks).

337 FURNITURE AND RELATED PRODUCT MANUFACTURING

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for

furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knockdown). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 HOUSEHOLD AND INSTITUTIONAL FURNITURE AND KITCHEN CABINET MANUFACTURING

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen and bedroom furniture and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 WOOD KITCHEN CABINET AND COUNTERTOP MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 WOOD KITCHEN CABINET AND COUNTERTOP MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

33712 HOUSEHOLD AND INSTITUTIONAL FURNITURE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 UPHOLSTERED HOUSEHOLD FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

337122 NONUPHOLSTERED WOOD HOUSEHOLD FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337124 METAL HOUSEHOLD FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337125 HOUSEHOLD FURNITURE (EXCEPT WOOD AND METAL) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed, rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337127 INSTITUTIONAL FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337129 WOOD TELEVISION, RADIO, AND SEWING MACHINE CABINET MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

3372 OFFICE FURNITURE (INCLUDING FIXTURES) MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

33721 OFFICE FURNITURE (INCLUDING FIXTURES) MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 WOOD OFFICE FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337212 CUSTOM ARCHITECTURAL WOODWORK AND MILLWORK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

337214 OFFICE FURNITURE (EXCEPT WOOD) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337215 SHOWCASE, PARTITION, SHELVING, AND LOCKER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

337211 WOOD OFFICE FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337214 OFFICE FURNITURE (EXCEPT WOOD) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

3379 OTHER FURNITURE RELATED PRODUCT MANUFACTURING

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 MATTRESS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 MATTRESS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

33792 BLIND AND SHADE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 BLIND AND SHADE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following:

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1. venetian blinds, other window blinds, shades;
 2. curtain and drapery rods, poles; and/or
 3. curtain and drapery fixtures.

The blinds and shades may be made on a stock or custom basis and may be made of any material.

339 MISCELLANEOUS MANUFACTURING

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 MEDICAL EQUIPMENT AND SUPPLIES MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

33911 MEDICAL EQUIPMENT AND SUPPLIES MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 LABORATORY APPARATUS AND FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

For this industry, the 1997 Economic Census did not fully implement the conversion to NAICS. The data from 1997 to 2001 for NAICS industry 339111 did not include establishments primarily engaged in the manufacture of hospital beds and other hospital furniture. These establishments are included in the 2002 Economic Census data.

339112 SURGICAL AND MEDICAL INSTRUMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electro-medical and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

339113 SURGICAL APPLIANCE AND SUPPLIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

339114 DENTAL EQUIPMENT AND SUPPLIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material and dental cements.

339115 OPHTHALMIC GOODS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, reading glasses made to standard powers, and protective eyewear.

339116 DENTAL LABORATORIES

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

3399 OTHER MISCELLANEOUS MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Jewelry and silverware manufacturing;
2. Sporting and athletic goods manufacturing;
3. Doll, toy, and game manufacturing;
4. Office supplies (except paper) manufacturing;
5. Sign manufacturing; and/or
6. All other miscellaneous manufacturing.

33991 JEWELRY AND SILVERWARE MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing, engraving, chasing, or etching jewelry;
2. manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases);
3. manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware;
4. manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases);
5. stamping coins;
6. manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing;
7. cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems;
8. recutting, repolishing, and setting gem stones; and

9. drilling, sawing, and peeling cultured and costume pearls.

339911 JEWELRY (EXCEPT COSTUME) MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one of the following:

1. manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry;
2. manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and
3. stamping coins.

339912 SILVERWARE AND HOLLOWWARE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other hollowware.

339913 JEWELERS' MATERIAL AND LAPIDARY WORK MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one of the following:

1. manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing;
2. cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems;
3. recutting, repolishing, and setting gem stones; and
4. drilling, sawing, and peeling cultured pearls.

339914 COSTUME JEWELRY AND NOVELTY MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one of the following:

1. manufacturing, engraving, chasing, and etching costume jewelry; and/or
2. manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases).

This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

33992 SPORTING AND ATHLETIC GOODS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 SPORTING AND ATHLETIC GOODS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

33993 DOLL, TOY, AND GAME MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 DOLL AND STUFFED TOY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes; action figures; and stuffed toys.

339932 GAME, TOY, AND CHILDREN'S VEHICLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

33994 OFFICE SUPPLIES (EXCEPT PAPER) MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 PEN AND MECHANICAL PENCIL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

339942 LEAD PENCIL AND ART GOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

339943 MARKING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

339944 CARBON PAPER AND INKED RIBBON MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

33995 SIGN MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, and displays).

339950 SIGN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, and displays).

33999 ALL OTHER MISCELLANEOUS MANUFACTURING

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 GASKET, PACKING, AND SEALING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

339992 MUSICAL INSTRUMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

339993 FASTENER, BUTTON, NEEDLE, AND PIN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

339994 BROOM, BRUSH, AND MOP MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

339995 BURIAL CASKET MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

339999 ALL OTHER MISCELLANEOUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

Appendix C.

Methodology

SOURCES OF THE DATA

The manufacturing sector includes approximately 350,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing. The amount of information requested from manufacturing establishments was 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).

Establishments in the 2002 Economic Census are divided into those sent report forms and those not sent report forms. The coverage of and the method of obtaining census information from each are described below:

1. Establishments sent a report form:

- 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-10000) 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 473 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 certain 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 listed on the form.

A wide variety of special inquiries were 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 “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 “not specified by kind” (nsk) categories.

2. Establishments not sent a report form:

- a. 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 the Census Bureau’s ability to assign the correct six-digit NAICS industry classification to the establishment. For each six-digit NAICS 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 that 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 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 NAICS group classification codes available in the files. For 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.

- b. All nonemployers, i.e., all firms subject to federal income tax, with no paid employees, during 2002 are excluded as in previous censuses. Data for nonemployers are not included in this report, but are released in the annual *Nonemployer Statistics* series.

The report forms used to collect information for establishments in this sector are available at help.econ.census.gov/econhelp/resources/.

A more detailed examination of census methodology is presented in the *History of the Economic Census* at www.census.gov/econ/www/history.html.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

The classifications for all establishments covered in the 2002 Economic Census — Manufacturing are classified in 1 of 473 industries in accordance with the industry definitions in the *North American Industry Classification System (NAICS), United States, 2002* manual. There were no changes between the 2002 edition and the 1997 edition affecting this sector. When applicable, Appendix F 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 2002, 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). Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. There are 1,450 product classes (seven-digit codes), 5,674 census products, and an additional 3,746 ten-digit product codes. The ten-digit products are considered the primary products of the industry with the same first six digits.

For the 2002 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 2002, 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 that 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 2002 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 2002, 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 2002 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 ASM sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1999 survey year based on the 1997 Economic Census — Manufacturing. This sample will be in place through the 2003 ASM.

In 1997, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the establishments in the 1997 manufacturing population were partitioned into two components for developing estimates within the ASM. The details of each are described below:

1. 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 200,000 of the 370,000 establishments in the 1997 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 1999 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1997 census. Supplemental samples representing both 1998 and 1999 births (newly active establishments that were not included in the 1997 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 2003.

The 1999-2003 ASM sample design is similar to the one used since 1984. Companies in the 1997 Economic Census — Manufacturing 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 1999-2003 sample, there are approximately 500 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. Across these 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 1997 Economic Census — Manufacturing.

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 1997 industry classification and its 1997 product class data. For each product class (1,755) and six-digit industry (473), 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 the Census Bureau's 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) that permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

2. Nonmail stratum. The initial nonmail component of the survey was comprised of approximately 170,000 small, single-establishment companies that were tabulated as administrative records in the 1997 Economic Census — Manufacturing. 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.

RELIABILITY OF DATA

All data compiled in the economic census are subject to nonsampling errors. Nonsampling errors can be attributed to many sources during the development or execution of the census. The following are two ways that further explain this method: 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 1997 (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 1998-2002 ASM estimates, the 1997 Economic Census — Manufacturing values serve as the base year. For the 2003 ASM, the base will be updated to be the 2002 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 contained approximately 170,000 individual establishments in 1999, 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. ASM Data Qualifications. 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.

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 2002 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.

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 in a specific industry or geographic area is not considered a disclosure; therefore, this information may be released even though other information is withheld. Techniques employed to limit disclosure are discussed at www.census.gov/epcd/ec02/disclosure.htm.

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. Nonetheless, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures, which can be suppressed even though value of shipments data are published.

Appendix D. Geographic Notes

RHODE ISLAND

All **Balance of Metropolitan Areas (MAs)** shown in 1997 have been converted to Balance of County records.

Foster does not qualify but should have been reported separately as the only nonqualifying place territory in Providence County.

Glocester qualified on the basis of population estimates, but was incorrectly not reported separately. It is included in Balance of Providence County.

West Greenwich incorrectly shown as Balance of Kent County.

Balance of Kent County equals West Greenwich, which should have been shown separately.

Balance of Providence County incorrectly shown. Foster and Glocester should have been shown separately leaving no balance.

Appendix E.

Metropolitan and Micropolitan Statistical Areas

PROVIDENCE-NEW BEDFORD-FALL RIVER, RI-MA METROPOLITAN STATISTICAL AREA

Bristol County, MA

Bristol County, RI

Kent County, RI

Newport County, RI

Providence County, RI

Washington County, RI

