# Massachusetts: 2002

#### Issued September 2005

EC02-31A-MA (RV)

**2002 Economic Census** *Manufacturing* Geographic Area Series



Helping You Make Informed Decisions

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



#### 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.

# Massachusetts: 2002

Issued September 2005

EC02-31A-MA (RV)

## 2002 Economic Census

*Manufacturing* Geographic Area Series





U.S. Department of Commerce Carlos M. Gutierrez, Secretary

> David A. Sampson, Deputy Secretary

Economics and Statistics Administration Kathleen B. Cooper, Under Secretary for Economic Affairs

> U.S. CENSUS BUREAU Charles Louis Kincannon, Director



#### Economics and Statistics Administration

**Kathleen B. Cooper,** Under Secretary for Economic Affairs



## U.S. CENSUS BUREAU Charles Louis Kincannon, Director

Hermann Habermann, Deputy Director and Chief Operating Officer

**Thomas L. Mesenbourg,** Associate Director for Economic Programs

**Thomas L. Mesenbourg,** Acting Assistant Director for Economic Programs

William G. Bostic, Jr., Chief, Manufacturing and Construction Division

## CONTENTS

	oduction to the Economic Census	v ix
Tab	les	
1. 2.	Industry Statistics for the State: 2002 Industry Statistics for Metropolitan and Micropolitan	1
3.	Statistical Areas: 2002 Industry Statistics for Counties: 2002	15 80
4. 5.	Industry Statistics for Places: 2002 Detailed Statistics for the State: 2002	98 118
Арр	endixes	
A. B. C. D. E.	Explanation of Terms NAICS Codes, Titles, and Descriptions Methodology Geographic Notes Metropolitan Areas and Micropolitan Statistical Areas	A–1 B–1 C–1 D–1 E–1

## 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 22 23	Mining Utilities 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.

This page is intentionally blank.

## 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 contain statistics on the number of establishments for the threeand 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.

- 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 f h i j k l m	250 to 499 employees 500 to 999 employees 1,000 to 2,499 employees 2,500 to 4,999 employees 5,000 to 9,999 employees 10,000 to 24,999 employees 25,000 to 49,999 employees 50,000 to 99,999 employees 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]

	and geographical demnitions, see note at		A		Ű								
			establis	nments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MASSACHUSETTS												
31-33	Manufacturing	1	8 859	2 918	'349 184	'15 573 734	'210 629	417 159	7 029 948	'44 508 791	'32 904 181	'77 996 586	2 349 095
311	Food manufacturing	2	737	204	21 722	<sup>719</sup> 784	14 417	27 950	'381 482	2 462 305	3 045 246	5 505 000	107 020
3111	Animal food manufacturing	2	9	2	237	6 803	185	405	4 447	24 834	28 442	53 651	3 134
31111 311111	Animal food manufacturing Dog and cat food	2	9	2	237	6 803	185	405	4 447	24 834	28 442	53 651	3 134
3112	manufacturing	-	4	2 3	с 496	D 20 696	D 328	D 628	D 10 841	D 89 099	D 114 049	D 202 169	D 4 894
3112	Grain and oilseed milling Starch and vegetable fats and	_		3	490	20 090	320	020	10 041	89 099	114 049	202 109	4 094
311222 31123	oils manufacturing Soybean processing Breakfast cereal	-	4 2	1 1	c c	D D	D D	D D	D D	D D	D D	D D	D D
311230	manufacturing Breakfast cereal	1	6	1	294	11 944	222	406	7 893	44 228	33 480	78 367	D
	manufacturing	1	6	1	294	11 944	222	406	7 893	44 228	33 480	78 367	D
3113 31133	Sugar and confectionery product manufacturing Confectionery manufacturing	1	72	11	1 435	44 638	1 115	2 211	30 561	123 648	102 976	225 807	2 899
311330	from purchased chocolate Confectionery manufacturing	2	48	6	789	24 363	628	1 258	17 599	71 940	47 384	118 544	1 617
31134	from purchased chocolate Nonchocolate confectionery	2	48	6	789	24 363	628	1 258	17 599	71 940	47 384	118 544	1 617
311340	Manufacturing Nonchocolate confectionery	1	18	4	549	16 280	413	790	10 213	28 804	20 293	47 096	573
	manufacturing	1	18	4	549	16 280	413	790	10 213	28 804	20 293	47 096	573
3114	Fruit and vegetable preserving and specialty food manufacturing	2	29	13	783	25 432	620	1 289	16 095	159 277	81 069	243 475	5 290
31141 311412	Frozen food manufacturing Frozen specialty food	2	13	5	е	D	D	D	D	D	D	D	2 686
31142	Fruit and vegetable canning,	1	11	5	352	8 531	300	616	5 900	27 833	17 725	45 559	D
311421	pickling, and drying Fruit and vegetable canning .	2	16 12	8 6	e 287	D 9 854	D 238	D 487	D 7 438	D 80 050	D 42 355	D 125 733	2 604 D
3115	Dairy product manufacturing	1	40	13	3 086	142 401	1 737	3 306	64 077	686 369	982 354	1 660 893	27 204
31151	Dairy product (except frozen)	2	00	0	1 070	00 100	1 000	0.040	00,400	410,000	050 001	1 057 050	01 401
311511 31152	manufacturing Fluid milk manufacturing Ice cream and frozen dessert	-	20 13	6 5	1 973 g	86 193 D	1 096 D	2 243 D	38 482 D	410 096 D	653 981 D	1 057 353 D	21 481 D
311520	manufacturing Ice cream and frozen dessert	-	20	7	1 113	56 208	641	1 063	25 595	276 273	328 373	603 540	5 723
	manufacturing	-	20	7	1 113	56 208	641	1 063	25 595	276 273	328 373	603 540	5 723
3116	Animal slaughtering and processing	-	45	25	2 502	75 096	1 769	3 607	41 219	176 788	336 607	513 284	8 408
31161	Animal slaughtering and processing	-	45	25	2 502	75 096	1 769	3 607	41 219	176 788	336 607	513 284	8 408
311611	Animal (except poultry) slaughtering	1	11	4	362	7 006	280	365	3 324	20 985	24 958	45 928	D
311612	Meat processed from carcasses	-	27	15	1 744	57 792	1 209	2 682	32 267	129 206	289 914	419 427	6 567
311613 311615	Rendering and meat byproduct processing Poultry processing	2	2 5	1 5	c e	D D	D D	D D	D D	D D	D D	D D	D 365
3117	Seafood product preparation and packaging	4	50	25	3 229	110 410	2 371	4 693	55 783	380 843	587 665	974 875	12 349
31171	Seafood product preparation and packaging	4	50	25	3 229	110 410	2 371	4 693	55 783	380 843	587 665	974 875	12 349
311711 311712	Seafood canning Fresh and frozen seafood processing	2	8 42	2 23	134 3 095	3 209 107 201	105 2 266	215 4 478	1 974 53 809	20 682 360 161	21 341 566 324	42 180 932 695	836 11 513
3118	Bakeries and tortilla manufacturing	2	384	82	6 879	'185 394	4 170	7 666	<sup>1</sup> 99 300	502 870	278 706	779 758	22 523
31181	Bread and bakery product		070	70	0.000	1175 400	4 0 4 0	7 440	105 740	474 004	045 044	740 404	01.000
311811 311812	manufacturing Retail bakeries	2 4 2	370 247 105	78 35 32	6 622 2 235 3 797	'175 186 '34 990 123 351	4 048 1 137 2 464	7 412 1 563 4 982	<sup>1</sup> 95 719 16 998 67 291	471 824 72 634 357 428	245 641 33 421 180 985	716 434 106 050 537 418	21 008 3 188 16 853
311812	Commercial bakeries Frozen cakes, pies, and other pastries	2	105	32	3 /9/	123 351	2 404	4 982	67 291	357 428	180,985	537 418	10 853
31182	manufacturing	2	18	11	590	16 845	447	867	11 430	41 762	31 235	72 966	967
311822	Flour mixes and dough manufacturing from	1	12	3	с	D	D	D	D	D	D	D	D
	purchased flour	-	3	1	с	D	D	D	D	D	D	D	259
3119	Other food manufacturing	1	97	30	3 075	108 914	2 122	4 145	59 159	318 577	533 378	851 088	20 319
31191 311911	Snack food manufacturing Roasted nuts and peanut	-	11	5	f	D	D	D	D	D	D	D	D
311919	butter manufacturing Other snack food	-	6	3	300	10 060	237	418	5 937	39 117	74 728	114 846	D
31192	manufacturing Coffee and tea manufacturing .	1	5 8	2 4	с 312	D 13 181	D 137	D 284	D 4 310	D 41 039	D 50 652	D 91 566	D 1 577
311920	Coffee and tea manufacturing	1	8	4	312	13 181	137	284	4 310	41 039	50 652	91 566	1 577

[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]

			A	JI									
			establis	hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MASSACHUSETTS-Con.												
311 3119	Food manufacturing—Con. Other food manufacturing—Con.												
31194 311941	Seasoning and dressing manufacturing Mayonnaise, dressing, and	1	17	6	820	35 856	480	972	15 751	57 221	255 316	312 092	3 314
311942	other prepared sauce manufacturing Spice and extract	1		4	627	30 472	357	690	12 721	41 897	245 261	287 168	2 992
31199	All other food manufacturing	2 2	8 59	2 15	193 1 376	5 384 39 420	123 1 080	282 2 075	3 030 26 823	15 324 130 404	10 055 120 078	24 924 249 678	322 6 405
311991 311999	Perishable prepared food manufacturing	1	17	11	935	24 885	720	1 405	15 997	80 014	70 862	150 201	4 867
311999	All other miscellaneous food manufacturing	5	42	4	441	14 535	360	670	10 826	50 390	49 216	99 477	1 538
312	Beverage and tobacco product manufacturing	2	42	14	2 620	118 257	1 289	2 781	49 948	415 817	599 628	1 018 205	31 785
3121	Beverage manufacturing	2	42	14	2 620	118 257	1 289	2 781	49 948	415 817	599 628	1 018 205	31 785
31211 312111 312112 31212 312120	Soft drink and ice manufacturing Soft drink manufacturing Bottled water manufacturing . Breweries Breweries	2 2 9 -	15 15	9 6 2 4 4	1 915 1 680 185 469 469	76 435 66 944 8 131 24 207 24 207	938 846 64 304 304	1 973 1 780 139 704 704	32 743 29 680 2 384 14 633 14 633	205 963 173 675 29 036 174 631 174 631	476 364 460 632 14 748 112 242 112 242	684 762 637 354 43 172 287 202 287 202	17 122 14 100 D D
31214 312140	Distilleries Distilleries	9 9		1	c c	D D	D D	D D	D	D D	D D	D D	D D
313	Textile mills	2	136	69	10 492	347 482	8 110	17 403	226 551	765 054	941 866	1 722 334	65 031
3131	Fiber, yarn, and thread mills	-	17	6	774	22 702	669	1 322	17 683	49 335	69 540	118 949	969
31311 313111 313112	Fiber, yarn, and thread mills Yarn spinning mills Yarn texturizing, throwing,	-	17	6	774 312	22 702 8 415	669 296	1 322 561	17 683 7 467	49 335 16 719	69 540 23 648	118 949 40 766	969 341
313113	and twisting mills Thread mills	-	4 6	2 3	e c	D D	D D	D D	D D	D D	D D	D D	452 176
3132	Fabric mills	-	53	26	5 120	166 025	4 059	8 943	114 126	313 618	378 125	711 263	49 701
31321 313210 31322	Broadwoven fabric mills Broadwoven fabric mills Narrow fabric mills and schiffli	- 3	18 18	777	3 704 3 704	115 578 115 578	3 019 3 019	6 831 6 831	84 238 84 238	219 659 219 659	260 402 260 402	489 079 489 079 27 401	D D
313221 31323	machine embroidery Narrow fabric mills Nonwoven fabric mills	3	14	6 6 8	280 e 725	7 542 D 29 147	227 D 484	447 D 1 019	5 188 D 15 711	18 294 D 47 387	8 859 D 59 232	27 401 D 114 777	918 D D
313230 31324	Nonwoven fabric mills Knit fabric mills	1 4	13 7	8 5	725 411	29 147 13 758	484 329	1 019 646	15 711 8 989	47 387 28 278	59 232 49 632	114 777 80 006	D 740
313241 313249	Weft knit fabric mills Other knit fabric and lace mills	9		2	208 203	7 041 6 717	167 162	329 317	5 029 3 960	8 169 20 109	18 558 31 074	27 187 52 819	532 208
3133	Textile and fabric finishing and fabric coating mills	3		37	4 598	158 755	3 382	7 138	94 742	402 101	494 201	892 122	14 361
31331	Textile and fabric finishing mills	4	42	18	3 217	95 448	2 514	5 218	66 904	267 652	283 533	546 402	4 961
313311	Broadwoven fabric finishing mills	5		14	2 222	65 917	1 807	3 830	47 494	187 929	232 101	409 419	4 680
313312	Textile and fabric finishing (except broadwoven fabric) mills	_	11	4	995	29 531	707	1 388	19 410	79 723	51 432	136 983	281
31332 313320	Fabric coating mills	2 2	24 24	19 19	1 381 1 381	63 307 63 307	868 868	1 920 1 920	27 838 27 838	134 449 134 449	210 668 210 668	345 720 345 720	9 400 9 400
314	Textile product mills	2		44	4 339	113 854	3 375	6 493	71 388	286 131	270 463	554 276	12 557
3141	Textile furnishings mills	3		20	1 867	43 932	1 533	2 925	28 186	131 871	123 036	251 780	2 787
31411 314110 31412	Carpet and rug mills Carpet and rug mills Curtain and linen mills	4	9	2 2 18	110 110 1 757	3 838 3 838 40 094	80 80 1 453	173 173 2 752	2 421 2 421 25 765	7 736 7 736 124 135	13 123 13 123 109 913	20 799 20 799 230 981	179 179 2 608
314121 314129	Curtain and drapery mills Other household textile	2		15	1 500	34 160	1 250	2 371	21 979	113 488	101 351	211 827	2 452
3149	product mills	1		3 24	257 2 472	5 934 69 922	203 1 842	381 3 568	3 786 43 202	10 647 154 260	8 562 147 427	19 154 302 496	156 9 770
31491	Textile bag and canvas mills	4		5	419	12 622	287	574	6 821	24 439	21 732	47 515	436
314912 31499	Canvas and related product mills All other textile product mills	4		4 19	368 2 053	11 109 57 300	247	498 2 994	5 883 36 381	22 042 129 821	19 827 125 695	43 295	326 9 334
314991	Rope, cordage, and twine mills	-	4	19	2 053	5 438	1 555 134	2 994 264	36 381	129 821	9 873	254 981 22 505	9 334 D
314999	All other miscellaneous textile product mills	2		18	1 880	51 862	1 421	2 730	33 086	117 853	115 822	232 476	D
315	Apparel manufacturing	3	179	50	5 201	136 030	4 149	7 513	77 866	257 539	298 160	550 103	3 934
3151	Apparel knitting mills	9	5	2	е	D	D	D	D	D	D	D	D
31519 315191	Other apparel knitting mills Outerwear knitting mills	9 9		2 2	e e	D D	D D	D	D D	D	D D	D D	D D

[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]

	and geographical dominione, eee note a				anon on goo	grapine areae i	, ,	0007.000					
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MASSACHUSETTS-Con.							(, ,		(1.7.7)			
315 3152	Apparel manufacturing – Con. Cut and sew apparel manufacturing	3	132	40	4 470	115 857	3 533	6 340	63 289	223 760	255 604	474 946	2 660
31521	Cut and sew apparel contractors	6	74	15	1 015	15 605	927	1 570	13 046	22 009	4 451	26 438	173
315211	Men's and boys' cut and sew apparel contractors	5	7	3	205	3 555	192	357	3 218	5 119	383	5 502	38
315212	Women's, girls', and infants' cut and sew apparel contractors	6	67	12	810	12 050	735	1 213	9 828	16 890	4 068	20 936	135
31522	Men's and boys' cut and sew apparel manufacturing	5	12	10	1 729	40 599	1 475	2 652	28 976	73 968	61 312	136 699	740
315222	Men's and boys' cut and sew suit, coat, and overcoat	6	7	6		30 563	1 051	1 882	21 668	58 735	48 635		561
315223	manufacturing Men's and boys' cut and sew shirt (except work shirt)				1 245							108 668	
315228	manufacturing Men's and boys' cut and sew other outerwear	9	2	1	с	D	D	D	D	D	D	D	D
31523	manufacturing Women's and girls' cut and sew	1	3	3	e	D	D	D	D	D	D	D	D
315232	apparel manufacturing Women's and girls' cut and sew blouse and shirt	1	32	11	1 339	50 895	817	1 473	14 963	114 886	181 772	290 466	1 653
315234	manufacturing Women's and girls' cut and sew suit, coat, tailored	1	5	1	155	1 867	92	147	871	4 340	7 157	11 869	D
315239	jacket, and skirt manufacturing Women's and girls' cut and sew other outerwear	2	6	5	761	32 841	473	789	6 122	87 246	79 150	156 924	1 062
31529	manufacturing Other cut and sew apparel	1	14	4	334	13 056	201	427	7 032	17 827	85 653	106 945	175
315292	manufacturing Fur and leather apparel	3	14	4	387	8 758	314	645	6 304	12 897	8 069	21 343	94
315299	manufacturing All other cut and sew apparel manufacturing	1	4	1	130 257	3 424 5 334	93 221	185 460	2 393 3 911	6 184 6 713	3 657 4 412	10 372 10 971	D
3159	Apparel accessories and other apparel manufacturing	8	42	8	e	D	D	D	D	D	D	D	D
31599	Apparel accessories and other apparel manufacturing	8	42	8	е	D	D	D	D	D	D	D	D
315991	Hat, cap, and millinery manufacturing	8	6	2	157	3 634	141	266	3 173	4 489	13 394	17 837	D
315999	Other apparel accessories and other apparel manufacturing	8	32	5	237	6 802	184	353	4 147	11 685	12 743	23 529	D
316	Leather and allied product manufacturing	1	64	20	1 710	47 331	1 434	2 539	34 066	101 267	81 172	183 870	2 791
3161	Leather and hide tanning and finishing	3	15	4	209	6 871	157	302	4 693	10 538	22 812	34 491	116
31611	Leather and hide tanning and finishing	3	15	4	209	6 871	157	302	4 693	10 538	22 812	34 491	116
316110	Leather and hide tanning and finishing	3	15	4	209	6 871	157	302	4 693	10 538	22 812	34 491	116
3162	Footwear manufacturing	-	17	6	745	23 823	656	1 129	19 124	52 414	36 574	89 184	2 298
31621 316211	Footwear manufacturing Rubber and plastics footwear	-	17	6	745	23 823	656	1 129	19 124	52 414	36 574	89 184	2 298
316213	manufacturing Men's footwear (except	-	3	2	e	D	D	D	D	D	D	D	D
316219	athletic) manufacturing Other footwear manufacturing	2	6 4	2 2	с 247	D 5 919	D 228	D 409	D 5 086	D 9 963	D 11 615	D 21 651	D
3169	Other leather and allied product manufacturing	_	32	10	756	16 637	621	1 108	10 249	38 315	21 786	60 195	377
31699 316993	Other leather and allied product manufacturing Personal leather goods	-	32	10	756	16 637	621	1 108	10 249	38 315	21 786	60 195	377
316999	(except women's handbag and purse) manufacturing All other leather goods	-	6	2	195	3 078	165	198	2 030	5 144	5 096	10 272	59
0.0000	manufacturing	1	16	5	401	8 868	344	677	5 943	20 307	11 319	31 883	284
321	Wood product manufacturing	2	238	43	3 588	116 065	2 506	5 102	69 940	222 805	283 551	504 566	18 411
3211 32111	Sawmills and wood preservation . Sawmills and wood	1	43	12	673	20 928	517	1 033	14 901	36 479	121 907	160 831	D
321113 321113 321114	preservation Sawmills Wood preservation	1 2 -	43 37 6	12 9 3	673 563 110	20 928 17 283 3 645	517 432 85	1 033 869 164	14 901 12 744 2 157	36 479 28 938 7 541	121 907 57 973 63 934	160 831 88 850 71 981	D 2 915 D
3212	Veneer, plywood, and engineered wood product manufacturing	7	15	2	202	7 119	154	339	4 498	15 151	15 630	30 671	D
32121	Veneer, plywood, and engineered wood product	-	45	~	000	7 440	454	000	4 400	45 454	45 000	00.674	5
321214	manufacturing Truss manufacturing	7 5	15 9	2 2	202 156	7 119 5 586	154 117	339 260	4 498 3 272	15 151 10 796	15 630 9 704	30 671 20 426	D 760

#### Manufacturing-Geo. Area Series

U.S. Census Bureau, 2002 Economic Census

[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]

							· · · · , , ,			Thing of abbrevia		-,	
			A establist	ll nments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MASSACHUSETTS-Con.												
321 3219	Wood product manufacturing—Con. Other wood product manufacturing	1	180	29	2 713	88 018	1 835	3 730	50 541	171 175	146 014	313 064	11 869
32191	Millwork	1	72	7	922	32 697	564	1 190	15 668	57 484	73 686	127 937	5 046
321911	Wood window and door manufacturing	_	27	6	723	26 677	393	843	11 117	46 624	58 017	101 575	4 099
321918	Other millwork (including flooring)	4	36	1	177	5 420	151	308	4 070	9 819	13 705	23 357	890
32192	Wood container and pallet manufacturing	1	51	10	805	20 214	626	1 163	13 950	31 309	33 016	64 517	2 215
321920	Wood container and pallet manufacturing	1	51	10	805	20 214	626	1 163	13 950	31 309	33 016	64 517	2 215
32199	All other wood product manufacturing	2	57	12	986	35 107	645	1 377	20 923	82 382	39 312	120 610	4 608
321992	Prefabricated wood building manufacturing	_	9	3	c	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product manufacturing	2	47	9	761	25 383	478	1 014	15 263	60 625	24 870	85 228	3 873
322	Paper manufacturing	1	206	140	15 896	652 857	11 374	23 593	393 944	1 602 957	1 866 030	3 479 905	97 608
3221	Pulp, paper, and paperboard mills	1	26	25	3 412	162 250	2 340	5 021	100 250	451 113	455 400	902 590	28 677
32212	Paper mills Paper (except newsprint)	-	20	19	2 852	132 934	1 887	4 097	77 920	361 421	363 910	720 331	24 533
322121	Paper (except newsprint) mills Paperboard mills	-	20	19	2 852	132 934	1 887	4 097	77 920	361 421	363 910	720 331	24 533
32213 322130	Paperboard mills	2 2	6 6	6 6	560 560	29 316 29 316	453 453	924 924	22 330 22 330	89 692 89 692	91 490 91 490	182 259 182 259	4 144 4 144
3222	Converted paper product manufacturing	1	180	115	12 484	490 607	9 034	18 572	293 694	1 151 844	1 410 630	2 577 315	68 931
32221 322211	Paperboard container manufacturing Corrugated and solid fiber	1	80	56	4 561	172 704	3 387	7 013	105 049	377 677	536 549	914 138	25 732
322211	box manufacturing Folding paperboard box	1	46	32	2 671	109 089	1 905	3 964	62 730	250 136	374 863	625 496	16 264
322212	manufacturing Setup paperboard box	2	15	10	1 193	43 376	928	1 854	28 010	83 839	96 081	179 099	6 651
322214	manufacturing Fiber can, tube, drum, and	1	8	5	258	5 590	205	441	3 700	9 932	5 983	15 888	D
322215	similar products manufacturing Nonfolding sanitary food	1	8	7	277	9 531	228	486	6 921	23 023	24 900	47 984	507
32222	container manufacturing Paper bag and coated and	-	3	2	162	5 118	121	268	3 688	10 747	34 722	45 671	D
322221	treated paper manufacturing Coated and laminated packaging paper and	1	40	23	3 621	169 371	2 364	4 974	90 035	371 425	486 790	861 173	25 742
322222	plastics film manufacturing . Coated and laminated paper	-	2	2	с	D	D	D	D	D	D	D	D
322225	manufacturing Laminated aluminum foil manufacturing for flexible	1	33	16	3 221	153 304	2 098	4 375	81 051	332 719	421 744	757 028	24 582
322226	packaging uses Surface-coated paperboard	3	1	1	с 100	D	D	D	D	D	D	D	D
32223	manufacturing Stationery product	3	3 29	3	100	4 005	65 2 117	145	2 362	10 089	12 389	22 288 459 163	174
322231	manufacturing Die-cut paper and paperboard office supplies	_		17	2 719	94 220		4 206	67 361	209 411	237 510	193 327	7 230
322232 322233	manufacturing Envelope manufacturing Stationery, tablet, and related	_	8 12	5 8	1 091 1 338	37 956 46 059	888 1 051	1 774 2 026	25 136 37 638	96 302 87 292	90 906 113 645	205 470	3 322 2 979
32229	product manufacturing Other converted paper product	-	9	4	290	10 205	178	406	4 587	25 817	32 959	60 366	929
322299	All other converted paper	2	31	19	1 583	54 312	1 166	2 379	31 249	193 331	149 781	342 841	10 227
	product manufacturing	2	29	19	g	D	D	D	D	D	D	D	D
323	Printing and related support activities	2	984	208	17 772	679 214	12 682	24 404	412 504	1 470 903	841 661	2 312 199	74 832
3231	Printing and related support activities	2	984	208	17 772	679 214	12 682	24 404	412 504	1 470 903	841 661	2 312 199	74 832
32311 323110	Printing Commercial lithographic	2	'874	188	'16 232	'619 597	'11 491	'22 175	'372 331	'1 358 803	'811 486	'2 169 865	'70 180
323111 323112	printing Commercial gravure printing . Commercial flexographic	2	'443 5	116 2	'9 160 160	'377 780 7 634	r6 300 106	'12 226 233	'221 953 4 188	730 176 24 309	'501 966 33 753	'1 230 299 58 115	'47 421 D
323113	printing	6 4	12 100	5 17	417 1 360	17 492 41 899	275 993	566 1 888	8 526 24 888	36 005 74 489	31 095 37 630	67 412 112 252	1 613 2 484
323114 323115	Quick printing Digital printing	3	186 34	10 12	1 143 621	35 991 24 315	764 426	1 383 766	21 233 14 592	81 254 49 689	33 278 20 397	114 544 69 936	3 319 1 250
323116	Manifold business forms printing	1	15	7	478	15 544	330	545	8 998	107 509	31 025	138 793	2 609
323117 323118	Books printing Blankbook, looseleaf binders, and devices manufacturing .	5	18 6	10 5	1 463 645	53 427 20 162	1 214 491	2 360 1 070	38 349 13 077	127 936 76 818	45 498 56 329	174 201 133 063	D 1 338
323119 32312 323121	Other commercial printing Support activities for printing Tradebinding and related	3 2	55 110	4 20	785 1 540	25 353 59 617	592 1 191	1 138 12 229	16 527 140 173	50 618 112 100	20 515 '30 175	71 250 142 334	1 998 14 652
323122	work	2 2	38 72	9 11	709 '831	23 310 '36 307	568 '623	1 064 '1 165	15 688 '24 485	40 003 72 097	10 457 19 718	50 455 '91 879	2 598 '2 054

[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]

			1			graphic areas	, onewearby	oce rippend	IX D. TOT MOD				
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction work	kers				
NAICS	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MASSACHUSETTS-Con.												
324	Petroleum and coal products manufacturing	_	51	9	875	43 907	550	1 087	24 753	156 449	205 742	356 976	10 449
3241	Petroleum and coal products manufacturing	_	51	9	875	43 907	550	1 087	24 753	156 449	205 742	356 976	10 449
32412	Asphalt paving, roofing, and saturated materials manufacturing	_	43	7	f	D	D	D	D	D	D	D	9 887
324121	Asphalt paving mixture and block manufacturing	1	41	5	417	18 811	258	420	11 278	74 051	103 544	177 199	D
324122	Asphalt shingle and coating		2	2		D	200 D	D	D	D	D	D	D
32419	materials manufacturing Other petroleum and coal	_			е								
324191	Petroleum lubricating oil and	2	7	2	с 165	D 8 685	D 81	D 172	D 2 859	D 22 270	D 20 617	D 42 575	D 366
	grease manufacturing	1	5	2	105	6 080	01	172	2 859	22 270	20 617	42 575	300
325	Chemical manufacturing	2	'352	r150	'19 942	'1 083 979	'9 619	'19 444	'418 003	r4 723 888	'2 537 573	7 273 778	312 407
3251	Basic chemical manufacturing	<sup>r</sup> 2	33	13	1 061	78 384	508	1 075	31 731	'254 017	'211 099	r462 308	13 626
32518	Other basic inorganic chemical manufacturing	2	11	4	280	15 621	168	345	8 160	56 958	36 075	92 692	3 615
325188	All other basic inorganic chemical manufacturing	2	11	4	280	15 621	168	345	8 160	56 958	36 075	92 692	3 615
32519	Other basic organic chemical manufacturing	1	12	7	644	56 172	291	621	21 357	r173 447	'154 287	'324 388	D
325199	All other basic organic chemical manufacturing	r_	9	6	598	54 155	254	538	19 926	'159 730	'143 235	'299 619	D
3252	Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	_	28	20	1 046	50 300	600	1 190	22 288	169 453	369 533	538 483	11 038
32521	Resin and synthetic rubber												
325211	manufacturing Plastics material and resin	-	26	19	g	D	D	D	D	D	D	D	D
	manufacturing	-	23	18	946	44 327	549	1 117	19 594	149 680	347 317	497 476	D
3254	Pharmaceutical and medicine manufacturing	3	75	41	9 118	527 549	3 861	7 940	180 774	2 900 844	743 373	3 632 725	187 449
32541	Pharmaceutical and medicine manufacturing	3	75	41	9 118	527 549	3 861	7 940	180 774	2 900 844	743 373	3 632 725	187 449
325411	Medicinal and botanical manufacturing Pharmaceutical preparation	3	16	6	492	28 296	253	507	12 653	64 191	31 038	94 195	6 312
325412 325413	manufacturing In-vitro diagnostic substance	4	33	14	5 316	320 273	2 181	4 559	112 951	1 728 383	561 860	2 275 658	123 909
325413	manufacturing Biological product (except	2	11	10	1 976	100 643	775	1 592	25 518	367 204	73 465	459 283	20 753
323414	diagnostic) manufacturing	-	15	11	1 334	78 337	652	1 282	29 652	741 066	77 010	803 589	36 475
3255	Paint, coating, and adhesive manufacturing	-	'65	<sup>r</sup> 22	r1 727	'84 459	'815	r1 720	'35 486	'351 387	'236 067	'594 415	8 806
32551	Paint and coating manufacturing	_	41	12	848	37 838	372	789	15 578	197 740	126 088	325 963	2 593
325510	Paint and coating manufacturing	-	41	12	848	37 838	372	789	15 578	197 740	126 088	325 963	2 593
32552 325520	Adhesive manufacturing Adhesive manufacturing	-	'24 '24	'10 '10	'879 '879	r46 621 r46 621	r443 r443	'931 '931	r19 908 r19 908	'153 647 '153 647	'109 979 '109 979	'268 452 '268 452	6 213 6 213
3256	Soap, cleaning compound, and toilet preparation manufacturing.	1	48	16	1 615	67 184	954	1 818	32 900	558 088	267 973	826 584	13 852
32561	Soap and cleaning compound manufacturing	4	40	12	811	35 559	391	814	12 278	129 480	110 076	240 648	8 062
325611	Soap and other detergent manufacturing	3	18	4	271	9 779	191	414	5 878	31 723	21 350	53 157	2 292
325612	Polish and other sanitation good manufacturing	7	15	5	329	13 506	133	264	3 374	60 062	43 064	103 456	2 392
325613	Surface active agent manufacturing	2	7	3	211	12 274	67	136	3 026	37 695	45 662	84 035	3 378
32562	Toilet preparation manufacturing	_	8	4	804	31 625	563	1 004	20 622	428 608	157 897	585 936	5 790
325620	Toilet preparation manufacturing	_	8	4	804	31 625	563	1 004	20 622	428 608	157 897	585 936	5 790
3259	Other chemical product and preparation manufacturing	1	92	36	5 278	271 318	2 809	5 545	111 152	471 190	696 701	1 187 796	77 014
32591	Printing ink manufacturing	4	20	8	452	20 547	225	440	7 415	47 098	81 112	127 991	1 908
325910 32599	Printing ink manufacturing All other chemical product and	4	20	8	452	20 547	225	440 5 105	7 415	47 098	81 112	127 991	1 908
325991	preparation manufacturing Custom compounding of	1	72	28	4 826	250 771	2 584	5 105	103 737	424 092	615 589	1 059 805	75 106 D
325992	purchased resins Photographic film, paper, plate, and chemical manufacturing	2	32 10	13	961 1 858	44 891 93 905	537 1 096	1 148 1 986	20 093 43 464	98 993 71 320	184 703 112 819	284 452 213 924	D
325998	All other miscellaneous chemical product and preparation manufacturing .	1	30	4	2 007	111 975	951	1 986	43 464	253 779	318 067	561 429	59 555
	proparation manufacturing .		. 50		. 2007		3311	1 3711	-101 100	200 //9		331 429	00 000

[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]

						9.000.000	,					,	
			A establis	.ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MASSACHUSETTS-Con.												
326	Plastics and rubber products												
020	manufacturing	1	390	191	20 216	695 204	15 026	27 870	424 949	2 055 762	1 502 209	3 568 786	129 583
3261	Plastics product manufacturing	1	340	172	17 847	610 565	13 379	24 451	378 261	1 864 881	1 357 659	3 228 750	123 532
32611	Plastics packaging materials												
	and unlaminated film and sheet manufacturing	_	47	25	2 362	114 391	1 630	3 285	71 562	306 626	348 043	656 613	24 963
326111 326112	Plastics bag manufacturing Plastics packaging film and sheet (including laminated)	1	11	6	387	13 138	277	527	7 621	28 652	22 284	51 376	586
326113	manufacturing Unlaminated plastics film and sheet (except packaging)	-	6	3	184	6 012	121	245	4 055	21 338	23 145	44 716	2 158
32612	manufacturing Plastics pipe, pipe fitting, and unlaminated profile shape	-	30	16	1 791	95 241	1 232	2 513	59 886	256 636	302 614	560 521	22 219
326121	manufacturing Unlaminated plastics profile	-	26	13	1 708	60 573	1 397	2 511	41 804	129 426	106 820	236 189	7 347
	shape manufacturing	-	21	10	1 520	54 209	1 255	2 214	37 979	109 771	79 405	190 694	6 424
326122	Plastics pipe and pipe fitting manufacturing	_	5	3	188	6 364	142	297	3 825	19 655	27 415	45 495	923
32614	Polystyrene foam product manufacturing	2	10	7	382	14 754	245	488	7 702	33 253	25 323	58 478	1 894
326140	Polystyrene foam product manufacturing	2		7	382	14 754	245	488	7 702	33 253	25 323	58 478	1 894
32615	Urethane and other foam product (except polystyrene) manufacturing	1	18	11	1 035	38 795	631	1 167	15 907	95 105	81 706	177 439	5 572
326150	Urethane and other foam product (except polystyrene) manufacturing	1	18	11	1 035	38 795	631	1 167	15 907	95 105	81 706	177 439	5 572
32616 326160	Plastics bottle manufacturing Plastics bottle	-	6	4	276	9 742	242	461	8 139	51 661	12 282	65 138	1 555
32619	manufacturing Other plastics product	-	6	4	276	9 742	242	461	8 139	51 661	12 282	65 138	1 555
326199	All other plastics product	1	223	111	j	D	D	D	D	D	D	D	D
	manufacturing	1	221	110	11 948	367 628	9 132	16 344	229 928	1 239 364	773 377	2 015 041	81 708
3262	Rubber product manufacturing	2	50	19	2 369	84 639	1 647	3 419	46 688	190 881	144 550	340 036	6 051
32622	Rubber and plastics hoses and	3	6	3	004	0.000	100	000	4 704	10,000	10,000	01 070	D
326220	belting manufacturing Rubber and plastics hoses				234	8 238	169	266	4 724	18 833	13 039	31 879	
32629	and belting manufacturing Other rubber product	3	6	3	234	8 238	169	266	4 724	18 833	13 039	31 879	D
326291	manufacturing Rubber product	2	41	16	2 100	74 871	1 455	3 109	41 319	168 916	128 286	301 823	5 103
326299	manufacturing for mechanical use All other rubber product	1		6	1 126	43 475	728	1 624	21 789	97 336	60 365	162 284	1 825
	manufacturing	3	29	10	974	31 396	727	1 485	19 530	71 580	67 921	139 539	3 278
327	Nonmetallic mineral product manufacturing	2	264	90	8 150	359 710	5 692	12 290	203 040	792 882	535 481	1 327 951	47 158
3271	Clay product and refractory manufacturing	2	36	12	947	32 745	741	1 485	20 978	91 999	38 807	133 606	2 201
32711	Pottery, ceramics, and plumbing fixture												
327112	manufacturing Vitreous china, fine earthenware, and other pottery product	3	28	8	486	14 657	393	805	9 975	30 622	13 824	46 097	738
007440	manufacturing	-	20	2	225	5 247	194	401	4 168	7 808	3 183	11 522	113
327113	Porcelain electrical supply manufacturing	4	8	6	261	9 410	199	404	5 807	22 814	10 641	34 575	625
32712	Clay building material and refractories manufacturing	1	8	4	461	18 088	348	680	11 003	61 377	24 983	87 509	1 463
327125	Nonclay refractory manufacturing	_	2	1	е	D	D	D	D	D	D	D	D
3272	Glass and glass product manufacturing	4		8	1 387	63 429	961	2 146	32 097	120 535	86 056	206 744	6 294
32721	Glass and glass product manufacturing	4	52	8	1 387	63 429	961	2 146	32 097	120 535	86 056	206 744	6 294
327213	Glass container manufacturing	_	1	1	c	D	D	D	D	D	D	D	D
327215	Glass product manufacturing made of purchased glass	6		7	1 076	49 129	687	1 561	20 266	83 107	45 375	128 492	5 622
3273	Cement and concrete product manufacturing	3	_	39	2 489	107 015	1 879	4 124	73 391	247 571	197 702	444 296	23 413
32732	Ready-mix concrete manufacturing	4		21	1 147	54 404	932	2 075	40 989	128 607	116 377	245 242	13 175
327320	Ready-mix concrete												
32733	manufacturing Concrete pipe, brick, and block	4		21	1 147	54 404	932	2 075	40 989	128 607	116 377	245 242	13 175
327331	manufacturing Concrete block and brick	4	23	6	355	14 943	223	505	8 536	34 730	30 983	65 708	D
327332	manufacturing	5	16	4	237	10 058	131	300	4 878	22 565	25 383	47 739	D
	manufacturing	1	7	2	118	4 885	92	205	3 658	12 165	5 600	17 969	1 106
32739	Other concrete product manufacturing	1	33	12	972	36 682	712	1 521	22 950	81 633	44 513	124 916	7 134
327390	Other concrete product manufacturing	1	33	12	972	36 682	712	1 521	22 950	81 633	44 513	124 916	7 134
	3			_			_						

[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]

	and geographical actinitionic, eee nete at				allon on goo	grapine areae i	, ionorioù by	0007.000		and a contraction of the second second			
			A establist	ll nments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry			With 20 em- ploy- ees or		Payroll		Hours	Wages	Value added	Total cost of materials	Total value of shipments	Total capital expendi- tures
		E1	Total	more	Number <sup>3</sup>	(\$1,000)	Number <sup>4</sup>	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
	MASSACHUSETTS-Con.												
327	Nonmetallic mineral product												
3274	manufacturing—Con. Lime and gypsum product												
0214	manufacturing	2	6	2	133	7 106	108	254	5 298	22 145	18 570	40 790	1 340
32742	Gypsum product	2	5	2		D	D	D	D	D	D	D	D
327420	manufacturing Gypsum product				с								
0070		2	5	2	с	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product manufacturing	1	75	29	3 194	149 415	2 003	4 281	71 276	310 632	194 346	502 515	13 910
32791	Abrasive product manufacturing		21	13	2 193	110 697	1 274	2 756	45 428	225 802	132 784	358 788	9 632
327910	Abrasive product	_											
32799	manufacturing	_	21	13	2 193	110 697	1 274	2 756	45 428	225 802	132 784	358 788	9 632
327991	product manufacturing Cut stone and stone product	4	54	16	1 001	38 718	729	1 525	25 848	84 830	61 562	143 727	4 278
327999	manufacturing All other miscellaneous	5	40	10	671	24 816	527	1 090	18 578	49 415	40 408	87 170	2 966
	nonmetallic mineral product manufacturing	1	9	5	254	10 303	154	330	5 539	29 683	12 683	42 373	1 144
331	Primary metal manufacturing	_	117	55	5 019	200 221	3 545	7 233	125 187	361 721	689 734	1 062 056	18 954
3312	Steel product manufacturing from												
	purchased steel	-	17	10	775	32 625	507	1 042	20 657	78 403	118 588	197 877	D
33122	Rolling and drawing of purchased steel	_	15	8	f	D	D	D	D	D	D	D	2 453
331221	Rolled steel shape manufacturing	_	3	2	е	D	D	D	D	D	D	D	569
331222	Steel wire drawing	1	12	6	е	D	D	D	D	D	D	D	1 884
3313	Alumina and aluminum production and processing	2	8	4	с	D	D	D	D	D	D	D	1 023
33131	Alumina and aluminum						P						4 000
331319	production and processing Other aluminum rolling and	2	8	4	c	D	D	D	D	D	D	D	1 023
0014	drawing	2	3	2	107	4 856	80	173	3 225	11 247	32 917	44 378	D
3314	Nonferrous metal (except aluminum) production and		0.5		0,000	05 400	4 504	0.010	54.004	405 574	404 440	005 045	
00140	processing	_	35	22	2 302	95 132	1 504	2 916	54 981	135 571	461 118	605 945	D
33142	Copper rolling, drawing, extruding, and alloying	1	16	13	g	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, and extruding	5	4	2	с	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing	-	12	11	887	33 864	603	1 222	19 891	75 536	161 938	238 052	2 946
33149	Nonferrous metal (except copper and aluminum) rolling,												
	drawing, extruding, and alloying	_	16	8	1 167	51 042	717	1 304	28 043	44 869	278 294	332 588	5 351
331491	Nonferrous metal (except copper and aluminum)												
	rolling, drawing, and extruding	_	7	4	584	19 022	427	741	12 539	43 637	93 252	136 687	1 001
331492	Secondary smelting, refining,			,	004	TO OLL	-21	741	12 000	40 007	00 202	100 007	1 001
	and alloying of nonferrous metal (except copper and				500	00,000		500	45 504	4 000	185 042	105 001	4.050
3315	aluminum)	1	9 55	4 17	583 1 602	32 020 58 644	290 1 291	563 2 756	15 504 41 416	1 232 116 052	57 940	195 901 174 175	4 350 6 135
3315	Foundries	1	55 19	8	667	58 644 25 408	537	2 756 1 138	41 416 17 601	48 557	57 940 22 213	69 743	1 131
331511 331513	Iron foundries Steel foundries (except	1	15	5	479	18 597	384	801	13 354	32 770	15 539	48 077	D
	investment) Nonferrous metal foundries	-	3	3 9	C	D	D	D	D 00 015	D	D	D	D
33152 331521	Aluminum die-casting	'	36	-	935	33 236	754	1 618	23 815	67 495	35 727	104 432	5 004
331524	foundries	_	5	2	478	18 239	394	905	14 301	39 027	16 824	57 122	D
	die-casting)	2	16	2	279	9 633	228	466	6 105	17 774	13 027	30 829	2 103
332	Fabricated metal product manufacturing	1	r1 613	r455	'39 443	'1 643 651	'27 898	'56 588	'965 371	'3 658 928	'2 303 436	'5 987 599	'186 035
3321	Forging and stamping	1	78	33	3 056	123 318	2 350	4 789	80 298	297 610	216 860	531 334	12 438
33211	Forging and stamping	1	78	33	3 056	123 318	2 350	4 789 1 018	80 298 21 314	297 610 98 682	216 860	531 334	12 438
332111 332114	Iron and steel forging Custom roll forming	5	67	3	688 122	31 889 4 359	507 102	216	3 218	17 358	83 531 32 662	199 131 48 457	5 368 851
332116 332117	Metal stamping Powder metallurgy part	1	58	23	1 755	68 725	1 332	2 722	42 556	133 601	75 626	209 442	3 284
2200	manufacturing	1	5	2	е	D	D	D	D	D	D	D	D
3322	Cutlery and handtool manufacturing	-	51	23	4 724	218 469	3 273	6 955	123 193	699 447	489 975	1 177 931	39 422
33221	Cutlery and handtool manufacturing	-	51	23	4 724	218 469	3 273	6 955	123 193	699 447	489 975	1 177 931	39 422
332211	Cutlery and flatware (except precious) manufacturing	_	4	4	g	D	D	D	D	D	D	D	D
332212	Hand and edge tool manufacturing	1	43	16	g	D	D	D	D	D	D	D	D
332213	Saw blade and handsaw manufacturing		4	3	1 170	62 747	685	1 518	26 618	177 940	81 406	257 060	D
				51			0001		_0 0.0		0	_5. 550	2

[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]

terms,		enu	or table.		autori ori geo	graphic areas	onowed by ,	See Append	IN D. TOTING	ining of abbrevia	allonis and symbo	3, 366 millouuc	
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MASSACHUSETTS-Con.												
332	Fabricated metal product												
3323	manufacturing—Con. Architectural and structural metals manufacturing	2	r293	101	r6 581	r254 077	r4 793	r9 489	r155 402	r477 542	r364 974	r870 725	r20 221
33231	Plate work and fabricated	2	235	101	.0.301	234 077	.4 793	-9 409	133 402	477 542	-304 974	070 725	20 221
	structural product manufacturing	2	76	32	1 667	69 019	1 159	2 371	41 440	116 498	93 283	225 826	8 366
332312	Fabricated structural metal manufacturing	2	53	20	995	41 586	684	1 378	24 789	82 273	62 178	146 604	4 107
332313 33232	Plate work manufacturing Ornamental and architectural	2	19	11	607	24 988	437	921	15 618	29 513	26 438	69 751	D
332321	metal products manufacturing Metal window and door	3	r217	69	r4 914	'185 058	'3 634	'7 118	'113 962	'361 044	'271 691	<sup>r</sup> 644 899	'11 855
332322	manufacturing Sheet metal work	4	21	10	423	13 548	306	564	7 588	26 232	20 467	46 544	569
332323	manufacturing Ornamental and architectural	3	139	47	3 692	135 357	2 787	5 480	86 295	277 664	198 642	474 481	8 986
	metal work manufacturing	3	'57	12	'799	'36 153	'541	'1 074	'20 079	'57 148	'52 582	'123 874	'2 300
3324	Boiler, tank, and shipping container manufacturing	2	30	14	1 351	58 569	927	1 943	34 104	195 429	133 512	322 518	5 150
33241	Power boiler and heat exchanger manufacturing	1	7	5	308	14 355	160	331	6 907	80 348	17 231	93 334	214
332410	Power boiler and heat exchanger manufacturing	1	7	5	308	14 355	160	331	6 907	80 348	17 231	93 334	214
33242	Metal tank (heavy gauge) manufacturing	6	6	4	674	27 930	466	949	14 944	65 806	47 933	111 726	1 457
332420 33243	Metal tank (heavy gauge) manufacturing Metal can, box, and other metal	6	6	4	674	27 930	466	949	14 944	65 806	47 933	111 726	1 457
00240	container (light gauge) manufacturing	_	17	5	369	16 284	301	663	12 253	49 275	68 348	117 458	3 479
332431 332439	Metal can manufacturing Other metal container	-	1	1	c	D	D	D	D	-10 2/0 D	00 040 D	D	D
	manufacturing	3		4	c	D	D	D	D	D	D	D	D
3325 33251	Hardware manufacturing	2		9 9	846 846	31 598 31 598	630 630	1 346 1 346	17 829 17 829	66 888 66 888	42 984 42 984	109 264 109 264	3 612 3 612
332510	Hardware manufacturing	2 2	18	9	846	31 598	630	1 346	17 829	66 888	42 984	109 264	3 612
3326	Spring and wire product manufacturing	2	52	14	1 867	55 995	1 595	3 453	41 063	105 428	82 231	187 070	9 759
33261	Spring and wire product manufacturing	2	52	14	1 867	55 995	1 595	3 453	41 063	105 428	82 231	187 070	9 759
332612	Spring (light gauge) manufacturing	1	8	4	e	D	D	0 400 D	D	D	02 201 D	D	0 700 D
332618	Other fabricated wire product manufacturing	2		10	1 503	43 453	1 288	2 837	31 760	74 100	48 658	121 855	9 096
3327	Machine shops; turned product;												
	and screw, nut, and bolt manufacturing	2	749	144	9 926	428 442	7 227	14 658	277 057	848 300	394 616	1 249 513	55 161
33271 332710	Machine shops Machine shops	2		97 97	7 131 7 131	314 367 314 367	5 192 5 192	10 531 10 531	205 469 205 469	597 303 597 303	259 235 259 235	858 102 858 102	34 288 34 288
33272	Turned product and screw, nut, and bolt manufacturing	1		47	2 795	114 075	2 035	4 127	71 588	250 997	135 381	391 411	20 873
332721	Precision turned product manufacturing	1	84	35	1 817	73 864	1 348	2 782	49 245	160 067	57 350	219 823	17 179
332722	Bolt, nut, screw, rivet, and washer manufacturing	-	30	12	978	40 211	687	1 345	22 343	90 930	78 031	171 588	3 694
3328	Coating, engraving, heat treating, and allied activities	1	r183	<sup>r</sup> 61	r3 869	'140 789	'2 943	'5 798	<sup>r</sup> 88 539	'264 322	'91 796	'358 692	13 187
33281	Coating, engraving, heat treating, and allied activities	1	r183	r61	r3 869	r140 789	r2 943	<sup>1</sup> 5 798	r88 539	r264 322	<sup>r</sup> 91 796	r358 692	13 187
332811 332812	Metal heat treating	1	18	4	227	9 217	176	405	6 221	19 211	5 888	25 147	814
002012	(except jewelry and silverware), and allied												
332813	services to manufacturers Electroplating, plating,	1	r77	r25	r1 639	r60 958	r1 271	r2 325	r39 581	r114 504	r42 097	r158 993	7 908
	polishing, anodizing, and coloring	2	88	32	2 003	70 614	1 496	3 068	42 737	130 607	43 811	174 552	4 465
3329	Other fabricated metal product		150	50	7 000	000.004	4 100	0 157	147.000	700.000	400 400	1 100 550	07 005
33291	manufacturing	_	159 27	56 15	7 223 2 518	332 394 121 184	4 160 1 522	8 157 2 988	147 886 59 995	703 962 275 916	486 488 224 011	1 180 552 486 476	27 085 7 397
332911	Industrial valve manufacturing	_	14	.0	1 417	75 516	781	1 603	31 716	142 475	176 667	302 439	4 236
332912	Fluid power valve and hose fitting manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
332913	Plumbing fixture fitting and trim manufacturing	1	4	2	340	12 859	212	415	4 977	47 233	18 529	67 991	2 017
33299 332991	All other fabricated metal product manufacturing Ball and roller bearing	1	132	41	4 705	211 210	2 638	5 169	87 891	428 046	262 477	694 076	19 688
332991	Ball and roller bearing manufacturing Ammunition (except small	-	2	1	с	D	D	D	D	D	D	D	D
332994	arms) manufacturing Small arms manufacturing	-	34	2 3	g 1 077	D 39 975	D 717	D 1 381	D 21 439	D 77 320	D 48 772	D 127 484	D 5 714
332996	Fabricated pipe and pipe fitting manufacturing	2		2	119	5 181	76	131	2 879	8 433	4 356	12 855	325
332997	Industrial pattern manufacturing		10	1		5 795	79	150	2 820	12 737	8 968	21 881	D
	-												

[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]

		1			lation on goo	grapino aroao i	l l l l l l l l l l l l l l l l l l l	occ r spond		inig of abbroth			
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry			With 20									Total
code				em- ploy-							Total cost of	Total value of	capital expendi-
		E1	Total	ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	materials (\$1,000)	shipments (\$1,000)	tures (\$1,000)
	MASSACHUSETTS-Con.												
332	Fabricated metal product												
3329	manufacturing—Con. Other fabricated metal product manufacturing—Con.												
33299	All other fabricated metal												
332999	product manufacturing—Con. All other miscellaneous												
	fabricated metal product manufacturing	2	103	32	2 150	80 564	1 449	2 823	46 279	158 764	115 115	276 045	6 060
333	Machinery manufacturing	3		254	28 528	1 420 657	16 043	31 159	610 075	2 825 368	2 179 200	5 044 343	170 035
3331	Agriculture, construction, and												
	mining machinery manufacturing	3	20	7	509	24 041	319	677	12 574	40 819	46 599	90 020	2 969
33311	Agricultural implement manufacturing	_	5	1	с	D	D	D	D	D	D	D	D
333111	Farm machinery and equipment manufacturing	_	5	1	с	D	D	D	D	D	D	D	D
33312	Construction machinery manufacturing	6		5	268	11 225	178	352	6 301	20 040	25 856	46 592	1 231
333120	Construction machinery manufacturing	6		5	268	11 225	178	352	6 301	20 040	25 856	46 592	1 231
3332	Industrial machinery	ľ			200	11 220	170		0.001	20 040	20 000	40 002	1 201
	manufacturing	4	145	60	10 516	601 058	4 991	9 157	206 249	1 149 740	932 606	2 103 881	76 896
33322	Plastics and rubber industry machinery manufacturing	4	27	9	1 284	62 253	664	1 311	23 160	110 104	86 806	198 836	3 411
333220	Plastics and rubber industry machinery manufacturing	4	27	9	1 284	62 253	664	1 311	23 160	110 104	86 806	198 836	3 411
33329	Other industrial machinery manufacturing	4	114	51	9 223	538 510	4 322	7 837	182 959	1 039 060	845 164	1 903 767	73 464
333291	Paper industry machinery manufacturing	3	18	6	750	39 274	396	705	15 328	70 253	51 388	126 212	1 982
333292	Textile machinery manufacturing	2		5	225	8 549	142	275	4 321	15 734	10 039	26 326	681
333293	Printing machinery and equipment manufacturing	2		13	822	39 548	403	853	15 977	91 751	65 422	157 407	2 322
333294	Food product machinery manufacturing	1	8	2	226	9 596	151	295	5 620	28 217	12 928	41 167	312
333295	Semiconductor machinery manufacturing	3		12	4 824	321 623	1 948	3 281	102 998	602 693	545 398	1 150 135	54 388
333298	All other industrial machinery manufacturing	5		13	2 376	119 920	1 282	2 428	38 715	230 412	159 989	402 520	13 779
3333	Commercial and service industry	5		15	2 370	119 920	1 202	2 420	30 / 13	230 412	159 909	402 520	15 775
0000	machinery manufacturing	4	96	45	4 243	185 003	2 580	5 108	89 055	401 984	260 581	657 764	15 393
33331	Commercial and service industry machinery												
333312	manufacturing Commercial laundry,	4	96	45	4 243	185 003	2 580	5 108	89 055	401 984	260 581	657 764	15 393
	drycleaning, and pressing machine manufacturing	8	2	2	е	D	D	D	D	D	D	D	D
333314	Optical instrument and lens manufacturing	_	47	21	2 224	105 645	1 341	2 808	51 275	195 915	93 053	285 649	6 628
333315	Photographic and photocopying equipment					100 010		2 000	0. 2.0	100 010	00 000	200 010	0 020
333319	manufacturing Other commercial and	9	9	6	731	28 928	467	767	13 791	75 020	63 288	137 230	3 232
000010	service industry machinery manufacturing	5	32	15	880	35 632	487	1 012	15 638	91 187	74 181	164 827	3 607
3334	Ventilation, heating, air-	5	52	15	000	35 032	407	1 012	15 050	51 107	74 101	104 027	5 007
0004	conditioning, and commercial refrigeration equipment												
	manufacturing	4	33	18	1 872	72 217	1 120	2 289	32 899	156 147	154 994	311 876	3 930
33341	Ventilation, heating, air- conditioning, and commercial												
	refrigeration equipment manufacturing	4	33	18	1 872	72 217	1 120	2 289	32 899	156 147	154 994	311 876	3 930
333411	Air purification equipment manufacturing	6		4	334	13 275	230	484	6 319	28 729	22 005	50 382	925
333414	Heating equipment (except warm air furnaces)	0	<i>'</i>	4		13 275	230	404	0 319	20 729	22 005	50 562	925
333415	manufacturing Air-conditioning and warm air	3	12	8	883	35 708	406	853	11 310	72 531	72 156	145 752	1 784
333415	heating equipment and												
	commercial and industrial refrigeration equipment		10		500	40.050	407	000	10.000	40,400	F4 007	400.007	
000E	manufacturing	6	10	4	569	19 856	437	863	13 863	48 160	54 997	103 237	D
3335	Metalworking machinery manufacturing	2	239	56	4 881	227 833	3 329	6 992	131 737	393 726	255 247	658 922	30 168
33351	Metalworking machinery manufacturing	2	239	56	4 881	227 833	3 329	6 992	131 737	393 726	255 247	658 922	30 168
333511	Industrial mold manufacturing	2		19	1 699	79 001	1 201	2 543	45 810	131 576	85 743	219 588	11 630
333512	Machine tool (metal cutting types) manufacturing	2		6	279	14 240	173	2 543 348	43 810 7 456	20 668	18 041	39 404	930
333513	Machine tool (metal forming	2				14 240 D	173 D	348 D	7 456 D	20 668 D	18 041 D	39 404 D	930 1 325
333514	types) manufacturing Special die and tool, die set, iig. and fixture	2	8	5	e	U		U		U	U	U	1 323
200545	jig, and fixture manufacturing	3	75	6	544	23 719	384	727	15 535	39 052	13 059	52 401	1 361
333515	Cutting tool and machine tool accessory manufacturing	2	57	13	1 222	51 150	950	2 023	38 359	92 645	40 304	134 180	7 187
	-												

[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]

	and geographical deminions, see note at					grapino areao i	, ionomed by	occ rippend					
			A establist	ll nments <sup>2</sup>	All em	ployees	Pro	oduction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MASSACHUSETTS-Con.												
333 3335	Machinery manufacturing—Con. Metalworking machinery manufacturing—Con.												
33351	Metalworking machinery manufacturing—Con.												
333516	Rolling mill machinery and equipment manufacturing	_	4	2	е	D	D	D	D	D	D	D	D
333518	Other metalworking machinery manufacturing	3	16	5	405	19 683	214	457	7 779	43 730	43 304	88 406	D
3336	Engine, turbine, and power transmission equipment manufacturing	2	24	14	1 250	57 195	872	1 663	33 457	141 402	75 194	219 267	6 825
33361	Engine, turbine, and power transmission equipment		04	14	1 050	57 105	070	1 000	00 457	141 400	75 104	010 007	0.005
333611	manufacturing Turbine and turbine generator set units	2	24	14	1 250	57 195	872	1 663	33 457	141 402	75 194	219 267	6 825
333612	manufacturing Speed changer, industrial high-speed drive, and gear	4	6	5	455	24 029	307	582	15 195	53 391	27 668	80 698	2 304
333613	manufacturing Mechanical power	4	7	4	с	D	D	D	D	D	D	D	409
333618	transmission equipment manufacturing Other engine equipment	-	8	4	519	21 370	389	702	12 478	62 193	37 169	101 750	D
3339	manufacturing	-	3	1	с	D	D	D	D	D	D	D	D
3339	Other general purpose machinery manufacturing	1	155	54	5 257	253 310	2 832	5 273	104 104	541 550	453 979	1 002 613	33 854
33391	Pump and compressor manufacturing	_	14	8	1 282	63 886	591	1 060	23 214	141 676	194 442	332 795	3 196
333911	equipment manufacturing	-	8	3	410	18 299	278	514	9 498	64 350	43 985	107 097	1 351
333912	Air and gas compressor manufacturing	1	6	5	872	45 587	313	546	13 716	77 326	150 457	225 698	1 845
33392	Material handling equipment manufacturing	6	21	10	463	18 456	290	601	9 277	33 147	28 918	61 529	938
333922 333923	Conveyor and conveying equipment manufacturing Overhead traveling crane,	4	10	4	158	6 293	84	177	2 786	11 937	8 345	19 790	367
	hoist, and monorail system manufacturing	8	4	4	209	8 550	138	280	4 304	15 122	15 272	30 500	436
33399	All other general purpose machinery manufacturing	1	120	36	3 512	170 968	1 951	3 612	71 613	366 727	230 619	608 289	29 720
333991 333993	Power-driven handtool manufacturing	-	5	3	192	8 958	132	244	4 408	19 625	16 524	39 090	1 164
333994	Packaging machinery manufacturing Industrial process furnace	5	16	6	488	24 919	284	561	10 008	45 106	24 606	69 103	2 565
333996	and oven manufacturing Fluid power pump and motor	1	16	6	604	25 823	338	522	10 547	40 117	23 709	64 986	463
333997	manufacturing Scale and balance (except	-	4	1	144	9 136	62	141	3 245	8 615	13 385	22 806	D
333999	All other miscellaneous general purpose machinery	-	4	2	161	6 899	94	199	2 647	15 975	11 748	24 480	D
	manufacturing	1	68	16	1 839	91 536	988	1 852	38 865	229 951	134 817	374 700	18 943
334 3341	Computer and electronic product manufacturing Computer and peripheral	1	848	421	76 029	4 293 801	31 120	61 080	1 188 081	13 897 242	8 959 849	23 273 090	610 216
	equipment manufacturing	1	97	40	5 888	373 815	2 230	4 626	89 925	1 394 141	1 567 339	2 925 843	64 819
33411 334111	Computer and peripheral equipment manufacturing	1	97	40	5 888	373 815	2 230	4 626	89 925	1 394 141	1 567 339	2 925 843	64 819
334112	manufacturing Computer storage device	1	19	10	g	D	D	D	D	D	D	D	D
334119	manufacturing Other computer peripheral	-	13	5	g	D	D	D	D	D	D	D	22 376
3342	equipment manufacturing	3	61	25	2 734	147 753	1 110	2 164	39 805	329 639	312 831	646 462	31 389
33421	manufacturing	1	99	65	12 491	758 236	4 118	8 121	171 449	2 300 041	2 195 913	4 775 353	97 519
334210	manufacturing Telephone apparatus	1	32	24	5 720	355 173	1 741	3 693	84 144	1 298 759	1 269 418	2 837 950	40 003
33422	manufacturing Radio and television	1	32	24	5 720	355 173	1 741	3 693	84 144	1 298 759	1 269 418	2 837 950	40 003
334220	broadcasting and wireless communications equipment manufacturing Radio and television broadcasting and wireless	2	46	30	4 260	251 385	1 484	2 601	54 049	420 992	623 660	1 052 464	42 823
00400	communications equipment manufacturing	2	46	30	4 260	251 385	1 484	2 601	54 049	420 992	623 660	1 052 464	42 823
33429 334290	Other communications equipment manufacturing	1	21	11	2 511	151 678	893	1 827	33 256	580 290	302 835	884 939	14 693
334290	Other communications equipment manufacturing	1	21	11	2 511	151 678	893	1 827	33 256	580 290	302 835	884 939	14 693

[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]

101113, 8		enu	or table.		ation on geo	graphic areas	onowed by ,	See Append		ining of abbrevia	allonis and symbo	, 366 milloude	
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MASSACHUSETTS-Con.												
334	Computer and electronic product												
3343	manufacturing—Con. Audio and video equipment manufacturing	1	18	7	924	37 112	517	1 050	13 876	246 281	117 716	367 233	5 086
33431	Audio and video equipment												
334310	manufacturing Audio and video equipment manufacturing	1	18 18	7	924 924	37 112 37 112	517 517	1 050 1 050	13 876 13 876	246 281 246 281	117 716 117 716	367 233 367 233	5 086 5 086
3344	Semiconductor and other electronic component manufacturing	_	301	157	21 029	974 002	12 158	23 529	426 372	4 053 652	2 237 394	6 374 653	208 133
33441	Semiconductor and other electronic component												
334411	manufacturing Electron tube manufacturing .	_	301 6	157 3	21 029 630	974 002 27 428	12 158 454	23 529 920	426 372 17 886	4 053 652 32 964	2 237 394 14 419	6 374 653 46 662	208 133 1 177
334412	Bare printed circuit board manufacturing	_	49	23	2 981	104 302	1 766	3 124	58 554	192 403	273 266	467 965	9 204
334413	Semiconductor and related												
334414	device manufacturing	_	68	39	7 960	453 037	4 658	8 885	190 694	3 023 883	1 234 042	4 322 730	152 334
334415	manufacturing	-	8	2	628	17 309	399	824	8 861	27 985	33 486	64 036	3 307
334416	manufacturing Electronic coil, transformer, and other inductor	-	5	4	240	9 040	176	350	5 685	13 367	8 227	21 414	D
334417	manufacturing	1	15	3	232	7 966	169	301	4 231	14 641	9 186	25 415	230
334418	manufacturing Printed circuit assembly (electronic assembly)	1	18	10	775	29 133	510	1 070	14 852	67 349	28 820	97 735	D
334419	manufacturing Other electronic component	2	52	38	3 607	148 805	2 017	3 999	55 639	297 521	394 549	698 075	18 361
	manufacturing	-	80	35	3 976	176 982	2 009	4 056	69 970	383 539	241 399	630 621	21 027
3345	Navigational, measuring, electromedical, and control instruments manufacturing	1	304	142	34 340	2 099 388	11 113	21 718	452 680	5 777 272	2 708 876	8 571 363	229 782
33451	Navigational, measuring, electromedical, and control												
334510	instruments manufacturing Electromedical and electrotherapeutic	1	304	142	34 340	2 099 388	11 113	21 718	452 680	5 777 272	2 708 876	8 571 363	229 782
334511	apparatus manufacturing Search, detection, navigation, guidance,	2	42	22	4 248	257 414	1 529	3 315	66 927	1 119 202	247 640	1 450 749	57 552
	aeronautical, and nautical system and instrument					700 075	0.074		445 004	2 240 390	1 021 416	0.000.010	50 5 10
334512	Automatic environmental control manufacturing for	-	42	17	11 740	788 875	3 271	5 727	145 601	2 240 390	1 021 416	3 209 918	58 549
334513	residential, commercial, and appliance use Instruments and related products manufacturing for	6	8	4	482	17 648	256	531	6 829	64 298	51 731	116 116	D
	measuring, displaying, and controlling industrial process variables	_	42	27	4 418	211 932	1 895	3 738	61 335	511 505	273 028	800 942	10 785
334514	Totalizing fluid meter and counting device manufacturing	4	6	4	с	D	D	D	D	D	D	D	521
334515	Instrument manufacturing for measuring and testing electricity and electrical												
334516	signals Analytical laboratory	2	40	17	4 506	265 268	1 226	2 316	60 923	426 948	328 047	787 260	36 548
334517	instrument manufacturing	-	42	15	3 460	238 311	911	1 902	35 432	632 755	359 289	990 133	39 609
334518	manufacturing Watch, clock, and part	-	16	10	2 381	147 690	773	1 751	26 981	344 470	217 539	561 740	13 568
	manufacturing	-	6	3	с	D	D	D	D	D	D	D	D
334519	Other measuring and controlling device manufacturing	1	60	23	2 821	160 475	1 111	2 198	44 559	294 930	159 566	462 534	6 583
3346	Manufacturing and reproducing magnetic and optical media	3	29	10	1 357	51 248	984	2 036	33 779	125 855	132 611	258 645	4 877
33461	Manufacturing and reproducing												
334611 334612	magnetic and optical media Software reproducing Prerecorded compact disc (except software), tape, and	3	29 5	10 3	1 357 461	51 248 18 279	984 363	2 036 720	33 779 12 203	125 855 39 946	132 611 21 132	258 645 61 094	4 877 1 004
334613	(except software), tape, and record reproducing Magnetic and optical recording media	7	19	5	646	20 524	414	897	11 879	53 757	30 494	83 784	2 157
	manufacturing	-	5	2	250	12 445	207	419	9 697	32 152	80 985	113 767	1 716
335	Electrical equipment, appliance, and component manufacturing	2	<sup>7</sup> 223	104	'15 889	'661 207	'9 786	'19 292	'313 058	'1 585 516	'1 253 163	'2 846 730	'73 465
3351	Electric lighting equipment manufacturing	1	'31	13	r1 827	'62 325	r1 434	'3 156	r41 602	'258 239	'127 257	'384 030	'3 882

[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]

				or intoini		grapino areas i	ionowed by ,	occ Append					
			A establist	ll nments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MASSACHUSETTS-Con.												
335	Electrical equipment, appliance, and												
3351	component manufacturing-Con. Electric lighting equipment												
33512	manufacturing—Con. Lighting fixture manufacturing	1	<sup>r</sup> 29	13		D	D	D	D	D	D	D	D
335121	Residential electric lighting	7		3	g	D	D	D	D	D	D	D	310
335122	fixture manufacturing Commercial, industrial, and		11	3	е	U	U	U	D	U	U	U	310
005400	institutional electric lighting fixture manufacturing	-	r <b>1</b> 1	6	'1 189	'41 187	<sup>r</sup> 986	'2 264	'30 519	'215 297	'97 349	'311 570	'2 753
335129	Other lighting equipment manufacturing	3	7	4	347	12 391	239	479	6 647	24 939	17 457	41 931	D
3352	Household appliance manufacturing	_	9	4	601	18 505	465	938	11 875	74 712	51 889	124 301	1 439
33522	Major appliance manufacturing.	-	6	4	f	D	D	D	D	D	D	D	D
335222	Household refrigerator and home freezer						_		_		_		_
335228	manufacturing Other major household	-	1	1	е	D	D	D	D	D	D	D	D
3353	appliance manufacturing Electrical equipment	-	5	3	с	D	D	D	D	D	D	D	D
	manufacturing	3	63	27	4 006	205 455	1 842	3 527	66 272	414 395	292 640	713 917	15 608
33531	Electrical equipment manufacturing	3	63	27	4 006	205 455	1 842	3 527	66 272	414 395	292 640	713 917	15 608
335312	Motor and generator manufacturing	1	14	9	974	51 017	566	1 201	25 306	62 310	73 169	139 455	4 549
335313	Switchgear and switchboard apparatus manufacturing	-	6	4	594	30 906	285	518	13 371	110 784	44 894	158 088	1 872
335314	Relay and industrial control manufacturing	5	39	14	2 415	122 577	974	1 772	26 968	238 859	171 899	411 254	9 109
3359	Other electrical equipment and component manufacturing	1	120	60	9 455	374 922	6 045	11 671	193 309	838 170	781 377	1 624 482	52 536
33591	Battery manufacturing	1	6	4	e 5	074 322 D	0 043 D	D	130 303 D	000 170 D	D	1 024 402 D	1 185
335911	Storage battery manufacturing	4	3	2	с	D	D	D	D	D	D	D	D
335912	Primary battery manufacturing	_	3	2	215	7 916	175	339	5 782	17 808	11 234	28 425	D
33592	Communication and energy wire and cable manufacturing.	2	35	25	3 123	127 485	1 737	3 811	66 540	322 055	375 534	698 605	22 160
335921	Fiber optic cable manufacturing	3	9	5	203	9 725	82	172	3 601	20 380	15 989	37 074	D
335929	Other communication and energy wire manufacturing .	2	26	20	2 920	117 760	1 655	3 639	62 939	301 675	359 545	661 531	D
33593 335931	Wiring device manufacturing Current-carrying wiring	-	28	16	h	D	D	D	D	D	D	D	8 267
33599	device manufacturing All other electrical equipment and component	-	27	15	3 170	112 518	2 115	3 784	54 430	316 589	222 675	542 741	D
335999	manufacturing All other miscellaneous electrical equipment and	3	51	15	2 727	117 183	1 841	3 365	59 994	172 291	166 063	339 302	20 924
000	component manufacturing	3	46	14	2 648	112 748	1 794	3 276	57 965	163 266	157 628	321 816	D
336	Transportation equipment manufacturing	-	176	58	10 601	604 773	5 868	11 811	272 922	2 037 394	1 972 733	4 012 212	132 498
3362	Motor vehicle body and trailer manufacturing	1	24	11	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body and trailer manufacturing	1	24	11	f	D	D	D	D	D	D	D	D
336211	Motor vehicle body manufacturing	-	13	6	228	8 625	182	349	5 622	26 458	17 963	44 316	410
336212 336214	Travel trailer and camper	2	5	3	166	8 692	100	200	4 079	15 208	17 821	32 814	146
3363	manufacturing	8	5	1	с	D	D	D	D	D	D	D	D
33631	manufacturing Motor vehicle gasoline engine	1	66	24	4 088	184 518	2 193	4 415	54 005	524 514	363 825	893 232	25 967
336311	and engine parts manufacturing Carburetor, piston, piston	-	12	2	e	D	D	D	D	D	D	D	D
000040	ring, and valve manufacturing	-	1	1	с	D	D	D	D	D	D	D	D
336312 33632	Gasoline engine and engine parts manufacturing Motor vehicle electrical and	-	11	1	281	11 702	179	417	6 377	25 087	22 240	47 260	750
336322	electronic equipment manufacturing Other motor vehicle electrical	-	20	6	2 533	129 139	1 054	2 075	19 172	418 871	257 564	678 627	21 243
	and electronic equipment manufacturing	_	20	6	2 533	129 139	1 054	2 075	19 172	418 871	257 564	678 627	21 243
33634	Motor vehicle brake system manufacturing	_	6	2	2 000	7 463	224	517	6 195	11 235	15 601	27 752	274
336340	Motor vehicle brake system manufacturing	-	6	2	254	7 463	224	517	6 195	11 235	15 601	27 752	274
33636	Motor vehicle seating and interior trim manufacturing	6	5	4	231	6 196	195	384	4 450	15 406	12 766	26 837	D
336360	Motor vehicle seating and interior trim manufacturing	6	5	4	231	6 196	195	384	4 450	15 406	12 766	26 837	D
33637 336370	Motor vehicle metal stamping Motor vehicle metal	1	10	5	423	17 131	256	460	9 408	28 454	25 750	57 143	941
	stamping	1	10	5	423	17 131	256	460	9 408	28 454	25 750	57 143	941

12 Massachusetts

[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]

					allon on geo	graphic areas				ining of abbrevia		, 366 miloude	
			A establis	hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MASSACHUSETTS-Con.												
336 3363	Transportation equipment manufacturing—Con. Motor vehicle parts manufacturing—Con.												
33639 336399	Other motor vehicle parts manufacturing All other motor vehicle parts manufacturing	7	11	4	226 226	8 069 8 069	171 171	354 354	4 946 4 946	18 283 18 283	21 502 21 502	39 985 39 985	1 300 1 300
3364	Aerospace product and parts manufacturing	-	20	10	i	D	D	D	D	D	D	D	D
33641 336412	Aerospace product and parts manufacturing Aircraft engine and engine parts manufacturing	-	20	10 10	i	D	D	D	D	D	D	D	D
3366	Ship and boat building	5	50	7	f	D	D	D	D	D	D	D	D
33661 336611 336612	Ship and boat building Ship building and repairing Boat building	5 4 5	50 16 34	7 3 4	f e e	D D D	D D D	D D D	D D D	D D D	D D D	D D D	D 863 D
3369	Other transportation equipment manufacturing	-	13	5	с	D	D	D	D	D	D	D	D
33699	Other transportation equipment manufacturing	_	13	5	с	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, and parts manufacturing	-	6	2	с	D	D	D	D	D	D	D	152
337	Furniture and related product manufacturing	2	413	80	7 220	262 968	5 091	10 202	147 011	560 479	407 416	967 767	17 543
3371	Household and institutional furniture and kitchen cabinet manufacturing	2	295	41	3 764	119 526	2 835	5 617	74 704	232 179	186 808	418 309	9 250
33711	Wood kitchen cabinet and countertop manufacturing	4	153	12	1 129	37 514	802	1 547	22 673	66 015	40 561	107 836	2 790
337110	Wood kitchen cabinet and countertop manufacturing	4	153	12	1 129	37 514	802	1 547	22 673	66 015	40 561	107 836	2 790
33712 337121	Household and institutional furniture manufacturing	2	142	29	2 635	82 012	2 033	4 070	52 031	166 164	146 247	310 473	6 460
337121	furniture manufacturing Nonupholstered wood household furniture	1	25	4	420	10 725	348	634	8 152	27 149	16 163	43 420	489
337127	Institutional furniture manufacturing	1 3	88 18	14 9	1 129 970	31 861 36 409	934 665	1 939 1 360	22 621 19 477	59 921 72 029	61 713 64 463	120 050 135 962	D 4 222
3372	Office furniture (including fixtures) manufacturing	2	96	32	2 609	111 730	1 584	3 221	51 675	215 488	128 500	343 769	6 372
33721	Office furniture (including fixtures) manufacturing	2	96	32	2 609	111 730	1 584	3 221	51 675	215 488	128 500	343 769	6 372
337211 337212	Wood office furniture manufacturing Custom architectural	9	8	1	2 003 C	D	D	0 22 I	D	213 400 D	D	040 703 D	0 0/2 D
	woodwork and millwork manufacturing	1	57	19	1 269	56 471	806	1 585	26 665	100 605	54 850	154 960	4 441
337214 337215	Office furniture (except wood) manufacturing Showcase, partition,	-	3	2	f	D	D	D	D	D	D	D	D
	shelving, and locker manufacturing	3	28	10	535	21 628	375	761	11 655	35 247	31 159	66 397	1 189
3379	Other furniture related product manufacturing	-	22	7	847	31 712	672	1 364	20 632	112 812	92 108	205 689	1 921
33791 337910	Mattress manufacturing Mattress manufacturing	-	10 10	6 6	764 764	28 970 28 970	611 611	1 240 1 240	19 137 19 137	106 070 106 070	85 824 85 824	192 664 192 664	D D
339	Miscellaneous manufacturing	2	913	259	33 932	1 372 782	21 055	41 325	619 809	4 268 384	2 129 868	6 444 840	226 783
3391	Medical equipment and supplies manufacturing	2	344	114	15 321	694 368	8 823	17 585	279 670	2 198 788	824 575	3 072 093	101 832
33911 339111	Medical equipment and supplies manufacturing	2	344	114	15 321	694 368	8 823	17 585	279 670	2 198 788	824 575	3 072 093	101 832
339111 339112	Laboratory apparatus and furniture manufacturing Surgical and medical	1	25	10	922	54 090	326	693	13 240	111 809	62 877	180 225	3 543
339112	instrument manufacturing	2	92	57	7 952	385 855	4 062	8 177	126 925	1 290 308	503 969	1 831 546	63 296
339115	supplies manufacturing Ophthalmic goods	1	47	26	3 651	156 330	2 388	5 039	77 905	603 172	172 042	779 268	20 454
339116	manufacturing	6	19 145	9 11	1 475 1 253	54 754 41 102	1 051 958	1 748 1 872	30 902 29 774	122 710 65 961	68 350 15 763	193 383 81 273	12 300 2 108
3399	Other miscellaneous manufacturing	2	569	145	18 611	678 414	12 232	23 740	340 139	2 069 596	1 305 293	3 372 747	124 951

[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]

			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MASSACHUSETTS-Con.												
339 3399	Miscellaneous manufacturing—Con. Other miscellaneous manufacturing—Con.												
33991	Jewelry and silverware manufacturing	_	89	29	3 470	129 346	2 118	3 766	50 296	290 397	403 495	699 815	9 568
339911	Jewelry (except costume) manufacturing	1	43	13	1 199	39 439	817	1 289	18 652	156 549	85 956	242 070	3 280
339912	Silverware and hollowware		9	6			-						
339913	manufacturing Jewelers' material and lapidary work	-	9	0	1 000	52 577	335	611	10 083	82 980	156 011	246 589	1 647
339914	manufacturing Costume jewelry and novelty	-	12	5	994	29 237	759	1 459	17 467	35 216	153 238	187 181	3 679
33992	manufacturing	3	25	5	277	8 093	207	407	4 094	15 652	8 290	23 975	962
	Sporting and athletic goods manufacturing	5	43	13	3 463	138 092	2 239	4 332	70 404	690 244	181 842	880 599	19 729
339920	Sporting and athletic goods manufacturing	5	43	13	3 463	138 092	2 239	4 332	70 404	690 244	181 842	880 599	19 729
33993	Doll, toy, and game manufacturing	1	28	9	g	D	D	D	D	D	D	D	6 188
339932	Game, toy, and children's	1	26	9	9 2 206	80 482	1 691	3 323	55 109	169 983	147 026	317 536	0 100 D
33994	vehicle manufacturing Office supplies (except paper)		-	-									_
339941	manufacturing Pen and mechanical pencil	2	22	5	е	D	D	D	D	D	D	D	763
339943	manufacturing	-	4	2	с	D	D	D	D	D	D	D	D
33995	manufacturing	1 2	11 136	2 23	125 2 142	5 563 77 806	83 1 326	186 2 473	2 515 37 162	9 736 149 111	3 676 109 520	13 638 262 458	395 7 268
339950	Sign manufacturing Sign manufacturing	2	136	23	2 142	77 806	1 326	2 473	37 162	149 111	109 520	262 458	7 268
33999	All other miscellaneous manufacturing	2	251	66	6 950	239 364	4 618	9 334	120 778	741 157	444 983	1 164 936	81 435
339991	Gasket, packing, and sealing device manufacturing	3	22	8	1 239	53 614	685	1 396	22 342	140 440	70 927	212 046	2 637
339992	Musical instrument manufacturing	1	28	8	542	21 913	414	828	14 285	62 366	22 400	84 792	1 376
339994	Broom, brush, and mop		-										
339995	manufacturing Burial casket manufacturing .	2	9 4	5 3	418 166	12 539 4 371	334 144	727 272	7 827 3 185	25 021 9 095	17 882 4 561	43 147 13 789	D 154
339999	All other miscellaneous manufacturing	2	184	41	4 533	143 675	3 022	6 076	72 472	498 754	323 786	800 284	73 022

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more. <sup>2</sup>Includes establishments with payroll at any time during the year. <sup>3</sup>Inclustries with 100 employees for 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; 6–250 to 99 employees; f–500 to 99.999 employees; g–1,000 to 24,999 employees; k–25,000 to 99,999 employees; m–100,000 employees or more. <sup>4</sup>Number 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.

[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]

			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA												
31-33	Manufacturing	1	8 134	2 700	324 972	r14 975 806	r190 036	374 379	r6 500 487	r42 539 160	'30 860 341	73 869 181	2 234 477
311	Food manufacturing	2	599	174	j	D	D	D	D	D	D	D	D
3112 31123	Grain and oilseed milling Breakfast cereal	-	8	3	е	D	D	D	D	D	D	D	D
311230	manufacturing Breakfast cereal manufacturing	-	4	1	e	D	D D	D D	D	D D	D D	D D	D
3113	Sugar and confectionery product manufacturing	4	57	10	g	D	D	D	D	D	D	D	D
31132	Chocolate and confectionery manufacturing from cacao beans	9	7	1	е	D	D	D	D	D	D	D	D
311320	Chocolate and confectionery manufacturing from cacao	9	7	1		D	D	D	D	D	D	D	D
31133	beans Confectionery manufacturing from purchased chocolate	9	36	1	e	D	D	D	D	D	D	D	D
311330	Confectionery manufacturing from purchased chocolate	1	36	6	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery manufacturing	_	14	3	e	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery manufacturing	-	14	3	e	D	D	D	D	D	D	D	D
3114	Fruit and vegetable preserving and specialty food manufacturing	-	20	10	f	D	D	D	D	D	D	D	D
31141 311412	Frozen food manufacturing Frozen specialty food manufacturing	1	11 9	5 5	e	D	D	D	D	D	D	D	D
3115	Dairy product manufacturing	_	32	11	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen)		16	6		D	D	D	D	D	D	D	D
311511 31152	manufacturing Fluid milk manufacturing Ice cream and frozen dessert	-	11	6	g g	D	D	D	D	D	D	D	D
311520	Ice cream and frozen dessert manufacturing	1 1	16 16	5 5	e	D	D	D	D	D D	D D	D	D
3116	Animal slaughtering and processing	-	28	16	1 847	55 506	1 282	2 505	29 865	142 587	259 099	400 079	5 452
31161	Animal slaughtering and processing	_	28	16	1 847	55 506	1 282	2 505	29 865	142 587	259 099	400 079	5 452
311611	Animal (except poultry) slaughtering	_	7	2	e	D	D	2 000 D	D	D	_000 000	D	D
311612	Meat processed from carcasses	_	16	10	g	D	D	D	D	D	D	D	D
3117	Seafood product preparation and packaging	4	37	18	h	D	D	D	D	D	D	D	D
31171	Seafood product preparation and packaging	4	37	18	h	D	D	D	D	D	D	D	D
311712	Fresh and frozen seafood processing	4	32	16	g	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing	3	328	75	i	D	D	D	D	D	D	D	D
31181 311811 311812 311813	Bread and bakery product manufacturing Retail bakeries Commercial bakeries Frozen cakes, pies, and	3 3 3	310 206 86	70 32 27	i g h	D D D	D D D	D D D	D D D	D D D	D D D	D D D	D D D
31182	other pastries manufacturing Cookie, cracker, and pasta	2	18	11	f	D	D	D	D	D	D	D	D
	manufacturing	2	16	4	e	D	D	D	D	D	D	D	D
3119	Other food manufacturing	1	83	28	h	D	D	D	D	D	D	D	D
31191 311911	Snack food manufacturing Roasted nuts and peanut butter manufacturing	_	11 6	4	e	D	D	D	D	D	D	D	D
31192 311920	Coffee and tea manufacturing . Coffee and tea	1	6	4	е	D	D	D	D	D	D	D	D
31194	manufacturing Seasoning and dressing	1	6	4	e	D	D	D	D	D	D	D	D
311941	manufacturing Mayonnaise, dressing, and other prepared sauce	1	14	7	f	D	D	D	D	D	D	D	D
31199 311991	manufacturing All other food manufacturing Perishable prepared food manufacturing	1 3	7 51	5 13 9	f g f	ם ם	D D D	D D D	D D D	ם ם ם	D D D	D D D	D D D
311999	manufacturing All other miscellaneous food manufacturing	1 5	15 36	9 4	e	D	D	D	D	ם	ם	D	D

See footnotes at end of table.

[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]

			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
312	Beverage and tobacco product manufacturing	1	43	18	h	D	D	D	D	D	D	D	D
3121	Beverage manufacturing	1	43	18	h	D	D	D	D	D	D	D	D
31211 312111 31212 312120	Soft drink and ice manufacturing Soft drink manufacturing Breweries Breweries	2 1 - -	21 9 15 15	12 7 5 5	g g f	D D D	D D D D		D D D	D D D	D D D D	D D D D	D D D
313	Textile mills	2	106	51	i	D	D	D	D	D	D	D	D
3131	Fiber, yarn, and thread mills	-	13	3	f	D	D	D	D	D	D	D	D
31311 313111	Fiber, yarn, and thread mills Yarn spinning mills	-	13 5	3 1	e	D D	D D	D D	D D	D	D D	D D	D D
3132 31321	Fabric mills Broadwoven fabric mills	2 4	43 13	22 5	g	D	D	D	D	D	D	D	D
313210 31322	Broadwoven fabric mills Narrow fabric mills and schiffli	4	13	5	e e	D	D	D	D	D	D	D	D
313221 31323	machine embroidery Narrow fabric mills Nonwoven fabric mills	1 1 1	13 11 10	6 6 5	f f e	D D D	D D D	D D D	D D D	D D D	D D D		D D D
313230 31324	Nonwoven fabric mills Knit fabric mills	1	10 10 7	556	e e	D D	D D	D D	DDD	D D	D		
313249	Other knit fabric and lace mills	-	5	4	е	D	D	D	D	D	D	D	D
3133	Textile and fabric finishing and fabric coating mills	2	50	26	h	D	D	D	D	D	D	D	D
31331	Textile and fabric finishing mills	2	28	9	g	D	D	D	D	D	D	D	D
313311 313312	Broadwoven fabric finishing mills Textile and fabric finishing	3	21	7	f	D	D	D	D	D	D	D	D
31332 313320	(except broadwoven fabric) mills Fabric coating mills Fabric coating mills	- 2 2	7 22 22	2 17 17	f g g	D D D	D D D	D D D	D D D	D D D	D D D	D D D	D D D
314	Textile product mills	4	166	28	h	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	2	67	9	f	D	D	D	D	D	D	D	D
31412 314121	Curtain and linen mills Curtain and drapery mills	2 2	63 56	8 6	f f	D D	D D	D D	D D	D D	D D	D D	D D
3149	Other textile product mills	4	99	19	g	D	D	D	D	D	D	D	D
31491 314912	Textile bag and canvas mills Canvas and related product	3	44	6	e	D	D	D	D	D	D	D	D
31499 314999	All other textile product mills All other miscellaneous textile	4 5	39 55	4 13	e g	D	DD	DDD	D	D	D	D	D
315	product mills	5 2	55 129	13 27	g h	D	D	D	D	D	D	D	D
3152	Cut and sew apparel manufacturing	1	92	22	h	D	D	D	D	D	D	D	D
31521	Cut and sew apparel contractors Women's, girls', and infants'	6	49	8	f	D	D	D	D	D	D	D	D
315212	cut and sew apparel	5	43	7	f	D	D	D	D	D	D	D	D
31522	Men's and boys' cut and sew apparel manufacturing	1	8	6	f	D	D	D	D	D	D	D	D
315222	Men's and boys' cut and sew suit, coat, and overcoat manufacturing	4	4	3	е	D	D	D	D	D	D	D	D
315225	Men's and boys' cut and sew				-								
31523	manufacturing Women's and girls' cut and sew apparel manufacturing	_	1 25	1 7	e f	D	D	D	D	D	D	D	D
315234	Women's and girls' cut and sew suit, coat, tailored jacket, and skirt			ŕ	ľ	D			D	D		5	5
315239	manufacturing Women's and girls' cut and sew other outerwear	-	3	2	f	D	D	D	D	D	D	D	D
3159	manufacturing	1	13	4	e	D	D	D	D	D	D	D	D
31599	Apparel manufacturing	8	33	4	е	D	D	D	D	D	D	D	D
01099	apparel manufacturing	8	33	4	е	D	D	D	D	D	D	D	D

See footnotes at end of table.

[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]

			A		All em	oloyees	Pro	duction work	kers				
NAICS			establis	hments <sup>2</sup> With 20									Total
code	Geographic area and industry	E1	Total	ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
316	Leather and allied product manufacturing	1	66	21	g	D	D	D	D	D	D	D	D
3161	Leather and hide tanning and finishing	2	19	7	е	D	D	D	D	D	D	D	D
31611 316110	Leather and hide tanning and finishing Leather and hide tanning and finishing	2	19 19	7	e	D	D	D	D	D	D	D	D
3162	Footwear manufacturing	-	19	8	f	D	D	D	D	D	D	D	D
31621 316211	Footwear manufacturing Rubber and plastics footwear manufacturing	-	19 6	8	f	D	D D	D D	D	D	D D	D	D
3169	Other leather and allied product manufacturing	1	28	6	f	D	D	D	D	D	D	D	D
31699 316993	Other leather and allied product manufacturing Personal leather goods	1	28	6	f	D	D	D	D	D	D	D	D
	(except women's handbag and purse) manufacturing	-	7	3	е	D	D	D	D	D	D	D	D
321	Wood product manufacturing	2	220	51	h	D	D	D	D	D	D	D	D
3211	Sawmills and wood preservation .	2	43	9	f	D	D	D	D	D	D	D	D
32111 321113	Sawmills and wood preservation Sawmills	2 2	43 38	9 9	f f	D D	D D	D D	D D	D D	D D	D D	D D
3219	Other wood product manufacturing	2	165	42	h	D	D	D	D	D	D	D	D
32191 321911	Millwork	1	63	12	g	D	D	D	D	D	D	D	D
321918	manufacturing Other millwork (including	-	23	7	f	D	D	D	D	D	D	D	D
32192	flooring) Wood container and pallet manufacturing	5 2	30 42	2	e f	D	D	D	D	D	D	D	D
321920	Wood container and pallet manufacturing	2	42	8	f	D	D	D	D	D	D	D	D
32199	All other wood product manufacturing	2	60	22	g	D	D	D	D	D	D	D	D
321992	Prefabricated wood building manufacturing	3	15	8	f	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product manufacturing	2	44	14	f	D	D	D	D	D	D	D	D
322	Paper manufacturing	1	145	93	j	D	D	D	D	D	D	D	D
3221	Pulp, paper, and paperboard mills	2	17	16	g	D	D	D	D	D	D	D	D
32212 322121	Paper mills Paper (except newsprint)	2	13	12	g	D	D	D	D	D	D	D	D
32213 322130	mills Paperboard mills Paperboard mills	2 3 3	13 4 4	12 4 4	g e e	D D D	D D D	D D D	D D D	D D D	D D D	D D D	D D D
3222	Converted paper product manufacturing	1	128	77	i	D	D	D	D	D	D	D	D
32221	Paperboard container manufacturing	1	61	39	h	D	D	D	D	D	D	D	D
322211	Corrugated and solid fiber box manufacturing	-	35	21	g	D	D	D	D	D	D	D	D
322212	Folding paperboard box manufacturing	2	16	11	g	D	D	D	D	D	D	D	D
32222 322222	Paper bag and coated and treated paper manufacturing Coated and laminated paper	2	30	16	h	D	D	D	D	D	D	D	D
32223	manufacturing Stationery product	2	26	12	h	D	D	D	D	D	D	D	D
322231	manufacturing Die-cut paper and	-	20	11	g	D	D	D	D	D	D	D	D
322232	paperboard office supplies manufacturing Envelope manufacturing	_ 1	6 10	3 7	f f	D D	D D	D D	D	D D	D D	D D	D D
32229 322299	Other converted paper product manufacturing All other converted paper	-	17	11	994	34 258	714	1 459	19 812	145 754	89 488	235 129	4 467
	product manufacturing	_	17	11	994	34 258	714	1 459	19 812	145 754	89 488	235 129	4 467

See footnotes at end of table.

[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]

			A	ull hments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
323	Printing and related support activities	2	910	194	16 258	639 323	11 435	22 140	388 139	1 383 869	764 847	2 148 688	D
3231	Printing and related support activities	2	910	194	16 258	639 323	11 435	22 140	388 139	1 383 869	764 847	2 148 688	D
32311 323110	Printing Commercial lithographic	2	<sup>7</sup> 813	174	j	D	D	D	D	D	D	D	D
323112	printing Commercial flexographic printing	1	r415 16	108 8	l l	D	D	D D	D	D	D	D	D
323113 323114	Commercial screen printing Quick printing	2 2 4 2	100 170	17 9	g	D	D	DDD	D	D			D D
323115 323116	Digital printing Manifold business forms		32	15	g f	D	D	D	D	D	D	D	D
323117	printing Books printing Other commercial printing	1 3	14	7	f g e	D	D D D	D	DDD	D D D	D D D		D
323119 32312 323121	Support activities for printing Tradebinding and related	6 2	45 197	2 20	g	D D	D	D D	D D	D	D	D	D
323122	work Prepress services	2 2	32 r65	8 12	f f	D D	D D	D D	DDD	D D	D D	D D	D D
324	Petroleum and coal products manufacturing	-	40	6	f	D	D	D	D	D	D	D	D
3241	Petroleum and coal products manufacturing	_	40	6	f	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, and saturated materials												
324121	manufacturing	-	33	6	f	D	D	D	D	D	D	D	D
324122	block manufacturing Asphalt shingle and coating	-	31	4	е	D	D	D	D	D	D	D	D
	materials manufacturing	-	2	2	е	D	D	D	D	D	D	D	D
325	Chemical manufacturing	2	'334	r139	j	D	D	D	D	D	D	D	D
3251	Basic chemical manufacturing	'2	31	11	f	D	D	D	D	D	D	D	D
32519 325199	Other basic organic chemical manufacturing All other basic organic	r1	12	7	f	D	D	D	D	D	D	D	D
	chemical manufacturing	r_	9	6	f	D	D	D	D	D	D	D	D
3252	Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	-	24	17	f	D	D	D	D	D	D	D	D
32521	Resin and synthetic rubber manufacturing	-	23	16	f	D	D	D	D	D	D	D	D
325211	Plastics material and resin manufacturing	-	19	15	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing	3	73	41	i	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing	3	73	41		D	D	D	D	D	D	D	D
325411	Medicinal and botanical manufacturing	3	15	6	e	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation manufacturing	3	33	15	i	D	D	D	D	D	D	D	D
325413 325414	In-vitro diagnostic substance manufacturing Biological product (except	2	10	9	g	D	D	D	D	D	D	D	D
	diagnostic) manufacturing	-	15	11	g	D	D	D	D	D	D	D	D
3255	Paint, coating, and adhesive manufacturing	1	'67	<sup>r</sup> 24	g	D	D	D	D	D	D	D	D
32551	Paint and coating manufacturing	1	38	13	f	D	D	D	D	D	D	D	D
325510	Paint and coating manufacturing	1	38	13	f	D	D	D	D	D	D	D	D
32552 325520	Adhesive manufacturing Adhesive manufacturing	-	<sup>r</sup> 29 r29	r11 r11	f	D D	D D	D D	D	D D	D	D	D
3256	Soap, cleaning compound, and toilet preparation manufacturing.	1	42	13	g	D	D	D	D	D	D	D	D
32561	Soap and cleaning compound manufacturing	4	36	11	f	D	D	D	D	D	D	D	D
325612 32562	Polish and other sanitation good manufacturing Toilet preparation	7	15	5	е	D	D	D	D	D	D	D	D
325620	manufacturing Toilet preparation	-	6	2	f	D	D	D	D	D	D	D	D
	manufacturing	- 1	6	2	l fl	D	D	D	D	D	D	D	D

See footnotes at end of table.

[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]

			A establis	II hments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
325 3259	Chemical manufacturing—Con. Other chemical product and preparation manufacturing	2	85	32	h	D	D	D	D	D	D	D	D
32591 325910 32599	Printing ink manufacturing Printing ink manufacturing All other chemical product and	5 5	20 20	7 7	e e	D D	D D	D D	D D	D D	D D	D D	D D
325991	preparation manufacturing Custom compounding of	1	64	25	h	D	D	D	D	D	D	D	D
325992	purchased resins Photographic film, paper, plate, and chemical	2	26	12	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product and	-	31	3 10	g	D	D	D	D	D	D	D	D
326	preparation manufacturing . Plastics and rubber products				g								
3261	manufacturing	1 1	357 313	179 163	18 965 j	636 123 D	14 140 D	26 414 D	389 852 D	'1 804 008 D	1 366 432 D	'3 177 304 D	D D
32611	Plastics packaging materials and unlaminated film and												
326111 326113	sheet manufacturing Plastics bag manufacturing Unlaminated plastics film and	-	33 7	18 5	g e	D	D D	D D	D	D D	D D	D D	D D
32612	sheet (except packaging) manufacturing Plastics pipe, pipe fitting, and unlaminated profile shape	1	22	11	f	D	D	D	D	D	D	D	D
326121	manufacturing Unlaminated plastics profile	1	'23	'11	f	D	D	D	D	D	D	D	D
32613	shape manufacturing Laminated plastics plate, sheet, (except packaging), and	-	19	10	f	D	D	D	D	D	D	D	D
326130	shape manufacturing Laminated plastics plate, sheet, (except packaging),	1	10	5	е	D	D	D	D	D	D	D	D
32614	and shape manufacturing Polystyrene foam product	1	10	5	е	D	D	D	D	D	D	D	D
326140	manufacturing Polystyrene foam product manufacturing	2 2	12 12	7	e e	D	D D	D	D	D	D	D	D
32615	Urethane and other foam product (except polystyrene) manufacturing	- 1	17	10	f	D	D	D	D	D	D	D	D
326150	Urethane and other foam product (except polystyrene) manufacturing	1	17	10	f	D	D	D	D	D	D	D	D
32616 326160	Plastics bottle manufacturing Plastics bottle manufacturing	- -	11	10 10	f	D	D D	D	D	D	D	D	D D
32619	Other plastics product manufacturing	1	·207	r102	i	D	D	D	D	D	D	D	D
326199	All other plastics product manufacturing	1	'205	'102	j	D	D	D	D	D	D	D	D D
3262 32622	Rubber product manufacturing Rubber and plastics hoses and	3	44	16	g	D	D	D		D	D	D	
326220	belting manufacturing Rubber and plastics hoses	3	8	5	е	D	D	D	D	D	D	D	D
32629	and belting manufacturing Other rubber product manufacturing	3 2	8 33	5 11	e	D	D	D	D	D	D	D	D
326291	Rubber product manufacturing for mechanical use	2	10	4	g	D	D	D	D	D	D	D	D
326299	All other rubber product manufacturing	3	23	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	2	236	91	8 563	378 851	5 944	12 754	212 163	893 715	586 159	1 480 370	D
3271	Clay product and refractory manufacturing	2	30	13	f	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, and plumbing fixture	0	01				D	D				D	D
32712	manufacturing Clay building material and refractories manufacturing	3 1	21 9	8 5	e	D	D	D	D	D	D	D	D
327125	Nonclay refractory manufacturing	-	3	2	e	D	D	D	D	D	D	D	D
3272	Glass and glass product manufacturing	3	44	9	g	D	D	D	D	D	D	D	D
32721	Glass and glass product manufacturing	3	44	9	g	D	D	D	D	D	D	D	D
327212	Other pressed and blown glass and glassware	-											
327215	manufacturing Glass product manufacturing made of purchased glass	1 4	12 31	1 7	e g	D	D	D	D	D	D	D	D D

See footnotes at end of table.

[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]

			,										
			establis	hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
327 3273	Nonmetallic mineral product manufacturing—Con. Cement and concrete product manufacturing	3	82	37	g	D	D	D	D	D	D	D	D
32732	Ready-mix concrete manufacturing	4	32	18	a	D	D	D	D	D	D	D	D
327320	Ready-mix concrete manufacturing	4	32	18	g g	D	D	D	D	D	D	D	D
32733	manufacturing	3	16	5	e	D	D	D	D	D	D	D	D
32739	Other concrete product manufacturing Other concrete product	1	33	14	f	D	D	D	D	D	D	D	D
327390	manufacturing	1	33	14	f	D	D	D	D	D	D	D	D
3274	Lime and gypsum product manufacturing	-	9	4	е	D	D	D	D	D	D	D	D
32742	Gypsum product manufacturing	_	8	4	е	D	D	D	D	D	D	D	D
327420	Gypsum product manufacturing		8	4	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product manufacturing	1	71	28	h	D	D	D	D	D	D	D	D
32791	Abrasive product manufacturing	_	17	12	g	D	D	D	D	D	D	D	D
327910	Abrasive product manufacturing All other nonmetallic mineral	_	17	12	g	D	D	D	D	D	D	D	D
32799	product manufacturing	3	54	16	g	D	D	D	D	D	D	D	D
327991 327999	Cut stone and stone product manufacturing	5	36	9	f	D	D	D	D	D	D	D	D
327999	All other miscellaneous nonmetallic mineral product manufacturing	-	14	7	е	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	-	86	37	h	D	D	D	D	D	D	D	D
3312	Steel product manufacturing from purchased steel	1	13	6	е	D	D	D	D	D	D	D	D
33122	Rolling and drawing of purchased steel	1	11	4	е	D	D	D	D	D	D	D	D
331222 3313	Steel wire drawing	2	10	4	e	D	D	D	D	D	D	D	D
33131	Alumina and aluminum	1	11	6	ſ	D	D	D	D	D	D	D	D
3314	production and processing Nonferrous metal (except			0		D	D	U	D		D	D	D
	aluminum) production and processing	1	19	8	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, and alloying	2	8	5	f	D	D	D	D	D	D	D	D
331422 33149	Copper wire (except mechanical) drawing Nonferrous metal (except	-	6	4	e	D	D	D	D	D	D	D	D
331492	copper and aluminum) rolling, drawing, extruding, and alloying	-	9	2	e	D	D	D	D	D	D	D	D
	metal (except copper and aluminum)	-	6	2	е	D	D	D	D	D	D	D	D
3315	Foundries	-	43	17	h	D	D	D	D	D	D	D	D
33151 331512 33152	Ferrous metal foundries Steel investment foundries Nonferrous metal foundries	-	13 1 30	6 1 11	g g	D D D	D D D	D D D	D D D	D D D			D D D
331521	Aluminum die-casting foundries	_	4	3	9 f	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	-	17	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	1	'1 517	<sup>r</sup> 411	k	D	D	D	D	D	D	D	D
3321	Forging and stamping	1	64	23	g	D	D	D	D	D	D	D	D
33211 332111 332116 332117	Forging and stamping Iron and steel forging Metal stamping Powder metallurgy part	$\frac{1}{3}$	64 7 42	23 2 15	g f g		D D D		D D D	D D D	D D D	D D D	D D D
	manufacturing	1	5	2	е	D	D	D	D	D	D	D	D

See footnotes at end of table.

[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]

	aning of appreviations and sympols, see			MI hments <sup>2</sup>	All em	oloyees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
332	Fabricated metal product												
3322	manufacturing—Con. Cutlery and handtool manufacturing	-	35	16	h	D	D	D	D	D	D	D	D
33221	Cutlery and handtool	_	35	16	h	D	D	D	D	D	D	D	D
332211	manufacturing Cutlery and flatware (except precious) manufacturing	_	3	3	g	D	D	D	D	D	D	D	D
332212	Hand and edge tool	1	30	12	g	D	D	D	D	D	D	D	D
332213	manufacturing Saw blade and handsaw manufacturing	_	2	1	e	D	D	D	D	D	D	D	D
3323	Architectural and structural metals manufacturing	2	289	96	i	D	D	D	D	D	D	D	D
33231	Plate work and fabricated												
332311	structural product manufacturing Prefabricated metal building and component	2	73	29	g	D	D	D	D	D	D	D	D
332312	manufacturing Fabricated structural metal	-	6	2	e	D	D	D	D	D	D	D	D
332313 33232	manufacturing Plate work manufacturing Ornamental and architectural	2 2	50 17	19 8	g e	D D	D D	D D	D	D D	D D	D D	D D
332321	metal products manufacturing Metal window and door	2	216	67	h	D	D	D	D	D	D	D	D
332322	manufacturing Sheet metal work	3	15	7	е	D	D	D	D	D	D	D	D
332323	Ornamental and architectural metal work manufacturing	2 3	143 58	48 12	h f	D D	D D	D D	D	D D	D D	D D	D
3324	Boiler, tank, and shipping container manufacturing	2	28	15	g	D	D	D	D	D	D	D	D
33241	Power boiler and heat exchanger manufacturing	_	7	5	е	D	D	D	D	D	D	D	D
332410	Power boiler and heat exchanger manufacturing	_	7	5	e	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge)	5	7	5	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) manufacturing	5	7	5	f	D	D	D	D	D	D	D	D
33243	manufacturing Metal can, box, and other metal container (light gauge)					_	_	_	_	_	_	_	_
	manufacturing	-	14	5	e	D	D	D	D	D	D	D	D
3325	Hardware manufacturing	3	11	6	T f	D	D	D	D	D	D	D	D
33251 332510 3326	Hardware manufacturing Hardware manufacturing Spring and wire product	3 3	11 11	6 6	f	D	D	D	D	D	D	D	D D
0020	manufacturing	1	37	12	f	D	D	D	D	D	D	D	D
33261	Spring and wire product manufacturing	1	37	12	f	D	D	D	D	D	D	D	D
332612	Spring (light gauge) manufacturing	_	6	3	е	D	D	D	D	D	D	D	D
332618	Other fabricated wire product manufacturing	2	30	9	f	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	2	725	141	8 925	376 709	6 530	12 904	244 192	748 645	306 001	1 061 690	D
33271	Machine shops	3	617	94	0 323 i	0/0 /05 D	0 330 D	12 304 D	D	740 040 D	D	D	D
332710 33272	Machine shops Turned product and screw, nut,	3	617	94	i	Ď	Ď	Ď	Ď	Ď	Ď	Ď	D
332721	and bolt manufacturing Precision turned product	1	108	47	h	D	D	D	D	D	D	D	D
332722	manufacturing Bolt, nut, screw, rivet, and	1	83	35	g	D	D	D	D	D	D	D	D
3328	washer manufacturing Coating, engraving, heat treating,	1	25	12	716	29 090	507	970	17 040	55 530	37 421	94 751	D
00001	and allied activities	1	r170	r44	h	D	D	D	D	D	D	D	D
33281 332812	Coating, engraving, heat treating, and allied activities Metal coating, engraving (except jewelry and	1	r170	r44	h	D	D	D	D	D	D	D	D
332813	silverware), and allied services to manufacturers Electroplating, plating, polishing, anodizing, and	1	r79	<sup>r</sup> 18	g	D	D	D	D	D	D	D	D
	coloring	2	75	21	g	D	D	D	D	D	D	D	D

See footnotes at end of table.

[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]

			A		All em	ployees	Pro	duction work	kers				
NAICS			establis										
code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
332	Fabricated metal product												
3329	manufacturing—Con. Other fabricated metal product manufacturing	-	158	58	i	D	D	D	D	D	D	D	D
33291 332911	Metal valve manufacturing Industrial valve	-	33	18	h	D	D	D	D	D	D	D	D
332912	manufacturing Fluid power valve and hose	-	20	12	g	D	D	D	D	D	D	D	D
332913	fitting manufacturing Plumbing fixture fitting and	-	5	3	е	D	D	D	D	D	D	D	D
33299	trim manufacturing All other fabricated metal	-	2	1	e	D	D	D	D	D	D	D	D
332991	product manufacturing Ball and roller bearing	-	125	40	h	D	D	D	D	D	D	D	D
332993	manufacturing Ammunition (except small	-	3	2	T	D	D	D	D	D	D	D	D
332994 332999	arms) manufacturing Small arms manufacturing All other miscellaneous	_	3 4	2 3	g f	D D	D D	D	D	D	D	D	D D
332999	fabricated metal product manufacturing	1	97	29	g	D	D	D	D	D	D	D	D
333	Machinery manufacturing	2	648	234	k	D	D	D	D	D	D	D	D
3331	Agriculture, construction, and mining machinery manufacturing	3	21	9	f	D	D	D	D	D	D	D	D
33312	Construction machinery	Ū		Ū		5	5	5		5	5	5	5
333120	manufacturing Construction machinery manufacturing	6 6	11 11	6 6	e e	D D	D D	D D	D	D D	D	D	D
3332	Industrial machinery manufacturing	3	146	59	j	D	D	D	D	D	D	D	D
33322	Plastics and rubber industry machinery manufacturing	4	23	9		D	D	D	D	D	D	D	D
333220	Plastics and rubber industry machinery manufacturing	4	23	9	g g	D	D	D		D	D	D	D
33329	Other industrial machinery manufacturing	3	114	49	y i	D	D	D	D	D	D	D	D
333291	Paper industry machinery manufacturing	4	14	5	f	D	D	D	D	D	D	D	D
333293	Printing machinery and equipment manufacturing	_	15	10	g	D	D	D	D	D	D	D	D
333294	Food product machinery manufacturing	1	14	4	е	D	D	D	D	D	D	D	D
333295	Semiconductor machinery manufacturing	3	22	13	h	D	D	D	D	D	D	D	D
333298	All other industrial machinery manufacturing	5	36	14	h	D	D	D	D	D	D	D	D
3333	Commercial and service industry machinery manufacturing	1	100	44	4 467	212 637	2 478	5 158	86 507	419 269	308 029	719 742	D
33331	Commercial and service industry machinery												
333314	manufacturing Optical instrument and lens	1	100	44	4 467	212 637	2 478	5 158	86 507	419 269	308 029	719 742	D
333315	manufacturing Photographic and	-	53	25	h	D	D	D	D	D	D	D	D
	photocopying equipment manufacturing	5	10	5	е	D	D	D	D	D	D	D	D
333319	Other commercial and service industry machinery						5						5
3334		3	32	14	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, air- conditioning, and commercial refrigeration equipment	5	31	13		D	D	D	D	D	D	D	D
33341	manufacturing	5	31	13	g	D	U	U		U	U	U	U
00041	conditioning, and commercial refrigeration equipment												
333411	manufacturing Air purification equipment	5	31	13	g	D	D	D	D	D	D	D	D
333414	manufacturing	7	8	5	е	D	D	D	D	D	D	D	D
333415	warm air furnaces) manufacturing Air-conditioning and warm air	1	9	4	е	D	D	D	D	D	D	D	D
	heating equipment and commercial and industrial refrigeration equipment manufacturing	7	10	2	f	D	D	D	D	D	D	D	D

[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]

1 01 1116				-									
			establis	ll hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
333 3335	Machinery manufacturing—Con. Metalworking machinery manufacturing	1	190	42	h	D	D	D	D	D	D	D	D
33351	Metalworking machinery manufacturing	1	190	42	h	D	D	D	D	D	D	D	D
333511	Industrial mold	2	55	14	g	D	D	D	D	D	D	D	D
333512	manufacturing Machine tool (metal cutting types) manufacturing	5	11	6	e	D	D	D	D	D	D	D	D
333514	Special die and tool, die set, jig, and fixture	-		_		_	_	_	_	_	_	_	_
333515	manufacturing Cutting tool and machine tool	3	60	5	e	D	D	D	D	D	D	D	D
333516	accessory manufacturing Rolling mill machinery and	1	39	9	T	D	D	D	D	D	D	D	D
3336	equipment manufacturing Engine, turbine, and power	-	3	'	e	U	U	U		U	U	D	D
0000	transmission equipment manufacturing	3	15	8	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, and power			Ū		5	2	5		5	5	2	5
333611	transmission equipment manufacturing Turbine and turbine	3	15	8	f	D	D	D	D	D	D	D	D
333613	generator set units manufacturing Mechanical power	6	4	3	е	D	D	D	D	D	D	D	D
000010	transmission equipment manufacturing	-	2	1	e	D	D	D	D	D	D	D	D
3339	Other general purpose machinery manufacturing	1	145	59	i	D	D	D	D	D	D	D	D
33391	Pump and compressor manufacturing	1	17	10	g	D	D	D	D	D	D	D	D
333911	Pump and pumping equipment manufacturing	_	9	4	f	D	D	D	D	D	D	D	D
333912	Air and gas compressor manufacturing	2	7	5	f	D	D	D	D	D	D	D	D
33392	Material handling equipment manufacturing	4	18	9	f	D	D	D	D	D	D	D	D
333922	Conveyor and conveying equipment manufacturing	1	9	4	е	D	D	D	D	D	D	D	D
33399	All other general purpose machinery manufacturing	1	110	40	h	D	D	D	D	D	D	D	D
333993 333994	Packaging machinery manufacturing Industrial process furnace	2	14	5	е	D	D	D	D	D	D	D	D
333999	and oven manufacturing All other miscellaneous	-	18	8	f	D	D	D	D	D	D	D	D
000000	general purpose machinery manufacturing	1	61	20	g	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	1	957	488	86 205	4 863 399	35 823	70 980	1 359 145	15 419 598	10 013 168	25 764 997	688 045
3341	Computer and peripheral equipment manufacturing	1	104	45	i	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	1	104	45	i	D	D	D	D	D	D	D	D
334111	Electronic computer manufacturing	1	25	14	g	D	D	D	D	D	D	D	D
334112	Computer storage device manufacturing	-	10	5	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment manufacturing	3	64	26	h	D	D	D	D	D	D	D	D
3342	Communications equipment manufacturing	1	127	82	j	D	D	D	D	D	D	D	D
33421	Telephone apparatus manufacturing	1	47	36	i	D	D	D	D	D	D	D	D
334210	Telephone apparatus manufacturing	1	47	36	i	D	D	D	D	D	D	D	D
33422	Radio and television broadcasting and wireless communications equipment												
334220	manufacturing Radio and television broadcasting and wireless	4	58	35	h	D	D	D	D	D	D	D	D
33429	communications equipment manufacturing Other communications	4	58	35	h	D	D	D	D	D	D	D	D
334290	equipment manufacturing Other communications	1	22	11	h	D	D	D	D	D	D	D	D
20.200	equipment manufacturing	1	22	11	h	D	D	D	D	D	D	D	D

See footnotes at end of table.

[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]

			Δ	ull hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry		establis	With 20 em- ploy-							Total cost of	Total value of	Total capital expendi-
		E1	Total	ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	materials (\$1,000)	shipments (\$1,000)	tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
334	Computer and electronic product manufacturing – Con.												
3343	Audio and video equipment manufacturing	2	20	9	g	D	D	D	D	D	D	D	D
33431	Audio and video equipment manufacturing	2	20	9	g	D	D	D	D	D	D	D	D
334310	Audio and video equipment manufacturing	2	20	9	g	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	_	356	183	k	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component												
334411	manufacturing Electron tube manufacturing .	-	356 7	183 3	k f	D D	D D	D D	D	D D	D D	D D	D D
334412 334413	Bare printed circuit board manufacturing Semiconductor and related	-	57	31	i	D	D	D	D	D	D	D	D
334416	device manufacturing Electronic coil, transformer,	-	82	43	i	D	D	D	D	D	D	D	D
334417	and other inductor manufacturing Electronic connector	-	18	5	f	D	D	D	D	D	D	D	D
334417	manufacturing Printed circuit assembly	1	18	10	f	D	D	D	D	D	D	D	D
	(electronic assembly) manufacturing	1	71	51	h	D	D	D	D	D	D	D	D
334419	Other electronic component manufacturing	-	96	37	h	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	316	157	k	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control												
334510	instruments manufacturing Electromedical and electrotherapeutic	-	316	157	k	D	D	D	D	D	D	D	D
334511	apparatus manufacturing Search, detection, navigation, guidance, aeronautical, and nautical	2	40	21	h	D	D	D	D	D	D	D	D
334512	system and instrument manufacturing Automatic environmental control manufacturing for	-	41	19	j	D	D	D	D	D	D	D	D
334513	residential, commercial, and appliance use Instruments and related products manufacturing for	4	10	6	f	D	D	D	D	D	D	D	D
334515	measuring, displaying, and controlling industrial process variables	_	43	26	h	D	D	D	D	D	D	D	D
334515	measuring and testing electricity and electrical signals	2	52	25	i	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument manufacturing	-	45	18	h	D	D	D	D	D	D	D	D
334517	Irradiation apparatus manufacturing	-	16	11	h	D	D	D	D	D	D	D	D
334518 334519	Watch, clock, and part manufacturing Other measuring and	-	7	4	е	D	D	D	D	D	D	D	D
001010	controlling device manufacturing	1	55	22	h	D	D	D	D	D	D	D	D
3346	Manufacturing and reproducing magnetic and optical media	3	34	12	g	D	D	D	D	D	D	D	D
33461	Manufacturing and reproducing magnetic and optical media	3	34	12		D	D	D	D	D	D	D	D
334611 334612	Software reproducing Prerecorded compact disc (except software), tape, and	-	5	3	g 461	18 279	363	720	12 203	39 946	21 132	61 094	1 004
334613	record reproducing Magnetic and optical recording media	7	20	6	f	D	D	D	D	D	D	D	D
335	manufacturing Electrical equipment, appliance, and component manufacturing	1	9 219	3 105	e	D	D	D	D	D	D	D	D
3351	Electric lighting equipment		219	105	J h	D	D	D	D D	D	D	D	D
33511	manufacturing		24		n								
335110	manufacturing Electric lamp bulb and part manufacturing	-	3 3	2 2	g g	D	D D	D	D	D	D	D D	D D

[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]

	aning of abbreviations and symbols, see		A	II hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
335 3351	Electrical equipment, appliance, and component manufacturing—Con. Electric lighting equipment manufacturing—Con.												
33512 335122	Lighting fixture manufacturing Commercial, industrial, and institutional electric lighting	1	21	9	g	D	D	D	D	D	D	D	D
335129	fixture manufacturing Other lighting equipment manufacturing	-	5 8	3 4	f e	D D	D D	D D	D D	D D	D D	D D	D D
3353	Electrical equipment manufacturing	2	73	32	h	D	D	D	D	D	D	D	D
33531 335312	Electrical equipment manufacturing Motor and generator	2	73	32	h	D	D	D	D	D	D	D	D
335313	manufacturing Switchgear and switchboard _apparatus manufacturing	2	18 7	10 4	g f	D D	D D	D D	D D	D	D D	D	D D
335314	Relay and industrial control manufacturing	3	41	16	h	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing	1	117	60	i 400	D	D	D	D	D	D	D	D
33591 33592	Battery manufacturing Communication and energy wire and cable manufacturing.	1	6 33	4 24	400 h	16 490 D	324 D	644 D	11 577 D	25 439 D	16 498 D	41 320 D	1 185 D
335921 335929	Fiber optic cable manufacturing Other communication and	-	9	6	е	D	D	D	D	D	D	D	D
33593	energy wire manufacturing . Wiring device manufacturing	2	24 28	18 16	h h	D D	D D	D D	D D	D D	D D	D D	D D
335931 33599	Current-carrying wiring device manufacturing All other electrical equipment	-	26	15	h	D	D	D	D	D	D	D	D
335999	and component manufacturing All other miscellaneous electrical equipment and	4	50	16	h	D	D	D	D	D	D	D	D
336	component manufacturing	4	44	14	h	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer	-	148	53	i	D	D	D	D	D	D	D	D
33621	manufacturing	1	24	10	f	D	D	D	D	D	D	D	D
336211	Motor vehicle body and trailer manufacturing	1	24 14	10 7	f e	D D	D D	D D	D	D D	D D	D D	D D
3363	Motor vehicle parts manufacturing	2	64	25	h	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine and engine parts manufacturing		12	1	е	D	D	D	D	D	D	D	D
336312 33632	Gasoline engine and engine parts manufacturing Motor vehicle electrical and	_	12	1	e	D	D	D	D	D	D	D	D
336322	electronic equipment manufacturing Other motor vehicle electrical	4	21	8	е	D	D	D	D	D	D	D	D
	and electronic equipment manufacturing	4	21	8	е	D	D	D	D	D	D	D	D
33634 336340	Motor vehicle brake system manufacturing Motor vehicle brake system	-	6	2	e	D	D	D	D	D	D	D	D
33635	manufacturing Motor vehicle transmission and	-	6	2	е	D	D	D	D	D	D	D	D
336350	power train parts manufacturing Motor vehicle transmission and power train parts	-	2	2	f	D	D	D	D	D	D	D	D
33637	manufacturing Motor vehicle metal stamping	-	2 10	2 5	f e	D D	D D	D D	D D	D D	D D	D D	D D
336370 33639	Motor vehicle metal stamping Other motor vehicle parts	1	10	5	е	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts manufacturing	2	9 9	3 3	f	D D	D	D D	D	D	D	D	D D
3364	Aerospace product and parts manufacturing	_	17	11	i	D	D	D	D	D	D	D	D
33641	Aerospace product and parts	_	17	11	:	D	D	D	D	D	D	D	D
336412	manufacturing Aircraft engine and engine parts manufacturing		12	11	i	ם	D	ם	D	ם	ם	D	D

See footnotes at end of table.

[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]

			Δ	MI hments <sup>2</sup>	All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
336	Transportation equipment manufacturing—Con.												
3366	Ship and boat building	3	32	4	е	D	D	D	D	D	D	D	D
33661 336612	Ship and boat building Boat building	3 4	32 22	4 3	e e	D D	D D	D D	D	D D	D D	D D	D D
337	Furniture and related product manufacturing	1	382	81	i	D	D	D	D	D	D	D	D
3371	Household and institutional furniture and kitchen cabinet manufacturing	1	276	45	h	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet and countertop manufacturing	3	143	15	g	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet and countertop manufacturing	3	143	15	g	D	D	D	D	D	D	D	D
33712	Household and institutional furniture manufacturing	1	133	30	h	D	D	D	D	D	D	D	D
337121 337122	Upholstered household furniture manufacturing Nonupholstered wood	-	17	4	е	D	D	D	D	D	D	D	D
	household furniture manufacturing	1	86	17	g	D	D	D	D	D	D	D	D
337127	Institutional furniture manufacturing	-	19	7	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) manufacturing	2	86	30	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) manufacturing	2	86	30	g	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork and millwork manufacturing		49	16	-	D	D	D	D	D	D	D	D
337214	Office furniture (except wood) manufacturing		43	2	g f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, and locker				,								
3379	manufacturing Other furniture related product	3	25	11	t	D	D	D	D	D	D	D	D
33791	manufacturing Mattress manufacturing	-	20 10	6 5	f	D	D D	D D	D	D	D	D	D
337910 339	Mattress manufacturing Miscellaneous manufacturing	- 2	10 826	5 219	f 25 273	D 1 050 489	D 15 069	D 29 695	D 443 442	D 2 731 924	D 1 457 416	D 4 234 856	D
3391	Medical equipment and supplies				25 275								
33911	manufacturing	3	332	102	1	D	D	D	D	D	D	D	D
339111	supplies manufacturing Laboratory apparatus and	3	332	102	j	D	D	D	D	D	D	D	D
339112	furniture manufacturing Surgical and medical	3	30	15	g	D	D	D	D	D	D	D	D
339113	instrument manufacturing Surgical appliance and supplies manufacturing	4	84 44	48	1	D	D	D	D	D	D	D	D
339115	Ophthalmic goods manufacturing	2	14	20 6	g	D	D	D	D	D	D	D	D
339116	Dental laboratories	5	146	12	g	Ď	D	Ď	Ď	Ď	Ď	D	D
3399	Other miscellaneous manufacturing	2	494	117	j	D	D	D	D	D	D	D	D
33991	Jewelry and silverware manufacturing	_	42	7	f	D	D	D	D	D	D	D	D
339912	Silverware and hollowware manufacturing	_	5	2	е	D	D	D	D	D	D	D	D
33992	Sporting and athletic goods manufacturing	4	36	11	g	D	D	D	D	D	D	D	D
339920	Sporting and athletic goods manufacturing	4	36	11	g	D	D	D	D	D	D	D	D
33993	Doll, toy, and game manufacturing	4	20	7	е	D	D	D	D	D	D	D	D
339932 33994	Game, toy, and children's vehicle manufacturing	4	19	7	е	D	D	D	D	D	D	D	D
33994 33995	Office supplies (except paper) manufacturing	1 3	20 141	4 20	e	D	D	D	D	D	D	D	D
33995 339950 33999	Sign manufacturing Sign manufacturing All other miscellaneous	3	141	20	g g	D	D	D	D	D	D	D	D
339991	Gasket, packing, and sealing	1	235	68	i	D	D	D	D	D	D	D	D
339992	device manufacturing	1	30	18	h	D	D	D	D	D	D	D	D
339994	manufacturing Broom, brush, and mop	1	25	8	f	D	D	D	D	D	D	D	D
339995	manufacturing Burial casket manufacturing .	3	6 5	4 3	e e	D D	D D	D D	D	D D	D D	D D	D D
339999	All other miscellaneous manufacturing	2	166	34	h	D	D	D	D	D	D	D	D

[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]

			A	JI	<b>All am</b>		Der		leava				
			establis	hments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area												
31-33	Manufacturing	1	5 872	1 910	232 033	r10 952 280	'131 012	258 296	r4 579 130	'32 338 591	<sup>1</sup> 22 739 496	<sup>r</sup> 55 561 592	1 574 558
311	Food manufacturing	2	513	149	16 027	<sup>r</sup> 543 061	10 704	20 512	<sup>r</sup> 287 840	1 882 246	2 233 206	4 108 291	75 273
3113	Sugar and confectionery product manufacturing	4	53	9	g	D	D	D	D	D	D	D	D
31132	Chocolate and confectionery manufacturing from cacao					_	_	_	_	_	_	_	_
311320	beans Chocolate and confectionery manufacturing from cacao	9	6	1	e	D	D	D	D	D	D	D	D
31133	beans Confectionery manufacturing from purchased chocolate	9	6 33	1	e 628	19 824	D 518	D 1 054	14 709	62 023	39 848	101 298	D
311330	from purchased chocolate	1	33	5	628	19 824	518	1 054	14 709	62 023	39 848	101 298	D
31134 311340	Nonchocolate confectionery manufacturing Nonchocolate confectionery	-	14	3	е	D	D	D	D	D	D	D	D
	manufacturing	-	14	3	e	D	D	D	D	D	D	D	D
3114	Fruit and vegetable preserving and specialty food manufacturing	-	17	9	455	16 572	323	651	8 553	125 253	46 268	174 650	3 283
3115	Dairy product manufacturing	-	28	9	2 107	100 337	1 208	2 393	48 082	535 642	632 274	1 162 956	20 796
31151	Dairy product (except frozen)	_	13	5	g	D	D	D	D	D	D	D	D
311511 31152	Fluid milk manufacturing Ice cream and frozen dessert	-	10	5	g	D	D	D	D	D	D	D	D
311520	manufacturing Ice cream and frozen dessert	1	15 15	4	e	D	D	D	D	D	D	D	D
3116	manufacturing Animal slaughtering and processing	-	23	13	e 1 721	52 555	1 219	2 388	28 500	135 215	243 470	377 169	5 372
31161	Animal slaughtering and		23	10	1 701	50 555	1 010	0.000	00 500	105 015	243 470	077 100	F 070
311611	processing Animal (except poultry) slaughtering	1	6	13 1	1 721 e	52 555 D	1 219 D	2 388 D	28 500 D	135 215 D	243 470 D	377 169 D	5 372 1 095
311612	Meat processed from carcasses	-	12	8	1 194	41 072	824	1 819	22 913	98 400	221 143	319 042	D
3117	Seafood product preparation and packaging	4	35	17	2 486	95 686	1 693	3 260	43 470	320 002	455 619	782 735	D
31171 311712	Seafood product preparation and packaging Fresh and frozen seafood	4	35	17	2 486	95 686	1 693	3 260	43 470	320 002	455 619	782 735	D
511712	processing	4	30	15	2 384	93 485	1 603	3 079	41 824	315 847	447 534	770 518	D
3118	Bakeries and tortilla manufacturing	3	273	63	4 928	'129 077	3 060	5 659	'71 137	326 668	187 748	512 719	D
31181	Bread and bakery product manufacturing	3	256	58	h	D	D	D	D	D	D	D	D
311811 311812 311813	Retail bakeries Commercial bakeries Frozen cakes, pies, and other pastries	3 3	174 67	25 25	g 2 565	D 79 149	D 1 737	D 3 525	D 45 347	D 207 714	D 103 759	D 310 580	D 9 517
31182	manufacturing Cookie, cracker, and pasta	2	15	8	e	D	D	D	D	D	D	D	D
3119	manufacturing Other food manufacturing	2	15 73	4 25	e h	D	D	D	D	D	D	D	D
31191	Snack food manufacturing	-	8	3	e	D	D	D	D	D	D	D	D
311911 31192	Roasted nuts and peanut butter manufacturing Coffee and tea manufacturing .	-	4	3	e 259	D 10 989	D 122	D 250	D 3 819	D 34 782	D 46 099	D 81 058	D
311920	Coffee and tea manufacturing	1	4	3	259	10 989	122	250	3 819	34 782	46 099	81 058	D
31194 311941	Seasoning and dressing manufacturing Mayonnaise, dressing, and	1	13	6	805	35 304	468	948	15 376	54 702	252 439	306 696	3 197
31199 311991	other prepared sauce manufacturing All other food manufacturing Perishable prepared food	1 3	6 47	4 13	f g	D D	D D	D D	D D	D D	D D	D D	D D
311991	Manufacturing	1	15	9	f	D	D	D	D	D	D	D	D
	manufacturing	5	32	4	е	D	D	D	D	D	D	D	D

See footnotes at end of table.

[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]

			-	JI	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area – Con.												
312	Beverage and tobacco product manufacturing	1	30	13	1 943	92 605	1 114	2 435	45 449	409 634	568 392	979 187	28 610
3121	Beverage manufacturing	1	30	13	1 943	92 605	1 114	2 435	45 449	409 634	568 392	979 187	28 610
31211	Soft drink and ice manufacturing	_	14	8	1 239	50 743	783	1 626	28 156	193 991	445 612	640 480	D
312111 31212 312120	Soft drink manufacturing Breweries Breweries		5 12 12	5 4 4	1 011 e e	41 572 D D	685 D D	1 428 D D	25 038 D D	160 629 D D	428 885 D D	591 133 D D	D D D
313	Textile mills	1	68	33	3 569	129 086	2 613	5 348	75 674	295 369	383 404	699 545	D
3131	Fiber, yarn, and thread mills	-	6	2	e	D	D	D	D	D	D	D	703
31311 313111	Fiber, yarn, and thread mills Yarn spinning mills	-	6 2	2 1	e e	D D	D D	D D	D	D D	D D	D	703 D
3132	Fabric mills	2	27	12	f	D	D	D	D	D	D	D	D
31322 313221	Narrow fabric mills and schiffli machine embroidery Narrow fabric mills	8 8	7	4	e	D	D	D	D	D	D	D	D D
31323 313230	Nonwoven fabric mills Nonwoven fabric mills	1	9 9	4 4	450 450	20 045 20 045	336 336	699 699	12 464 12 464	28 936 28 936	32 438 32 438	68 846 68 846	D
3133	Textile and fabric finishing and fabric coating mills	1	35	19	2 155	79 649	1 454	2 997	41 578	205 172	253 386	463 149	D
31331	Textile and fabric finishing mills	-	20	7	1 183	35 743	833	1 614	22 880	105 591	92 838	203 540	D
313311 313312	Broadwoven fabric finishing mills	2	14	5	e	D	D	D	D	D	D	D	D
31332 313320	mills Fabric coating mills Fabric coating mills	22	6 15 15	2 12 12	f 972 972	D 43 906 43 906	D 621 621	D 1 383 1 383	D 18 698 18 698	D 99 581 99 581	D 160 548 160 548	D 259 609 259 609	D 7 414 7 414
314	Textile product mills	5	125	21	2 182	63 955	1 549	3 133	40 509	131 442	149 163	282 978	3 673
3141	Textile furnishings mills	2	48	7	695	18 563	510	972	9 828	40 806	63 037	104 611	1 230
31412 314121	Curtain and linen mills Curtain and drapery mills	2 2	46 42	6 5	f 570	D 14 167	D 439	D 823	D 7 946	D 34 255	D 53 694	D 88 254	D
3149	Other textile product mills	7	77	14	1 487	45 392	1 039	2 161	30 681	90 636	86 126	178 367	2 443
31491 314912	Textile bag and canvas mills Canvas and related product	2	35 31	4	332 284	10 271 8 818	224 186	461 389	5 739 4 833	21 333 19 019	18 598 16 781	40 121 36 072	463 355
31499 314999	All other textile product mills All other miscellaneous textile	8	42	10	1 155	35 121	815	1 700	24 942	69 303	67 528	138 246	1 980
	product mills	8	42	10	1 155	35 121	815	1 700	24 942	69 303	67 528	138 246	1 980
315	Apparel manufacturing	2	109	21	2 274	70 890	1 689	3 099	31 163	155 260	173 813	322 349	D
3152	Cut and sew apparel manufacturing	1	78	17	1 959	62 314	1 422	2 569	24 952	142 774	151 344	288 107	D
31521	Cut and sew apparel contractors Women's, girls', and infants'	7	40	7	е	D	D	D	D	D	D	D	D
315212	cut and sew apparel	6	36	6	391	6 434	346	610	5 159	9 138	3 099	12 220	87
31522	contractors Men's and boys' cut and sew apparel manufacturing	4	6	4	- 391 e	0 434 D	546 D	010 D	5 159 D	9 136 D	3 099 D	12 220 D	87 D
315222	Men's and boys' cut and sew							_			_	5	2
31523	Women's and girls' cut and sew apparel manufacturing	4	4 23	3	e 971	D 42 399	D 575	D 1 042	D 10 951	D 107 617	D 131 759	D 231 869	D
315234	sew suit, coat, tailored iacket, and skirt												
315239	manufacturing Women's and girls' cut and sew other outerwear	-	3	2	f	D	D	D	D	D	D	D	D
3159	Apparel accessories and other	1	11	3	е	D	D	D	D	D	D	D	D
	apparel manufacturing	8	29	4	е	D	D	D	D	D	D	D	D
31599	Apparel accessories and other apparel manufacturing	8	29	4	е	D	D	D	D	D	D	D	D

[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]

			A establis	ll hments <sup>2</sup>	All em	oloyees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area – Con.												
316	Leather and allied product manufacturing	1	55	17	g	D	D	D	D	D	D	D	D
3161	Leather and hide tanning and finishing	1	15	6	e	D	D	D	D	D	D	D	D
31611	Leather and hide tanning and finishing	1	15	6	e	D	D	D	D	D	D	D	D
316110	Leather and hide tanning and finishing	1	15	6	e	D	D	D	D	D	D	D	D
3162	Footwear manufacturing	-	16	7	f	D	D	D	D	D	D	D	D
31621 316211	Footwear manufacturing Rubber and plastics footwear manufacturing	-	16	7	f	D	D	D	D D	D	D	D	D
3169	Other leather and allied product	_	4		е								
31699	manufacturing Other leather and allied product	2	24	4	е	D	D	D	D	D	D	D	D
321	manufacturing	2 2	24 128	4 23	e 2 435	D 82 635	D 1 655	D 3 439	D 47 107	D 170 219	D 180 899	D 347 321	D 9 859
3211	Wood product manufacturing Sawmills and wood preservation .	2	120	23	2 435 e	62 635 D	D	3 439 D	47 107 D	170 219 D	180 899 D	547 521 D	9 859 1 270
32111	Sawmills and wood preservation	2	19	2	е	D	D	D	D	D	D	D	1 270
321113 3219	Sawmills	2	17	2	e	D	D	D	D	D	D	D	D
	Other wood product manufacturing	2	100	21	2 097	71 304	1 397	2 893	39 174	146 238	132 755	274 678	8 445
32191 321911	Millwork Wood window and door manufacturing	1	48 20	8	803 533	26 368 19 224	502 268	964 517	12 082 6 688	48 843 35 538	69 293 51 839	114 998 85 299	D 1 412
32199	All other wood product manufacturing	3	33	12	1 134	40 763	200 766	1 677	24 339	91 367	57 752	147 936	1 412 D
321992	Prefabricated wood building manufacturing	4	11	6	570	20 748	445	968	13 422	45 021	40 321	84 477	D
321999	All other miscellaneous wood product manufacturing	1	22	6	564	20 015	321	709	10 917	46 346	17 431	63 459	3 539
322 3221	Paper manufacturing Pulp, paper, and paperboard	2	94	59	6 011	244 055	4 330	8 906	144 134	574 814	640 153	1 212 609	31 930
	mills	2	11	10	995	50 556	709	1 550	34 157	141 617	156 226	298 399	8 810
32212 322121	Paper mills Paper (except newsprint) mills	2	7	6 6	t f	D	D	D	D D	D	D	D	D
32213 322130	Paperboard mills Paperboard mills	3	4	4	e	D	D	D D	D	D		D	D
3222	Converted paper product manufacturing	2	83	49	5 016	193 499	3 621	7 356	109 977	433 197	483 927	914 210	23 120
32221	Paperboard container manufacturing	1	39	25	2 090	77 196	1 581	3 165	46 198	160 527	246 207	406 808	6 760
322211	Corrugated and solid fiber box manufacturing	_	19	11	1 036	44 577	714	1 464	22 822	96 319	147 653	244 060	3 941
322212 32222	Folding paperboard box manufacturing Paper bag and coated and	4	11	7	716	21 883	604	1 126	15 824	42 799	53 667	96 200	D
322222	treated paper manufacturing Coated and laminated paper	4	20	12	1 450	68 055	912	1 929	34 590	173 696	155 461	325 343	10 668
32223	manufacturing Stationery product	3	17	9	g	D	D	D	D	D	D	D	D
322231	manufacturing Die-cut paper and paperboard office supplies	_	12	5	838	27 720	684	1 358	17 966	59 083	38 259	98 222	2 717
32229	manufacturing Other converted paper product	-	5	3	744	24 712	616	1 211	16 269	52 771	30 431	83 681	D
322299	manufacturing All other converted paper	2	12	7	638	20 528	444	904	11 223	39 891	44 000	83 837	2 975
323	product manufacturing Printing and related support	2	12	7	638	20 528	444	904	11 223	39 891	44 000	83 837	2 975
3231	Activities Printing and related support	2	713	150	12 467	497 850	8 768	17 098	298 400	1 053 112	572 573	1 626 030	42 641
32311	activities Printing	2	713 '642	150 134	12 467 '11 280	497 850 1448 924	8 768 '7 871	17 098 15 365	298 400 '264 590	1 053 112 '957 611	572 573 '549 655	1 626 030 1 507 716	42 641 '38 856
323110	Commercial lithographic printing	2	'327	85	r6 702	1288 918	r4 528	r9 059	164 070	557 611	373 178	'923 355	'26 340
323112	Commercial flexographic printing	3	12	4	282	11 240	170	352	5 339	24 658	17 507	42 292	D
323113 323114 323115 323116	Commercial screen printing Quick printing Digital printing Manifold business forms	3 4 2	72 138 27	11 7 13	1 090 879 615	33 925 28 123 24 166	796 602 421	1 562 1 098 772	19 841 17 092 14 162	68 797 63 271 48 254	36 411 27 103 18 672	105 011 90 381 66 793	2 040 2 654 D
020710	printing	1	11	5	417	13 400	302	486	7 910	99 766	24 369	124 450	2 348

See footnotes at end of table.

[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]

			Δ	II hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS	Geographic area and industry		establis	With 20									Total
code		E1	Total	em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area-Con.												
323 3231	Printing and related support activities—Con. Printing and related support activities—Con.												
32311 323117	Printing—Con. Books printing Other commercial printing …	4	16	7	1 002	38 907	849	1 671	30 224	81 545	40 047	122 262	1 857
323119 32312	Support activities for printing	6 2	36 71	2 16	264 1 187	9 484 148 926	178 '897	326 1 733	5 399 '33 810	19 321 '95 501	11 014 '22 918	30 388 118 314	1 393 '3 785
323121 323122	Tradebinding and related work Prepress services	2	21 '50	6 10	455 732	16 152 '32 774	358 '539	721 1 012	11 061 '22 749	27 976 '67 525	6 448 16 470	34 403 '83 911	2 246 1 539
324	Petroleum and coal products manufacturing	_	28	4	е	D	D	D	D	D	D	D	D
3241	Petroleum and coal products manufacturing	_	28	4	e	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, and saturated materials		20		Ū	5	2	2	5			2	5
324122	manufacturing Asphalt shingle and coating	-	23	4	437	22 987	317	699	15 508	90 779	117 407	203 781	D
325	materials manufacturing Chemical manufacturing	- 12	2 '258	2 107	e 16 779	D 1933 095	D 7 809	D 15 489	D '346 590	D '3 785 472	D 1 605 791	D 15 399 852	D 274 438
3251	Basic chemical manufacturing	r2	20	8	622	53 483	263	555	18 992	r175 532	r132 013	r301 561	D
32519	Other basic organic chemical manufacturing	r1	9	5	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical manufacturing	r_	6	4	e	D	D	D	D	D	D	D	D
3252	Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	1	12	8	е	D	D	D	D	D	D	D	6 671
32521	Resin and synthetic rubber manufacturing	_	11	7	е	D	D	D	D	D	D	D	6 671
325211	Plastics material and resin manufacturing	-	9	7	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing	3	64	37	i	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing	3	64	37	i	D	D	D	D	D	D	D	D
325411 325412	Medicinal and botanical manufacturing Pharmaceutical preparation	3	15	6	е	D	D	D	D	D	D	D	D
325413	manufacturing In-vitro diagnostic substance	5	27	14	i	D	D	D	D	D	D	D	D
325414	manufacturing Biological product (except diagnostic) manufacturing	2	9 13	8 9	g g	D	D D	D D	D	D	D	D	D
3255	Paint, coating, and adhesive manufacturing	-	<sup>r</sup> 56	<sup>r</sup> 20	g	D	D	D	D	D	D	D	D
32551	Paint and coating manufacturing	1	32	10	f	D	D	D	D	D	D	D	D
325510	Paint and coating manufacturing	1	32	10	f	D	D	D	D	D	D	D	D
32552 325520	Adhesive manufacturing Adhesive manufacturing	-	<sup>r</sup> 24 <sup>r</sup> 24	'10 '10	'881 '881	'46 119 '46 119	r453 r453	'941 '941	'19 833 '19 833	'145 495 '145 495	'109 235 '109 235	'258 912 '258 912	6 247 6 247
3256	Soap, cleaning compound, and toilet preparation manufacturing . Soap and cleaning compound	1	38	11	1 291	55 423	709	1 312	26 404	521 801	238 885	761 024	D
32561 325612	manufacturing Polish and other sanitation	5	32	9	f	D	D	D	D	D	D	D	D
32562	good manufacturing Toilet preparation	7	14	5	e	D	D	D	D	D	D	D	D
325620	manufacturing Toilet preparation manufacturing	-	6 6	2 2	f	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing	2	57	22	3 750	202 974	1 891	3 552	80 097	329 930	449 068	794 168	69 056
32591	Printing ink manufacturing	5	18	7	е	D	D	D	D	D	D	D	D
325910 32599	Printing ink manufacturing All other chemical product and preparation manufacturing	5	18 38	7 15	e h	D	D	D	D	D	D	D	D 67 553
325992	Photographic film, paper, plate, and chemical manufacturing		5	2		D	D	D	D	D	D	D	07 333 D
325998	All other miscellaneous chemical product and preparation manufacturing	1		9	g 1 906	106 392	929	1 926	39 116	231 059	299 404	519 910	D

[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]

	aning of appreviations and sympols, see		A establis		All emp	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area – Con.												
326	Plastics and rubber products manufacturing	1	206	95	9 698	340 153	7 121	14 294	201 224	<sup>7</sup> 836 642	685 002	'1 524 635	54 651
3261	Plastics product manufacturing	1	172	83	8 401	293 829	6 209	12 418	175 779	717 009	582 878	r1 298 781	49 775
32611	Plastics packaging materials and unlaminated film and												
326111 326113	sheet manufacturing	1	21 5	13 4	744 272	28 703 10 845	496 214	1 010 441	16 523 7 371	67 744 22 106	75 785 26 174	143 074 46 930	2 541 D
32612	Plastics pipe, pipe fitting, and unlaminated profile shape	1	13	8	435	16 456	256	511	8 202	42 411	46 012	89 196	1 585
326121	manufacturing Unlaminated plastics profile	1	r17	r8	<sup>r</sup> 501	r17 665	r412	'978	r13 292	r43 079	<sup>7</sup> 52 353	'96 967	D
32615	shape manufacturing Urethane and other foam product (except polystyrene)	1	14	7	e	D	D	D	D	D	D	D	D
326150	manufacturing Urethane and other foam product (except polystyrene)	1	11	7	706	27 578	403	746	10 148	70 800	61 987	132 764	4 663
32619	manufacturing Other plastics product	1	11	7	706	27 578	403	746	10 148	70 800	61 987	132 764	4 663
326199	All other plastics product	1	r112	r49	r6 211	r210 228	r4 730	r9 337	r130 265	<sup>r</sup> 516 445	'373 253	<sup>r</sup> 886 244	r40 459
3262	manufacturing Rubber product manufacturing	1 3	r112 34	<sup>r</sup> 49 12	r6 211 1 297	r210 228 46 324	r4 730 912	'9 337 1 876	r130 265 25 445	<sup>r</sup> 516 445 119 633	r373 253 102 124	r886 244 225 854	r40 459 4 876
32622	Rubber and plastics hoses and												
326220	belting manufacturing Rubber and plastics hoses	3	7	4	e	D	D	D	D	D	D	D	2 498
32629	and belting manufacturing Other rubber product	3	7	4	e	D	D	D	D	D	D	D	2 498
326291	manufacturing Rubber product manufacturing for	2	25	8	828	30 869	546	1 179	15 981	80 791	78 856	164 121	2 378
326299	All other rubber product manufacturing	-	6 19	2 6	421 407	16 778 14 091	248 298	574 605	7 600 8 381	43 212 37 579	29 144 49 712	73 346 90 775	1 003 1 375
327	Nonmetallic mineral product manufacturing	2	154	55	4 060	169 732	2 978	6 415	110 349	444 228	310 142	754 750	22 553
3271	Clay product and refractory manufacturing	2	21	8	е	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, and plumbing fixture manufacturing	2	16	6	е	D	D	D	D	D	D	D	D
3272	Glass and glass product manufacturing	_	30	4	746	31 155	508	1 111	17 737	83 606	50 396	134 191	5 320
32721	Glass and glass product manufacturing	_	30	4	746	31 155	508	1 111	17 737	83 606	50 396	134 191	5 320
327212	Other pressed and blown glass and glassware		8	1	254	10 189	204	456	6 525	20 937	15 667	37 429	5 320 D
327215	manufacturing Glass product manufacturing made of purchased glass	_	22	3	254 492	20 966	204 304	456 655	11 212	20 937 62 669	34 729	96 762	D
3273	Cement and concrete product manufacturing	4	46	23	1 420	65 897	1 030	2 243	42 350	138 466	109 628	245 762	9 729
32732	Ready-mix concrete manufacturing	6	18	10	654	33 846	523	1 184	24 393	68 774	65 957	134 728	6 067
327320	Ready-mix concrete manufacturing	6	18	10	654	33 846	523	1 184	24 393	68 774	65 957	134 728	6 067
32739	Other concrete product manufacturing	1	18	9	f	D	D	D	D	D	D	D	2 835
327390	Other concrete product manufacturing	1	18	9	f	D	D	D	D	D	D	D	2 835
3274	Lime and gypsum product manufacturing	-	8	4	е	D	D	D	D	D	D	D	D
32742	Gypsum product manufacturing	-	7	4	e	D	D	D	D	D	D	D	D
327420	Gypsum product manufacturing	-	7	4	е	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product manufacturing	3	49	16	1 138	43 268	825	1 726	27 974	91 360	63 619	155 384	3 989
32799	All other nonmetallic mineral product manufacturing	3	42	13	971	36 812	713	1 486	24 398	75 207	50 307	125 732	3 675
327991	Cut stone and stone product manufacturing	6	29	7	569	21 217	453	953	15 871	36 973	29 304	66 348	1 839
327999	All other miscellaneous nonmetallic mineral product manufacturing	-	10	6	е	D	D	D	D	D	D	D	D

See footnotes at end of table.

[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]

			A establis		All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area—Con.												
331	Primary metal manufacturing	-	48	19	1 676	72 852	1 194	2 526	44 478	<sup>r</sup> 86 910	190 070	r287 450	8 156
3314	Nonferrous metal (except aluminum) production and processing	_	10	3	е	D	D	D	D	D	D	D	3 454
33149	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and												
331492	alloying	-	8	2	e	D	D	D	D	D	D	D	D
3315	Foundries	1	28	10	958	36 285	776	1 727	25 909	r80 991	26 404	108 113	D
33151	Ferrous metal foundries	1	9	4	328	12 471	268	583	8 485	24 956	10 800	35 361	D
33152 331521	Nonferrous metal foundries Aluminum die-casting foundries	_	19 2	6 1	630 e	23 814 D	508 D	1 144 D	17 424 D	'56 035 D	15 604 D	'72 752 D	D
331524	Aluminum foundries (except die-casting)	1	11	3	281	10 025	232	496	7 142	'24 313	5 467	'29 723	D
332	Fabricated metal product manufacturing	1	r1 034	'269	'22 231	'953 556	'15 349	'30 632	'544 414	'2 314 293	'1 396 235	'3 703 345	109 889
3321	Forging and stamping	3	39	10	999	39 473	736	1 533	24 300	86 596	47 284	132 232	D
33211 332116	Forging and stamping	3 3	39 27	10 8	999 f	39 473 D	736 D	1 533 D	24 300 D	86 596 D	47 284 D	132 232 D	D D
3322	Cutlery and handtool manufacturing	-	19	7	g	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing	_	19	7	g	D	D	D	D	D	D	D	D
332211	manufacturing Cutlery and flatware (except precious) manufacturing	-	2	2	g	D	D	D	D	D	D	D	D
3323	Architectural and structural metals manufacturing	2	204	69	4 660	184 144	3 378	6 575	114 013	384 736	285 577	672 093	11 612
33231	Plate work and fabricated structural product												
332312	manufacturing Fabricated structural metal	3	45	19	1 075	42 345	733	1 413	24 021	87 444	59 538	153 873	2 726
33232	manufacturing Ornamental and architectural metal products	2	35	15 50	905	35 502 141 799	607	1 161	19 752	75 510	50 850	133 246	2 240
332321	manufacturing Metal window and door manufacturing	2	159 14	50 7	3 585 264	8 609	2 645 184	5 162 335	89 992 4 361	297 292 16 829	226 039 13 334	518 220 30 173	8 886 358
332322	Sheet metal work manufacturing	2	99	35	2 766	110 673	2 091	4 138	72 653	232 283	180 104	410 328	6 864
332323	Ornamental and architectural metal work manufacturing	3	46	8	555	22 517	370	689	12 978	48 180	32 601	77 719	1 664
3324	Boiler, tank, and shipping container manufacturing	2	27	15	g	D	D	D	D	D	D	D	D
33241	Power boiler and heat exchanger manufacturing	_	6	5	е	D	D	D	D	D	D	D	D
332410	Power boiler and heat exchanger manufacturing	_	6	5	е	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) manufacturing	5	7	5	f	D	D	D	D	D	D	D	D
332420 33243	Metal tank (heavy gauge) manufacturing Metal can, box, and other metal container (light gauge)	5	7	5	f	D	D	D	D	D	D	D	D
	manufacturing	-	14	5	е	D	D	D	D	D	D	D	D
3325	Hardware manufacturing	1	5	1	313	7 847	247	490	4 594	19 787	7 109	26 027	D
33251 332510	Hardware manufacturing Hardware manufacturing	1	5 5	1 1	313 313	7 847 7 847	247 247	490 490	4 594 4 594	19 787 19 787	7 109 7 109	26 027 26 027	D D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	2	490	91	6 092	264 988	4 415	8 824	169 994	526 540	219 813	749 832	36 798
33271 332710	Machine shops Machine shops	3	414 414	61 61	4 413 4 413	194 466 194 466	3 157 3 157	6 297 6 297	122 890 122 890	370 691 370 691	157 936 157 936	531 339 531 339	19 691 19 691
332710 33272	Turned product and screw, nut, and bolt manufacturing	3	76	30	4 413	70 522	1 258	6 297 2 527	47 104	370 691 155 849	61 877	218 493	19 691
332721	Precision turned product manufacturing	2	61	25	1 228	50 520	941	1 912	35 366	115 096	33 866	148 383	16 284
332722	Bolt, nut, screw, rivet, and washer manufacturing	1	15	5	451	20 002	317	615	11 738	40 753	28 011	70 110	823

See footnotes at end of table.

[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]

	aning of abbreviations and symbols, see		A	ll hments <sup>2</sup>	All em	ployees	Pro	oduction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area—Con.												
332 3328	Fabricated metal product manufacturing—Con. Coating, engraving, heat treating, and allied activities	2	r125	'35	r2 393	'85 537	r <b>1 826</b>	'3 579	<sup>7</sup> 55 063	<sup>,</sup> 159 081	<sup>r</sup> 51 313	'212 714	9 063
33281	Coating, engraving, heat treating, and allied activities	2	125	'35	12 393	<sup>1</sup> 85 537	r1 826	r3 579	<sup>755</sup> 063	159 081	51 313	212 714	9 063
332812	Metal coating, engraving (except jewelry and silverware), and allied	2	125		2 000	05 557	1 020	0 0/ 0	33 000	100 001	51 515	212 / 14	3 000
332813	services to manufacturers Electroplating, plating, polishing, anodizing, and	1	<sup>r</sup> 55 60	'14 19	'1 176 1 093	<sup>r</sup> 44 084 36 030	'931	'1 739 1 635	<sup>r</sup> 29 494 22 232	'80 353 67 976	<sup>1</sup> 28 499	'110 903 87 061	6 520
3329	Coloring	3					806				18 867		2 399
00001	manufacturing	-	108 19	40 10	4 562 1 204	213 210 55 928	2 510	4 685 1 311	81 074 22 135	528 530 153 738	291 206 82 725	825 437 239 633	17 982
33291 332911	Metal valve manufacturing Industrial valve manufacturing	_	9	6	708	55 928 35 107	645 340	696	13 826	90 717	57 510	239 633 149 051	4 845 2 506
332913	Plumbing fixture fitting and trim manufacturing	-	2	1	e	D	D	D	.0 020 D	D	D	D	2 000 D
33299	All other fabricated metal product manufacturing	-	89	30	3 358	157 282	1 865	3 374	58 939	374 792	208 481	585 804	13 137
332993 332994	Ammunition (except small arms) manufacturing Small arms manufacturing	-	3	2	g	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product	2	71		1 500								
333	manufacturing	2	417	23 158	1 500 20 055	58 782 1 039 898	1 062 10 588	2 066 20 069	34 818 403 957	119 257 1 990 710	86 385 1 666 584	208 156 3 653 915	4 594 134 190
3331	Agriculture, construction, and mining machinery manufacturing	5	12	5	_0 000	D	D	_0 000	D	D	D	D	D
3332	Industrial machinery	3	103	47	9 841	569 707	4 475	7 923	185 520	1 061 202	956 996	2 008 137	
33322	manufacturing Plastics and rubber industry												77 706
333220	machinery manufacturing Plastics and rubber industry machinery manufacturing	4	11	7	f 4	D	D	D	D	D	D	D	1 796 1 796
33329	Other industrial machinery manufacturing	4	88	40	i	D	D	D	D	D	D	D	75 887
333293	Printing machinery and equipment manufacturing	_	11	8	1 580	84 356	735	1 166	30 826	166 090	195 549	327 314	70 007 D
333294	Food product machinery manufacturing	1	10	3	е	D	D	D	D	D	D	D	D
333295	Semiconductor machinery manufacturing	3	20	13	h	D	D	D	D	D	D	D	52 329
333298	All other industrial machinery manufacturing	5	33	12	2 319	117 509	1 249	2 373	37 580	226 607	157 114	395 836	13 623
3333	Commercial and service industry machinery manufacturing	2	71	30	2 673	125 868	1 516	3 097	51 859	212 651	177 439	383 707	8 758
33331	Commercial and service industry machinery												
333314	Manufacturing	2	71	30	2 673	125 868	1 516	3 097	51 859	212 651	177 439	383 707	8 758
333319	manufacturing Other commercial and service industry machinery	-	32	15	1 782	88 671	1 025	2 085	35 605	123 819	100 638	219 060	D
	manufacturing	5	25	11	662	26 778	368	752	12 019	62 431	51 679	113 468	2 265
3334	Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing	5	27	12	1 255	48 967	777	1 579	23 336	111 203	117 820	228 472	2 776
33341	Ventilation, heating, air- conditioning, and commercial				. 200							2	
333411	refrigeration equipment manufacturing Air purification equipment	5	27	12	1 255	48 967	777	1 579	23 336	111 203	117 820	228 472	2 776
333414	manufacturing	7	7	4	е	D	D	D	D	D	D	D	1 023
333415	warm air furnaces) manufacturing Air-conditioning and warm air	1	8	4	е	D	D	D	D	D	D	D	D
	heating equipment and commercial and industrial refrigeration equipment manufacturing	7	9	2	521	18 113	412	816	13 179	44 222	50 401	94 722	971
	See feetrates at and of table	. ,	. 3	. 2	521	10 110	. 1121	0101	10 179		50 -011	54 1221	571

See footnotes at end of table.

[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]

	aning of abbreviations and symbols, see		A	-	All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area-Con.												
333 3335	Machinery manufacturing—Con. Metalworking machinery manufacturing	3	94	18	1 462	65 976	1 057	2 236	41 208	114 130	71 993	188 088	7 677
33351	Metalworking machinery manufacturing	3	94	18	1 462	65 976	1 057	2 236	41 208	114 130	71 993	188 088	7 677
333511	Industrial mold manufacturing	7	13	4	292	13 867	208	432	7 868	28 184	12 376	40 367	D
333515	Cutting tool and machine tool accessory manufacturing	1	26	5	576	22 638	494	1 088	19 421	38 735	19 893	59 855	2 478
3339	Other general purpose machinery manufacturing	1	102	43	4 412	209 430	2 522	4 738	91 870	454 237	304 123	769 788	34 671
33391	Pump and compressor manufacturing	1	10	6	957	47 540	529	1 002	21 237	100 435	82 360	185 281	D
333911 333912	Pump and pumping equipment manufacturing Air and gas compressor	-	5	3	427	20 093	295	546	10 658	65 094	52 085	117 576	D
33392	manufacturing Material handling equipment	3	5	3	530	27 447	234	456	10 579	35 341	30 275	67 705	D
333922	manufacturing Conveyor and conveying	5	13	7	491	19 083	331	600	10 235	35 457	24 408	59 144	D
33399	equipment manufacturing All other general purpose	1	7	3	256	9 748	176	280	5 534	19 195	8 767	27 242	D
333993	machinery manufacturing Packaging machinery	1	79	30	2 964	142 807	1 662	3 136	60 398	318 345	197 355	525 363	27 992
333994	manufacturing Industrial process furnace	2	10	4	303	16 937	168	341	6 583	26 710	13 241	39 338	2 081
333999	and oven manufacturing All other miscellaneous general purpose machinery	1	12 43	6 15	586 1 688	25 037 83 399	328 914	502 1 812	10 224	38 622 215 079	22 393 130 984	62 175	D 18 181
334	manufacturing	1	733	380	66 017	3 710 822	27 074	53 171	35 207 1 049 530	12 696 167	7 912 141	355 410 21 027 555	485 643
3341	manufacturing Computer and peripheral	'											
33411	equipment manufacturing Computer and peripheral	-	82	35	5 482	351 342	2 077	4 282	85 711	1 357 259	1 548 175	2 869 370	59 961
334111	equipment manufacturing Electronic computer	-	82	35	5 482	351 342	2 077	4 282	85 711	1 357 259	1 548 175	2 869 370	59 961
334112	manufacturing Computer storage device	1	19	10	g	D	D	D	D	D	D	D	D
334119	manufacturing Other computer peripheral equipment manufacturing	-	8 51	4 21	g	D	D	D	D	D	D	D	D
3342	Communications equipment manufacturing	1	92	63	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus manufacturing	1	39	31	6 404	384 271	2 046	4 271	93 171	1 617 713	1 573 878	3 495 897	56 657
334210	Telephone apparatus manufacturing	י 1	39	31	6 404	384 271	2 040	4 271	93 171	1 617 713	1 573 878	3 495 897 3 495 897	56 657
33422	Radio and television broadcasting and wireless communications equipment manufacturing	5	38	25	g	D	D	D	D	D	D	D	D
334220	Radio and television broadcasting and wireless communications equipment				5								
33429	manufacturing Other communications	5	38	25	g	D	D	D	D	D	D	D	D
334290	equipment manufacturing Other communications	7	15	7	621	27 211	240	449	6 601	60 632	47 817	108 286	1 443
3343	equipment manufacturing Audio and video equipment manufacturing	7	15 17	7	621 f	27 211 D	240 D	449 D	6 601 D	60 632 D	47 817 D	108 286 D	1 443 D
33431	Audio and video equipment												
334310	manufacturing Audio and video equipment manufacturing	1 1	17 17	8 8	f	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	_	260	134	17 592	815 668	9 794	18 950	346 486	3 719 963	1 855 095	5 643 948	146 320
33441	Semiconductor and other electronic component					<u></u>							
334411	manufacturing Electron tube manufacturing .	-	260 6	134 3	17 592 630	815 668 27 428	9 794 454	18 950 920	346 486 17 886	3 719 963 32 964	1 855 095 14 419	5 643 948 46 662	146 320 1 177
334412 334413	Bare printed circuit board manufacturing Semiconductor and related	-	41	21	2 676	90 760	1 644	2 808	52 813	156 446	119 135	274 968	6 948
334413	device manufacturing Electronic coil, transformer,	-	61	35	6 601	374 725	3 615	6 956	149 442	2 812 735	1 106 576	3 974 307	107 528
-	and other inductor manufacturing	1	14	2	297	10 533	176	349	4 296	19 833	8 678	31 127	D

See footnotes at end of table.

[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]

<u> </u>	aning of abbreviations and symbols, see		A		Allem	ployees	Pro	oduction work	kers				
NAICS			establis	hments <sup>2</sup>	, 011	p.0,000							
code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area-Con.												
334	Computer and electronic product manufacturing-Con.												
3344	Semiconductor and other electronic component manufacturing-Con.												
33441	Semiconductor and other electronic component												
334417	manufacturing—Con. Electronic connector manufacturing	2	13	9	579	22 703	382	815	11 497	48 682	20 155	70 120	907
334418	Printed circuit assembly (electronic assembly)	2	13	5	575	22 703	502	015	11 497	40 002	20 133	70 120	507
334419	Manufacturing Other electronic component	2	53	38	3 245	135 134	1 773	3 499	51 138	334 327	366 958	705 621	17 255
3345	manufacturing Navigational, measuring, electromedical, and control	-	68	25	3 508	151 795	1 700	3 500	57 194	311 994	216 087	535 072	12 223
33451	instruments manufacturing Navigational, measuring,	1	255	132	31 838	1 927 055	10 750	20 970	444 542	5 332 774	2 546 387	7 956 611	198 768
334510	electromedical, and control instruments manufacturing Electromedical and electrotherapeutic	1	255	132	31 838	1 927 055	10 750	20 970	444 542	5 332 774	2 546 387	7 956 611	198 768
334511	apparatus manufacturing Search, detection, navigation, guidance, aeronautical, and nautical	2	35	19	h	D	D	D	D	D	D	D	D
334512	system and instrument manufacturing	-	35	16	10 590	727 537	3 105	5 366	139 626	2 113 246	1 006 137	3 058 589	D
334513	residential, commercial, and appliance use	6	6	4	473	17 184	242	494	6 551	63 081	48 002	110 588	D
334515	measuring, displaying, and controlling industrial process variables Instrument manufacturing for	_	34	24	4 088	196 754	1 751	3 446	57 235	476 740	254 912	748 235	9 876
004010	measuring and testing electricity and electrical												
334516	signals Analytical laboratory instrument manufacturing	1	40 35	20 14	4 907 2 473	290 159 139 480	1 476 883	2 755 1 842	73 009 33 983	498 214 332 167	367 685 229 687	898 056 563 016	39 632 D
334517	Irradiation apparatus manufacturing	_	14	14	2 4/3 g	139 460 D	003 D	1 642 D	53 963 D	332 107 D	229 087 D	565 016 D	D
334518	Watch, clock, and part manufacturing	-	7	4	e	D	D	D	D	D	D	D	D
334519	Other measuring and controlling device manufacturing	1	46	19	2 511	144 305	1 004	1 994	40 764	271 909	144 752	422 737	6 087
3346	Manufacturing and reproducing magnetic and optical media	3	27	8	1 229	45 020	887	1 814	29 233	104 216	127 185	232 157	4 461
33461	Manufacturing and reproducing magnetic and optical media	3	27	8	1 229	45 020	887	1 814	29 233	104 216	127 185	232 157	4 461
334611 334612	Software reproducing Prerecorded compact disc (except software), tape, and	-	5	3	461	18 279	363	720	12 203	39 946	21 132	61 094	1 004
335	Electrical equipment, appliance, and component manufacturing	8	16 158	4 74	f 11 324	D 480 906	D 6 473	D 11 929	D 197 130	D 1 167 546	D 731 393	D 1 914 321	2 037 57 405
3351	Electric lighting equipment												
33512	Lighting fixture manufacturing	1	20 19	8	f	D	D	D	D	D	D	D	D
335122	Commercial, industrial, and institutional electric lighting				1								
335129	fixture manufacturing Other lighting equipment manufacturing	- 4	5 7	3 3	f 275	D 10 121	D 187	D 378	D 5 437	D 17 466	D 12 404	D 29 405	D 449
3353	Electrical equipment manufacturing	3	54	22	3 344	168 263	1 382	2 479	46 032	369 028	242 524	621 452	9 386
33531	Electrical equipment manufacturing	3	54	22	3 344	168 263	1 382	2 479	46 032	369 028	242 524	621 452	9 386
335312 335313	manufacturing	-	14	6	f	D	D	D	D	D	D	D	D
335313	apparatus manufacturing	-	6	3	f	D	D	D	D	D	D	D	D
	manufacturing	4	30	13	2 205	113 370	815	1 468	23 712	227 620	155 337	385 203	5 188

See footnotes at end of table.

[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]

Torme	annig of abbreviations and symbols, see		A	JI	All and		Dra						
			establis	hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area – Con.												
335	Electrical equipment, appliance, and component manufacturing - Con.												
3359	Other electrical equipment and component manufacturing	1	80	42	6 948	277 143	4 374	7 933	132 201	699 457	407 426	1 113 943	45 461
33591	Battery manufacturing	1	6	4	400	16 490	324	644	11 577	25 439	16 498	41 320	1 185
33592	Communication and energy wire and cable manufacturing.	-	16	11	1 259	59 432	413	821	18 366	251 431	55 513	309 328	D
335921 335929	Fiber optic cable manufacturing Other communication and	-	7	6	е	D	D	D	D	D	D	D	D
33593	energy wire manufacturing	-	9 23	5 13	f h	D D	D D	D	D D	D	D	D D	D D
335931	Current-carrying wiring device manufacturing	_	21	12	h	D	D	D	D	D	D	D	D
33599	All other electrical equipment and component	-				_	_	_	_	_	_	_	_
335999	manufacturing All other miscellaneous electrical equipment and component manufacturing	3	35	14 13	g	D	D	D	D	D	D	D	D
336	Transportation equipment						4 004	0,400		4 017 544		0.000.045	
3362	manufacturing Motor vehicle body and trailer manufacturing	- 1	117	42 8	7 982 e	475 128 D	4 634 D	9 403 D	247 999 D	1 647 541 D	1 744 614 D	3 392 045 D	D
33621	Motor vehicle body and trailer manufacturing	1	18	8	е	D	D	D	D	D	D	D	D
336211	Motor vehicle body manufacturing	-	10	6	e	D	D	D	D	D	D	D	410
3363	Motor vehicle parts												
33631	manufacturing Motor vehicle gasoline engine	2	50	19	g	D	D	D	D	D	D	D	D
00001	and engine parts manufacturing	_	10	1	е	D	D	D	D	D	D	D	D
336312	Gasoline engine and engine parts manufacturing	_	10	1	е	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical and electronic equipment			_	o. 1 =	10.000	100	0.45	- 40-	05 400		105 000	
336322	manufacturing Other motor vehicle electrical and electronic equipment	3	15	5	317	18 383	168	345	7 127	65 486	69 690	135 302	D
33634	manufacturing Motor vehicle brake system	3	15	5 2	317	18 383 D	168 D	345 D	7 127 D	65 486 D	69 690 D	135 302 D	D
336340	manufacturing Motor vehicle brake system manufacturing	_	5	2	e e	D	D	D	D	D	D	D	D
33637 336370	Motor vehicle metal stamping Motor vehicle metal	1	8	4	e	Ď	Ď	Ď	Ď	Ď	Ď	Ď	D
33639	stamping Other motor vehicle parts	1	8	4	е	D	D	D	D	D	D	D	D
336399	Manufacturing All other motor vehicle parts	1	7	2	f	D	D	D	D	D	D	D	D
3364	manufacturing Aerospace product and parts manufacturing	1	7	2 9	ī	D	D	D	D	D	D	D	D
33641	Aerospace product and parts				•								
336412	manufacturing Aircraft engine and engine	-	13	9	i .	D	D	D	D	D	D	D	D
3366	parts manufacturing Ship and boat building	4	10 26	9 3	e I	D D	D	D D	D	D	D	D	D
33661	Ship and boat building	4	26	3	e	D	D	D	D	D	D	D	D
336612 337	Boat building	3	18	3	е	D	D	D	D	D	D	D	D
337	manufacturing	2	266	49	4 055	145 850	2 976	6 003	88 284	329 104	234 039	562 378	10 752
3371	Household and institutional furniture and kitchen cabinet manufacturing	2	195	25	2 216	74 207	1 601	3 225	43 996	148 690	102 160	250 078	5 783
33711	Wood kitchen cabinet and	3	109	10	000	30 569	CE A	1 297	18 921	53 554	31 839	86 721	1 672
337110	countertop manufacturing Wood kitchen cabinet and countertop manufacturing	3	109	10	892 892	30 569 30 569	654 654	1 297	18 921	53 554 53 554	31 839	86 721	1 672
33712	Household and institutional furniture manufacturing	1	86	15	1 324	43 638	947	1 928	25 075	95 136	70 321	163 357	4 111
337122	Nonupholstered wood household furniture												
337127	manufacturing Institutional furniture manufacturing	2	55 10	8 4	524 603	15 389 22 742	416 383	835 807	10 540 11 043	35 119 48 267	25 374 34 713	58 722 82 583	996 D
	San fastnatas at and of table												

See footnotes at end of table.

[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]

		5 1111	A		All em	ployees	Pro	duction work	kers				
			establis	hments <sup>2</sup>	7.0 611	picyees							
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area-Con.												
337	Furniture and related product manufacturing—Con.												
3372	Office furniture (including fixtures) manufacturing	3	55	18	1 170	46 363	845	1 677	27 530	94 798	56 414	150 522	D
33721	Office furniture (including			_				-					
337212	fixtures) manufacturing Custom architectural	3	55	18	1 170	46 363	845	1 677	27 530	94 798	56 414	150 522	D
007045	woodwork and millwork	1	31	10	f	D	D	D	D	D	D	D	1 540
337215	Showcase, partition, shelving, and locker	2	17	7		D	D	D	D	D	D	D	D
3379	manufacturing Other furniture related product	2	17		e	U	U	U	D	U	U	U	D
00701	manufacturing	-	16 9	6	669	25 280 D	530	1 101 D	16 758	85 616	75 465 D	161 778 D	D
33791 337910	Mattress manufacturing Mattress manufacturing	-	9	5 5	f	D	D D	D	D D	D D	D	D D	D
339	Miscellaneous manufacturing	3	618	172	19 396	841 111	10 912	21 712	329 112	2 180 389	1 146 749	3 361 743	93 714
3391	Medical equipment and supplies manufacturing	3	253	87	11 048	508 740	6 132	12 421	193 862	1 414 566	526 270	1 975 043	68 215
33911	Medical equipment and supplies manufacturing	3	253	87	11 048	508 740	6 132	12 421	193 862	1 414 566	526 270	1 975 043	68 215
339111	Laboratory apparatus and furniture manufacturing	1	23	10	1 350	70 962	534	1 139	19 896	140 647	86 752	229 555	D
339112	Surgical and medical instrument manufacturing	3	73	43	5 459	273 884	2 697	5 242	88 357	915 776	279 173	1 224 871	47 763
339113	Surgical appliance and supplies manufacturing	2	36	19	2 793	113 971	1 845	3 942	52 338	289 412	111 054	402 054	11 546
339115 339116	Ophthalmic goods manufacturing Dental laboratories	7	8 101	3 11	271 1 121	10 557 37 584	167 860	347 1 706	5 217 27 321	4 770 60 254	33 959 14 154	39 734 73 945	D
3399	Other miscellaneous manufacturing	2	365	85	8 348	37 564	4 780	9 291	135 250	765 823	620 479	1 386 700	25 499
33991	Jewelry and silverware												
339912	manufacturing Silverware and hollowware manufacturing	_	35	7	779 e	42 388 D	253 D	512 D	7 878 D	58 882 D	142 642 D	206 726 D	1 245 D
33992	Sporting and athletic goods manufacturing	4	28	9	f	D	D	D	D	D	D	D	1 856
339920	Sporting and athletic goods manufacturing	4	28	9	f	D	D	D	D	D	D	D	1 856
33994	Office supplies (except paper) manufacturing	1	13	4	е	D	D	D	D	D	D	D	D
33995 339950	Sign manufacturing	3 3	100 100	16 16	1 668 1 668	61 723 61 723	992 992	1 790 1 790	27 812 27 812	120 276 120 276	89 885 89 885	213 844 213 844	6 180 6 180
33999	All other miscellaneous manufacturing	2	175	45	4 497	175 346	2 739	5 516	78 919	457 462	289 129	738 794	D
339991 339992	Gasket, packing, and sealing device manufacturing Musical instrument	3	16	7	1 392	55 926	782	1 576	24 076	145 364	75 526	221 287	D
339999	Musical institution manufacturing All other miscellaneous	1	24	8	509	21 083	389	786	13 679	60 414	21 867	82 427	D
	manufacturing	1	126	25	2 220	85 589	1 285	2 565	34 250	224 482	174 112	390 247	10 330
	Boston-Quincy, MA Metropolitan Division												
31-33	Manufacturing	1	1 901	624	63 740	2 756 960	38 423	76 327	1 257 766	7 818 963	r6 123 773	r14 005 713	368 841
311	Food manufacturing	1	200	67	6 255	197 023	4 205	8 194	108 456	645 752	783 804	1 432 343	21 527
3114	Fruit and vegetable preserving and specialty food												
	manufacturing	-	8	7	330	13 564	216	468	6 521	116 901	39 159	159 189	2 966
3115 31151	Dairy product manufacturing Dairy product (except frozen)	-	8	3	f	D	D	D	D	D	D	D	1 177
311511	Fluid milk manufacturing	-	5 3	2 2	f	D D	D D	D	D	D	D	D D	D
3116	Animal slaughtering and processing	_	14	9	938	32 252	675	1 469	18 964	83 822	188 560	271 678	1 759
31161	Animal slaughtering and processing	_	14	9	938	32 252	675	1 469	18 964	83 822	188 560	271 678	1 759
311612	Meat processed from carcasses	-	9	6	936 f	32 232 D	075 D	D	18 904 D	63 622 D	D	271 678 D	D
3117	Seafood product preparation and packaging	-	14	7	864	24 885	673	1 149	14 732	99 620	166 193	265 672	2 369
31171	Seafood product preparation and packaging	_	14	7	864	24 885	673	1 149	14 732	99 620	166 193	265 672	2 369
311712	Fresh and frozen seafood processing	-	12	6	f	D	D	D	D	D	D	D	D

See footnotes at end of table.

[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]

	aning of appreviations and sympols, see		A establis	JI	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry		establis	With 20 em-							Total	Total	Total capital
		E1	Total	ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	cost of materials (\$1,000)	value of shipments (\$1,000)	expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area—Con.												
	Boston-Quincy, MA Metropolitan Division—Con.												
311 3118	Food manufacturing—Con. Bakeries and tortilla manufacturing	3	108	29	2 496	64 181	1 630	3 079	38 765	166 079	91 704	257 077	9 198
31181	Bread and bakery product manufacturing	3	98	26	2 385	59 898	1 565	2 953	37 031	153 309	81 738	234 326	7 904
311811 311812 311813	Retail bakeries Commercial bakeries Frozen cakes, pies, and other pastries manufacturing	3 3 1	71 22 5	13 8 5	784 1 349 252	12 010 39 971 7 917	387 970 208	512 1 975 466	5 642 25 267 6 122	24 043 112 727 16 539	9 787 59 433 12 518	33 801 171 426 29 099	681 6 887 336
3119	Other food manufacturing	4	27	10	742	23 912	208 543	1 055	14 184	80 319	81 536	161 640	2 050
31199 311991	All other food manufacturing Perishable prepared food	1	18	6	503	14 249	412	764	10 153	42 672	46 939	89 570	1 223
312	manufacturing Beverage and tobacco product	-	6	5	283	6 406	235	458	4 522	16 157	19 817	35 938	689
3121	manufacturing Beverage manufacturing	-	7	5 5	724 724	33 000 33 000	490 490	1 099 1 099	20 102 20 102	201 224 201 224	233 743 233 743	436 712 436 712	14 094 14 094
31211	Soft drink and ice									-			
31212 312120	manufacturing Breweries Breweries	1	2 5 5	2 3 3	e e e	D D D	D D D	D D D	D D D	D D D			D D D
313	Textile mills	1	27	9	831	34 214	585	1 216	18 008	67 396	105 448	175 680	D
3132	Fabric mills	2	12	4	470	19 850	339	747	11 525	28 462	28 223	60 619	D
31323 313230	Nonwoven fabric mills Nonwoven fabric mills	-	4 4	2 2	331 331	15 465 15 465	241 241	562 562	9 121 9 121	20 820 20 820	22 589 22 589	47 059 47 059	1 646 1 646
3133	Textile and fabric finishing and fabric coating mills	1	13	5	e	D	D	D	D	D	D	D	D
314	Textile product mills	1	43	12	713	19 629	525	1 039	11 010	46 586	66 571	113 414	D
3141 31412	Textile furnishings mills	1	17 16	4	e	D	D	D	D	D	D	D	D
31412	Curtain and inen mills	1	15	4 4	е 315	8 172	241	448	4 401	22 193	44 672	67 135	D
3149	Other textile product mills	2	26	8	е	D	D	D	D	D	D	D	D
315	Apparel manufacturing	2	53	15	1 625	57 216	1 138	2 084	21 378	130 707	155 783	278 626	D
3152	Cut and sew apparel manufacturing	1	40	12	1 434	52 222	967	1 743	17 299	124 838	140 340	257 383	D
31522	Men's and boys' cut and sew apparel manufacturing	6	3	3	е	D	D	D	D	D	D	D	D
31523 315234	Women's and girls' cut and sew apparel manufacturing Women's and girls' cut and sew suit, coat, tailored	-	14	5	902	40 943	517	947	9 752	104 547	128 985	225 351	D
	jacket, and skirt manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
316	Leather and allied product manufacturing	_	16	5	е	D	D	D	D	D	D	D	D
3162	Footwear manufacturing	-	6	4	е	D	D	D	D	D	D	D	D
31621	Footwear manufacturing	-	6	4	e	D	D	D	D	D	D	D	D
321 3219	Wood product manufacturing Other wood product	2	44	8	730	24 588	453	923	13 297	58 968	37 464	95 343	4 223
	manufacturing	2	33	8	662	22 237	400	813	11 729	53 304	29 809	82 000	3 983
32199 321999	All other wood product manufacturing All other miscellaneous wood	2	13	6	486	16 213	278	593	8 556	40 926	13 554	53 389	3 115
322	product manufacturing	2	10 26	5 15	e 1 549	D 64 252	D	D	D	D 164 885	D 178 421	D 241 010	D
322 3222	Paper manufacturing Converted paper product				1 549	04 252	1 048	2 190	34 613	104 885	1/6 421	341 919	13 361
32221	manufacturing Paperboard container	2	23	12	1 376	56 103	920	1 941	28 927	133 137	146 531	278 877	10 910
32221	manufacturing Paper bag and coated and	1	7	4	305	12 742	230	473	7 488	27 360	40 556	68 081	D
322222	treated paper manufacturing Coated and laminated paper	3	6	3	698	32 584	415	900	15 327	82 048	78 393	160 091	7 802
	manufacturing	3	6	3	698	32 584	415	900	15 327	82 048	78 393	160 091	7 802

See footnotes at end of table.

[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]

	aning of appreviations and sympols, see		A establis		All emp	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area – Con.												
	Boston-Quincy, MA Metropolitan Division—Con.												
323	Printing and related support activities	2	291	67	5 372	219 859	3 717	7 371	129 181	444 086	241 489	684 837	25 634
3231	Printing and related support activities	2	291	67	5 372	219 859	3 717	7 371	129 181	444 086	241 489	684 837	25 634
32311 323110	Printing Commercial lithographic	2	254	61	4 780	195 568	3 262	6 481	112 450	395 142	231 158	625 333	23 190
323114 323117 32312 323121	printing. Quick printing. Books printing. Support activities for printing.	1 4 3 1	140 54 6 37	43 6 2 6	3 388 446 275 592	146 901 15 168 9 961 24 291	2 265 310 230 455	4 634 601 419 890	82 513 9 432 7 710 16 731	284 552 36 994 22 853 48 944	176 046 15 676 13 105 10 331	459 317 52 661 36 177 59 504	18 265 1 726 358 2 444
323121	Tradebinding and related work Prepress services	1 1	13 24	3 3	312 280	11 708 12 583	244 211	489 401	8 172 8 559	20 424 28 520	3 927 6 404	24 357 35 147	1 795 649
324	Petroleum and coal products manufacturing	_	8	2	291	16 269	214	499	10 719	60 028	82 697	138 248	D
3241	Petroleum and coal products manufacturing	_	8	2	291	16 269	214	499	10 719	60 028	82 697	138 248	D
32412	Asphalt paving, roofing, and saturated materials												
324122	manufacturing Asphalt shingle and coating materials manufacturing	_	7	2 2	e e	D	D	D	D	D	D	D	D
325	Chemical manufacturing	2	76	31	4 216	206 338	1 983	3 752	74 835	'1 223 038	'379 028	'1 617 776	55 024
3254	Pharmaceutical and medicine manufacturing	1	21	12	2 907	143 870	1 304	2 546	50 881	1 022 263	129 725	1 166 961	D
32541	Pharmaceutical and medicine manufacturing	1	21	12	2 907	143 870	1 304	2 546	50 881	1 022 263	129 725	1 166 961	D
325412 325413	Pharmaceutical preparation manufacturing In-vitro diagnostic substance	4	10	5	f	D	D	D	D	D	D	D	D
325414	manufacturing Biological product (except	2	3	3 3	g	D	D	D	D	D	D	D	D
3255	diagnostic) manufacturing Paint, coating, and adhesive manufacturing	-	4	6	315	16 373	156	302	6 081	52 689	45 044	97 312	1 577
3259	Other chemical product and preparation manufacturing	6	17	4	502	20 718	257	354	6 700	38 298	56 730	96 089	1 672
32599	All other chemical product and preparation manufacturing	8	11	3	374	14 838	192	226	4 437	25 421	42 583	68 879	1 354
326	Plastics and rubber products manufacturing	2	59	33	2 399	94 672	1 629	3 480	49 722	228 377	219 637	448 316	9 677
3261	Plastics product manufacturing	2	42	24	1 649	66 144	1 149	2 434	35 838	152 323	148 241	299 865	D
32619 326199	Other plastics product manufacturing All other plastics product	2	31	18	1 337	55 332	879	1 822	27 163	124 531	112 336	235 122	6 357
3262	manufacturing Rubber product manufacturing	2 2	31 17	18 9	1 337 750	55 332 28 528	879 480	1 822 1 046	27 163 13 884	124 531 76 054	112 336 71 396	235 122 148 451	6 357 D
32629	Other rubber product manufacturing	2	13	8	f	D	D	D	D	D	D	D	D
326291	Rubber product manufacturing for	2			, i								
326299	mechanical use All other rubber product manufacturing	- 3	2	2 6	e e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	3	57	18	1 376	64 214	976	2 155	41 479	143 485	92 089	234 036	7 180
3273	Cement and concrete product manufacturing	4	27	14	986	47 307	714	1 583	31 096	91 245	69 375	159 136	4 604
32732	Ready-mix concrete	7											
327320	manufacturing Ready-mix concrete manufacturing	7	10 10	6 6	495 495	26 612 26 612	403 403	918 918	19 380 19 380	46 432 46 432	42 228 42 228	88 660 88 660	2 745 2 745
32739 327390	Other concrete product manufacturing Other concrete product	-	9	4	е	D	D	D	D	D	D	D	D
	manufacturing	-	9	4	e 540	D	D	D	D	D	D	D	D
331 3315	Primary metal manufacturing	2 2	21 12	7 4	548 e	21 015 D	431 D	909 D	13 560 D	39 892 D	26 255 D	66 343 D	D 558
33151	Ferrous metal foundries	1		4	308	11 720	252	550	7 912	23 439	9 720	32 764	D

See footnotes at end of table.

[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]

			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area-Con.												
	Boston-Quincy, MA Metropolitan Division—Con.												
332	Fabricated metal product manufacturing	1	302	90	8 220	364 022	5 703	11 632	215 905	889 533	439 674	1 337 599	45 808
3321	Forging and stamping	2	12	3	345	12 325	249	514	8 218	28 908	9 917	37 545	D
33211 332116	Forging and stamping Metal stamping	2 2	12 10	3 3	345 e	12 325 D	249 D	514 D	8 218 D	28 908 D	9 917 D	37 545 D	D D
3322	Cutlery and handtool manufacturing	_	4	2	g	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing	_	4	2	g	D	D	D	D	D	D	D	D
332211	Cutlery and flatware (except precious) manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
3323	Architectural and structural metals manufacturing	2	71	28	1 908	79 548	1 364	2 773	49 012	164 787	128 208	294 053	4 126
33231	Plate work and fabricated structural product												
332312	manufacturing Fabricated structural metal	-	14	7	349	15 687	203	428	7 617	27 197	16 738	48 088	946 D
33232	manufacturing Ornamental and architectural metal products	_	11	6	319	14 724	179	386	6 980	25 940	15 721	45 816	D
332322	manufacturing Sheet metal work	2	57	21	1 559	63 861	1 161	2 345	41 395	137 590	111 470	245 965	3 180
332323	manufacturing Ornamental and architectural metal work manufacturing	1	27 21	13 5	1 109 317	48 113 11 358	838 222	1 714 404	31 525 7 257	106 632 22 164	86 099 19 106	192 631 38 299	2 193 816
3327	Machine shops; turned product; and screw, nut, and bolt												
33271	manufacturing	1 2 2	121 99	24 15	1 676 1 088	72 297 47 501	1 198 772	2 299 1 468	45 382 30 053	155 327 105 392	69 588 41 408	228 459 147 911	9 971 6 365
332710 33272	Machine shops Turned product and screw, nut,	2	99 22	15 9	1 088 588	47 501 24 796	772	1 468 831	30 053 15 329	105 392 49 935	41 408 28 180	147 911 80 548	6 365 3 606
332721	and bolt manufacturing Precision turned product manufacturing	_	18	9 7	313	12 221	426 239	474	8 261	49 933 25 861	9 428	35 778	3 393
332722	Bolt, nut, screw, rivet, and washer manufacturing	-	4	2	275	12 575	187	357	7 068	24 074	18 752	44 770	213
3328	Coating, engraving, heat treating, and allied activities	1	39	13	948	34 497	735	1 430	22 386	57 411	18 372	77 734	5 485
33281	Coating, engraving, heat treating, and allied activities	1	39	13	948	34 497	735	1 430	22 386	57 411	18 372	77 734	5 485
332812	Metal coating, engraving (except jewelry and silverware), and allied		10		500	00.004	440	005	44 570	05.050	44,005	10,010	4 000
332813	services to manufacturers Electroplating, plating, polishing, anodizing, and	1	18 19	6	586	22 804 D	442 D	835 D	14 578 D	35 050 D	11 985 D	48 846 D	4 300 D
3329	coloring Other fabricated metal product manufacturing		40	6 15	e 1 670	72 235	977	1 869	32 599	176 261	95 773	275 826	6 522
33291	Metal valve manufacturing	_	5	4	713	33 439	364	742	12 530	98 841	42 349	143 514	3 221
332911 332913	Industrial valve manufacturing Plumbing fixture fitting and	-	2	2	е	D	D	D	D	D	D	D	D
33299	trim manufacturing All other fabricated metal	-	2	1	е	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product	1	35 28	11 9	957 777	38 796 30 803	613 514	1 127 940	20 069	77 420 60 062	53 424 44 095	132 312 105 447	3 301 D
333	manufacturing	2	107	9 40	3 647	30 803 173 804	1 958	940 3 623	67 000	338 543	230 672	575 017	21 272
3332	Industrial machinery manufacturing	_	23	9	1 401	67 950	680	1 032	19 325	113 139	90 285	208 770	D
33329	Other industrial machinery manufacturing	_	20	8	g	D	D	D	D	D	D	D	D
333298	All other industrial machinery manufacturing	_	7	2	9 907	45 997	399	502	9 363	64 588	62 487	133 056	D
3333	Commercial and service industry machinery manufacturing	3	13	7	307	14 449	172	368	6 664	32 869	17 605	50 777	1 621
33331	Commercial and service industry machinery manufacturing	3	13	7	307	14 449	172	368	6 664	32 869	17 605	50 777	1 621

See footnotes at end of table.

[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]

			Δ	ll hments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area-Con.												
	Boston-Quincy, MA Metropolitan Division—Con.												
333 3335	Machinery manufacturing—Con. Metalworking machinery manufacturing	7	24	5	434	20 135	318	702	11 290	38 604	20 629	59 933	3 183
33351	Metalworking machinery manufacturing	7	24	5	434	20 135	318	702	11 290	38 604	20 629	59 933	3 183
3339	Other general purpose machinery manufacturing	1	31	15	1 274	59 836	654	1 235	24 461	131 764	81 072	212 711	8 478
33399	All other general purpose machinery manufacturing	_	26	11	1 024	49 588	515	903	19 394	112 302	68 918	181 182	D
333999	All other miscellaneous general purpose machinery manufacturing	_	11	6	767	35 987	362	603	13 211	85 796	52 908	139 022	7 095
334	Computer and electronic product manufacturing	_	143	72	11 409	609 407	4 681	9 455	180 731	1 887 543	1 818 791	3 712 261	90 269
3341	Computer and peripheral equipment manufacturing	_	19	10	g	D	D	D	D	D	D	D	26 944
33411 334112	Computer and peripheral equipment manufacturing	_	19	10	g	D	D	D	D	D	D	D	26 944
334112	Computer storage device manufacturing Other computer peripheral	-	2	1	g	D	D	D	D	D	D	D	D
3342	equipment manufacturing Communications equipment	1	13	5	Ť	D	D	D	D	D	D	D	D
33421	manufacturing	4	9	6	T	D	D	D	D	D	D	D	D
334210	manufacturing Telephone apparatus manufacturing	3 3	3	2	e e	D	D D	D D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	2	51	27	1 971	87 567	1 224	2 468	37 580	234 962	163 216	397 430	21 616
33441	Semiconductor and other electronic component												
334413	manufacturing Semiconductor and related device manufacturing	2	51 12	27 7	1 971 631	87 567 38 495	1 224 361	2 468 775	37 580 16 062	234 962 121 916	163 216 46 846	397 430 169 213	21 616 18 755
334418	Printed circuit assembly (electronic assembly) manufacturing	2	10	8	603	21 794	377	757	8 710	56 745	88 953	145 575	1 845
334419	Other electronic component manufacturing	-	16	7	525	19 512	327	621	8 078	37 592	18 370	56 117	D
3345	Navigational, measuring, electromedical, and control		51	26	6 592	365 681	2 072	4 075	88 749	624 395	388 114	1 054 711	38 575
33451	instruments manufacturing Navigational, measuring, electromedical, and control	_	51	20	0 592	303 061	2 0/2	4 075	66 749	024 393	300 114	1 054 711	36 575
334511	instruments manufacturing Search, detection, navigation, guidance, aeronautical, and nautical	_	51	26	6 592	365 681	2 072	4 075	88 749	624 395	388 114	1 054 711	38 575
334513	system and instrument manufacturing Instruments and related products manufacturing for	3	10	3	e	D	D	D	D	D	D	D	552
334515	measuring, displaying, and controlling industrial process variables Instrument manufacturing for	_	8	7	1 721	87 990	772	1 566	25 638	210 790	88 787	309 207	D
	measuring and testing electricity and electrical signals	_	7	5	3 378	199 937	859	1 603	47 644	255 700	192 525	483 425	D
334516 334519	Analytical laboratory instrument manufacturing Other measuring and	-	8	3	472	21 141	144	331	4 168	47 582	47 445	92 908	D
	controlling device manufacturing	-	6	2	е	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	-	46	23	4 204	159 279	2 743	5 177	74 772	409 966	283 155	696 223	20 620
3351	Electric lighting equipment manufacturing	1	9	5	509	18 007	336	731	9 073	37 048	20 361	57 327	1 061
33512 335122	Lighting fixture manufacturing Commercial, industrial, and institutional electric lighting	1	9	5	509	18 007	336	731	9 073	37 048	20 361	57 327	1 061
	fixture manufacturing	1	3	2	e	D	D	D	D D	D	D	D	D

See footnotes at end of table.

[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]

			A establis		All em	ployees	Pro	oduction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area – Con.												
	Boston-Quincy, MA Metropolitan Division—Con.												
335 3353	Electrical equipment, appliance, and component manufacturing—Con. Electrical equipment manufacturing	_	17	6	856	38 822	472	991	12 704	97 334	46 548	144 409	1 157
33531	Electrical equipment manufacturing	_	17	6	856	38 822	472	991	12 704	97 334	46 548	144 409	1 157
335313	Switchgear and switchboard apparatus manufacturing	-	4	2	е	D	D	D	D	D	D	D	D
335314	Relay and industrial control manufacturing	-	7	3	505	21 598	301	627	6 473	49 117	28 207	77 457	926
3359	Other electrical equipment and component manufacturing	_	20	12	2 839	102 450	1 935	3 455	52 995	275 584	216 246	494 487	18 402
33593	Wiring device manufacturing	-	6	5	g	D	D	D	D	D	D	D	5 994
335931	Current-carrying wiring device manufacturing	-	6	5	g	D	D	D	D	D	D	D	5 994
336	Transportation equipment manufacturing	2	40	9	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts manufacturing	2	18	6	572	20 658	423	946	13 943	34 848	44 538	82 998	D
337	Furniture and related product manufacturing	1	101	23	1 632	59 684	1 224	2 469	36 630	151 100	106 860	258 490	3 701
3371	Household and institutional furniture and kitchen cabinet manufacturing	1	68	13	774	26 807	548	1 091	14 953	54 027	28 271	82 141	1 531
33711	Wood kitchen cabinet and												
337110	countertop manufacturing Wood kitchen cabinet and	2	42	6	433	16 326	300	588	9 223	30 016	15 469	45 415	1 013
33712	countertop manufacturing Household and institutional furniture manufacturing	2 1	42 26	6 7	433 341	16 326 10 481	300 248	588 503	9 223 5 730	30 016 24 011	15 469 12 802	45 415 36 726	1 013 518
3372	Office furniture (including fixtures) manufacturing	3	24	5	268	10 035	206	393	6 542	19 045	9 882	28 911	D
33721	Office furniture (including fixtures) manufacturing	3	24	5	268	10 035	206	393	6 542	19 045	9 882	28 911	D
3379	Other furniture related product manufacturing	-	9	5	590	22 842	470	985	15 135	78 028	68 707	147 438	D
33791 337910	Mattress manufacturing Mattress manufacturing	-	6 6	4 4	552 552	21 352 21 352	442 442	925 925	14 368 14 368	74 208 74 208	65 990 65 990	140 904 140 904	1 708 1 708
339	Miscellaneous manufacturing	2	234	73	6 724	297 242	3 714	7 055	108 359	612 769	559 644	1 199 873	24 481
3391	Medical equipment and supplies manufacturing	2	80	31	3 225	150 118	1 769	3 340	55 429	319 233	247 775	591 396	16 529
33911	Medical equipment and supplies manufacturing	2	80	31	3 225	150 118	1 769	3 340	55 429	319 233	247 775	591 396	16 529
339111	Laboratory apparatus and furniture manufacturing	3	6	4	312	14 249	142	294	4 473	36 703	17 535	53 164	1 005
339112	Surgical and medical instrument manufacturing	2	26	15	1 789	94 125	866	1 668	29 199	180 761	149 915	354 388	10 513
339113	Surgical appliance and supplies manufacturing	3	10	7	765	28 768	524	893	14 318	92 652	47 310	140 890	3 693
3399	Other miscellaneous manufacturing	2	154	42	3 499	147 124	1 945	3 715	52 930	293 536	311 869	608 477	7 952
33991 339912	Jewelry and silverware manufacturing Silverware and hollowware	-	24	6	694	39 302	191	388	6 094	54 246	136 164	195 865	D
33992	manufacturing Sporting and athletic goods	-	3	2	е	D	D	D	D	D	D	D	D
339920	manufacturing Sporting and athletic goods	5	14	7	730	30 828	389	663	10 877	55 539	54 481	108 933	1 732
33995 339950 339900	manufacturing Sign manufacturing Sign manufacturing	5 3 3	14 48 48	7 12 12	730 843 843	30 828 31 031 31 031	389 540 540	663 969 969	10 877 14 425 14 425	55 539 55 574 55 574	54 481 39 057 39 057	108 933 95 889 95 889	1 732 D D
33999 339992	All other miscellaneous manufacturing Musical instrument	2	59	16	1 089	42 009	734	1 516	19 434	115 374	71 735	184 768	3 519
339992	Musical instrument manufacturing All other miscellaneous	-	6	4	292	12 132	209	436	6 715	42 264	14 083	58 192	D
	manufacturing	3	47	9	615	23 303	391	807	9 488	60 447	47 106	103 415	2 136

See footnotes at end of table.

[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]

	aning of abbreviations and symbols, see		Δ	MI hments <sup>2</sup>	All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area – Con.												
	Cambridge-Newton- Framingham, MA Metropolitan Division												
31-33	Manufacturing	2	2 189	723	90 711	4 606 151	46 231	91 640	1 637 156	13 764 714	8 859 031	22 747 554	626 091
311	Food manufacturing	1	177	45	4 894	168 861	3 315	6 282	95 141	563 559	748 636	1 307 964	19 261
3113	Sugar and confectionery product manufacturing	-	16	3	804	26 532	674	1 389	19 094	65 661	44 784	107 996	1 023
31133 311330	Confectionery manufacturing from purchased chocolate Confectionery manufacturing	-	9	2	393	13 415	334	725	10 337	44 209	30 390	74 121	D
31134	from purchased chocolate Nonchocolate confectionery	-	9	2	393	13 415	334	725	10 337	44 209	30 390	74 121	D
311340	manufacturing Nonchocolate confectionery manufacturing	-	6 6	1	e e	D	D	D D	D	D	D	D	D
3115	Dairy product manufacturing	1	14	3	354	16 984	312	376	14 703	178 778	148 656	327 833	D
31152	Ice cream and frozen dessert												_
311520	manufacturing Ice cream and frozen dessert manufacturing	1 1	11 11	3 3	338 338	16 329 16 329	301 301	354 354	14 315 14 315	176 889 176 889	144 231 144 231	321 519 321 519	D
3116	Animal slaughtering and processing	_	7	2	е	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing	_	7	2	е	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing	3	102	20	1 508	39 862	908	1 676	19 665	95 997	52 973	148 876	2 832
31181	Bread and bakery product manufacturing	3	99	20	1 484	39 139	892	1 646	19 166	93 285	50 357	143 550	2 732
311811 311812	Retail bakeries Commercial bakeries	3 2	64 30	6 14	493 949	7 692 30 061	284 573	403 1 172	4 076 14 073	18 161 71 180	8 731 37 954	26 905 109 029	2 111
3119	Other food manufacturing	-	26	11	1 401	54 145	891	1 661	26 081	118 496	368 868	487 991	8 320
31191 311911	Snack food manufacturing Roasted nuts and peanut	-	4	3	е	D	D	D	D	D	D	D	D
31194	butter manufacturing Seasoning and dressing	-	4	3	e f	D	D	D	D	D	D	D	D
311941	manufacturing Mayonnaise, dressing, and other prepared sauce		5	5	1	D	D	D		U	U	D	D
31199	manufacturing All other food manufacturing	4	2 16	2 4	f 315	D 8 872	D 223	D 393	D 5 602	D 33 731	D 38 206	D 71 618	D 3 419
312	Beverage and tobacco product manufacturing	2	10	5	985	51 059	468	1 010	19 687	88 265	196 831	285 212	7 469
3121	Beverage manufacturing	2	10	5	985	51 059	468	1 010	19 687	88 265	196 831	285 212	7 469
31211	Soft drink and ice		_	4	4	D	D	D	D	D	D	D	D
312111	manufacturing Soft drink manufacturing	-	5 3	43	f	D	D	D	D	D	D	D	D
313	Textile mills	2	20	13	1 366	51 875	1 047	2 227	29 780	125 681	189 264	327 504	8 268
3131	Fiber, yarn, and thread mills	-	3	2	е	D	D	D	D	D	D	D	D
31311 313111	Fiber, yarn, and thread mills Yarn spinning mills	-	3 2	2 1	e e	D D	D D	D D	D	D D	D D	D D	D D
3133	Textile and fabric finishing and fabric coating mills	3	9	7	f	D	D	D	D	D	D	D	D
31332 313320	Fabric coating mills Fabric coating mills	3 3	7 7	7 7	659 659	29 947 29 947	423 423	940 940	12 398 12 398	76 349 76 349	101 310 101 310	177 491 177 491	D D
314	Textile product mills	3	38	2	361	9 211	279	551	5 799	16 398	13 595	30 349	D
315	Apparel manufacturing	9	36	2	е	D	D	D	D	D	D	D	D
321	Wood product manufacturing	-	30	5	610	21 602	469	1 014	14 610	43 347	64 045	105 547	2 376
3219	Other wood product manufacturing	_	25	4	426	15 491	305	662	9 488	33 812	37 685	69 308	1 550

See footnotes at end of table.

[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]

				JI	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area-Con.												
	Cambridge-Newton- Framingham, MA Metropolitan Division—Con.												
322	Paper manufacturing	1	36	23	2 562	107 353	1 833	3 785	61 762	250 934	280 333	529 059	10 075
3221	Pulp, paper, and paperboard mills	_	4	3	315	14 977	212	429	9 682	43 631	52 274	96 594	D
32212	Paper mills	_	3	2	e	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	_	3	2	е	D	D	D	D	D	D	D	D
3222	Converted paper product manufacturing	1	32	20	2 247	92 376	1 621	3 356	52 080	207 303	228 059	432 465	D
32221	Paperboard container												
322211	manufacturing Corrugated and solid fiber	-	16	11	873	36 532	605	1 295	19 988	75 236	130 735	206 043	2 781
32222	box manufacturing Paper bag and coated and	-	7	6	537	24 283	346	728	11 513	50 579	80 378	131 273	1 612
322222	treated paper manufacturing Coated and laminated paper	3	9	5	513	27 027	310	672	13 595	73 167	65 250	134 057	1 898
32223	manufacturing Stationery product	3	7	3	е	D	D	D	D	D	D	D	D
322231	manufacturing Die-cut paper and paperboard office supplies	-	3	1	f	D	D	D	D	D	D	D	D
323	Printing and related support	-	1	1	f	D	D	D	D	D	D	D	D
020	activities	2	257	51	4 530	180 924	3 212	6 086	109 437	419 179	231 189	651 506	10 447
3231	Printing and related support activities	2	257	51	4 530	180 924	3 212	6 086	109 437	419 179	231 189	651 506	10 447
32311 323110	Printing Commercial lithographic	2	<sup>r</sup> 235	44	r4 240	'169 699	'2 986	'5 666	'101 917	'395 440	'223 752	'620 783	<sup>r</sup> 9 748
323114	printing	2 5	'115 52	27 1	'2 374 291	'105 925 8 933	r1 592 194	'3 096 338	<sup>r</sup> 59 336 5 277	'198 471 17 434	'154 681 7 488	'354 094 24 929	'5 193 772
323115 323117	Digital printing Books printing	2	16	7 4	279 618	9 897 23 574	193 538	366 1 087	6 070 19 299	22 687 45 377	8 538 21 953	31 220 67 523	543 985
32312	Support activities for printing	r5	'22	7	r290	11 225	<sup>1</sup> 226	'420	7 520	123 739	7 437	30 723	<sup>r</sup> 699
325	Chemical manufacturing	5	94	40	6 085	367 511	2 285	4 419	108 852	1 058 135	607 114	1 692 971	131 155
3254	Pharmaceutical and medicine manufacturing	7	29	17	2 924	184 424	905	1 782	41 070	739 758	237 062	988 188	60 907
32541	Pharmaceutical and medicine manufacturing	7	29	17	2 924	184 424	905	1 782	41 070	739 758	237 062	988 188	60 907
325412	Pharmaceutical preparation manufacturing	8	11	5	1 834	123 822	322	591	16 617	591 426	184 844	795 620	41 914
325414	Biological product (except diagnostic) manufacturing	1	7	5	691	39 934	326	619	14 327	81 998	26 132	100 082	14 659
3255	Paint, coating, and adhesive manufacturing	-	18	5	321	17 572	144	306	7 617	40 451	28 678	68 294	1 332
3256	Soap, cleaning compound, and toilet preparation manufacturing.	6	15	4	269	9 826	135	267	3 895	50 894	27 912	78 847	2 310
32561	Soap and cleaning compound manufacturing	7	13	4	е	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing	1	20	10	2 326	142 431	998	1 895	51 298	193 936	279 324	488 498	60 192
32599	All other chemical product and												
325992	preparation manufacturing Photographic film, paper, plate, and chemical	-	12	6	2 136	134 878	896	1 703	48 418	177 320	255 203	447 619	59 424
325998	Manufacturing All other miscellaneous chemical product and	-	1	1	g	D	D	D	D	D	D	D	D
326	preparation manufacturing . Plastics and rubber products	-	9	4	g	D	D	D	D	D	D	D	D
	manufacturing	1	61	25	2 497	84 074	1 762	3 499	46 553	265 305	168 600	435 560	19 460 D
3261	Plastics product manufacturing	1	58	25	2 468	82 942	1 741	3 458	45 886	262 649	167 043	431 345	D
32611 326113	Plastics packaging materials and unlaminated film and sheet manufacturing Unlaminated plastics film and	-	12	7	395	16 272	247	518	8 056	38 600	45 351	84 825	1 614
	sheet (except packaging) manufacturing	_	8	5	302	13 001	170	343	5 629	31 800	39 192	71 715	1 325

See footnotes at end of table.

[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]

			Δ	-	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry		establis	With 20 em-							Total	Total	Total capital
		E1	Total	ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	cost of materials (\$1,000)	value of shipments (\$1,000)	expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area – Con.												
	Cambridge-Newton- Framingham, MA Metropolitan Division—Con.												
326 3261	Plastics and rubber products manufacturing—Con. Plastics product manufacturing— Con.												
32615	Urethane and other foam product (except polystyrene) manufacturing	_	3	1	е	D	D	D	D	D	D	D	D
326150	Urethane and other foam product (except polystyrene) manufacturing Other plastics product	_	3	1	e	D	D	D	D	D	D	D	D
32619	manufacturing	1	35	15	1 669	52 825	1 230	2 373	31 504	187 948	86 061	274 443	16 550
326199	All other plastics product manufacturing	1	35	15	1 669	52 825	1 230	2 373	31 504	187 948	86 061	274 443	16 550
327	Nonmetallic mineral product manufacturing	5	51	17	1 013	39 539	787	1 717	26 924	81 314	66 975	148 797	3 737
3279	Other nonmetallic mineral product manufacturing	5	17	9	531	20 563	417	884	14 863	36 330	30 842	67 338	1 806
32799	All other nonmetallic mineral product manufacturing	5	16	8	е	D	D	D	D	D	D	D	D
327991	Cut stone and stone product manufacturing	6	10	6	413	16 115	343	719	12 591	26 400	24 966	51 646	1 500
331	Primary metal manufacturing	-	17	5	750	37 603	463	974	20 794	14 758	147 616	172 866	5 599
3314	Nonferrous metal (except aluminum) production and processing	_	4	2	е	D	D	D	D	D	D	D	D
33149	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and												
331492	alloying	-	3	2	е	D	D	D	D	D	D	D	D
	metal (except copper and aluminum)	-	2	2	е	D	D	D	D	D	D	D	D
3315	Foundries	-	10	2	310	12 668	249	577	9 934	28 634	10 234	39 986	D
33152	Nonferrous metal foundries	-	6	2	290	11 917	233	544	9 361	27 117	9 154	37 389	D
332	Fabricated metal product manufacturing	2	356	89	7 024	304 631	4 480	8 996	149 896	794 855	544 943	1 323 094	32 982
3323	Architectural and structural metals manufacturing	4	65	19	980	37 258	699	1 283	21 494	77 567	47 508	125 448	1 973
33232	Ornamental and architectural metal products												
332322	manufacturing Sheet metal work manufacturing	4 4	52 34	14 9	787 552	28 777 19 721	555 414	986 764	16 107 11 969	59 038 38 689	33 415 19 047	92 878 58 237	1 473 900
3324	Boiler, tank, and shipping container manufacturing	6	8	5	757	30 890	497	1 046	15 954	72 054	42 088	112 603	1 202
33242	Metal tank (heavy gauge)	_				_		_	_	_	_	_	_
332420	manufacturing Metal tank (heavy gauge) manufacturing	8 8	3	2	f	D	D	D	D	D	D	D	D
3325	Hardware manufacturing	-	2	1	e	D	D	D	D	D	D	D	D
33251	Hardware manufacturing	_	2	1	е	D	D	D	D	D	D	D	D
332510 3327	Hardware manufacturing Machine shops; turned product;	_	2	1	е	D	D	D	D	D	D	D	D
	and screw, nut, and bolt manufacturing	2	172	35	2 047	87 543	1 471	2 949	55 195	184 355	66 528	251 292	10 114
33271 332710	Machine shops Machine shops	3 3	142 142	23 23	1 434 1 434	62 664 62 664	1 004 1 004	2 017 2 017	38 352 38 352	124 754 124 754	48 632 48 632	175 463 175 463	6 062 6 062
332710	Turned product and screw, nut, and bolt manufacturing	3 2	30	23 12	613	62 664 24 879	467	932	16 843	59 601	48 632 17 896	75 829	6 062 4 052
332721	Precision turned product manufacturing	2	26	12	585	23 226		902			15 825	68 250	3 953

See footnotes at end of table.

[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]

			A establis	JI	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area – Con.												
	Cambridge-Newton- Framingham, MA Metropolitan Division—Con.												
332 3328	Fabricated metal product manufacturing—Con. Coating, engraving, heat treating, and allied activities	2	50	15	1 022	34 688	771	1 510	22 535	68 932	23 179	92 474	2 677
33281	Coating, engraving, heat treating, and allied activities	2	50	15	1 022	34 688	771	1 510	22 535	68 932	23 179	92 474	2 677
332812	Metal coating, engraving (except jewelry and silverware), and allied services to manufacturers	1	26	6	481	16 500	407	758	12 096	33 920	13 853	48 013	1 837
332813	Electroplating, plating, polishing, anodizing, and coloring	3	20	9	508	16 846	343	706	9 686	31 413	8 882	40 367	D
3329	Other fabricated metal product manufacturing	-	30	7	1 529	91 313	548	1 202	22 346	198 450	98 799	297 665	7 742
33299	All other fabricated metal product manufacturing		25	6	1 376	85 240	441	983	18 863	185 645	89 216	275 277	D
332993	Ammunition (except small arms) manufacturing	_	3	2	r 3/0	03 240 D	441 D	505 D	D	185 045 D	03 210 D	273 277 D	D
332999	All other miscellaneous fabricated metal product manufacturing	3	19	4	e	D	D	D	D	D	D	D	D
333	Machinery manufacturing	5	169	60	7 753	406 568	4 140	8 510	158 586	801 109	634 081	1 455 041	63 430
3332	Industrial machinery manufacturing	7	41	15	3 474	201 783	1 757	3 739	67 655	416 241	330 253	759 385	36 032
33329	Other industrial machinery												
333293	manufacturing Printing machinery and equipment manufacturing	7 3	37 4	15 3	3 434 326	200 015 18 450	1 738 145	3 699 298	66 923 6 083	411 746 39 720	326 991 27 208	751 643 67 175	35 907 D
333295	Semiconductor machinery manufacturing	7	10	6	1 841	116 271	811	1 665	35 235	216 108	218 983	442 242	26 681
333298	All other industrial machinery manufacturing	9	18	5	1 212	62 407	750	1 671	24 174	142 173	77 469	225 141	7 842
3333	Commercial and service industry machinery manufacturing	3	37	17	1 638	71 722	974	1 975	34 908	133 450	86 454	215 334	4 157
33331	Commercial and service industry machinery	_											
333314	Optical instrument and lens	3	37 20	17 9	1 638 997	71 722 45 634	974 626	1 975 1 270	34 908 23 691	133 450 69 779	86 454 29 096	215 334	4 157
333319	Manufacturing Other commercial and service industry machinery manufacturing	5	11	5	471	18 324	259	514	8 054	44 205	38 223	95 151 81 927	1 527
3334	Ventilation, heating, air- conditioning, and commercial refrigeration equipment	5											
33341	manufacturing Ventilation, heating, air- conditioning, and commercial	-	10	5	377	14 986	171	339	5 423	31 183	48 307	79 581	562
	refrigeration equipment manufacturing	-	10	5	377	14 986	171	339	5 423	31 183	48 307	79 581	562
3335	Metalworking machinery manufacturing	2	34	6	377	19 106	210	417	8 377	33 017	30 619	64 641	2 338
33351	Metalworking machinery manufacturing	2	34	6	377	19 106	210	417	8 377	33 017	30 619	64 641	2 338
3339	Other general purpose machinery manufacturing	1	42	15	1 822	96 330	982	1 950	40 526	181 205	134 590	326 368	19 854
33391	Pump and compressor manufacturing	_	3	2	е	D	D	D	D	D	D	D	D
333912	Air and gas compressor manufacturing	_	1	1	e	D	D	D	D	D	D	D	D
33399	All other general purpose machinery manufacturing	1	34	10	1 230	68 514	672	1 394	29 139	138 563	80 656	227 622	18 915
333993 333999	Packaging machinery manufacturing All other miscellaneous	2	5	3	е	D	D	D	D	D	D	D	D
000999	general purpose machinery manufacturing	1	19	3	538	32 992	299	653	15 313	86 294	40 424	135 327	10 124

[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]

			A	ll hments <sup>2</sup>	All em	ployees	Pro	oduction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area—Con.												
	Cambridge-Newton- Framingham, MA Metropolitan Division—Con.												
334	Computer and electronic product manufacturing	1	398	212	36 053	2 164 508	13 380	26 114	523 677	7 599 649	4 135 553	11 800 758	246 162
3341	Computer and peripheral equipment manufacturing	3	45	21	2 919	211 277	824	1 659	35 179	351 637	269 613	620 176	24 258
33411 334111	Computer and peripheral equipment manufacturing Electronic computer	3	45	21	2 919	211 277	824	1 659	35 179	351 637	269 613	620 176	24 258
334119	manufacturing Other computer peripheral equipment manufacturing	- 5	9 28	5 13	1 435 1 285	125 365 74 253	240 531	512 1 037	12 686 20 933	169 042 160 136	113 747 138 548	281 696 298 806	9 581 12 690
3342	Communications equipment manufacturing	2	55	35	5 179	340 367	1 513	2 828	66 332	1 229 216	827 241	2 107 109	33 824
33421	Telephone apparatus manufacturing	1	24	17	3 452	235 317	946	1 843	46 751	986 062	736 033	1 776 237	25 916
334210 33422	Telephone apparatus manufacturing Radio and television	1	24	17	3 452	235 317	946	1 843	46 751	986 062	736 033	1 776 237	25 916
334220	broadcasting and wireless communications equipment manufacturing Radio and television	6	21	13	g	D	D	D	D	D	D	D	6 609
	broadcasting and wireless communications equipment manufacturing	6	21	13	g	D	D	D	D	D	D	D	6 609
33429	Other communications equipment manufacturing	7	10	5	g f	D	D	D	D	D	D	D	1 299
334290	Other communications equipment manufacturing	7	10	5	f	D	D	D	D	D	D	D	1 299
3343	Audio and video equipment manufacturing	-	5	3	е	D	D	D	D	D	D	D	D
33431 334310	Audio and video equipment manufacturing Audio and video equipment	_	5	3	e	D	D	D	D	D	D	D	D
	manufacturing	-	5	3	е	D	D	D	D	D	D	D	D
3344	electronic component manufacturing	-	133	66	11 224	544 736	5 797	11 383	212 400	3 094 965	1 459 717	4 624 732	100 621
33441	Semiconductor and other electronic component		400		44 004	544 700	F 707	44,000	040,400	0.004.005	4 450 747	4 004 700	100,001
334412	manufacturing Bare printed circuit board manufacturing	_	133 25	66 10	11 224 1 421	544 736 45 723	5 797 742	11 383 1 526	212 400 24 655	3 094 965 93 198	1 459 717 67 580	4 624 732 162 281	100 621 4 670
334413	Semiconductor and related device manufacturing	-	32	18	5 139	291 011	2 864	5 445	116 912	2 601 613	1 004 344	3 659 489	75 006
334418	(electronic assembly) manufacturing	2	29	24	2 199	94 793	1 135	2 224	32 520	180 521	239 421	423 770	13 579
334419	Other electronic component manufacturing	1	32	10	2 176	101 128	856	1 772	31 562	190 697	133 725	332 751	6 897
3345	Navigational, measuring, electromedical, and control instruments manufacturing	1	148	81	15 354	1 016 582	4 272	8 173	176 966	2 627 515	1 426 039	3 998 711	80 684
33451	Navigational, measuring, electromedical, and control												
334510	electrotherapeutic	1	148	81	15 354	1 016 582	4 272	8 173	176 966	2 627 515	1 426 039	3 998 711	80 684
334511	apparatus manufacturing Search, detection, navigation, guidance, aeronautical, and nautical	8	22	12	1 402	85 769	484	987	17 148	226 309	106 551	333 791	7 956
334513	products manufacturing for	-	15	9	i	D	D	D	D	D	D	D	D
334515	measuring and testing	-	17	13	1 784	88 624	634	1 067	24 365	189 113	128 380	318 505	5 378
004540	electricity and electrical signals	5	22	11	962	54 062	312	601	10 729	147 497	128 470	272 666	3 785
334516 334517	instrument manufacturing	1	20	8	1 664	100 314	609	1 259	26 269	234 447	164 203	402 503	8 936
00+017	manufacturing	_	12	9	g	D	D	Ы	D	D	D	D	D

See footnotes at end of table.

[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]

	aning of appreviations and sympols, see		A		All and		Der						
			establis	nments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area – Con.												
	Cambridge-Newton- Framingham, MA Metropolitan Division—Con.												
334 3345	Computer and electronic product manufacturing—Con. Navigational, measuring, electromedical, and control instruments manufacturing— Con.												
33451	Navigational, measuring, electromedical, and control instruments manufacturing— Con.												
334519	Other measuring and controlling device manufacturing	1	33	15	1 784	109 097	844	1 662	36 610	206 269	102 469	314 767	4 508
3346	Manufacturing and reproducing magnetic and optical media	3	12	6	g	D	D	D	D	D	D	D	D
33461 334611	Manufacturing and reproducing magnetic and optical media Software reproducing	3	12 3	6 3	g	D	D	D	D	D	D	D	D
334612	Prerecorded compact disc (except software), tape, and record reproducing	9	6	2	425	13 668	257	564	7 650	38 454	22 725	60 710	1 535
335	Electrical equipment, appliance, and component manufacturing	3	62	27	2 908	119 843	1 520	2 934	48 064	210 712	179 695	393 511	13 055
3351	Electric lighting equipment manufacturing	1	8	2	е	D	D	D	D	D	D	D	D
33512 335122	Lighting fixture manufacturing Commercial, industrial, and institutional electric lighting	1	7	2	е	D	D	D	D	D	D	D	D
3353	fixture manufacturing	-	2	1	е	D	D	D	D	D	D	D	D
	manufacturing	4	21	10	799	39 027	385	628	9 311	58 843	53 457	115 889	D
33531 335312	Electrical equipment manufacturing Motor and generator	4	21	10	799	39 027	385	628	9 311	58 843	53 457	115 889	D
335314	Relay and industrial control manufacturing	- 6	6 13	4 6	e 452	D 23 356	D 216	D 290	D 4 423	D 38 574	D 20 996	D 59 682	2 114 D
3359	Other electrical equipment and component manufacturing	4	32	14	g	D	D	D	D	D	D	D	D
33591	Battery manufacturing	-	3	2	е	D	D	D	D	D	D	D	D
33592 335929	Communication and energy wire and cable manufacturing . Other communication and	3	8	4	696	18 892	90	198	2 774	11 216	14 012	24 852	D
33599	energy wire manufacturing . All other electrical equipment	2	5	2	635	16 276	55	130	1 556	6 206	9 607	15 469	D
335999	and component manufacturing All other miscellaneous	5	15	6	533	29 846	368	806	16 054	54 597	47 281	102 139	6 352
	electrical equipment and component manufacturing	6	13	5	е	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	2	41	19	1 403	66 121	928	1 897	36 384	168 003	145 152	310 410	6 104
3363	Motor vehicle parts manufacturing	3	20	8	f	D	D	D	D	D	D	D	3 803
33631	Motor vehicle gasoline engine and engine parts manufacturing	_	4	1	е	D	D	D	D	D	D	D	D
336312	Gasoline engine and engine parts manufacturing	-	4	1	e	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical and electronic equipment manufacturing	3	9	4	254	15 863	120	235	5 429	61 001	64 851	125 978	D
336322	Other motor vehicle electrical and electronic equipment manufacturing	3	9	4	254	15 863	120	235	5 429	61 001	64 851	125 978	D

[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]

	aning of appreviations and sympols, see		Δ	ll hments <sup>2</sup>	All em	ployees	Pro	duction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area—Con.												
	Cambridge-Newton- Framingham, MA Metropolitan Division—Con.												
337	Furniture and related product manufacturing	3	84	15	1 654	59 984	1 185	2 427	35 725	124 049	90 893	215 331	5 402
3371	Household and institutional furniture and kitchen cabinet manufacturing	2	65	7	f	D	D	D	D	D	D	D	3 292
33711	Wood kitchen cabinet and countertop manufacturing	6	34	4	е	D	D	D	D	D	D	D	335
337110	Wood kitchen cabinet and countertop manufacturing	6	34	4	e	D	D	D	D	D	D	D	335
33712	Household and institutional furniture manufacturing	-	31	3	658	23 017	454	953	12 815	50 054	38 128	87 824	2 957
337127	Institutional furniture manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) manufacturing	4	14	7	655	26 371	462	941	15 536	55 036	37 384	91 752	2 010
33721	Office furniture (including fixtures) manufacturing	4	14	7	655	26 371	462	941	15 536	55 036	37 384	91 752	2 010
337212	Custom architectural woodwork and millwork manufacturing	1	7	3	278	10 503	196	393	6 502	22 322	12 877	34 514	948
339	Miscellaneous manufacturing	4	233	66	7 861	352 887	4 362	8 626	137 580	1 101 924	378 700	1 489 263	39 076
3391	Medical equipment and supplies manufacturing	4	111	38	4 896	238 489	2 525	5 055	84 639	820 081	174 143	1 007 128	27 458
33911	Medical equipment and supplies manufacturing	4	111	38	4 896	238 489	2 525	5 055	84 639	820 081	174 143	1 007 128	27 458
339111	Laboratory apparatus and furniture manufacturing	_	10	2	403	28 144	93	201	5 282	52 195	33 054	91 934	1 732
339112	Surgical and medical instrument manufacturing	4	34	22	3 327	160 780	1 636	3 218	50 804	669 308	113 066	788 011	20 250
339113	Surgical appliance and supplies manufacturing	2	13	7	546	27 589	331	744	13 436	64 332	17 979	82 799	4 403
339116 3399	Dental laboratories Other miscellaneous	6	46	5	476	17 352	371	729	12 757	25 335	5 811	31 065	D
	manufacturing	3	122	28	2 965	114 398	1 837	3 571	52 941	281 843	204 557	482 135	11 618
33995 339950 33999	Sign manufacturing Sign manufacturing All other miscellaneous	8 8	29 29	3 3	420 420	14 060 14 060	286 286	509 509	7 370 7 370	24 779 24 779	16 567 16 567	41 329 41 329	D D
339991	manufacturing Gasket, packing, and sealing	3	70	18	2 141	85 764	1 292	2 550	38 638	221 543	158 871	375 692	9 279
339999	device manufacturing All other miscellaneous	7	7 50	3	636 1 250	28 531 47 438	386 693	777 1 383	12 915 18 538	65 779 135 114	36 346	101 996	D
	manufacturing	_	50	11	1 250	47 438	693	1 383	18 538	135 114	114 179	244 772	7 407
31-33	Metropolitan Division Manufacturing	1	1 134	365	55 183	'2 679 381	'31 929	62 687	r1 232 166	'8 128 805	'5 773 188	14 187 532	468 030
311	Food manufacturing	3	99	303	3 953	r140 604	2 523	4 835	r63 406	563 567	519 325	1 084 223	30 191
3115	Dairy product manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) manufacturing	_	3	2	f	D	D	D	D	D	D	D	D
311511	Fluid milk manufacturing	-	3	2	f	Ď	Ď	D	Ď	Ď	Ď	Ď	D
3116	Animal slaughtering and processing	-	2	2	е	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing	-	2	2	е	D	D	D	D	D	D	D	D
3117	Seafood product preparation and packaging	8	11	5	1 143	49 811	702	1 449	19 001	173 429	185 937	366 983	7 010
31171	Seafood product preparation and packaging	8	11	5	1 143	49 811	702	1 449	19 001	173 429	185 937	366 983	7 010
311712	Fresh and frozen seafood processing	8	10	5	g	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing	-	46	13	f	D	D	D	D	D	D	D	2 201
31181	Bread and bakery product manufacturing	1	45	12	693	'17 166	413	684	'9 640	41 538	16 270	57 711	D
311811 311812	Retail bakeries Commercial bakeries	3 1	27 14	6 3	e e	D	D	D D	D	D	D	D	1 342 D

See footnotes at end of table.

[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]

			A establis		All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area – Con.												
	Essex County, MA Metropolitan Division—Con.												
311 3119	Food manufacturing—Con. Other food manufacturing	3	12	4	349	9 887	300	600	7 154	33 301	25 740	59 019	D
31199 311991	All other food manufacturing Perishable prepared food	4	6	3	е	D	D	D	D	D	D	D	953
	manufacturing	3	2	2	e	D	D	D	D	D	D	D	D
313 3133	Textile mills Textile and fabric finishing and	-	16	8	1 159	36 809	797	1 582	23 494	93 979	77 130	176 936	D
31331	fabric coating mills	-	11	6	1 098	34 248	756	1 528	21 938	87 663	72 748	166 329	D
313312	mills	-	8	4	f	D	D	D	D	D	D	D	D
	(except broadwoven fabric) mills	-	3	2	f	D	D	D	D	D	D	D	D
314	Textile product mills	7	24	4	435	12 316	318	665	7 762	20 544	27 215	48 041	D
3149	Other textile product mills	9	18	3	364	9 841	268	558	6 348	15 774	20 990	37 163	D
31499 314999	All other textile product mills All other miscellaneous textile product mills	9 9	10 10	2 2	281 281	7 350 7 350	217 217	459 459	5 129 5 129	12 200 12 200	17 185 17 185	29 810 29 810	326 326
315	Apparel manufacturing	1	14	3	201 e	7 330 D	217 D	439 D	D	12 200 D	D	29 810 D	520 D
3152	Cut and sew apparel manufacturing	1	10	3	e	D	D	D	D	D	D	D	D
316	Leather and allied product manufacturing	2	27	9	f	D	D	D	D	D	D	D	D
3162	Footwear manufacturing	1	5	2	е	D	D	D	D	D	D	D	D
31621	Footwear manufacturing	1	5	2	е	D	D	D	D	D	D	D	D
321	Wood product manufacturing	2	27	3	340	12 622	150	321	4 107	17 450	20 901	38 628	D
3219	Other wood product manufacturing	2	22	2	298	11 353	140	301	3 857	15 007	16 912	32 046	D
322	Paper manufacturing	2	22	15	1 509	57 421	1 174	2 381	39 450	114 261	143 489	258 687	5 896
3221	Pulp, paper, and paperboard mills	-	3	3	е	D	D	D	D	D	D	D	D
3222	Converted paper product manufacturing	3	19	12	g	D	D	D	D	D	D	D	D
32221	Paperboard container manufacturing	3	13	8	737	22 636	608	1 135	15 360	46 719	62 528	109 062	2 029
322212	Folding paperboard box manufacturing	5	6	4	477	12 937	409	728	9 856	24 552	33 739	58 444	747
323	Printing and related support activities	3	108	20	1 599	61 008	1 179	2 269	38 775	114 883	62 131	177 417	3 589
3231	Printing and related support activities	3	108	20	1 599	61 008	1 179	2 269	38 775	114 883	62 131	177 417	3 589
32311 323110	Printing Commercial lithographic	4	99	19	1 444	54 160	1 049	2 006	33 497	103 829	58 996	163 234	D
323113	printing Commercial screen printing	6 2	49 17	10 4	601 354	22 208 10 906	433 275	806 536	14 267 7 124	40 742 20 460	26 147 7 879	66 918 28 410	1 293 446
325	Chemical manufacturing	1	'69	'29	'5 357	'310 993	'2 875	<sup>r</sup> 6 104	r142 042	'1 369 644	'559 717	'1 894 368	81 456
3251	Basic chemical manufacturing	3	8	4	е	D	D	D	D	D	D	D	D
32519	Other basic organic chemical manufacturing	2	5	3	е	D	D	D	D	D	D	D	D
325199	All other basic organic chemical manufacturing	-	2	2	е	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing	2	11	6	g	D	D	D	D	D	D	D	56 210
32541	Pharmaceutical and medicine manufacturing	2	11	6	g	D	D	D	D	D	D	D	56 210
325412	Pharmaceutical preparation manufacturing	2	4	2	g	D	D	D	D	D	D	D	D

[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]

	aning of abbreviations and symbols, see		A establis		All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area-Con.												
	Essex County, MA Metropolitan Division—Con.												
325 3255	Chemical manufacturing—Con. Paint, coating, and adhesive manufacturing	-	۲ <b>1</b> 7	r6	'743	'35 595	'336	'732	'14 729	r127 592	<sup>7</sup> 98 108	'232 423	5 184
32551	Paint and coating manufacturing	_	9	3	385	16 899	144	318	6 493	63 735	47 365	111 702	D
325510 32552	Paint and coating manufacturing	-	9 18	3 r3	385 r358	16 899 18 696	144 192	318 r414	6 493 r8 236	63 735 163 857	47 365 50 743	111 702 120 721	D D
325520	Adhesive manufacturing Adhesive manufacturing	-	-0 r8	-3 r3	r358	18 696	r192	r414	r8 236	r63 857	r50 743	120 721	D
3256	Soap, cleaning compound, and toilet preparation manufacturing.	-	10	4	834	36 912	497	889	20 355	444 234	178 973	623 245	D
32562 325620	Toilet preparation manufacturing Toilet preparation manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing	2	16	7	841	36 306	581	1 196	20 008	90 138	103 976	193 074	6 854
32599	All other chemical product and preparation manufacturing	1	13	5	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product and preparation manufacturing .	-	7	3	618	26 584	442	908	15 243	68 616	72 467	140 626	D
326	Plastics and rubber products manufacturing	1	51	23	2 245	79 974	1 722	3 447	50 113	206 635	156 209	360 386	16 983
3261	Plastics product manufacturing	1	44	22	2 029	72 494	1 555	3 183	45 260	192 032	148 556	337 944	16 320
32615 326150	Urethane and other foam product (except polystyrene) manufacturing Urethane and other foam product (except polystyrene)	1	8	6	е	D	D	D	D	D	D	D	D
32619	manufacturing Other plastics product	1	8	6	е	D	D	D	D	D	D	D	D
326199	Manufacturing All other plastics product	1 1	26 26	9 9	1 266 1 266	41 515 41 515	1 061 1 061	2 257 2 257	30 247 30 247	120 681 120 681	88 271 88 271	206 714 206 714	11 613 11 613
327	manufacturing Nonmetallic mineral product manufacturing	2	20	9	482	19 293	350	731	11 916	46 801	35 241	83 121	2 891
332	Fabricated metal product manufacturing	2	'240	<sup>r</sup> 59	r4 094	'175 132	r2 997	<sup>r</sup> 6 149	'110 206	'360 246	'246 080	<sup>r</sup> 601 577	21 223
3323	Architectural and structural metals manufacturing	4	42	13	1 060	38 700	785	1 554	23 837	79 530	59 297	135 093	3 808
33232	Ornamental and architectural metal products												
332322	manufacturing Sheet metal work manufacturing	5 5	34 25	9 7	812 697	29 331 23 493	609 533	1 199 1 048	18 119 15 064	62 072 49 147	46 648 41 130	105 624 87 162	3 410 2 975
3324	Boiler, tank, and shipping container manufacturing	-	9	4	285	14 292	224	498	10 593	50 204	65 320	114 512	2 143
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	2	128	24	1 696	77 868	1 239	2 568	50 082	137 761	65 925	202 753	13 269
33271 332710	Machine shops Machine shops	2 2	111 111	17 17	1 371 1 371	63 521 63 521	995 995	2 059 2 059	39 979 39 979	103 832 103 832	53 087 53 087	156 319 156 319	5 318 5 318
33272	Turned product and screw, nut, and bolt manufacturing	3	17	7	325	14 347	244	509	10 103	33 929	12 838	46 434	7 951
3328	Coating, engraving, heat treating, and allied activities	2	'21	r5	'293	'11 145	<sup>r</sup> 227	۲ <b>47</b> 2	r7 017	'20 755	<sup>r</sup> 6 998	'27 771	462
33281	Coating, engraving, heat treating, and allied activities	2	ľ21	r5	<sup>r</sup> 293	'11 145	'227	<sup>r</sup> 472	'7 017	'20 755	r6 998	'27 771	462
3329	Other fabricated metal product manufacturing	4	23	10	477	20 445	322	622	11 455	46 250	33 366	80 914	994
33299 332999	All other fabricated metal product manufacturing All other miscellaneous	5	20	8	303	12 013	233	447	7 846	28 964	15 213	44 962	D
	fabricated metal product manufacturing	5	18	7	е	D	D	D	D	D	D	D	D

See footnotes at end of table.

[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]

	aning of abbreviations and symbols, see		A		Allem	ployees	Pro	duction work	kers				
NAICS			establis		7.11 011	ployeee							
code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area – Con.												
	Essex County, MA Metropolitan Division—Con.												
333	Machinery manufacturing	2	87	37	5 866	323 010	2 974	5 254	126 021	612 360	507 272	1 121 948	34 101
3332	Industrial machinery manufacturing	1	26	16	3 614	231 085	1 378	2 100	71 697	404 022	358 163	764 566	27 939
33322	Plastics and rubber industry	5	4	3	751	38 662	975	777	14 817	66 762	55 800	123 302	1 459
333220	machinery manufacturing Plastics and rubber industry machinery manufacturing	5	4	3	751	38 662	375 375	777	14 817	66 762	55 800	123 302	1 459
33329	Other industrial machinery manufacturing	5	22	13	2 863	192 423	1 003	1 323	56 880	337 260	302 363	641 264	26 480
333295	Semiconductor machinery manufacturing	_	7	5	2 535	177 811	828	974	50 395	306 153	277 274	584 394	20 400 D
3334	Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing	8	9	5	725	25 960	536	1 088	15 730	61 821	55 658	117 282	1 541
33341	Ventilation, heating, air- conditioning, and commercial refrigeration equipment												
333415	Air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment	8	9	5	725	25 960	536	1 088	15 730	61 821	55 658	117 282	1 541
	manufacturing	9	2	1	е	D	D	D	D	D	D	D	D
3335	Metalworking machinery manufacturing	1	23	4	478	21 299	408	936	17 647	30 959	17 500	48 636	D
33351	Metalworking machinery manufacturing	1	23	4	478	21 299	408	936	17 647	30 959	17 500	48 636	D
333515	Cutting tool and machine tool accessory manufacturing	-	8	1	315	13 444	309	730	13 126	20 556	12 018	32 824	D
3339	Other general purpose machinery manufacturing	-	16	7	745	30 103	481	765	14 164	84 302	48 251	132 331	1 399
33391	Pump and compressor manufacturing	_	3	2	е	D	D	D	D	D	D	D	D
33399	All other general purpose machinery manufacturing	_	10	5	435	15 701	280	400	7 305	46 478	29 866	77 552	D
333994	Industrial process furnace and oven manufacturing	-	4	3	е	D	D	D	D	D	D	D	92
334	Computer and electronic product manufacturing	-	115	59	14 743	751 910	7 290	14 158	284 558	2 494 163	1 455 523	4 257 397	122 351
3341	Computer and peripheral equipment manufacturing	_	11	3	558	30 409	190	342	6 834	86 679	75 474	165 195	8 414
33411	Computer and peripheral equipment manufacturing	_	11	3	558	30 409	190	342	6 834	86 679	75 474	165 195	8 414
334119	Other computer peripheral equipment manufacturing	-	6	3	526	28 820	170	309	5 978	84 084	71 422	158 594	D
3342	Communications equipment manufacturing	_	14	11	g	D	D	D	D	D	D	D	18 019
33421	Telephone apparatus manufacturing		2	2		D	D	D	D	D	D	D	D
334210	Telephone apparatus manufacturing		2	2	g	D	D	D	D	D	D	D	D
33422	Radio and television broadcasting and wireless communications equipment		2	2	g	D		D		b	U	D	D
334220	manufacturing Radio and television broadcasting and wireless	2	10	8	f	D	D	D	D	D	D	D	D
	communications equipment manufacturing	2	10	8	f	D	D	D	D	D	D	D	D
3343	Audio and video equipment manufacturing	-	4	2	e	D	D	D	D	D	D	D	D
33431	Audio and video equipment manufacturing	_	4	2	е	D	D	D	D	D	D	D	D
334310	Audio and video equipment manufacturing	_	4	2	e	D	D	D	D	D	D	D	D

[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]

			Δ	-	All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area-Con.												
	Essex County, MA Metropolitan Division—Con.												
334	Computer and electronic product manufacturing-Con.												
3344	Semiconductor and other electronic component manufacturing	1	47	28	3 012	127 849	2 028	3 534	70 195	221 899	159 500	378 419	19 280
33441	Semiconductor and other electronic component												
334411	Electron tube manufacturing	1	47 3	28 3	3 012 f	127 849 D	2 028 D	3 534 D	70 195 D	221 899 D	159 500 D	378 419 D	19 280 D
334412 334413	Bare printed circuit board manufacturing Semiconductor and related	-	9	5	740	25 439	579	619	17 666	23 550	18 421	42 183	1 504
334417	device manufacturing Electronic connector	2	12	7	681	36 911	339	630	13 991	72 364	52 073	125 066	13 095
334419	manufacturing Other electronic component manufacturing	1	5 10	5 6	e 435	D 19 334	D 298	D 643	D 10 976	D 57 839	D 54 437	D 110 752	D 2 534
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	34	15	8 912	491 587	3 934	7811	160 190	1 973 644	660 773	2 725 750	75 350
33451	Navigational, measuring,												
334510	electromedical, and control instruments manufacturing Electromedical and electrotherapeutic	-	34	15	8 912	491 587	3 934	7 811	160 190	1 973 644	660 773	2 725 750	75 350
334511	apparatus manufacturing Search, detection, navigation, guidance, aeronautical, and nautical	-	5	4	2 336	143 777	767	1 782	41 953	832 267	109 152	1 027 287	D
334512	system and instrument manufacturing Automatic environmental control manufacturing for residential, commercial, and	-	7	2	h	D	D	D	D	D	D	D	D
334513	appliance use. Instruments and related products manufacturing for measuring, displaying, and	9	2	1	e	D	D	D	D	D	D	D	D
334517	controlling industrial process variables Irradiation apparatus manufacturing	-	6	4	569 g	19 456 D	338 D	800 D	7 033 D	75 212 D	36 897 D	118 050 D	D
335	Electrical equipment, appliance, and component manufacturing	3	32	15	3 368	153 962	1 689	2 865	56 898	285 933	226 587	518 149	17 974
3353	Electrical equipment manufacturing	4	8	3	1 318	74 549	351	599	18 208	175 304	120 830	300 025	D
33531	Electrical equipment manufacturing	4	8	3	1 318	74 549	351	599	18 208	175 304	120 830	300 025	D
335313	Switchgear and switchboard apparatus manufacturing	_	1	1	е	D	D	D	D	D	D	D	D
335314	Relay and industrial control manufacturing	7	7	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing	-	21	11	g	D	D	D	D	D	D	D	13 102
33599	All other electrical equipment and component												
335999	manufacturing All other miscellaneous electrical equipment and component manufacturing	-	10 10	4	1 647 1 647	64 390 64 390	1 130 1 130	1 897 1 897	33 678 33 678	78 314 78 314	80 589 80 589	160 400 160 400	D
336	Transportation equipment manufacturing	_	24	10	i	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	-	7	6	h	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing	_	7	6	h	D	D	D	D	D	D	D	D
336412	Aircraft engine and engine parts manufacturing	-	6	6	h	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	3	51	6	455	14 621	351	692	9 397	33 955	23 725	56 810	D
3371	Household and institutional furniture and kitchen cabinet manufacturing	4	37	2	291	8 806	237	473	6 279	19 565	17 720	36 414	D

See footnotes at end of table.

[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]

			Δ		All and		Dre						
			establis	nments <sup>2</sup>	All em	ployees		duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area-Con.												
	Essex County, MA Metropolitan Division—Con.												
339	Miscellaneous manufacturing	-	90	23	3 279	136 469	1 896	4 160	57 286	342 690	143 715	488 089	24 972
3391	Medical equipment and supplies manufacturing	1	37	13	2 029	83 200	1 314	2 963	37 306	199 725	63 996	263 826	20 239
33911	Medical equipment and supplies manufacturing	1	37	13	2 029	83 200	1 314	2 963	37 306	199 725	63 996	263 826	20 239
339113	Surgical appliance and supplies manufacturing	-	.7	4	g 315	D	D	D	D	D	D	D	3 073
339116 3399	Dental laboratories	8	17	2	315	10 256	238	491	7 355	17 172	4 437	21 249	553
0099	manufacturing	-	53	10	1 250	53 269	582	1 197	19 980	142 965	79 719	224 263	4 733
33995 339950	Sign manufacturing	-	11 11	1 1	e e	D D	D D	D D	D D	D D	D D	D D	D D
33999	All other miscellaneous manufacturing Gasket, packing, and sealing	-	32	8	813	35 086	417	890	13 986	97 418	41 288	137 898	D
339991 339999	device manufacturing All other miscellaneous	-	6	3	е	D	D	D	D	D	D	D	973
000000	manufacturing	1	20	4	252	12 257	133	284	5 001	25 019	9 571	34 879	D
	Rockingham County-Strafford County, NH Metropolitan Division												
31-33	Manufacturing	1	648	198	22 399	909 788	14 429	27 642	452 042	'2 626 109	1 983 504	r4 620 793	111 596
311	Food manufacturing	3	37	6	925	36 573	661	1 201	20 837	109 368	181 441	283 761	4 294
3113	Sugar and confectionery product manufacturing	9	3	1	е	D	D	D	D	D	D	D	D
31132	Chocolate and confectionery manufacturing from cacao						5			5	5	5	5
311320	beans Chocolate and confectionery manufacturing from cacao beans	9 9	2	1	e e	D	D D	D	D	D	D	D	D
3117	Seafood product preparation and packaging	_	7	3	302	12 334	201	388	5 460	21 787	74 334	95 782	1 456
31171	Seafood product preparation and packaging	_	7	3	302	12 334	201	388	5 460	21 787	74 334	95 782	1 456
311712	Fresh and frozen seafood processing	-	6	3	е	D	D	D	D	D	D	D	D
314	Textile product mills	8	20	3	673	22 799	427	878	15 938	47 914	41 782	91 174	1 327
3149	Other textile product mills	9	14	2	608	20 668	400	835	15 509	45 918	38 984	85 787	1 207
31499 314999	All other textile product mills All other miscellaneous textile	9	5	2	f	D	D	D	D	D	D	D	D
001	product mills	9	5 27	2 7	f	D 23 823	D	D	D	D	D 58 489	D 107 803	D
321 3219	Wood product manufacturing Other wood product manufacturing	4	27	7	755	23 823	583 552	1 181 1 117	15 093 14 100	50 454 44 115	48 349	91 324	D
32191	Millwork	_	8	3	e	22 223 D	552 D	D	14 100 D	D	40 040 D	51 324 D	D
32199	All other wood product manufacturing	5	10	4	435	14 757	330	706	9 325	31 057	31 065	61 971	D
321992	Prefabricated wood building manufacturing	5	7	4	е	D	D	D	D	D	D	D	D
322	Paper manufacturing	7	10	6	391	15 029	275	550	8 309	44 734	37 910	82 944	2 598
3222	Converted paper product manufacturing	5	9	5	е	D	D	D	D	D	D	D	D
323	Printing and related support activities	1	57	12	966	36 059	660	1 372	21 007	74 964	37 764	112 270	2 971
3231	Printing and related support activities	1	57	12	966	36 059	660	1 372	21 007	74 964	37 764	112 270	2 971
32311 323110	Printing Commercial lithographic	1	54	10	816	29 497	574	1 212	16 726	63 200	35 749	98 366	D
323113	printing	-	23 9	5 3	339 296	13 884 9 658	238 215	523 465	7 954 5 464	26 805 23 537	16 304 13 251	43 026 36 466	1 589 684

See footnotes at end of table.

[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]

1 01 1110			A establis		All em	ployees	Pro	oduction worl	kers				
NAICS	Geographic area and industry		establisi	With 20									Total
code		E1	Total	em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area—Con.												
	Rockingham County-Strafford County, NH Metropolitan Division—Con.												
325	Chemical manufacturing	1	19	7	1 121	48 253	666	1 214	20 861	134 655	59 932	194 737	6 803
3254	Pharmaceutical and medicine manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine					_		_	_	_	_	_	_
325412	manufacturing Pharmaceutical preparation manufacturing	-	3	2 2	f f	D	D D	D D	D	D	D	D	D D
326	Plastics and rubber products manufacturing	1	35	14	2 557	81 433	2 008	3 868	54 836	'136 325	140 556	'280 373	8 531
3261	Plastics product manufacturing	r1	28	12	2 255	72 249	1 764	3 343	48 795	'110 005	119 038	'229 627	D
32619	Other plastics product												
326199	Manufacturing All other plastics product	1	'20	r7	r1 939	'60 556	r1 560	'2 885	r41 351	<sup>r</sup> 83 285	'86 585	169 965	'5 939
	manufacturing	1	'20	7	r1 939	'60 556	'1 560	'2 885	r41 351	<sup>r</sup> 83 285	<sup>r</sup> 86 585	169 965	'5 939
3262	Rubber product manufacturing	6	7	2	302	9 184	244	525	6 041	26 320	21 518	50 746	D
32622 326220	Rubber and plastics hoses and belting manufacturing Rubber and plastics hoses and belting manufacturing	5 5	2	2 2	e e	D	D D	D	D	D	D D	D D	D
327	Nonmetallic mineral product manufacturing	_	25	- 11	1 189	46 686	865	1 812	30 030	172 628	115 837	288 796	8 745
3272	Glass and glass product manufacturing	_	5	2	f	D	D	D	D	D	D	D	D
32721	Glass and glass product												
327215	manufacturing Glass product manufacturing	-	5	2	f	D	D	D	D	D	D	D	D
004	made of purchased glass	-	3	1	е	D	D	D	D	D	D	D	D
331 3315	Primary metal manufacturing	_	5	5 4	e	D	D	D	D	D	D	D '26 701	D
33152	Foundries Nonferrous metal foundries	_	4	4	268 268	9 153 9 153	215 215	473 473	6 018 6 018	'23 211 '23 211	3 485 3 485	26 701	D
33152	Fabricated metal product	_											_
3323	Architectural and structural metals	2	136	31	2 893	109 771	2 169	3 855	68 407	269 659	165 538	441 075	9 876
33231	manufacturing	1	26	9	712	28 638	530	965	19 670	62 852	50 564	117 499	1 705
00201	structural product manufacturing	3	10	3	285	8 808	210	333	5 299	24 260	16 058	43 746	882
332312	Fabricated structural metal manufacturing	3	7	3	262	7 945	193	297	4 749	22 506	14 469	40 403	821
33232	Ornamental and architectural metal products												
332322	manufacturing Sheet metal work manufacturing	-	16 13	6 6	427 408	19 830 19 346	320 306	632 612	14 371 14 095	38 592 37 815	34 506 33 828	73 753 72 298	823 796
3327	Machine shops; turned product; and screw, nut, and bolt		10	Ū	400	13 040	500	012	14 000	57 013	30 020	72 230	750
	manufacturing	4	69	8	673	27 280	507	1 008	19 335	49 097	17 772	67 328	3 444
33271 332710	Machine shops Machine shops	5 5	62 62	6 6	520 520	20 780 20 780	386 386	753 753	14 506 14 506	36 713 36 713	14 809 14 809	51 646 51 646	1 946 1 946
3329	Other fabricated metal product manufacturing	-	15	8	886	29 217	663	992	14 674	107 569	63 268	171 032	2 724
33299 332994	All other fabricated metal product manufacturing Small arms manufacturing	_	9	5 2	722 f	21 233 D	578 D	817 D	12 161 D	82 763 D	50 628 D	133 253 D	1 842 D
332994 333	Machinery manufacturing		54	2 21	r 2 789	D 136 516	1 516	2 682	52 350	238 698	294 559	501 909	15 387
3332	Industrial machinery		54		2 709	100 510	1 310	2 002	52 330	200 090	234 338	501 509	13 307
	manufacturing	-	13	7	1 352	68 889	660	1 052	26 843	127 800	178 295	275 416	D
33329	Other industrial machinery manufacturing	-	9	4	g	D	D	D	D	D	D	D	D
333293	Printing machinery and equipment manufacturing	_	1	1	g	D	D	D	D	D	D	D	D

See footnotes at end of table.

[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]

			A establis		All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area-Con.												
	Rockingham County-Strafford County, NH Metropolitan Division—Con.												
333 3333	Machinery manufacturing—Con. Commercial and service industry machinery manufacturing	_	11	4	625	35 147	312	627	8 379	33 952	65 740	97 922	2 617
33331	Commercial and service industry machinery manufacturing	_	11	4	625	35 147	312	627	8 379	33 952	65 740	97 922	2 617
333314	Optical instrument and lens manufacturing	-	7	4	613	34 680	305	615	8 151	32 886	64 811	95 937	2 569
3339	Other general purpose machinery manufacturing	1	13	6	571	23 161	405	788	12 719	56 966	40 210	98 378	4 940
33399 333999	All other general purpose machinery manufacturing All other miscellaneous general purpose machinery	4	9	4	275	9 004	195	439	4 560	21 002	17 915	39 007	D
334	manufacturing Computer and electronic product	4	7	4	e	D 184 997	D	D	D	D	D	D	D
3342	manufacturing Communications equipment manufacturing	-	77	37 11	3 812 g	184 997 D	1 723 D	3 444 D	60 564 D	714 812 D	502 274 D	1 257 139 D	26 861 D
33421	Telephone apparatus manufacturing		10	10	9 1 100	59 678	341	653	11 241	403 842	334 810	777 490	16 950
334210	Telephone apparatus manufacturing	-	10	10	1 100	59 678	341	653	11 241	403 842	334 810 334 810	777 490	16 950
3344	Semiconductor and other electronic component manufacturing	_	29	13	1 385	55 516	745	1 565	26 311	168 137	72 662	243 367	4 803
33441	Semiconductor and other electronic component												
334412	manufacturing Bare printed circuit board manufacturing	-	29 4	13 3	1 385 e	55 516 D	745 D	1 565 D	26 311 D	168 137 D	72 662 D	243 367 D	4 803 D
334418	Printed circuit assembly (electronic assembly)												
334419	manufacturing Other electronic component manufacturing	-	7 10	4 2	280 372	13 505 11 821	139 219	300 464	6 920 6 578	84 327 25 866	26 554 9 555	111 515 35 452	1 270 D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	22	10	980	53 205	472	911	18 637	107 220	71 461	177 439	4 159
33451	Navigational, measuring,		22	10	500	33 203	472	311	10 007	107 220	71 401	177 439	4 155
334515	electromedical, and control instruments manufacturing Instrument manufacturing for measuring and testing	-	22	10	980	53 205	472	911	18 637	107 220	71 461	177 439	4 159
334518	electricity and electrical signals Watch, clock, and part manufacturing	-	5 2	3 1	428 e	26 457 D	263 D	469 D	12 487 D	74 970 D	41 664 D	116 524 D	3 178 D
335	Electrical equipment, appliance, and component manufacturing	_	18	9	844	47 822	521	953	17 396	260 935	41 956	306 438	5 756
3353	Electrical equipment manufacturing	_	.0	3	371	15 865	174	261	5 809	37 547	21 689	61 129	D
33531	Electrical equipment manufacturing	_	8	3	371	15 865	174	261	5 809	37 547	21 689	61 129	D
3359	Other electrical equipment and component manufacturing	-	7	5	431	30 835	312	612	10 742	222 432	17 927	242 016	D
336	Transportation equipment manufacturing	_	12	4	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts manufacturing	_	5	2	е	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts manufacturing		1	1	е	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts manufacturing	-	1	1	e e	D	D	D	ם	D	D	D	D
337	Furniture and related product manufacturing	1	30	5	314	11 561	216	415	6 532	20 000	12 561	31 747	D

[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]

<u> </u>			Δ	ll hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.		TOTAL	more	Number*	(\$1,000)	Number	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
	Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area – Con.												
	Rockingham County-Strafford County, NH Metropolitan Division—Con.												
339	Miscellaneous manufacturing	2	61	10	1 532	54 513	940	1 871	25 887	123 006	64 690	184 518	5 185
3391	Medical equipment and supplies manufacturing	3	25	5	898	36 933	524	1 063	16 488	75 527	40 356	112 693	3 989
33911	Medical equipment and supplies manufacturing	3	25	5	898	36 933	504	1 063	16 488	75 527	40 356	112 693	3 989
339111	Laboratory apparatus and furniture manufacturing	-	25	э 1	698 e	36 933 D	524 D	T 063	16 488 D	75 527 D	40 356 D	112 693 D	3 989 D
3399	Other miscellaneous manufacturing	1	36	5	634	17 580	416	808	9 399	47 479	24 334	71 825	1 196
33999	All other miscellaneous manufacturing	_	14	3	454	12 487	296	560	6 861	23 127	17 235	40 436	D
	Concord, NH Micropolitan Statistical Area			5	-0-	12 407	230	500	0 001	20 127	17 200	40 400	U
31-33	Manufacturing	-	220	82	7 869	296 807	5 770	11 163	182 616	644 114	632 099	1 282 487	48 010
315	Apparel manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
3152	Cut and sew apparel manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
31522 315225	Men's and boys' cut and sew apparel manufacturing Men's and boys' cut and sew	-	1	1	е	D	D	D	D	D	D	D	D
	work clothing manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
321	Wood product manufacturing	2	30	15	933	27 802	626	1 296	15 011	58 132	75 890	134 301	2 887
3219	Other wood product manufacturing	2	17	10	684	20 253	430	896	9 462	40 586	49 395	90 329	927
32191 32199	Millwork	1	7	4	327	10 504	141	283	2 821	21 442	33 764	55 343	D
	manufacturing	2	7	5	322	8 917	258	553	6 020	17 720	13 655	31 586	504
323	Printing and related support activities	-	26	10	795	33 813	583	1 192	21 761	76 203	40 995	118 054	18 013
3231	Printing and related support activities	-	26	10	795	33 813	583	1 192	21 761	76 203	40 995	118 054	18 013
32311 323110	Printing Commercial lithographic	-	20	9	747	32 177	551	1 130	20 677	73 600	40 305	114 762	D
	printing	-	12	5	631	28 815	477	975	18 996	65 359	37 882	104 128	17 131
326	Plastics and rubber products manufacturing	-	6	4	461	16 599	317	579	10 548	27 319	28 656	56 432	D
3261	Plastics product manufacturing	-	4	4	е	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, (except packaging), and			2		D	D		P	D	P	D	
326130	shape manufacturing Laminated plastics plate, sheet, (except packaging),	-	3	3	e	D	D	D	D	D	D	D	D
327	and shape manufacturing Nonmetallic mineral product	-	3 12	3	e 070	D 11 490	D	D 419	D	D	D 15 627	D	D
332	manufacturing Fabricated metal product	_			272		196	-	7 045	28 316		42 201	2 341
3329	manufacturing Other fabricated metal product	_	44	8	920	32 289	713	1 506	19 101	104 644	77 073	184 233	5 269
33291	Metal valve manufacturing	-	7	3 2	f	D	D	D	D	D	D	D	D
332911	Industrial valve manufacturing	_	3	2	f	D	D	D	D	D	D	D	D
333	Machinery manufacturing	-	20	8	735	33 744	411	852	14 516	78 969	66 294	144 084	3 394
3333	Commercial and service industry machinery manufacturing	1	4	3	397	17 805	248	524	8 281	52 689	36 808	89 297	2 401
33331	Commercial and service industry machinery manufacturing	1	4	3	397	17 805	248	524	8 281	52 689	36 808	89 297	2 401
333319	Other commercial and service industry machinery manufacturing	1		2	397 e	17 805 D	248 D	524 D	8 281 D	52 689 D	36 808 D	89 297 D	2 401 D
	manulaciumy		. 3		e	U		U	U U	וט	וט		U

See footnotes at end of table.

[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]

	aning of appreviations and sympols, see		A	-	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Concord, NH Micropolitan Statistical Area – Con.												
334	Computer and electronic product manufacturing	-	13	5	697	24 848	515	958	13 845	48 148	29 652	77 546	1 372
3344	Semiconductor and other electronic component manufacturing	_	5	3	е	D	D	D	D	D	D	D	1 099
33441	Semiconductor and other electronic component					_	_	_	_		_	_	
334413	manufacturing Semiconductor and related device manufacturing	_	5	3 1	e e	D D	D D	D D	D	D D	D D	D D	1 099 D
336	Transportation equipment manufacturing	_	3	2	f	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing Aircraft engine and engine	_	1	1	f	D	D	D	D	D	D	D	D
336412	parts manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
339 3399	Miscellaneous manufacturing Other miscellaneous	-	19	5	549	16 304	404	762	9 767	43 100	30 386	73 081	2 647
33999	manufacturing	_	12	4	е	D	D	D	D	D	D	D	D
339991	manufacturing Gasket, packing, and sealing device manufacturing	-	5	3 2	e e	D	D D	D D	D	D	D	D	D
	Laconia, NH Micropolitan Statistical Area												
31-33	Manufacturing	1	121	37	3 343	118 424	2 258	4 580	66 115	267 679	218 388	483 970	17 014
331 3315	Primary metal manufacturing	_	3	3 2	e e	D	D	D	D	D	D	D	D
33152 331524	Nonferrous metal foundries Aluminum foundries (except	_	2	2	е	D	D	D	D	D	D	D	D
	die-casting)	-	2	2	е	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	-	31	10	f	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	_	16	6	293	9 635	215	431	6 191	13 799	5 984	20 054	794
3329	Other fabricated metal product manufacturing	-	6	2	371	11 931	182	302	4 114	23 473	15 199	38 925	D
33299 332999	All other fabricated metal product manufacturing All other miscellaneous	-	6	2	371	11 931	182	302	4 114	23 473	15 199	38 925	D
002000	fabricated metal product manufacturing	_	6	2	371	11 931	182	302	4 114	23 473	15 199	38 925	D
333	Machinery manufacturing	-	6	1	е	D	D	D	D	D	D	D	D
3336	Engine, turbine, and power transmission equipment manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
33361	Engine, turbine, and power transmission equipment					_	_	_	_		_		_
333613	manufacturing Mechanical power transmission equipment	_	1	1	e	D	D	D	D	D	D	D	D
334	Computer and electronic product	-	1	1	e 701	D	D	D	D	D	D	D	D
3344	manufacturing	1	13	8	731	29 765	362	707	10 272	69 590	77 181	143 353	4 456
00444	electronic component manufacturing	-	7	4	345	11 809	229	439	6 571	27 983	26 612	51 225	D
33441	Semiconductor and other electronic component manufacturing	-	7	4	345	11 809	229	439	6 571	27 983	26 612	51 225	D
339	Miscellaneous manufacturing	_	14	5	302	9 372	227	458	6 134	31 522	28 476	59 891	D

[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]

			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Manchester-Nashua, NH Metropolitan Statistical Area												
31-33	Manufacturing	1	678	236	31 667	1 453 038	18 372	37 291	604 425	3 418 772	2 738 818	6 088 367	252 764
311	Food manufacturing	1	18	6	е	D	D	D	D	D	D	D	D
312	Beverage and tobacco product manufacturing	-	4	3	f	D	D	D	D	D	D	D	D
3121	Beverage manufacturing	-	4	3	f	D	D	D	D	D	D	D	D
31212 312120	Breweries Breweries	-	1	1	e e	D D	D D	D D	D D	D D	D D	D D	D D
313	Textile mills	-	11	6	964	41 130	630	1 308	17 008	71 338	74 580	151 517	D
3132	Fabric mills	-	7	5	f	D	D	D	D	D	D	D	D
31322 313221	Narrow fabric mills and schiffli machine embroidery Narrow fabric mills	-	2	1 1	f	D D	D D	D D	D D	D D	D D	D D	D D
322	Paper manufacturing	-	11	6	739	33 262	477	955	15 437	58 429	85 857	147 150	4 021
3222	Converted paper product manufacturing	-	10	5	f	D	D	D	D	D	D	D	D
32222	Paper bag and coated and treated paper manufacturing	_	3	2	е	D	D	D	D	D	D	D	D
323	Printing and related support activities	-	67	14	1 275	43 090	872	1 729	28 522	132 839	82 704	213 635	6 448
3231	Printing and related support activities	-	67	14	1 275	43 090	872	1 729	28 522	132 839	82 704	213 635	6 448
32311 323110	Printing Commercial lithographic	-	62	13	1 236	41 743	846	1 689	27 762	130 336	82 233	210 661	D
323112	printing Commercial flexographic	1	26	7	310	11 672	217	427	7 379	20 936	10 850	31 700	1 836
325	printing	2	3 17	3 4	f 333	D 16 808	D 179	D 379	D 7 310	D 43 311	D 45 845	D 90 209	D 1 395
326	Plastics and rubber products manufacturing	1	37	19	1 959	75 902	1 447	3 083	48 079	237 690	164 813	401 988	16 960
3261	Plastics product manufacturing	1	36	19	g	70 002 D	D	D	-10 0/0 D	207 000 D	D	-101 000 D	D
32616	Plastics bottle manufacturing	_	8	8	678	26 055	541	1 156	20 554	114 042	83 297	197 280	6 048
326160 32619	Plastics bottle manufacturing	-	8	8	678	26 055	541	1 156	20 554	114 042	83 297	197 280	6 048
32619 326199	Other plastics product manufacturing All other plastics product manufacturing	2	20 19	7 7	1 035 g	39 728 D	759 D	1 620 D	22 587 D	100 031 D	62 573 D	162 066 D	8 697 8 697
327	Nonmetallic mineral product manufacturing	1	19	7	9 480	17 947	381	769	12 298	44 975	24 543	69 855	3 457
3273	Cement and concrete product manufacturing	1	9	5	355	13 600	286	580	9 617	33 192	17 534	50 739	1 929
331	Primary metal manufacturing	_	11	5	1 490	56 182	1 035	1 644	41 797	90 872	69 813	163 976	D
3313	Alumina and aluminum production and processing	_	4	2	е	D	D	D	D	D	D	D	D
33131	Alumina and aluminum production and processing	_	4	2	е	D	D	D	D	D	D	D	D
3315	Foundries	-	6	3	g	D	D	D	D	D	D	D	D
33151 331512	Ferrous metal foundries Steel investment foundries	-	2 1	2 1	g g	D D	D D	D D	D D	D D	D D	D D	D D
332	Fabricated metal product manufacturing	1	136	41	2 986	109 338	2 265	4 522	70 265	240 675	108 220	349 682	13 754
3323	Architectural and structural metals manufacturing	1	27	13	896	26 619	715	1 387	16 503	63 894	46 359	108 963	1 693
33231 332311	Plate work and fabricated structural product manufacturing Prefabricated metal building	-	7	3	516	14 318	422	901	9 218	26 272	29 625	54 764	432
33232	and component manufacturing Ornamental and architectural metal products	-	2	1	е	D	D	D	D	D	D	D	D
332322	manufacturing Sheet metal work manufacturing	1	20 16	10 7	380 263	12 301 8 814	293 195	486 346	7 285 5 043	37 622 26 953	16 734 10 373	54 199 37 272	1 261 505

See footnotes at end of table.

[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]

			Δ										
			establis	hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Manchester-Nashua, NH Metropolitan Statistical Area —Con.												
332 3327	Fabricated metal product manufacturing – Con. Machine shops; turned product; and screw, nut, and bolt manufacturing	1	74	16	888	36 792	641	1 279	24 883	82 718	23 145	105 649	5 993
33271 332710 33272	Machine shops Machine shops Turned product and screw, nut, and bolt manufacturing	2 2 -	62 62 12	9 9 7	508 508 380	21 742 21 742 15 050	366 366 275	738 738 541	14 917 14 917 9 966	51 183 51 183 31 535	13 871 13 871 9 274	65 095 65 095 40 554	2 243 2 243 3 750
3329	Other fabricated metal product manufacturing	_	7	5	728	28 470	548	1 119	17 854	61 371	25 848	89 807	3 676
33299 332991	All other fabricated metal product manufacturing Ball and roller bearing manufacturing	-	5	3	f	D	D	D	D	D	D	D	D
333	Machinery manufacturing	2	59	19	1 836	100 178	818	1 631	32 757	231 717	170 042	403 146	13 334
3332	Industrial machinery manufacturing	2	19	6	778	43 272	404	789	16 182	100 343	76 467	180 644	D
33329	Other industrial machinery manufacturing	2	17	6	f	D	D	D	D	D	D	D	D
333291 333293	Paper industry machinery manufacturing Printing machinery and equipment manufacturing	9	3	1 2	e e	D	D	D	D	D	D	D	D
3333	Commercial and service industry machinery manufacturing	_	10	3	609	34 292	189	403	7 673	81 061	65 452	145 526	D
33331	Commercial and service industry machinery												
333314	Optical instrument and lens manufacturing	-	10 6	3 2	609 e	34 292 D	189 D	403 D	7 673 D	81 061 D	65 452 D	145 526 D	D D
334	Computer and electronic product manufacturing	_	120	61	12 066	676 313	4 868	10 302	168 347	1 341 911	1 176 249	2 422 532	86 421
3341	Computer and peripheral equipment manufacturing	5	9	5	е	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	5	9	5	е	D	D	D	D	D	D	D	D
3342	Communications equipment manufacturing	3	19	11	f	D	D	D	D	D	D	D	D
33421 334210	Telephone apparatus manufacturing Telephone apparatus	3	6	4	е	D	D	D	D	D	D	D	D
33422	Radio and television broadcasting and wireless	3	6	4	e	D	D	D	D	D	D	D	D
334220	communications equipment manufacturing Radio and television broadcasting and wireless	4	12	7	e	D	D	D	D	D	D	D	D
	communications equipment manufacturing	4	12	7	е	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	_	58	31	5 033	206 728	3 006	6 434	97 710	285 743	559 380	827 725	31 792
33441	Semiconductor and other electronic component manufacturing	_	58	31	5 033	206 728	3 006	6 434	97 710	285 743	559 380	827 725	31 792
334412	Bare printed circuit board manufacturing	-	9	7	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) manufacturing	_	15	11	1 432	52 623	975	1 887	33 693	102 438	228 418	316 379	3 821
334419	Other electronic component manufacturing	1	17	7	590	52 623 24 789	293	607	7 896	50 161	228 418	79 228	3 684
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	28	12	5 777	397 143	1 518	3 180	55 317	905 324	501 736	1 330 968	47 916

[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]

			A	JI	Allem	oloyees	Pro	duction work	ers				
NAICS			establis		7 11 011	bioyees							
code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Manchester-Nashua, NH Metropolitan Statistical Area —Con.												
334	Computer and electronic product manufacturing—Con.												
3345	Navigational, measuring, electromedical, and control instruments manufacturing – Con.												
33451 334511	Navigational, measuring, electromedical, and control instruments manufacturing Search, detection,	_	28	12	5 777	397 143	1 518	3 180	55 317	905 324	501 736	1 330 968	47 916
	navigation, guidance, aeronautical, and nautical system and instrument manufacturing	_	2	2	h	D	D	D	D	D	D	D	D
334512	Automatic environmental control manufacturing for residential, commercial, and						5						
334519	appliance use Other measuring and controlling device	_	3	1	e	D	D	D	D	D	D	D	D
335	manufacturing	1	7	2	е	D	D	D	D	D	D	D	D
	component manufacturing	-	20	11	2 375	95 189	1 721	3 623	61 349	307 140	292 166	600 271	19 301
3351	Electric lighting equipment manufacturing	-	2	2	g	D	D	D	D	D	D	D	D
33511 335110	Electric lamp bulb and part manufacturing Electric lamp bulb and part	-	2	2	g	D	D	D	D	D	D	D	D
3353	manufacturing	-	2	2	g	D	D	D	D	D	D	D	D
33531	Electrical equipment	-	7	4	317	9 759	277	482	6 950	47 802	79 646	126 028	D
335314	manufacturing Relay and industrial control	-	7	4	317	9 759	277	482	6 950	47 802	79 646	126 028	D
3359	manufacturing Other electrical equipment and	-	4	2	e	D	D	D	D	D	D	D	D
33592	component manufacturing	_	10	5	e	D	D	D	D	D	D	D	D
335929	wire and cable manufacturing . Other communication and energy wire manufacturing .	-	5 4	4	e e	D D	D D	D D	D D	D	D	D	D
336	Transportation equipment manufacturing	_	10	5	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts manufacturing	_	6	4	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission and power train parts												
336350	manufacturing Motor vehicle transmission and power train parts	-	1	1	f	D	D	D	D	D	D	D	D
337	manufacturing	-	1	1	ť	D	D	D	D	D	D	D	D
339	manufacturing	1	29 65	4 17	277 2 578	8 341 98 976	179 1 747	352 3 542	4 895 50 350	15 697 262 740	12 279 152 633	28 091 425 705	D 14 972
3391	Medical equipment and supplies												
33911	manufacturing	7	26	6	1 063	43 013	658	1 341	18 533	118 563	50 952	174 728	4 773
339111	supplies manufacturing Laboratory apparatus and furniture manufacturing	7 9	26 3	6 3	1 063 398	43 013 17 628	658 220	1 341 450	18 533 5 719	118 563 42 610	50 952 26 557	174 728 69 123	4 773 D
339112	Surgical and medical instrument manufacturing	8	4	2	596 e	17 020 D	220 D	450 D	5 / 19 D	42 010 D	20 557 D	09 123 D	D
3399	Other miscellaneous manufacturing	-	39	11	1 515	55 963	1 089	2 201	31 817	144 177	101 681	250 977	10 199
33999	All other miscellaneous manufacturing	_	17	7	1 207	45 353	921	1 958	27 545	126 592	83 836	215 404	9 687
339991 339995	Gasket, packing, and sealing device manufacturing Burial casket manufacturing .	_	5	4 1	f	D	D	D	D	D	D	D	D D

See footnotes at end of table.

[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]

			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Worcester, MA Metropolitan Statistical Area												
31-33	Manufacturing	1	1 243	435	50 060	2 155 257	32 624	63 049	1 068 201	5 870 004	4 531 540	10 452 765	342 131
311	Food manufacturing	3	58	15	1 199	36 329	804	1 480	22 646	94 089	109 728	203 219	9 824
3112 31123	Grain and oilseed milling Breakfast cereal	-	1	1	е	D	D	D	D	D	D	D	D
31123	Breakfast cereal Breakfast cereal manufacturing	-	1	1	e e	D D	D D	D D	D	D D	D D	D D	D D
3118	Bakeries and tortilla manufacturing	4	34	8	532	14 320	349	627	9 003	35 682	35 829	71 327	1 207
31181	Bread and bakery product manufacturing	4	34	8	532	14 320	349	627	9 003	35 682	35 829	71 327	1 207
312	Beverage and tobacco product manufacturing	9	7	1	f	D	D	D	D	D	D	D	D
3121	Beverage manufacturing	9	7	1	f	D	D	D	D	D	D	D	D
31211	Soft drink and ice manufacturing	9	3	1	f	D	D	D	D	D	D	D	D
312111 313	Soft drink manufacturing	9 4	3 21	1 10	f 1 026	D 35 459	D 756	D 1 652	D 22 929	D 105 973	D 138 465	D 235 758	D
3132	Textile mills Fabric mills	9	4	3	322	8 082	224	471	6 827	10 796	20 350	31 701	D
3133	Textile and fabric finishing and fabric coating mills	3	11	6	628	25 783	462	1 042	14 731	92 872	113 743	197 380	D
31331	Textile and fabric finishing mills	4	5	2	372	12 635	314	728	8 641	69 607	80 199	140 112	D
313311	Broadwoven fabric finishing mills	4	5	2	372	12 635	314	728	8 641	69 607	80 199	140 112	D
31332 313320	Fabric coating mills Fabric coating mills	-	6 6	4 4	256 256	13 148 13 148	148 148	314 314	6 090 6 090	23 265 23 265	33 544 33 544	57 268 57 268	727 727
314	Textile product mills	1	18	5	726	21 630	534	972	11 142	53 737	57 342	111 414	1 007
3149	Other textile product mills	1	11	4	f	D	D	D	D	D	D	D	D
31499 314999	All other textile product mills All other miscellaneous textile	-	8	3	617	18 811	451	807	9 802	49 379	51 816	100 395	901
315	product mills	9	8	3 2	617 e	18 811 D	451 D	807 D	9 802 D	49 379 D	51 816 D	100 395 D	901 D
321	Wood product manufacturing	2	37	8	593	16 104	431	791	10 643	29 538	28 984	58 289	1 494
3219	Other wood product manufacturing	1	30	7	513	13 313	367	701	8 504	23 897	20 539	44 219	D
32192	Wood container and pallet manufacturing	1	13	5	376	9 306	269	528	6 126	14 582	13 715	28 180	561
321920	Wood container and pallet manufacturing	1	13	5	376	9 306	269	528	6 126	14 582	13 715	28 180	561
322	Paper manufacturing	1	36	26	3 420	147 839	2 406	4 845	91 313	386 644	431 385	825 550	19 529
3221	Pulp, paper, and paperboard mills	3	4	4	465	26 126	302	659	15 091	75 565	91 633	166 224	4 860
32212 322121	Paper mills Paper (except newsprint)	3	4	4	465	26 126	302	659	15 091	75 565	91 633	166 224	4 860
3222	mills	3	4	4	465	26 126	302	659	15 091	75 565	91 633	166 224	4 860
	Paperboard container	-	32	22	2 955	121 713	2 104	4 186	76 222	311 079	339 752	659 326	14 669
32221 322211	manufacturing Corrugated and solid fiber	-	15	11	884	33 525	615	1 257	19 805	85 820	107 758	194 084	9 929
	box manufacturing	-	12	9	f	D	D	D	D	D	D	D	D
32222 322222	Paper bag and coated and treated paper manufacturing Coated and laminated paper	-	6	2	1 043	49 120	695	1 353	26 338	70 812	134 363	211 757	1 276
32223	manufacturing Stationery product	-	6	2	1 043	49 120	695	1 353	26 338	70 812	134 363	211 757	1 276
322232	manufacturing Envelope manufacturing	1 1	6 5	5 5	672 f	25 338 D	524 D	1 021 D	21 490 D	48 584 D	52 143 D	102 193 D	1 972 D
32229 322299	Other converted paper product manufacturing All other converted paper	-	5	4	356	13 730	270	555	8 589	105 863	45 488	151 292	1 492
	product manufacturing	-	5	4	356	13 730	270	555	8 589	105 863	45 488	151 292	1 492
323	Printing and related support activities	2	97	20	1 683	63 157	1 182	2 066	38 556	119 297	66 892	186 869	7 423
3231	Printing and related support activities	2	97	20	1 683	63 157	1 182	2 066	38 556	119 297	66 892	186 869	7 423
32311 323110	Printing Commercial lithographic printing	2	83 45	18 11	1 580 1 109	59 151 41 210	1 104 779	1 916 1 316	35 990 25 853	112 834 78 039	64 971 43 180	178 230 121 576	6 853 5 472

See footnotes at end of table.

[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]

			A establis		All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Worcester, MA Metropolitan Statistical Area—Con.												
325	Chemical manufacturing	-	53	26	2 108	107 428	1 071	2 211	46 144	819 589	658 466	1 475 822	22 260
3252	Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	_	8	7	373	19 386	204	435	8 183	69 850	214 732	281 434	2 327
32521	Resin and synthetic rubber			7	070	40,000	004	105	0,400	00.050	04.4 700	001 404	0.007
325211	manufacturing Plastics material and resin manufacturing	-	8	6	373 e	19 386 D	204 D	435 D	8 183 D	69 850 D	214 732 D	281 434 D	2 327 D
3254	Pharmaceutical and medicine manufacturing	_	9	4	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing	_	9	4	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation manufacturing	-	6	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing	1	20	9	657	32 508	327	685	12 394	88 455	137 206	226 237	3 672
32599	All other chemical product and preparation manufacturing	1	19	9	f	D	D	D	D	D	D	D	D
325991	Custom compounding of purchased resins	-	13	8	572	28 600	273	580	10 274	71 311	124 228	196 116	D
326	Plastics and rubber products manufacturing	-	103	58	6 664	197 867	5 120	8 189	126 446	687 906	475 630	1 167 665	41 079
3261	Plastics product manufacturing	-	99	56	i	D	D	D	D	D	D	D	D
32611	Plastics packaging materials and unlaminated film and sheet manufacturing	_	9	3	303	15 014	199	417	9 448	27 527	40 208	69 800	1 745
32612	Plastics pipe, pipe fitting, and unlaminated profile shape		5	2	259	8 386	180	221	3 756	19 184	10 859	29 610	D
326121	manufacturing Unlaminated plastics profile shape manufacturing	_	4	2	259 e	8 360 D	180 D	221 D	3 730 D	19 184 D	10 859 D	29 010 D	D
32619	Other plastics product manufacturing	_	73	44	5 411	148 531	4 222	6 604	97 664	586 877	380 111	970 301	D
326199	All other plastics product manufacturing	-	72	44	i	D	D	D	D	D	D	D	35 357
3262	Rubber product manufacturing	-	4	2	е	D	D	D	D	D	D	D	D
32629	Other rubber product manufacturing	_	4	2	е	D	D	D	D	D	D	D	D
326299	All other rubber product manufacturing	-	2	1	е	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	2	43	21	3 613	175 409	2 287	4 983	79 930	367 265	224 386	592 841	16 177
3271	Clay product and refractory manufacturing	2	7	4	426	16 118	317	603	9 410	49 205	20 583	70 779	1 241
32712	Clay building material and refractories manufacturing	2	3	2	е	D	D	D	D	D	D	D	D
327125	Nonclay refractory manufacturing	-	2	1	е	D	D	D	D	D	D	D	D
3272	Glass and glass product manufacturing	4	7	5	1 030	48 765	701	1 594	22 622	90 627	67 151	158 325	D
32721	Glass and glass product manufacturing	4	7	5	1 030	48 765	701	1 594	22 622	90 627	67 151	158 325	D
327215	Glass product manufacturing made of purchased glass	8	5	4	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product manufacturing	-	11	9	g	D	D	D	D	D	D	D	D
32791	Abrasive product manufacturing	_	9	8	1 883	99 516	1 053	2 307	39 399	196 619	107 874	304 073	8 205
327910	Abrasive product manufacturing	_	9	8	1 883	99 516	1 053	2 307	39 399	196 619	107 874	304 073	8 205
331	Primary metal manufacturing	2	21	9	781	29 513	565	1 252	19 918	53 811	72 819	126 624	D
3314	Nonferrous metal (except aluminum) production and			_				D					
33142	processing Copper rolling, drawing, extruding, and alloying	3 2	5	4	e	D	D	D	D	D	D	D	D

See footnotes at end of table.

[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]

	aning of abbreviations and symbols, see		A establis		All emp	oloyees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Worcester, MA Metropolitan Statistical Area – Con.												
332	Fabricated metal product manufacturing	1	272	83	8 081	318 266	5 845	11 439	187 693	635 630	507 934	1 165 787	38 983
3321	Forging and stamping	-	15	10	1 220	51 266	939	1 877	34 431	145 852	122 221	285 856	8 104
33211 332111 332117	Forging and stamping Iron and steel forging Powder metallurgy part manufacturing		15 2 1	10 2 1	1 220 f e	51 266 D D	939 D D	1 877 D D	34 431 D D	145 852 D D	122 221 D D	285 856 D D	8 104 D D
3322	Cutlery and handtool manufacturing	-	11	7	g	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing	_	11	7	g	D	D	D	D	D	D	D	D
332212 332213	Hand and edge tool manufacturing Saw blade and handsaw	-	9	5	1 165	37 656	845	1 528	22 495	77 768	35 348	116 183	3 187
3323	manufacturing Architectural and structural metals manufacturing	-	1 42	1	e 980	D 36 132	D 705	D 1 432	D 21 510	D 48 976	D 39 229	D 102 947	D 3 773
33231	Plate work and fabricated structural product			10	000	00 102	100	1 402	21 010	40 010	00 220	102 047	0 //0
332313 33232	manufacturing Plate work manufacturing Ornamental and architectural	-	15 7	6 4	435 324	18 266 12 942	311 239	653 508	11 292 8 317	18 724 9 206	23 121 15 529	55 520 38 667	2 413 1 463
332322	metal products manufacturing Sheet metal work manufacturing	2	27 24	7	545 f	17 866 D	394 D	779 D	10 218 D	30 252 D	16 108 D	47 427 D	1 360 D
3325	Hardware manufacturing	4	4	4	309	11 939	237	527	7 270	24 662	16 789	41 377	2 918
33251 332510	Hardware manufacturing Hardware manufacturing	4 4	4 4	4 4	309 309	11 939 11 939	237 237	527 527	7 270 7 270	24 662 24 662	16 789 16 789	41 377 41 377	2 918 2 918
3326	Spring and wire product manufacturing	-	18	10	816	27 961	637	1 234	17 243	61 826	63 124	126 346	8 981
33261	Spring and wire product manufacturing	-	18	10	816	27 961	637	1 234	17 243	61 826	63 124	126 346	8 981
332612 332618	Spring (light gauge) manufacturing Other fabricated wire product	-	4	2	е	D	D	D	D	D	D	D	D
0007	manufacturing	1	13	8	f	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	2	127	25	1 469	58 238	1 106	2 064	37 872	109 443	50 939	163 990	3 685
33271 332710	Machine shops Machine shops	3 3	111 111	17 17	958 958	37 022 37 022	739 739	1 421 1 421	25 422 25 422	68 178 68 178	28 526 28 526	96 869 96 869	2 440 2 440
33272	Turned product and screw, nut, and bolt manufacturing	-	16	8	511	21 216	367	643	12 450	41 265	22 413	67 121	1 245
332721	Precision turned product manufacturing	-	10	5	387	17 323	268	474	9 707	35 670	18 205	56 892	D
3328	Coating, engraving, heat treating, and allied activities	1	25	6	е	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, and allied activities	1	25	6	е	D	D	D	D	D	D	D	D
3329	Other fabricated metal product manufacturing	_	30	8	g	D	D	D	D	D	D	D	4 054
33291 332911	Metal valve manufacturing Industrial valve manufacturing	-	9 8	4	770 f	43 298 D	466 D	957 D	18 350 D	63 284 D	125 996 D	171 959 D	D
33299 332994	All other fabricated metal product manufacturing Small arms manufacturing	-	21 1	4	f	D	D	D	D	D	D	D	D D
333	Machinery manufacturing	1	146	48	4 608	228 489	2 878	5 950	114 206	404 105	281 049	699 749	22 644
3332	Industrial machinery manufacturing	1	20	4	404	22 211	207	393	7 564	31 366	30 722	65 831	1 796
3333	Commercial and service industry machinery manufacturing	_	15	8	788	34 672	525	1 134	18 694	72 868	28 330	101 212	3 727
33331	Commercial and service industry machinery												
333314	Optical instrument and lens manufacturing	-	15 14	8 7	788 f	34 672 D	525 D	1 134 D	18 694 D	72 868 D	28 330 D	101 212 D	3 727 D

[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]

			A establis		All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry		establis	With 20 em- ploy- ees or		Payroll		Hours	Wages	Value added	Total cost of materials	Total value of shipments	Total capital expendi- tures
		E1	Total	more	Number <sup>3</sup>	(\$1,000)	Number <sup>4</sup>	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Worcester, MA Metropolitan Statistical Area – Con.												
333 3335	Machinery manufacturing—Con. Metalworking machinery manufacturing	_	71	19	2 179	109 318	1 402	2 882	56 938	175 273	133 499	316 227	13 261
33351	Metalworking machinery			10	0.470	100.010	4 400	0.000	50.000	475 070	400,400	040.007	40,004
333511	manufacturing Industrial mold	-	71 32	19 8	2 179 992	109 318	1 402	2 882 1 379	56 938 24 818	175 273 71 699	133 499 61 106	316 227 135 698	13 261 7 958
333515	manufacturing Cutting tool and machine tool	1	10	8 4	992 316	46 643 15 404	675 228	463	10 676	27 980	9 916	37 455	7 958 1 696
333516	accessory manufacturing Rolling mill machinery and equipment manufacturing	-	1	4	310 e	15 404 D	228 D	463 D	D	27 980 D	9 916 D	37 455 D	1 696 D
3336	Engine, turbine, and power	_		'	6	D		D		U	D	U	D
	transmission equipment manufacturing	5	6	4	292	16 140	193	407	9 512	38 222	22 831	61 085	1 713
33361	Engine, turbine, and power transmission equipment manufacturing	5	6	4	292	16 140	193	407	9 512	38 222	22 831	61 085	1 713
3339	Other general purpose machinery manufacturing	1	28	10	666	32 634	374	744	14 600	64 714	47 282	112 899	D
33399	All other general purpose machinery manufacturing	2	21	6	430	21 363	242	475	9 105	34 704	29 020	65 047	595
333999	All other miscellaneous general purpose machinery manufacturing	2	14	4	271	11 440	171	317	5 464	24 191	13 931	38 687	250
334	Computer and electronic product manufacturing	-	78	34	6 694	421 651	3 004	5 842	117 151	1 263 782	817 945	2 094 011	110 153
3342	Communications equipment manufacturing	-	13	8	2 374	148 222	949	1 917	36 242	539 266	310 633	851 754	D
33422	Radio and television broadcasting and wireless communications equipment										5		5
334220	manufacturing Radio and television broadcasting and wireless communications equipment	1	6	3	e	D	D	D	D	D	D	D	D
33429	manufacturing Other communications	1	6	3	е	D	D	D	D	D	D	D	D
334290	equipment manufacturing Other communications	-	6	4	g	D	D	D	D	D	D	D	D
3344	equipment manufacturing Semiconductor and other	-	6	4	g	D	D	D	D	D	D	D	D
22441	electronic component manufacturing	-	26	11	2 158	117 464	1 434	2 702	60 723	310 710	298 731	622 291	57 976
33441 334412	Semiconductor and other electronic component manufacturing Bare printed circuit board	-	26	11	2 158	117 464	1 434	2 702	60 723	310 710	298 731	622 291	57 976
334413	manufacturing Semiconductor and related	-	6	2	f	D	D	D	D	D	D	D	D
334419	device manufacturing Other electronic component	-	7	4	g	D	D	D	D	D	D	D	D
004410	manufacturing	-	9	4	392	18 563	265	486	10 266	61 245	13 837	74 281	10 060
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	26	9	1 536	122 859	336	628	10 625	351 926	173 212	522 274	32 278
33451	Navigational, measuring, electromedical, and control instruments manufacturing	_	26	9	1 536	122 859	336	628	10 625	351 926	173 212	522 274	32 278
334510	Electromedical and electrotherapeutic		20	J	1 300	122 000	000	020	10 023	001 020	175 212	522 214	02 270
334516	apparatus manufacturing Analytical laboratory instrument manufacturing	-	5 6	2 2	257 g	11 376 D	184 D	356 D	5 618 D	23 805 D	20 485 D	44 403 D	D
335	Electrical equipment, appliance, and component manufacturing	3	33	17	2 650	130 873	1 700	3 686	68 190	341 244	286 511	627 845	13 575
3353	Electrical equipment manufacturing	2	9	4	£ 000	D	D	D	D	D	D	D	5 499
33531	Electrical equipment	_						_			_	_	
335312	manufacturing Motor and generator manufacturing	2 3	9 2	4 2	f	D	D	D	D	D	D	D	5 499 D

See footnotes at end of table.

[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]

			A establis		All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOSTON-WORCESTER- MANCHESTER, MA-NH COMBINED STATISTICAL AREA-Con.												
	Worcester, MA Metropolitan Statistical Area—Con.												
335 3359	Electrical equipment, appliance, and component manufacturing—Con. Other electrical equipment and component manufacturing	3	22	12	1 866	87 992	1 213	2 673	45 966	269 441	246 985	518 394	D
33592 335929	Communication and energy wire and cable manufacturing . Other communication and energy wire manufacturing .	3 3	12 11	9 9	1 375 g	66 208 D	950 D	2 137 D	37 900 D	221 440 D	215 191 D	438 624 D	6 187 D
33599	All other electrical equipment and component manufacturing	9	7	1	e	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment and component manufacturing	9	5	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	3	16	4	261	12 943	176	353	6 716	21 377	23 728	44 755	D
337	Furniture and related product manufacturing	_	74	26	2 336	87 931	1 503	3 000	41 676	159 625	107 710	267 079	3 604
3371	Household and institutional furniture and kitchen cabinet manufacturing	1	49	16	g	D	D	D	D	D	D	D	D
33712 337122	Household and institutional furniture manufacturing Nonupholstered wood	-	35	14	1 104	31 248	900	1 750	21 206	55 361	56 137	111 031	1 330
0070	household furniture manufacturing	1	23	8	624	17 931	521	1 106	12 524	25 922	37 628	62 953	D
3372 33721	Office furniture (including fixtures) manufacturing Office furniture (including	-	23	10	1 084	52 303	524	1 127	18 393	95 813	46 521	142 622	1 549
337212	fixtures) manufacturing Custom architectural woodwork and millwork	-	23	10	1 084	52 303	524	1 127	18 393	95 813	46 521	142 622	1 549
337214	Manufacturing Office furniture (except wood) manufacturing	-	13 2	5 2	348 f	20 466 D	188 D	375 D	7 024 D	28 705 D	13 110 D	41 885 D	1 128 D
339	Miscellaneous manufacturing	2	110	20	2 448	84 726	1 779	3 221	48 079	214 173	99 172	314 436	19 852
3391	Medical equipment and supplies manufacturing	-	42	7	1 407	52 913	1 042	1 754	31 004	143 816	44 333	189 043	14 321
33911 339115	Medical equipment and supplies manufacturing Ophthalmic goods manufacturing	-	42 5	7 3	1 407 1 080	52 913 40 593	1 042 791	1 754 1 226	31 004 23 693	143 816 108 172	44 333 30 173	189 043 139 077	14 321 10 905
3399	Other miscellaneous manufacturing	4	68	13	1 041	31 813	737	1 467	17 075	70 357	54 839	125 393	5 531
33999 339999	All other miscellaneous manufacturing All other miscellaneous manufacturing	5 6	32 23	9 5	f 569	D 15 381	D 413	D 826	D 8 621	D 35 252	D 32 519	D 68 002	D
	BARNSTABLE TOWN, MA METROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	3	221	28	2 478	100 479	1 435	2 739	42 164	262 445	146 352	411 126	16 219
311	Food manufacturing	1	22	4	349	10 759	232	447	6 546	47 602	27 954	75 149	D
334	Computer and electronic product manufacturing	1	20	5	550	34 497	111	208	4 051	92 208	34 767	132 705	D
3342	Communications equipment manufacturing	-	2	1	е	D	D	D	D	D	D	D	D
33421 334210	Telephone apparatus manufacturing Telephone apparatus manufacturing	-	1	1	e e	D	D	D D	D	D	D	D	D
339	Miscellaneous manufacturing	3	28	7	368	11 075	267	529	6 937	23 617	14 368	38 427	1 551

[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]

For me	aning of abbreviations and symbols, see			exij									
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	PITTSFIELD, MA METROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	1	203	63	7 249	289 956	4 564	9 249	145 654	694 785	500 557	1 195 169	44 844
314	Textile product mills	8	7	2	е	D	D	D	D	D	D	D	D
322	Paper manufacturing	-	11	7	1 697	74 978	1 085	2 406	40 694	209 168	168 317	372 839	14 274
3221	Pulp, paper, and paperboard mills	-	5	5	g	D	D	D	D	D	D	D	13 519
32212 322121	Paper mills Paper (except newsprint)	-	5	5	g	D	D	D	D	D	D	D	13 519
022121	mills	-	5	5	g	D	D	D	D	D	D	D	13 519
323	Printing and related support activities	-	21	7	719	24 228	553	1 110	16 271	58 438	38 699	97 290	9 353
3231	Printing and related support activities	-	21	7	719	24 228	553	1 110	16 271	58 438	38 699	97 290	9 353
32311 323119	Printing Other commercial printing	-	19 2	6 1	f e	D D	D D	D D	D	D D	D D	D D	D D
325	Chemical manufacturing	2	9	3	e	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	2	19	11	1 187	39 123	882	1 620	24 637	89 908	107 168	197 260	D
3261	Plastics product manufacturing	2	18	10	g	D	D	D	D	D	D	D	D
32611	Plastics packaging materials and unlaminated film and sheet manufacturing	_	4	2	e	D	D	D	D	D	D	D	D
326113	Unlaminated plastics film and sheet (except packaging) manufacturing		4	2	е	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	8	11	6	600	17 493	483	895	10 832	35 083	28 404	63 609	D
326199	All other plastics product manufacturing	8	11	6	600	17 493	483	895	10 832	35 083	28 404	63 609	D
327	Nonmetallic mineral product manufacturing	2	17	3	364	13 104	302	680	10 322	29 383	34 146	62 935	2 727
3273	Cement and concrete product manufacturing	2	6	2	276	9 602	239	557	7 778	20 982	23 106	44 088	1 693
332	Fabricated metal product manufacturing	4	22	6	278	10 111	219	433	6 955	17 467	11 245	28 382	790
333	Machinery manufacturing	5	21	8	624	28 388	412	863	16 448	58 337	28 921	87 283	1 715
3332	Industrial machinery manufacturing	8	4	2	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery manufacturing	8	4	2	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery manufacturing	-	11	5	297	13 450	218	482	9 430	23 816	8 797	32 423	713
33351	Metalworking machinery manufacturing	-	11	5	297	13 450	218	482	9 430	23 816	8 797	32 423	713
334	Computer and electronic product manufacturing	-	9	2	1 043	56 599	100	211	3 954	113 690	25 783	146 605	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	4	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control												
334511	instruments manufacturing Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	-	4	1	f	D	D	D	D	D	D	D	D
	manufacturing	-	1	1	f	D	D	D	D	D	D	D	D

[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]

	aning of appreviations and sympols, see		A establis		All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	PROVIDENCE-NEW BEDFORD-FALL RIVER, RI- MA METROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	2	3 014	894	r103 563	r3 783 691	'71 551	143 096	r2 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	-10 -100 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 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 311812	Retail bakeries Commercial bakeries	5	96 35	10 10	695 1 487	9 888 51 457	318 977	443 1 824	4 851 29 023	19 108 158 244	10 802 61 807	29 928 220 165	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	е	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	е	D	D	D	D	D	D	D	D
31311	Fiber, yarn, and thread mills	2	13	5	е	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 313210 31322	Broadwoven fabric mills Broadwoven fabric mills Narrow fabric mills and schiffli	-	11 11	5 5	h h	D D	D D	D D	D	D D	D D	D D	D D
313221 31323	Machine embroidery	3	22 19 6	12 12 4	f	D D D	D D D	D D D	D D D	D D D	D D D	D D D	D D D
313230 31324	Nonwoven fabric mills Nonwoven fabric mills Knit fabric mills	4	6 12	4 4 8	e e f	D				D	D D		DDD
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 313320	Fabric coating mills	7 7	9 9	6 6	f	D D	D	D D	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 314110	Carpet and rug mills	2	5	3	275 275	6 280 6 280	229 229	425	4 683 4 683	14 154 14 154	9 743 9 743	23 841 23 841	600 600
31412 314121 314129	Curtain and linen mills Curtain and drapery mills Other household textile	2 2	31 23	15 10	1 060 783	22 609 16 043	917 695	1 685 1 271	16 469 12 186	83 845 71 907	53 006 42 782	133 426 111 293	D D
	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 27	8 8	968 842	26 386 22 510	736	1 415 1 247	18 350 16 106	53 424 47 142	38 814 33 786	92 485	D
31499 314991	All other textile product mills Rope, cordage, and twine mills		6	8	842 e	22 510 D	648 D	1 247 D	D	47 142 D	33 786 D	81 182 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.

[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]

			A	JI	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	PROVIDENCE-NEW BEDFORD-FALL RIVER, RI- MA METROPOLITAN STATISTICAL AREA—Con.												
315 3152	Apparel manufacturing—Con. 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						D	D	D		U		
31522	contractors Men's and boys' cut and sew	6	25	6	398	5 311	364	588	4 352	7 307	1 148	8 455	D
315222	apparel manufacturing Men's and boys' cut and sew suit, coat, and overcoat	6	6	6	g	D	D	D	D	D	D	D	D
315228	manufacturing Men's and boys' cut and sew other outerwear	7	3	3	f	D	D	D	D	D	D	D	D
31523	manufacturing Women's and girls' cut and sew	-	2	2	e	D	D	D	D	D	D	D	D
316	apparel manufacturing	4	11	5	е	D	D	D	D	D	D	D	D
	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 316993	Other leather and allied product manufacturing Personal leather goods (except women's handbag	-	16	11	f	D	D	D	D	D	D	D	D
	and purse) manufacturing	2	6	4	266	6 853	174	355	4 769	9 637	4 548	14 271	218
321 3219	Wood product manufacturing Other wood product	3	70	15	1 242	37 647	951	1 859	23 722	72 041	119 434	194 261	5 525
3219	manufacturing	3	52	13	f	D	D	D	D	D	D	D	4 495
32191 321911	Millwork Wood window and door manufacturing	2	22 9	5 3	463 359	14 826 12 231	336 248	658 524	8 645 6 816	24 382 20 011	20 291 13 725	43 933 32 925	D
32192	Wood container and pallet manufacturing	2	11	4		12 231 D	240 D	524 D	0 810 D	20 011 D	13 725 D	32 923 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	е	D	D	D	D	D	D	D	D
322	Paper manufacturing	1	53	32	2 516	'95 077	r1 780	3 542	'51 518	218 427	196 781	408 595	13 488
3222	Converted paper product manufacturing	1	50	31	2 476	<sup>1</sup> 93 935	r1 747	3 483	r50 774	215 960	194 871	404 250	13 405
32221	Paperboard container manufacturing	1	28	19	1 672	'61 357	r1 188	2 486	'34 847	128 750	132 850	260 102	10 009
322211 322212	Corrugated and solid fiber box manufacturing Folding paperboard box	1	10	7	f	D	D	D	D	D	D	D	D
322213	manufacturing	-	5	3	f	D	D	D	D	D	D	D	D
32222	manufacturing Paper bag and coated and	-	8	7	e	D	D	D	D	D	D	D	D
322222	treated paper manufacturing Coated and laminated paper manufacturing	_	15 14	10 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 323110	Printing Commercial lithographic	4	220	44	3 313	116 353	2 305	4 464	65 363	252 356	138 192	389 424	13 543
323113	printing	4	94 28	20 8	1 174 663	44 372 20 656	817 441	1 582 858	27 233 10 365	85 477 46 271	53 956 38 293	139 488 83 312	8 466 1 139
323117 32312	Books printing Support activities for printing	8 8	6 20	5 3	f 278	D 11 450	D 226	D 397	D 7 961	D 24 620	D 6 781	D 31 424	D 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 325132	Synthetic dye and pigment manufacturing Synthetic organic dye and	-	3	3	е	D	D	D	D	D	D	D	D
	pigment manufacturing	-	3	3	е	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing	7	6	3	е	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing	7	6	3	е	D	D	D	D	D	D	D	D
3255	Paint, coating, and adhesive manufacturing	1	18	4	е	D	D	D	D	D	D	D	D

See footnotes at end of table.

[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]

			A establis		All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$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	D
32561	Soap and cleaning compound	1	11	4	е	D	D	D	D	D	D	D	D
32562	Toilet preparation manufacturing	_	5	4	e	D	D	D	D	D	D	D	D
325620	Toilet preparation manufacturing	-	5	4	е	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing	-	30	13	g	D	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	D
325991	Custom compounding of purchased resins	_	15	5	f	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, and chemical		_			_	_	_	_	_	_	_	_
325998	Manufacturing All other miscellaneous	-	5	3	f	D	D	D	D	D	D	D	D
	chemical product and preparation manufacturing .	-	8	3	е	D	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												
326112	sheet manufacturing Plastics packaging film and sheet (including laminated)	1	13	6	g	D	D	D	D	D	D	D	D
32615	manufacturing Urethane and other foam	-	2	2	f	D	D	D	D	D	D	D	D
326150	product (except polystyrene) manufacturing Urethane and other foam product (except polystyrene)	-	5	3	е	D	D	D	D	D	D	D	D
32619	manufacturing Other plastics product	-	5	3	е	D	D	D	D	D	D	D	D
326199	manufacturing All other plastics product	2	67	30	h	D	D	D	D	D	D	D	17 830
2000		2	67	30	h	D	D	D	D	D 71 506	D	D	17 830
3262 32629	Rubber product manufacturing Other rubber product	2	21	7	959	33 808	663	1 476	18 209	71 506	45 213	120 266	1 301
326291	manufacturing Rubber product manufacturing for	2	19	7	f	D	D	D	D	D	D	D	D
326299	mechanical use All other rubber product manufacturing	2 4	5 14	3 4	640 e	24 580 D	428 D	978 D	12 607 D	51 036 D	28 924 D	83 529 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	D
32721	Glass and glass product manufacturing	1	21	4	f	D	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	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	2	45	7	307	13 493	050	F 47	10.001	40 950	28 478	69 723	E 004
327320	manufacturing Ready-mix concrete manufacturing	2	15 15	7	307 307	13 493	258 258	547 547	10 364 10 364	40 950 40 950	28 478	69 723 69 723	5 964 5 964
3279	Other nonmetallic mineral product manufacturing	2	15	4	e	13 433 D	230 D	547 D	D	40 930 D	20 470 D	03 723 D	5 304 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	D
33122	Rolling and drawing of		-			-	_	-	_	_	_	-	5
331221	purchased steel Rolled steel shape manufacturing	_	5 2	4 2	f	D	D	D D	D D	D	D	D	D

[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]

			A establis		All em	oloyees	Pro	oduction worl	kers				
NAICS	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	PROVIDENCE-NEW BEDFORD-FALL RIVER, RI- MA METROPOLITAN STATISTICAL AREA—Con.												
331 3314	Primary metal manufacturing – Con. Nonferrous metal (except aluminum) production and	1	38	19	1 792	70.040	1 211	2 450	43 385	259 079	362 267	626 439	6 495
33142	processing	1	30	19	1 792	72 918	1 211	2 450	43 303	259 079	302 207	020 439	6 495
331421	extruding, and alloying Copper rolling, drawing, and	1	8	6	f	D	D	D	D	D	D	D	D
331422	extruding Copper wire (except	-	4	2	е	D	D	D	D	D	D	D	1 058
33149	mechanical) drawing Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and	1	3	3	e	D	D	D	D	D	D	D	D
331491	alloying Nonferrous metal (except copper and aluminum) rolling, drawing, and	1	25	13	1 178	47 670	761	1 473	27 291	196 933	225 790	427 369	4 375
331492	Secondary smelting, refining, and alloying of nonferrous metal (except copper and	1	12	7	t	D	D	D	D	D	D	D	D
3315	aluminum)	1 2	13 45	6 9	е 727	D 25 905	D 577	D 1 140	D 17 594	D 48 033	D 28 272	D 76 681	D
33151	Ferrous metal foundries	2 1	11	3	, 21 e	23 903 D	5/7 D	D	D	40 033 D	20 2/2 D	70 001 D	D
331511 33152	Iron foundries	1 3	8 34	2 6	e	D	DDD	DDD	D	D D	DDD	D D	D D
332	Fabricated metal product manufacturing	1	<sup>r</sup> 534	124	'13 015	'463 391	'10 095	'20 259	'308 666	'1 057 324	<sup>r</sup> 640 996	r1 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 332116	Forging and stamping	3 3	61 54	19 16	1 481 g	58 502 D	1 142 D	2 238 D	35 900 D	111 934 D	83 159 D	192 697 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	е	D	D	D	D	D	D	D	D
332212	Hand and edge tool manufacturing	2	17	4	е	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												
332312	manufacturing Fabricated structural metal	-	26	9	2 414	97 025	1 910	3 880	71 911	323 403	159 996	481 698	D
33232	manufacturing Ornamental and architectural metal products	-	22	7	g	D	D	D	D	D	D	D	D
332322	manufacturing Sheet metal work	1	<sup>r</sup> 46	11	<sup>r</sup> 969	'37 819	'697	r1 380	<sup>r</sup> 21 664	'55 438	<sup>r</sup> 69 046	'143 302	D
3324	manufacturing Boiler, tank, and shipping container manufacturing	2	28 8	7	600 f	20 334 D	441 D	814 D	12 958 D	40 069 D	37 685 D	79 213 D	3 466 D
33242	Metal tank (heavy gauge)		0	2	'	D	D	D		U	U	D	D
332420	manufacturing Metal tank (heavy gauge)	-	2	1	f	D	D	D	D	D	D	D	D
3326	manufacturing Spring and wire product manufacturing	3	23	4	g	D	D	D	D	D	D	D	D
33261	Spring and wire product						D	D	D	5	D	D	D
332618	manufacturing Other fabricated wire product manufacturing	3 3	23 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
33271 332710 33272	Machine shops Turned product and screw, nut,	3	131	16	1 402	54 956	1 111	2 197	38 665	110 873	49 374	159 994	10 095
332722	and bolt manufacturing Bolt, nut, screw, rivet, and washer manufacturing	1 1	43 18	12 9	f 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		61 354	188 359	4 193

See footnotes at end of table.

[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]

			Δ	ll hments <sup>2</sup>	All em	oloyees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	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												
332813	services to manufacturers Electroplating, plating, polishing, anodizing, and	1	31	6	576	15 876	461	886	10 787	33 562	15 970	49 671	D
	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			10			5			5	5	5	
333	manufacturing	2 4	32 204	13 55	g 5 286	D 224 429	D 3 463	D 6 870	D 120 511	D 485 506	D 418 819	D 913 789	D 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	0					D						
333220	machinery manufacturing Plastics and rubber industry machinery manufacturing	_	6 6	2	e 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												
333312	manufácturing Commercial laundry, drycleaning, and pressing machine manufacturing	5 8	14 2	5	481 e	19 731 D	323 D	603 D	11 095 D	45 909 D	36 657 D	83 362 D	D
3334	Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing	-	10	-	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, air- conditioning, and commercial												
333414	refrigeration equipment manufacturing Heating equipment (except warm air furnaces)	-	10	4	е	D	D	D	D	D	D	D	D
	manufacturing	-	5	3	е	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 333514	Metalworking machinery manufacturing	2	95	21	g	D	D	D	D	D	D	D	3 748
	Special die and tool, die set, jig, and fixture manufacturing	1	38	4	е	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	е	D	D	D	D	D	D	D	D
333911	Pump and pumping equipment manufacturing	9	4	2	е	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 333999	Power-driven handtool manufacturing All other miscellaneous	-	1	1	f	D	D	D	D	D	D	D	D
	general purpose machinery manufacturing	5	14	6	е	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

[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]

	aning of abbreviations and symbols, see		A establist		All em	oloyees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	PROVIDENCE-NEW BEDFORD-FALL RIVER, RI- MA METROPOLITAN STATISTICAL AREA—Con.												
334 3342	Computer and electronic product manufacturing—Con. Communications equipment manufacturing	_	5	3	g	D	D	D	D	D	D	D	D
33422	Radio and television broadcasting and wireless communications equipment												
334220	manufacturing 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 334414	Semiconductor and related device manufacturing Electronic capacitor	1	8	5	g	D	D	D	D	D	D	D	D
334415	manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
334417	manufacturing Electronic connector manufacturing	_	5 6	5 3	e e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly)				C								
334419	manufacturing Other electronic component manufacturing	1 3	7 12	4 10	f 643	D 24 435	D 416	D 838	D 12 985	D 47 674	D 21 111	D 71 396	D 1 423
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	47	11	h	D	D	D	D	D	D	D	D
33451 334511	Navigational, measuring, electromedical, and control instruments manufacturing Search, detection,	_	47	11	h	D	D	D	D	D	D	D	D
334512	navigation, guidance, aeronautical, and nautical system and instrument manufacturing Automatic environmental	-	7	4	g	D	D	D	D	D	D	D	D
334519	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	-	<sup>r</sup> 18	11	r1 321	'43 493	'1 053	'2 439	'30 784	'213 022	'102 881	'313 071	D
33512 335121	Lighting fixture manufacturing Residential electric lighting fixture manufacturing	-	۲17 4	11 3	g e	D	D	D	D	D	D	D	D
335122	Commercial, industrial, and institutional electric lighting fixture manufacturing	_	۳ 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	е	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 335931	Wiring device manufacturing Current-carrying wiring device manufacturing	_	8	5	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment and component	1	14	4	_	D	D	D	D	D	D	D	D
335999	manufacturing All other miscellaneous electrical equipment and component manufacturing	1	14	4	g g	D		D	D	ם	ם ום	D	D

See footnotes at end of table.

[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]

	aning of abbreviations and symbols, see		A		All em	ployees	Pro	oduction worl	kers				
NAICS			establis	hments <sup>2</sup>									<b>-</b>
code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	PROVIDENCE-NEW BEDFORD-FALL RIVER, RI- MA METROPOLITAN STATISTICAL AREA—Con.												
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												
336322	manufacturing Other motor vehicle electrical and electronic equipment	-	6	1	g	D	D	D	D	D	D	D	D
33636	manufacturing Motor vehicle seating and	-	6	1	g	D	D	D	D	D	D	D	D
336360	interior trim manufacturing Motor vehicle seating and	-	2	1	е	D	D	D	D	D	D	D	D
0000	interior trim manufacturing	-	2	1	e	D	D	D	D	D	D	D	D
3366 33661	Ship and boat building	3	48 48	20 20	g	D	D	D		D	D	D	D
336611 336612	Ship building and repairing Boat building	1 4	15 33	8 12	g f g	D D D	D D	DDD	D	DDD	DDD	DDD	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			10	1 0/1	40 040	002	1 002		00 000	40 700	100 700	D
337215	manufacturing Showcase, partition, shelving, and locker manufacturing	1	16 20	7	f	D	D	D	D	D	D	D	D
3379	Other furniture related product manufacturing	_	1	1	е	D	D	D	D	D	D	D	D
33792	Blind and shade												5
337920	manufacturing Blind and shade manufacturing	_	1	1	e 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												
00011	manufacturing	1	95	25	3 904	175 983	2 168	4 300	71 723	675 974	242 879	930 230	27 194
33911 339112	Medical equipment and supplies manufacturing Surgical and medical	1	95	25	3 904	175 983	2 168	4 300	71 723	675 974	242 879	930 230	27 194
339113	instrument manufacturing Surgical appliance and	-	18	13	g	D	D	D	D	D	D	D	D
339115	supplies manufacturing Ophthalmic goods	-	16	5	g	D	D	D	D	D	D	D	D
3399	manufacturing	8	12	5	f	D	D	D	D	D	D	D	D
33991	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
339911	manufacturing Jewelry (except costume)	1	363	99	10 745	341 165	7 431	13 990	166 285	881 555	848 121	1 720 435	D
339912	manufacturing Silverware and hollowware	-	129	44	4 618	145 232	3 322	6 013	79 377	525 649	448 010	965 392	D
339913	manufacturing Jewelers' material and	2	10	6	f	D	D	D	D	D	D	D	D
339914	lapidary work manufacturing Costume jewelry and novelty	2	65	12	g	D	D	D	D	D	D	D	D
33992	manufacturing Sporting and athletic goods	4	159	37	h	D	D	D	D	D	D	D	D
339920	manufacturing Sporting and athletic goods	9	16	2	g	D	D	D	D	D	D	D	D
33993	manufacturing Doll, toy, and game	9 2	16 7	2	g	D	D	D	D	D	D	D	D
33994	manufacturing Office supplies (except paper) manufacturing	2	9	5	e f	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 339950	Sign manufacturing Sign manufacturing	1 1	42	12 12	f	D	D	D	D D	D	D	D	D D

[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]

				JI	All em	ployees	Pro	oduction worl	kers				
NAICS			establis										Tatal
code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	PROVIDENCE-NEW BEDFORD-FALL RIVER, RI- MA METROPOLITAN STATISTICAL AREA-Con.												
339 3399	Miscellaneous manufacturing—Con. 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
	SPRINGFIELD, MA METROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	1	1 056	371	38 233	1 489 516	26 562	53 331	853 201	3 957 540	3 598 526	7 570 869	261 053
311	Food manufacturing	3	69	20	2 393	88 687	1 512	2 987	41 826	286 043	520 880	804 585	13 667
3115	Dairy product manufacturing	3	7	3	g	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) manufacturing	6	4	2	е	D	D	D	D	D	D	D	D
311511 31152	Fluid milk manufacturing Ice cream and frozen dessert	-	3	1	e	D	D	D	D	D	D	D	D
311520	manufacturing Ice cream and frozen dessert manufacturing	_	3	1	f	D	D	D	D	D	D	D	D
3116	Animal slaughtering and processing	_	8	7	551	17 010	411	948	9 535	26 931	61 144	89 385	2 632
31161	Animal slaughtering and			-		17 010		0.40	0.505	00.004		00,005	0,000
311612	processing Meat processed from carcasses	_	8	7	551 e	17 010 D	411 D	948 D	9 535 D	26 931 D	61 144 D	89 385 D	2 632 D
3118	Bakeries and tortilla manufacturing	4	28	5	286	6 631	152	225	2 877	12 541	6 671	19 215	341
31181	Bread and bakery product manufacturing	4	28	5	286	6 631	152	225	2 877	12 541	6 671	19 215	341
313	Textile mills	_	13	8	599	20 062	417	894	11 761	34 545	55 453	92 436	3 005
3132	Fabric mills	-	7	4	312	9 515	210	420	4 867	20 423	30 788	52 978	D
321	Wood product manufacturing	2	53	12	604	18 748	450	934	12 529	35 049	95 049	131 841	4 967
3211	Sawmills and wood preservation .	1	17	8	289	8 198	212	443	5 602	14 811	73 831	90 623	3 640
32111 3219	Sawmills and wood preservation	1	17	8	289	8 198	212	443	5 602	14 811	73 831	90 623	3 640
0210	manufacturing	4	33	3	е	D	D	D	D	D	D	D	977
322	Paper manufacturing	1	60	43	4 284	167 577	3 179	6 615	106 854	404 089	585 954	1 002 017	27 019
3221	Pulp, paper, and paperboard mills	-	7	7	510	22 089	399	749	15 692	59 767	70 364	131 309	D
32212 322121	Paper mills Paper (except newsprint) mills	-	5 5	5 5	e e	D D	D D	D D	D	D D	D D	D D	D D
3222	Converted paper product manufacturing	1	53	36	3 774	145 488	2 780	5 866	91 162	344 322	515 590	870 708	D
32221	Paperboard container manufacturing	2	20	15	1 080	40 987	829	1 737	27 172	90 369	131 662	222 859	D
322211	Corrugated and solid fiber box manufacturing	2	13	10	843	33 764	632	1 373	21 864	71 847	113 180	185 348	2 881
32222 322222	Paper bag and coated and treated paper manufacturing Coated and laminated paper	-	11	8	1 040	48 919	689	1 579	27 232	116 086	184 284	300 488	13 413
32223	manufacturing Stationery product	-	7	4	f	D	D	D	D	D	D	D	D
322231	manufacturing Die-cut paper and paperboard office supplies manufacturing	-	11 3	7	1 198 e	40 702 D	899 D	1 805 D	27 535 D	100 633 D	144 750 D	255 279 D	D
322232 322233	Envelope manufacturing Stationery, tablet, and related	-	3	2	f	D	D	D	D	D	D	D	D
32229	product manufacturing Other converted paper product	-	5	3	e	D	D	D	D	D	D	D	D
322299	Manufacturing All other converted paper product manufacturing	5 5	11 9	6 6	456 e	14 880 D	363 D	745 D	9 223 D	37 234 D	54 894 D	92 082 D	4 784 D
		. 5	. 9	. 0	e	U	וש	U	. 0	וט		וט	U

See footnotes at end of table.

[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]

			A establis	II hments <sup>2</sup>	All em	oloyees	Pro	duction work	kers				
NAICS	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SPRINGFIELD, MA METROPOLITAN STATISTICAL AREA-Con.												
323	Printing and related support activities	_	100	26	2 349	79 398	1 750	3 477	50 492	196 703	160 818	355 726	10 767
3231	Printing and related support activities	_	100	26	2 349	79 398	1 750	3 477	50 492	196 703	160 818	355 726	10 767
32311	Printing	-	84	24	2 064	70 230	1 538	3 091	44 973	181 862	156 296	336 338	10 330
323110 323113	Commercial lithographic printing Commercial screen printing	_ 5	39 11	13 4	991 269	35 798 7 613	753 210	1 450 412	23 629 4 464	74 990 11 832	75 460 8 943	149 171 20 797	5 539 390
323118	Blankbook, looseleaf binders, and devices manufacturing.	-	3	3	203 f	, 010 D	210 D	-12 D	D	D	D	20 / 3/ D	D
32312	Support activities for printing	1	16	2	285	9 168	212	386	5 519	14 841	4 522	19 388	437
325 3252	Chemical manufacturing Resin, synthetic rubber, and	-	26	10	818	34 616	513	1 112	17 670	98 635	154 584	256 703	4 332
0202	artificial synthetic fibers and filaments manufacturing	-	7	5	е	D	D	D	D	D	D	D	D
32521	Resin and synthetic rubber manufacturing	_	6	5	e	D	D	D	D	D	D	D	1 495
325211	Plastics material and resin manufacturing	_	6	5	e	D	D	D	D	D	D	D	1 495
3259	Other chemical product and preparation manufacturing	1	11	3	446	19 078	250	578	8 825	35 476	42 471	80 043	2 243
32599	All other chemical product and		10	0		D	D	D	D	D		D	D
325992	preparation manufacturing Photographic film, paper, plate, and chemical manufacturing	1	10 3	3	e 315	12 634	213	500	D 7 299	19 463	D 22 752	44 068	D
326	Plastics and rubber products												
3261	manufacturing	1 1	58 54	29 28	3 742 3 667	149 336 146 968	2 830 2 779	5 358 5 256	98 253 96 909	451 440 445 952	299 814 292 065	754 493 741 247	33 239 D
32611	Plastics packaging materials		54	20	0.001	140 300	2 113	5 250	50 505	443 332	232 003	/41 24/	D
326113	and unlaminated film and sheet manufacturing	-	13	8	1 043	60 604	707	1 493	38 622	176 367	181 284	359 787	19 048
32612	Unlaminated plastics film and sheet (except packaging) manufacturing Plastics pipe, pipe fitting, and	-	7	5	846	54 394	576	1 229	34 319	152 823	155 863	310 488	16 931
	unlaminated profile shape manufacturing	-	4	3	964	34 211	814	1 392	24 999	69 340	47 554	115 643	D
326121	Unlaminated plastics profile shape manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
32619 326199	Other plastics product manufacturing All other plastics product	3	31	15	1 420	43 952	1 044	1 977	26 301	148 982	55 264	206 607	D
	manufacturing	3	30	14	g	D	D	D	D	D	D	D	7 501
327	Nonmetallic mineral product manufacturing	1	32	7	401	14 812	289	578	8 915	34 310	32 679	67 138	3 404
331	Primary metal manufacturing	-	27	16	1 168	41 773	844	1 605	24 297	77 748	96 214	174 540	4 564
3314	Nonferrous metal (except aluminum) production and processing	_	7	7	f	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, and alloying	1	6	6	545	20 272	358	659	11 061	34 048	59 377	93 993	1 806
331422	Copper wire (except mechanical) drawing	1	6	6	545	20 272	358	659	11 061	34 048	59 377	93 993	1 806
3315	Foundries	1	15	5	342	11 055	271	536	6 704	18 347	14 499	33 324	2 096
33152	Nonferrous metal foundries	1	11	3	e	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	1	254	85	7 856	330 386	5 541	11 394	199 826	719 791	383 855	1 104 444	34 209
3321	Forging and stamping	3	8	6	263	10 078	217	479	7 253	22 895	23 295	47 121	1 112
33211	Forging and stamping	3	8	6	263	10 078	217	479	7 253	22 895	23 295	47 121	1 112
3322	Cutlery and handtool manufacturing	-	17	8	1 419	66 891	945	2 022	33 257	179 099	89 302	267 758	D
33221	Cutlery and handtool manufacturing	_	17	8	1 419	66 891	945	2 022	33 257	179 099	89 302	267 758	D
332212 332213	Hand and edge tool manufacturing Saw blade and handsaw	1	13	5	е	D	D	D	D	D	D	D	D
002213	manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
3323	Architectural and structural metals manufacturing	3	35	15	949	32 906	731	1 431	21 585	69 223	45 383	114 138	1 721
33232	Ornamental and architectural metal products	_			700	05 000	010	1 100	10,000	EE 400	07 01-	00 101	1 000
332322	manufacturing Sheet metal work manufacturing	3 2	24 17	11 7	780 594	25 633 19 828	610 476	1 168 922	16 962 13 812	55 409 42 147	37 217 27 745	92 181 69 701	1 383 1 053

See footnotes at end of table.

[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]

	aning of abbreviations and symbols, see		A establis		All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry		establisi	With 20 em- ploy-		Payroll		Hours	Wages	Value added	Total cost of materials	Total value of shipments	Total capital expendi- tures
		E1	Total	ees or more	Number <sup>3</sup>	(\$1,000)	Number <sup>4</sup>	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
	SPRINGFIELD, MA METROPOLITAN STATISTICAL AREA-Con.												
332	Fabricated metal product manufacturing—Con.												
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	_	130	28	2 262	101 028	1 613	3 577	67 772	201 991	109 674	310 050	15 747
33271	Machine shops	1	109	19	1 647	77 202	1 184	2 573	53 657	145 738	67 387	212 047	12 041
332710 33272	Machine shops Turned product and screw, nut,	1	109	19	1 647	77 202	1 184	2 573	53 657	145 738	67 387	212 047	12 041
332721	and bolt manufacturing Precision turned product	-	21	9	615	23 826	429	1 004	14 115	56 253	42 287	98 003	3 706
332722	manufacturing Bolt, nut, screw, rivet, and	-	15	6	278	9 625	201	518	6 827	16 565	6 674	23 313	1 151
0000	washer manufacturing	-	6	3	337	14 201	228	486	7 288	39 688	35 613	74 690	2 555
3328 33281	Coating, engraving, heat treating, and allied activities	1	27	14	864	34 378	644	1 274	20 230	60 278	22 635	82 924	2 334
332812	Coating, engraving, heat treating, and allied activities Metal coating, engraving (except jewelry and silverware), and allied	1	27	14	864	34 378	644	1 274	20 230	60 278	22 635	82 924	2 334
332813	services to manufacturers Electroplating, plating, polishing, anodizing, and	3	12	7	е	D	D	D	D	D	D	D	785
3329	Coloring	1	14	7	573	23 283	421	868	13 008	41 523	14 857	56 325	1 549
0020	manufacturing	-	22	11	1 882	74 913	1 256	2 331	44 506	164 792	75 534	242 800	5 904
33291 332912	Metal valve manufacturing Fluid power valve and hose	-	3	3	619	26 325	435	771	19 964	74 269	21 984	97 286	D
33299	fitting manufacturing All other fabricated metal	-	1	1	f	D	D	D	D	D	D	D	D
332994 332999	product manufacturing Small arms manufacturing All other miscellaneous fabricated metal product	-	19 2	8 2	1 263 f	48 588 D	821 D	1 560 D	24 542 D	90 523 D	53 550 D	145 514 D	D D
	manufacturing	-	14	6	е	D	D	D	D	D	D	D	D
333 3332	Machinery manufacturing Industrial machinery	3	115	45	4 113	173 974	2 419	4 603	80 311	410 553	358 226	768 516	20 693
	manufacturing	2	19	9	f	D	D	D	D	D	D	D	1 399
33329	Other industrial machinery manufacturing	-	15	8	468	17 663	284	525	10 304	39 247	27 600	68 404	1 181
3333	Commercial and service industry machinery manufacturing	6	15	8	1 016	45 220	566	983	17 745	120 593	93 941	213 914	D
33331	Commercial and service industry machinery manufacturing	6	15	8	1 016	45 220	566	983	17 745	120 593	93 941	213 914	D
333314	Optical instrument and lens manufacturing		7	3	e 1 010	43 220 D	D	D	н, т-з D	120 333 D	55 541 D	210 314 D	D
333315	Photographic and photocopying equipment	_		5	6	U	U	J	D	D	D	D	D
	manufacturing	9	2	2	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, air- conditioning, and commercial												
	refrigeration equipment manufacturing	6	4	4	514	20 324	258	532	6 761	35 134	32 799	69 022	989
33341	Ventilation, heating, air-												
	conditioning, and commercial refrigeration equipment												
333414	manufacturing Heating equipment (except	6	4	4	514	20 324	258	532	6 761	35 134	32 799	69 022	989
	warm air furnaces) manufacturing	6	3	3	е	D	D	D	D	D	D	D	D
3335	Metalworking machinery manufacturing	4	48	14	857	34 154	577	1 181	20 488	71 879	34 102	107 359	7 774
33351	Metalworking machinery manufacturing	4	48	14	857	34 154	577	1 181	20 488	71 879	34 102	107 359	7 774
3336	Engine, turbine, and power transmission equipment manufacturing	_	6	5	669	28 592	485	947	17 497	80 604	38 215	119 290	D
33361	Engine, turbine, and power transmission equipment												
333613	manufacturing	-	6	5	669	28 592	485	947	17 497	80 604	38 215	119 290	D
	transmission equipment manufacturing	-	4	3	е	D	D	D	D	D	D	D	D
3339	Other general purpose machinery manufacturing	-	22	5	511	24 096	200	330	5 802	55 421	126 044	177 327	1 949
33391	Pump and compressor manufacturing	_	1	1	е	D	D	D	D	D	D	D	D
333912	Air and gas compressor manufacturing	_	1	1	e	D	D	D	D	D	D	D	D

See footnotes at end of table.

[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]

			, 		All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SPRINGFIELD, MA METROPOLITAN STATISTICAL AREA-Con.												
334	Computer and electronic product manufacturing	2	40	17	1 579	78 321	827	1 729	26 522	177 515	161 558	335 029	6 557
3342	Communications equipment manufacturing	1	5	3	е	D	D	D	D	D	D	D	D
33422 334220	Radio and television broadcasting and wireless communications equipment manufacturing Radio and television	1	3	2	е	D	D	D	D	D	D	D	D
	broadcasting and wireless communications equipment manufacturing	1	3	2	e	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	_	12	7	481	19 006	339	747	11 250	41 618	45 700	84 669	D
33441	Semiconductor and other electronic component manufacturing		12	7	481	19 006	339	747	11 250	41 618	45 700	84 669	D
3345	Navigational, measuring, electromedical, and control												
33451	instruments manufacturing Navigational, measuring, electromedical, and control	4	13	5	607	29 567	327	686	9 717	66 239	26 795	93 131	D
335	instruments manufacturing Electrical equipment, appliance, and component manufacturing	4	13 13	5	607 744	29 567 24 306	327 518	686 1 071	9 717	66 239 70 190	26 795 50 347	93 131 119 037	D
3352	Household appliance manufacturing	_	1	1	e	D	D	D	D	D	D	D	D
33522 335222	Major appliance manufacturing. Household refrigerator and home freezer	-	1	1	e	D	D	D	D	D	D	D	D
3359	Manufacturing Other electrical equipment and	-	1	1	е	D	D	D	D	D	D	D	D
	component manufacturing	-	10	5	e	D	D	D	D	D	D	D	D
337 3371	Furniture and related product manufacturing Household and institutional	3	51	8	797	29 598	566	1 100	16 725	71 467	63 892	135 543	D
00710	furniture and kitchen cabinet manufacturing	8	37	2	е	D	D	D	D	D	D	D	D
33712 3372	Household and institutional furniture manufacturing Office furniture (including fixtures)	8	16	2	269	9 539	213	428	6 558	19 486	22 526	41 937	D
3372	Office furniture (including includes) Office furniture (including	-	10	5	287	11 743	166	321	4 979	21 440	22 378	44 015	1 929
337212	fixtures) manufacturing Custom architectural woodwork and millwork	-	10	5	287	11 743	166	321	4 979	21 440	22 378	44 015	1 929
339	manufacturing Miscellaneous manufacturing	-	7 86	5 25	e 5 764	D 205 831	D 4 153	D 8 379	D 123 874	D 783 602	D 446 866	D 1 230 087	D 81 242
3391	Medical equipment and supplies manufacturing	_	29	7	1 190	48 147	725	1 514	20 626	200 873	133 697	332 537	4 248
33911	Medical equipment and supplies manufacturing	_	29	7	1 190	48 147	725	1 514	20 626	200 873	133 697	332 537	4 248
339112	Surgical and medical instrument manufacturing	-	6	4	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing	-	57	18	4 574	157 684	3 428	6 865	103 248	582 729	313 169	897 550	76 994
33992 339920	Sporting and athletic goods manufacturing Sporting and athletic goods	-	6	3	f	D	D	D	D	D	D	D	D
339920	manufacturing	-	6	3	f	D	D	D	D	D	D	D	D
339932	manufacturing Game, toy, and children's	-	9	4	1 913	70 639	1 510	2 986	51 018	143 176	125 556	267 299	D
33999	vehicle manufacturing All other miscellaneous	-	8	4	g	D	D	D	D	D	D	D	D
339999	Manufacturing All other miscellaneous manufacturing	_	26 18	7 4	1 444 g	32 768 D	1 133 D	2 307 D	24 835 D	212 582 D	94 887 D	293 962 D	D
			10	+	y	D	5	D		U		D	

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent; 9–90 percent or more. <sup>2</sup>Includes establishments with payroll at any time during the year. <sup>3</sup>Includes establishments with 250 employees 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; 1–500 to 999 employees, m-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.

<sup>4</sup>Number 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]

			A			ployees		oduction work					
NAICS			establisi	With 20									Total
code	Geographic area and industry	E <sup>1</sup>	Total	em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	capital expendi- tures (\$1,000)
	BARNSTABLE												
31-33	Manufacturing	3	221	28	2 478	100 479	1 435	2 739	42 164	262 445	146 352	411 126	16 219
334	Computer and electronic product manufacturing	1	20	5	550	34 497	111	208	4 051	92 208	34 767	132 705	D
	BERKSHIRE												
31-33	Manufacturing	1	203	63	7 249	289 956	4 564	9 249	145 654	694 785	500 557	1 195 169	44 844
322	Paper manufacturing	-	11	7	1 697	74 978	1 085	2 406	40 694	209 168	168 317	372 839	14 274
3221	Pulp, paper, and paperboard mills	-	5	5	g	D	D	D	D	D	D	D	13 519
32212 322121	Paper mills Paper (except newsprint) mills	-	5 5	5 5	g g	D D	D D	D D	D	D D	D D	D D	13 519 13 519
323	Printing and related support activities	-	21	7	719	24 228	553	1 110	16 271	58 438	38 699	97 290	D
3231	Printing and related support activities	-	21	7	719	24 228	553	1 110	16 271	58 438	38 699	97 290	D
32311	Printing	-	19	6	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	2	19	11	1 187	39 123	882	1 620	24 637	89 908	107 168	197 260	D
3261	Plastics product manufacturing	2	18	10	g	D	D	D	D	D	D	D	D
32619 326199	Other plastics product manufacturing All other plastics product	8	11	6	600	17 493	483	895	10 832	35 083	28 404	63 609	D
	manufacturing	8	11	6	600	17 493	483	895	10 832	35 083	28 404	63 609	D
333 334	Machinery manufacturing	5	21	8	624	28 388	412	863	16 448	58 337	28 921	87 283	1 715
334	Computer and electronic product manufacturing	-	9	2	1 043	56 599	100	211	3 954	113 690	25 783	146 605	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	4	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control						_	_	_	_	_	_	_
334511	instruments manufacturing Search, detection, navigation, guidance, aeronautical, and nautical	-	4	1	t	D	D	D	D	D	D	D	D
	system and instrument manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
	BRISTOL												
31-33	Manufacturing	2	883	308	'41 278	1 489 130	28 722	57 899	789 878	'3 994 700	3 360 852	7 398 678	221 333
311 3117	Food manufacturing Seafood product preparation and	1	94	21	2 502	74 135	1 737	3 587	41 731	252 727	329 796	583 426	10 211
	packaging	2	22	11	g	D	D	D	D	D	D	D	D
31171 311712	Seafood product preparation and packaging Fresh and frozen seafood	2	22	11	g	D	D	D	D	D	D	D	D
	processing	2	18	11	g	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing	-	43	3	929	31 703	518	1 024	15 023	118 555	48 340	166 954	6 186
31181	Bread and bakery product manufacturing	-	43	3	929	31 703	518	1 024	15 023	118 555	48 340	166 954	6 186
311812 313	Commercial bakeries	2	14 33	2 19	797 5 376	29 685 165 110	452 4 422	924 9 728	13 981 118 904	114 568 330 610	46 087 368 766	160 716 700 061	45 435
3132	Fabric mills	_	15	8	3 692	116 401	3 059	6 864	83 641	231 835	254 213	486 848	D
31321 313210	Broadwoven fabric mills Broadwoven fabric mills	_	6	3 3	h h	D D	D D	D D	D D	D	D D	D	D D
3133	Textile and fabric finishing and fabric coating mills	7	15	10	g	D	D	D	D	D	D	D	D
31331	Textile and fabric finishing mills	8	12	7	1 515	42 285	1 255	2 628	32 230	87 616	100 359	187 219	D
313311	Broadwoven fabric finishing mills	8	9	6	r 515	42 205 D	T 233	2 020 D	32 230 D	57 010 D	100 339 D	107 219 D	D
314	Textile product mills	1	35	15	1 483	35 300	1 232	2 331	26 386	111 755	68 316	177 053	8 177
3141	Textile furnishings mills	2	17	11	870	18 940	749	1 397	13 972	77 268	43 809	117 706	D
31412 314121	Curtain and linen mills	2 2	17 13	11 8	870 647	18 940 13 716	749 576	1 397 1 081	13 972 10 730	77 268 68 239	43 809 36 658	117 706 101 581	D D
3149	Other textile product mills	-	18	4	613	16 360	483	934	12 414	34 487	24 507	59 347	D
31499	All other textile product mills	_	12	4	593	15 804	468	905	12 087	33 654	23 735	57 734	D

[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]

			A	JI	Allom	ployees			koro				
			establis	hments <sup>2</sup>	All em	pioyees	PIC	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BRISTOL-Con.												
315	Apparel manufacturing	5	51	24	2 453	53 926	2 048	3 626	38 361	82 214	106 010	189 954	D
3152	Cut and sew apparel manufacturing	5	41	20	g	D	D	D	D	D	D	D	D
31522	Men's and boys' cut and sew apparel manufacturing	6	5	5	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
321	Wood product manufacturing	3	25	3	541	17 947	411	869	11 485	29 910	25 071	54 467	D
322	Paper manufacturing	-	15	11	875	33 437	649	1 371	19 258	72 976	78 131	149 834	7 454
3222	Converted paper product manufacturing	-	15	11	875	33 437	649	1 371	19 258	72 976	78 131	149 834	7 454
32221	Paperboard container manufacturing	-	9	7	682	26 282	500	1 116	15 236	52 173	63 310	114 009	D
323	Printing and related support activities	5	69	17	1 286	43 108	945	1 787	25 774	102 601	33 266	135 681	6 775
3231	Printing and related support activities	5	69	17	1 286	43 108	945	1 787	25 774	102 601	33 266	135 681	6 775
32311	Printing	5	63	16	1 231	41 218	896	1 734	24 248	99 755	32 682	132 227	6 751
325	Chemical manufacturing	-	22	10	998	39 072	685	1 410	19 495	95 925	141 325	242 037	7 443
3259	Other chemical product and preparation manufacturing	1	7	3	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	2	35	11	1 456	49 329	1 065	2 249	28 850	124 032	73 772	201 592	4 602
3261	Plastics product manufacturing	1	21	6	567	18 487	443	855	12 196	58 373	32 807	91 382	3 594
3262	Rubber product manufacturing	2	14	5	889	30 842	622	1 394	16 654	65 659	40 965	110 210	1 008
32629 326291	Other rubber product manufacturing Rubber product manufacturing for mechanisal use	2	13	5	f 632	D 24 312	D 421	D 963	D 12 405	D 50 419	D 28 491	D 82 479	D
327	mechanical use												
221	manufacturing Primary metal manufacturing	2	29 21	11 15	673 1 649	25 115 64 329	532 1 141	1 089	17 902 41 832	65 021 161 468	34 841	100 703	8 239 4 286
331 3314	Nonferrous metal (except	-	21	15	1 649	64 329	1 141	2 278	41 832	101 408	332 294	494 448	4 280
	aluminum) production and processing	-	10	8	927	33 966	663	1 286	22 993	86 124	214 805	299 777	2 416
33149	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and alloying	_	6	5	662	24 029	455	834	16 037	54 027	130 582	184 810	1 784
332	Fabricated metal product manufacturing	2	r149	41	'3 779	'137 461	'3 023	r6 387	'92 112	'233 973	<sup>166</sup> 164	'415 637	'11 829
3321	Forging and stamping	2	18	7	754	28 864	604	1 193	18 592	54 732	35 514	90 235	D
33211 332116	Forging and stamping Metal stamping	2 1	18 17	7 7	754 f	28 864 D	604 D	1 193 D	18 592 D	54 732 D	35 514 D	90 235 D	D D
3323	Architectural and structural metals manufacturing	1	'30	11	'622	'26 863	<sup>r</sup> 439	<sup>r</sup> 888	'15 813	'33 289	<sup>1</sup> 40 622	'90 093	r4 542
3326	Spring and wire product manufacturing	1	9	1	f	D	D	D	D	D	D	D	D
33261	Spring and wire product manufacturing	1	9	1	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product manufacturing	1	9	1	f	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	4	52	6	f	D	D	D	D	D	D	D	D
33271 332710	Machine shops Machine shops	6	46 46	4	510 510	21 562 21 562	404 404	813 813	14 595 14 595	41 007 41 007	17 140 17 140	58 043 58 043	1 800 1 800
333	Machinery manufacturing	6	57	14	1 713	76 379	1 138	2 114	42 963	178 064	124 271	298 988	5 481
3332	Industrial machinery manufacturing	7	10	4	796	42 791	482	949	22 045	108 409	71 004	173 976	2 542
33329	Other industrial machinery manufacturing	8	8	3	f	D	D	D	D	D	D	D	D

See footnotes at end of table.

[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]

			A	JI		ployees		oduction wor					
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BRISTOL-Con.												
334	Computer and electronic product		45	00	2.050	170 000	1 707	0.000	47 407	000,000	500,000	704 004	00.010
3342	Communications equipment	-	45	20	3 958	176 908	1 727	3 363	47 437	268 692	509 929	794 324	33 312
33422	manufacturing Radio and television	-	1	1	g	D	D	D	D	D	D	D	D
334220	broadcasting and wireless communications equipment manufacturing Radio and television broadcasting and wireless communications equipment	-	1	1	g	D	D	D	D	D	D	D	D
3344	manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	1	23	16	g	D	D	D	D	D	D	D	D
33441	Semiconductor and other												
	electronic component manufacturing	1	23	16	g	D	D	D	D	D	D	D	D
334414	Electronic capacitor manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	1	'30	15	r1 960	'71 480	r1 577	'3 479	<sup>7</sup> 50 916	'264 384	<sup>7</sup> 224 126	r486 098	'5 967
3351	Electric lighting equipment												
33512	Lighting fixture manufacturing	_	7 76	5	'801 f	'27 786 D	'715 D	'1 650 D	'23 118 D	'159 023 D	'54 370 D	'213 002 D	D
335122	Commercial, industrial, and institutional electric lighting			5		D	U	D		U	5	D	D
	fixture manufacturing	-	r4	3	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing	1	13	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	_	27	11	2 694	126 721	1 263	2 389	22 642	390 589	226 579	619 312	D
3363	Motor vehicle parts manufacturing	_	7	3	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical and												
336322	electronic equipment manufacturing	-	4	1	g	D	D	D	D	D	D	D	D
330322	Other motor vehicle electrical and electronic equipment manufacturing		4	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	3	111	41	7 256	276 995	4 699	8 973	132 628	1 176 692	480 244	1 664 752	35 244
3391	Medical equipment and supplies manufacturing	_	31	14	2 355	114 399	1 266	2 585	45 675	500 983	154 897	667 884	18 848
33911	Medical equipment and												
339112	supplies manufacturing Surgical and medical	-	31	14	2 355	114 399	1 266	2 585	45 675	500 983	154 897	667 884	18 848
339113		-	11	9	g f	D	D	D	D	D	D	D	D
3399	Supplies manufacturing Other miscellaneous	-	6	3		D	D	D	D	U	U	U	D
	manufacturing	5	80	27	4 901	162 596	3 433	6 388	86 953	675 709	325 347	996 868	16 396
33991	Jewelry and silverware manufacturing	-	44	19	2 532	81 223	1 754	3 075	39 543	221 243	252 553	473 956	D
339911 339913	Jewelry (except costume) manufacturing Jewelers' material and	-	20	9	960	31 477	655	974	13 984	140 624	68 284	208 772	D
339913	lapidary work manufacturing	_	8	4	f	D	D	D	D	D	D	D	D
33992	Sporting and athletic goods manufacturing	9	4	1	g	D	D	D	D	D	D	D	D
339920	Sporting and athletic goods manufacturing	9	4	1	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous manufacturing	7	16	4	f	D	D	D	D	D	D	D	D
	ESSEX												
31-33	Manufacturing	1	1 134	365	55 183	r2 679 381	'31 929	62 687	r1 232 166	r8 128 805	'5 773 188	14 187 532	468 030
311	Food manufacturing	3	99	31	3 953	'140 604	2 523	4 835	'63 406	563 567	519 325	1 084 223	30 191
3115	Dairy product manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
31151 311511	Dairy product (except frozen) manufacturing Fluid milk manufacturing	-	3	2	f f	D	D	D	D	D	D D	D D	D D
3117	Seafood product preparation and packaging	8	11	5	1 143	49 811	702	1 449	19 001	173 429	185 937	366 983	7 010
31171	Seafood product preparation												
311712	and packaging Fresh and frozen seafood processing	8	11 10	5	1 143 g	49 811 D	702 D	1 449 D	19 001 D	173 429 D	185 937 D	366 983 D	7 010 D
	See feetnetes at and of table	5		0	9	5	2.	2	5				2

[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]

	and geographical delimitions, see note at		A establis	JI		ployees		oduction worl					
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	ESSEX-Con.												
311 3118	Food manufacturing—Con. Bakeries and tortilla manufacturing	_	46	13	f	D	D	D	D	D	D	D	2 201
31181	Bread and bakery product manufacturing	1	45	12	693	r17 166	413	684	r9 640	41 538	16 270	57 711	D
313	Textile mills	-	16	8	1 159	36 809	797	1 582	23 494	93 979	77 130	176 936	D
3133	Textile and fabric finishing and fabric coating mills	-	11	6	1 098	34 248	756	1 528	21 938	87 663	72 748	166 329	D
31331 313312	Textile and fabric finishing mills Textile and fabric finishing (except broadwoven fabric) mills	-	8	4	f	D	D	D	D	D	D	D	D
316	Leather and allied product manufacturing	2	27	9	f	D	D	D	D	D	D	D	D
322	Paper manufacturing	2	22	15	1 509	57 421	1 174	2 381	39 450	114 261	143 489	258 687	5 896
3222	Converted paper product manufacturing	3	19	12	g	D	D	D	D	D	D	D	D
32221	Paperboard container manufacturing	3	13	8	737	22 636	608	1 135	15 360	46 719	62 528	109 062	2 029
323	Printing and related support activities	3	108	20	1 599	61 008	1 179	2 269	38 775	114 883	62 131	177 417	3 589
3231	Printing and related support activities	3	108	20	1 599	61 008	1 179	2 269	38 775	114 883	62 131	177 417	3 589
32311 323110	Printing Commercial lithographic	4	99	19	1 444	54 160	1 049	2 006	33 497	103 829	58 996	163 234	D
525110	printing	6	49	10	601	22 208	433	806	14 267	40 742	26 147	66 918	1 293
325	Chemical manufacturing	1	'69	<sup>r</sup> 29	'5 357	'310 993	'2 875	'6 104	'142 042	'1 369 644	'559 717	'1 894 368	81 456
3254	Pharmaceutical and medicine manufacturing	2	11	6	g	D	D	D	D	D	D	D	56 210
32541 325412	Pharmaceutical and medicine manufacturing Pharmaceutical preparation	2	11	6	g	D	D	D	D	D	D	D	56 210
	manufacturing	2	4	2	g	D	D	D	D	D	D	D	D
3255	Paint, coating, and adhesive manufacturing	-	r17	r6	'743	'35 595	'336	'732	'14 729	'127 592	<sup>r</sup> 98 108	'232 423	5 184
3256	Soap, cleaning compound, and toilet preparation manufacturing.	-	10	4	834	36 912	497	889	20 355	444 234	178 973	623 245	D
32562 325620	Toilet preparation manufacturing Toilet preparation	-	2	2	f	D	D	D	D	D	D	D	D
	manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing	2	16	7	841	36 306	581	1 196	20 008	90 138	103 976	193 074	6 854
32599	All other chemical product and preparation manufacturing	1	13	5	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product and preparation manufacturing .	_	7	3	618	26 584	442	908	15 243	68 616	72 467	140 626	D
326	Plastics and rubber products manufacturing	1	51	23	2 245	79 974	1 722	3 447	50 113	206 635	156 209	360 386	16 983
3261	Plastics product manufacturing	1	44	22	2 029	72 494	1 555	3 183	45 260	192 032	148 556	337 944	16 320
32619	Other plastics product manufacturing	1	26	9	1 266	41 515	1 061	2 257	30 247	120 681	88 271	206 714	11 613
326199	All other plastics product manufacturing	1	26	9	1 266	41 515	1 061	2 257	30 247	120 681	88 271	206 714	11 613
332	Fabricated metal product manufacturing	2	<sup>r</sup> 240	'59	r4 094	'175 132	'2 997	'6 149	'110 206	'360 246	'246 080	'601 577	21 223
3323	Architectural and structural metals manufacturing	4	42	13	1 060	38 700	785	1 554	23 837	79 530	59 297	135 093	3 808
33232	Ornamental and architectural metal products manufacturing	5	34	9	812	29 331	609	1 199	18 119	62 072	46 648	105 624	3 410
332322	Sheet metal work manufacturing	э 5	25	9 7	697	29 331	533	1 048	15 064	49 147	46 648	87 162	3 410 2 975
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	2	128	24	1 696	77 868	1 239	2 568	50 082	137 761	65 925	202 753	13 269
33271 332710	Machine shops Machine shops	2 2	111 111	17 17	1 371 1 371	63 521 63 521	995 995	2 059 2 059	39 979 39 979	103 832 103 832	53 087 53 087	156 319 156 319	5 318 5 318

See footnotes at end of table.

[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]

			or table.		anon on geo	grapino aroao	ionowed by	, occ rippene	IX D. TOTHICO	ining of approvid	ationio and oymbo		
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	ESSEX-Con.												
333	Machinery manufacturing	2	87	37	5 866	323 010	2 974	5 254	126 021	612 360	507 272	1 121 948	34 101
3332	Industrial machinery manufacturing	1	26	16	3 614	231 085	1 378	2 100	71 697	404 022	358 163	764 566	27 939
33322	Plastics and rubber industry machinery manufacturing	5	4	3	751	38 662	375	777	14 817	66 762	55 800	123 302	1 459
333220	Plastics and rubber industry machinery manufacturing	5	4	3	751	38 662	375	777	14 817	66 762	55 800	123 302	1 459
33329	Other industrial machinery manufacturing	-	22	13	2 863	192 423	1 003	1 323	56 880	337 260	302 363	641 264	26 480
333295	Semiconductor machinery manufacturing	-	7	5	2 535	177 811	828	974	50 395	306 153	277 274	584 394	D
3334	Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing	8	9	5	725	25 960	536	1 088	15 730	61 821	55 658	117 282	1 541
33341	Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing	8	9	5	725	25 960	536	1 088	15 730	61 821	55 658	117 282	1 541
3339	Other general purpose machinery manufacturing	-	16	7	745	30 103	481	765	14 164	84 302	48 251	132 331	1 399
334	Computer and electronic product manufacturing	-	115	59	14 743	751 910	7 290	14 158	284 558	2 494 163	1 455 523	4 257 397	122 351
3341	Computer and peripheral equipment manufacturing	-	11	3	558	30 409	190	342	6 834	86 679	75 474	165 195	8 414
33411	Computer and peripheral equipment manufacturing	_	11	3	558	30 409	190	342	6 834	86 679	75 474	165 195	8 414
334119	Other computer peripheral equipment manufacturing	-	6	3	526	28 820	170	309	5 978	84 084	71 422	158 594	D
3342	Communications equipment manufacturing	-	14	11	g	D	D	D	D	D	D	D	18 019
33421	Telephone apparatus manufacturing	-	2	2	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus manufacturing	-	2	2	g	D	D	D	D	D	D	D	D
33422	Radio and television broadcasting and wireless communications equipment manufacturing	2	10	8	f	D	D	D	D	D	D	D	D
334220	Radio and television broadcasting and wireless communications equipment manufacturing	2	10	8	f	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	1	47	28	3 012	127 849	2 028	3 534	70 195	221 899	159 500	378 419	19 280
33441	Semiconductor and other		47	20	5 012	127 045	2 020	5 554	70 195	221 099	139 300	576 419	19 200
004444	electronic component manufacturing	1	47	28	3 012	127 849	2 028	3 534	70 195	221 899	159 500	378 419	19 280
334411 334412	Electron tube manufacturing . Bare printed circuit board manufacturing	_	3	3 5	740	D 25 439	D 579	D 619	D 17 666	D 23 550	D 18 421	D 42 183	D 1 504
334413	Semiconductor and related device manufacturing	2	12	7	681	36 911	339	630	13 991	72 364	52 073	125 066	13 095
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	34	15	8 912	491 587	3 934	7 811	160 190	1 973 644	660 773	2 725 750	75 350
33451	Navigational, measuring, electromedical, and control												
334510	instruments manufacturing Electromedical and electrotherapeutic	-	34	15	8 912	491 587	3 934	7 811	160 190	1 973 644	660 773	2 725 750	75 350
334511	apparatus manufacturing Search, detection, navigation, guidance, aeronautical, and nautical	-	5	4	2 336	143 777	767	1 782	41 953	832 267	109 152	1 027 287	D
334513	system and instrument manufacturing Instruments and related products manufacturing for measuring, displaying, and	-	7	2	h	D	D	D	D	D	D	D	D
	controlling industrial process variables	-	6	4	569	19 456	338	800	7 033	75 212	36 897	118 050	D
334517	Irradiation apparatus manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	3	32	15	3 368	153 962	1 689	2 865	56 898	285 933	226 587	518 149	17 974
3353	Electrical equipment manufacturing	4	8	3	1 318	74 549	351	599	18 208	175 304	120 830	300 025	D
33531	Electrical equipment manufacturing	4	8	3	1 318	74 549	351	599	18 208	175 304	120 830	300 025	D
335314	Relay and industrial control manufacturing	7	7	2	g	D	D	D	D	D	D	D	D

[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]

											alions and symbol		
			establis	ll hments <sup>2</sup>	All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	ESSEX-Con.												
335 3359	Electrical equipment, appliance, and component manufacturing – Con. Other electrical equipment and component manufacturing	_	21	11	g	D	D	D	D	D	D	D	13 102
33599	All other electrical equipment and component manufacturing	_	10	4	1 647	64 390	1 130	1 897	33 678	78 314	80 589	160 400	D
335999	All other miscellaneous electrical equipment and component manufacturing	_	10	4	1 647	64 390	1 130	1 897	33 678	78 314	80 589	160 400	D
336	Transportation equipment manufacturing	-	24	10	i	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	-	7	6	h	D	D	D	D	D	D	D	D
33641	Aerospace product and parts		7	6	h	D	D	D	D	D	D	D	D
336412	manufacturing Aircraft engine and engine parts manufacturing	_	6	6	h	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	-	90	23	3 279	136 469	1 896	4 160	57 286	342 690	143 715	488 089	24 972
3391	Medical equipment and supplies manufacturing	1	37	13	2 029	83 200	1 314	2 963	37 306	199 725	63 996	263 826	20 239
33911 339113	Medical equipment and supplies manufacturing Surgical appliance and	1	37	13	2 029	83 200	1 314	2 963	37 306	199 725	63 996	263 826	20 239
3399	Supplies manufacturing Other miscellaneous	-	7	4	g	D	D	D	D	D	D	D	3 073
33999	manufacturing	-	53	10	1 250	53 269	582	1 197	19 980	142 965	79 719	224 263	4 733
	manufacturing	-	32	8	813	35 086	417	890	13 986	97 418	41 288	137 898	D
31-33	Manufacturing	2	120	47	5 035	175 961	3 571	7 108	105 910	619 289	403 884	1 006 248	87 046
326	Plastics and rubber products manufacturing	1	10		972	40 043	707	1 380	25 829	139 181	80 950	220 513	D
3261	Plastics product manufacturing	1	10	8	972	40 043	707	1 380	25 829	139 181	80 950	220 513	D
32619	Other plastics product			-									
326199	manufacturing All other plastics product manufacturing	4	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	2	19	9	800	30 243	587	1 198	18 193	78 658	50 538	128 009	3 116
339	Miscellaneous manufacturing	-	9	7	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing	_	9	7	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous manufacturing	-	5	4	g	D	D	D	D	D	D	D	D
339999	All other miscellaneous manufacturing	-	5	4	g	D	D	D	D	D	D	D	D
	HAMPDEN												
31-33	Manufacturing	1	748	268	28 386	1 132 934	19 633	39 672	643 169	2 902 052	2 691 836	5 623 890	140 426
311	Food manufacturing	3	39	15	1 930	74 183	1 178	2 304	32 669	223 868	466 281	688 213	D
3115 31152	Dairy product manufacturing Ice cream and frozen dessert	3	5	3	g	D	D	D	D	D	D	D	D
311520	Ice cream and frozen dessert manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
3116	Animal slaughtering and processing	_	8	7	551	17 010	411	948	9 535	26 931	61 144	89 385	2 632
31161	Animal slaughtering and processing	_	8	7	551	17 010	411	948	9 535	26 931	61 144	89 385	2 632
322	Paper manufacturing	1	48	35	3 475	133 929	2 607	5 414	86 432	318 273	441 355	773 180	14 027
3222	Converted paper product manufacturing	1	43	30	h	D	D	D	D	D	D	D	12 290
32221	Paperboard container	_				_	_	_	_	_	_	_	_
322211	manufacturing Corrugated and solid fiber box manufacturing	2 3	17 12	13 9	f f	D	D D	D D	D	D	D	D	D
32222	Paper bag and coated and treated paper manufacturing	-	10	7	f	D	D	D	D	D	D	D	D
322222	Coated and laminated paper manufacturing	_	6	3	f	D	D	D	D	D	D	D	D
32223 322232	Stationery product manufacturing	-	10 3	6	g		D	D	D	D	D	D	D D
	. 3												

See footnotes at end of table.

[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]

terms,	वाच पुरुषुविधादिव वर्तामातिमाउ, उर्हर महत्व व	enu	of table.		ation on geo	graphic areas	ionowed by ,	, see Append		aning of apprevia	alloris and symbo	513, 366 Introduc	iory iexij
			A establisl	.ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	HAMPDEN-Con.												
323	Printing and related support												
0004	activities	-	76	21	2 063	70 072	1 545	3 142	44 776	178 370	140 969	318 128	9 536
3231	Printing and related support activities	-	76	21	2 063	70 072	1 545	3 142	44 776	178 370	140 969	318 128	9 536
32311 323110	Printing Commercial lithographic	-	62	19	g	D	D	D	D	D	D	D	D
323118	printing Blankbook, looseleaf binders, and devices manufacturing .	1	26 3	10 3	768 f	28 030 D	590 D	1 195 D	18 921 D	60 409 D	57 005 D	116 718 D	4 418 D
326	Plastics and rubber products manufacturing	1	41	18	1 777	74 703	1 284	2 537	46 333	241 436	174 699	418 678	17 546
3261	Plastics product manufacturing	-	38	17	g	D	D	D	D	D	D	D	D
32611 326113	Plastics packaging materials and unlaminated film and sheet manufacturingUnlaminated plastics film and sheet (except packaging)	-	4	2	f	D	D	D	D	D	D	D	D
32619	manufacturing Other plastics product	-	2	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product	2	27 26	13 12	T t	D	D	D	D D	D	D	D	D
331	manufacturing Primary metal manufacturing	2	20	12	610	21 667	471	958	13 343	42 478	42 419	84 992	3 169
332	Fabricated metal product manufacturing	_	200	70	6 630	284 702	4 652	9 510	172 255	610 490	320 876	933 294	29 413
3322	Cutlery and handtool manufacturing	_	12	5	1 014	51 841	615	1 376	22 997	131 690	58 086	190 330	4 627
33221 332213	Cutlery and handtool manufacturing Saw blade and handsaw manufacturing	-	12 2	5 1	1 014 f	51 841 D	615 D	1 376 D	22 997 D	131 690 D	58 086 D	190 330 D	4 627 D
3323	Architectural and structural metals manufacturing	1	21	11	636	21 835	499	988	15 089	45 771	30 449	75 707	D
33232	Ornamental and architectural metal products manufacturing	1	15	8	526	17 007	421	818	11 933	37 577	26 972	64 059	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	_	109	25	2 063	93 726	1 473	3 189	62 935	188 653	105 212	292 364	14 548
33271 332710	Machine shops Machine shops		94 94	19 19	1 584 1 584	74 859 74 859	1 139 1 139	2 482 2 482	52 189 52 189	141 465 141 465	65 450 65 450	205 983 205 983	11 315 11 315
3328	Coating, engraving, heat treating, and allied activities	1	27	14	864	34 378	644	1 274	20 230	60 278	22 635	82 924	2 334
33281	Coating, engraving, heat treating, and allied activities	1	27	14	864	34 378	644	1 274	20 230	60 278	22 635	82 924	2 334
332813	Electroplating, plating, polishing, anodizing, and coloring	1	14	7	573	23 283	421	868	13 008	41 523	14 857	56 325	1 549
3329	Other fabricated metal product manufacturing	_	15	7	g	D	D	D	D	D	D	D	D
33291	Metal valve manufacturing	_	2	2	f	D	D	D	D	D	D	D	D
332912	Fluid power valve and hose fitting manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product manufacturing	-	13	5	g	D	D	D	D	D	D	D	D
332994 333	Small arms manufacturing Machinery manufacturing	3	2 89	2 35	3 384	D 140 413	2 006	D 3 731	65 068	336 686	303 006	D 639 268	15 902
3333	Commercial and service industry machinery manufacturing	8	10	6	f	D	D	D	D	D	D	D	D
33331	Commercial and service industry machinery					_	_	_	_			_	_
333315	manufacturing Photographic and photocopying equipment manufacturing	8 9	10 2	6 2	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing	6	4	4	514	20 324	258	532	6 761	35 134	32 799	69 022	989
33341	Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing	6	4	4	514	20 324	258	532	6 761	35 134	32 799	69 022	989
3335	Metalworking machinery manufacturing	5	36	9	544	20 324	363	751	13 693	47 117	24 591	73 118	4 348
33351	Metalworking machinery manufacturing	5		9	544	23 175		751				73 118	
	See footnotes at end of table												

[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]

			A			• •							
			establis	nments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	HAMPDEN-Con.												
333 3336	Machinery manufacturing—Con. Engine, turbine, and power transmission equipment manufacturing	_	6	5	669	28 592	485	947	17 497	80 604	38 215	119 290	D
33361	Engine, turbine, and power transmission equipment manufacturing	_	6	5	669	28 592	485	947	17 497	80 604	38 215	119 290	D
334	Computer and electronic product manufacturing	-	20	9	1 020	50 885	532	1 116	17 881	111 878	121 824	232 644	4 459
335	Electrical equipment, appliance, and component manufacturing	-	11	5	f	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	2	35	3	511	19 596	381	759	11 613	53 348	48 515	102 063	2 417
339	Miscellaneous manufacturing	-	60	15	4 357	173 014	3 081	6 245	99 993	564 429	347 919	924 533	D
3391	Medical equipment and supplies manufacturing	-	24	6	g	D	D	D	D	D	D	D	D
33911 339112	Medical equipment and supplies manufacturing Surgical and medical instrument manufacturing	-	24 5	6 4	g f	D	D D	D D	D	D	D	D	D
3399	Other miscellaneous manufacturing	_	36	9	h	D	D	D	D	D	D	D	D
33992	Sporting and athletic goods manufacturing	_	2	1	f	D	D	D	D	D	D	D	D
339920	Sporting and athletic goods manufacturing	_	2	1	f	D	D	D	D	D	D	D	D
33993	Doll, toy, and game manufacturing	_	7	4	g	D	D	D		D	D	D	D
339932	Game, toy, and children's vehicle manufacturing	-	7	4	g	D	D	D	D	D	D	D	D
	HAMPSHIRE												
31-33	Manufacturing	1	188	56	4 812	180 621	3 358	6 551	104 122	436 199	502 806	940 731	33 581
326	Plastics and rubber products manufacturing	_	7	3	993	34 590	839	1 441	26 091	70 823	44 165	115 302	D
3261	Plastics product manufacturing	-	6	3	f	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, and unlaminated profile shape manufacturing	_	2	2	f	D	D	D	D	D	D	D	D
326121	Unlaminated plastics profile shape manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery manufacturing	1	15	8	506	25 211	269	604	10 529	56 098	48 857	105 149	2 135
	MIDDLESEX												
31-33	Manufacturing	2	2 189	723	90 711	4 606 151	46 231	91 640	1 637 156	13 764 714	8 859 031	22 747 554	626 091
311	Food manufacturing	1	177	45	4 894	168 861	3 315	6 282	95 141	563 559	748 636	1 307 964	19 261
3113	Sugar and confectionery product manufacturing	-	16	3	804	26 532	674	1 389	19 094	65 661	44 784	107 996	1 023
3118	Bakeries and tortilla manufacturing	3	102	20	1 508	39 862	908	1 676	19 665	95 997	52 973	148 876	2 832
31181 311812	Bread and bakery product manufacturing Commercial bakeries	3 2	99 30	20 14	1 484 949	39 139 30 061	892 573	1 646 1 172	19 166 14 073	93 285 71 180	50 357 37 954	143 550 109 029	2 732 2 111
3119	Other food manufacturing	-	26	11	1 401	54 145	891	1 661	26 081	118 496	368 868	487 991	8 320
31194	Seasoning and dressing manufacturing	_	5	3	f	D	D	D	D	D	D	D	D
311941	Mayonnaise, dressing, and other prepared sauce manufacturing	_	2	2	f	D	D	D	D	D	D	D	D
312	Beverage and tobacco product manufacturing	2	10	5	985	51 059	468	1 010	19 687	88 265	196 831	285 212	7 469
3121	Beverage manufacturing	2	10	5	985	51 059	468	1 010	19 687	88 265	196 831	285 212	7 469
31211	Soft drink and ice		-			5		5					5
312111	manufacturing Soft drink manufacturing	-	53	43	f	D	D	D	D	D	D	D	D
313	Textile mills	2	20	13	1 366	51 875	1 047	2 227	29 780	125 681	189 264	327 504	8 268
3133	Textile and fabric finishing and fabric coating mills	3	9	7	f	D	D	D	D	D	D	D	D
31332 313320	Fabric coating mills Fabric coating mills	3 3	777	7 7	659 659	29 947 29 947	423 423	940 940	12 398 12 398	76 349 76 349	101 310 101 310	177 491 177 491	D D
321	Wood product manufacturing	_	30	5	610	21 602	469	1 014	14 610	43 347	64 045	105 547	2 376

See footnotes at end of table.

[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]

tonno,		- onia			ution on goo	graphic areas i	ionoweaby ,	oce Append	IX D. TOTHIOU	ining of approvid	ations and symbol		
			A establisl	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MIDDLESEX-Con.												
322	Paper manufacturing	1	36	23	2 562	107 353	1 833	3 785	61 762	250 934	280 333	529 059	10 075
3222	Converted paper product manufacturing	1	32	20	2 247	92 376	1 621	3 356	52 080	207 303	228 059	432 465	D
32221	Paperboard container		16	11	873	36 532	605	1 295	19 988	75 236	130 735	206 043	2 781
322211	Corrugated and solid fiber	_	7		537								
32222	box manufacturing Paper bag and coated and	3	9	6 5		24 283 27 027	346	728 672	11 513	50 579	80 378	131 273	1 612 1 898
32223	treated paper manufacturing Stationery product	3	3	1	513	27 027 D	310 D	072 D	13 595 D	73 167 D	65 250 D	134 057 D	1 696 D
322231	manufacturing Die-cut paper and paperboard office supplies manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	2	257	51	4 530	180 924	3 212	6 086	109 437	419 179	231 189	651 506	10 447
3231	Printing and related support activities	2	257	51	4 530	180 924	3 212	6 086	109 437	419 179	231 189	651 506	10 447
32311	Printing	2	r235	44	r4 240	'169 699	'2 986	'5 666	'101 917	'395 440	'223 752	r620 783	<sup>r</sup> 9 748
323110	Commercial lithographic printing	2	r115	27	'2 374	'105 925	r1 592	'3 096	<sup>759</sup> 336	'198 471	'154 681	'354 094	'5 193
323117	Books printing	4	6	4	618	23 574	538	1 087	19 299	45 377	21 953	67 523	985
325 3254	Chemical manufacturing Pharmaceutical and medicine manufacturing	5	94 29	40 17	6 085 2 924	367 511 184 424	2 285 905	4 419 1 782	108 852 41 070	1 058 135 739 758	607 114 237 062	1 692 971 988 188	131 155 60 907
32541	Pharmaceutical and medicine												
325412	manufacturing Pharmaceutical preparation	7 8	29 11	17	2 924	184 424	905	1 782	41 070	739 758	237 062	988 188	60 907
325414	manufacturing Biological product (except	0	7	5	1 834 691	123 822 39 934	322 326	591 619	16 617 14 327	591 426 81 998	184 844 26 132	795 620 100 082	41 914 14 659
3259	diagnostic) manufacturing Other chemical product and preparation manufacturing	1	20	10	2 326	142 431	998	1 895	51 298	193 936	279 324	488 498	60 192
32599	All other chemical product and preparation manufacturing	_	12	6	2 136	134 878	896	1 703	48 418	177 320	255 203	447 619	59 424
325992	Photographic film, paper, plate, and chemical manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product and preparation manufacturing .	_	9	4	g	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	1	61	25	2 497	84 074	1 762	3 499	46 553	265 305	168 600	435 560	19 460
3261	Plastics product manufacturing	1	58	25	2 468	82 942	1 741	3 458	45 886	262 649	167 043	431 345	D
32619	Other plastics product manufacturing	1	35	15	1 669	52 825	1 230	2 373	31 504	187 948	86 061	274 443	16 550
326199	All other plastics product manufacturing	1	35	15	1 669	52 825	1 230	2 373	31 504	187 948	86 061	274 443	16 550
327	Nonmetallic mineral product manufacturing	5	51	17	1 013	39 539	787	1 717	26 924	81 314	66 975	148 797	3 737
3279	Other nonmetallic mineral product manufacturing	5	17	9	531	20 563	417	884	14 863	36 330	30 842	67 338	1 806
331	Primary metal manufacturing	-	17	5	750	37 603	463	974	20 794	14 758	147 616	172 866	5 599
332	Fabricated metal product manufacturing	2	356	89	7 024	304 631	4 480	8 996	149 896	794 855	544 943	1 323 094	32 982
3323	Architectural and structural metals manufacturing	4	65	19	980	37 258	699	1 283	21 494	77 567	47 508	125 448	1 973
33232	Ornamental and architectural metal products												==
332322	manufacturing Sheet metal work manufacturing	4	52 34	14 9	787 552	28 777 19 721	555 414	986 764	16 107 11 969	59 038 38 689	33 415 19 047	92 878 58 237	1 473 900
3324	Boiler, tank, and shipping container manufacturing	6	8	5	757	30 890	497	1 046	15 954	72 054	42 088	112 603	1 202
33242	Metal tank (heavy gauge) manufacturing	8	3	2	<u>،</u>	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) manufacturing	8	3	2	f	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	2	172	35	2 047	87 543	1 471	2 949	55 195	184 355	66 528	251 292	10 114
33271	Machine shops	3	142	23	1 434	62 664	1 004	2 017	38 352	124 754	48 632	175 463	6 062
332710 33272	Machine shops Turned product and screw, nut,	3	142	23	1 434	62 664	1 004	2 017	38 352	124 754	48 632	175 463	6 062
332721	and bolt manufacturing Precision turned product manufacturing	2	30 26	12 12	613 585	24 879 23 226	467 453	932 902	16 843 16 341	59 601 54 058	17 896 15 825	75 829 68 250	4 052 3 953
		~ ~	20	12	. 505	20 2201	4001	502	10 041	54 030	15 0251	00 200	0 300

[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]

			А	JI		ployees		oduction worl					
NALOO			establis	nments <sup>2</sup>	Airein	pioyees							
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MIDDLESEX-Con.												
332 3328	Fabricated metal product manufacturing—Con. Coating, engraving, heat treating, and allied activities	2	50	15	1 022	34 688	771	1 510	22 535	68 932	23 179	92 474	2 677
33281	Coating, engraving, heat		50	15	1 022	34 000	//1	1 510	22 555	00 932	25 179	52 474	2 0/7
332813	treating, and allied activities Electroplating, plating, polishing, anodizing, and coloring	2	50 20	15 9	1 022 508	34 688 16 846	771 343	1 510 706	22 535 9 686	68 932 31 413	23 179 8 882	92 474 40 367	2 677 D
3329	Other fabricated metal product manufacturing	-	30	7	1 529	91 313	548	1 202	22 346	198 450	98 799	297 665	7 742
33299 332993	All other fabricated metal product manufacturing Ammunition (except small	-	25	6	1 376	85 240	441	983	18 863	185 645	89 216	275 277	D
333	arms) manufacturing Machinery manufacturing	- 5	3 169	2 60	g 7 753	D 406 568	D 4 140	D 8 510	D 158 586	D 801 109	D 634 081	D 1 455 041	D 63 430
3332	Industrial machinery manufacturing	7	41	15	3 474	201 783	1 757	3 739	67 655	416 241	330 253	759 385	36 032
33329	Other industrial machinery manufacturing	7	37	15	3 434	200 015	1 738	3 699	66 923	411 746	326 991	751 643	35 907
333295	Semiconductor machinery manufacturing	7	10	6	3 434 1 841	116 271	811	1 665	35 235	216 108	218 983	442 242	26 681
333298	All other industrial machinery manufacturing	9	18	5	1 212	62 407	750	1 671	24 174	142 173	77 469	225 141	7 842
3333	Commercial and service industry machinery manufacturing	3	37	17	1 638	71 722	974	1 975	34 908	133 450	86 454	215 334	4 157
33331	Commercial and service industry machinery			-	4 000			4 075		100,150	00.454		
333314	manufacturing Optical instrument and lens manufacturing	3	37 20	17 9	1 638 997	71 722 45 634	974 626	1 975 1 270	34 908 23 691	133 450 69 779	86 454 29 096	215 334 95 151	4 157 D
3339	Other general purpose machinery manufacturing	1	42	15	1 822	96 330	982	1 950	40 526	181 205	134 590	326 368	19 854
33399 333999	All other general purpose machinery manufacturing All other miscellaneous	1	34	10	1 230	68 514	672	1 394	29 139	138 563	80 656	227 622	18 915
000000	general purpose machinery manufacturing	1	19	3	538	32 992	299	653	15 313	86 294	40 424	135 327	10 124
334	Computer and electronic product manufacturing	1	398	212	36 053	2 164 508	13 380	26 114	523 677	7 599 649	4 135 553	11 800 758	246 162
3341	Computer and peripheral equipment manufacturing	3	45	21	2 919	211 277	824	1 659	35 179	351 637	269 613	620 176	24 258
33411	Computer and peripheral equipment manufacturing	3	45	21	2 919	211 277	824	1 659	35 179	351 637	269 613	620 176	24 258
334111 334119	Electronic computer manufacturing Other computer peripheral	-	9	5	1 435	125 365	240	512	12 686	169 042	113 747	281 696	9 581
	equipment manufacturing	5	28	13	1 285	74 253	531	1 037	20 933	160 136	138 548	298 806	12 690
3342	Communications equipment manufacturing	2	55	35	5 179	340 367	1 513	2 828	66 332	1 229 216	827 241	2 107 109	33 824
33421	Telephone apparatus manufacturing	1	24	17	3 452	235 317	946	1 843	46 751	986 062	736 033	1 776 237	25 916
334210 33422	Telephone apparatus manufacturing Radio and television broadcasting and wireless	1	24	17	3 452	235 317	946	1 843	46 751	986 062	736 033	1 776 237	25 916
334220	communications equipment manufacturing	6	21	13	g	D	D	D	D	D	D	D	6 609
	communications equipment manufacturing	6	21	13	g	D	D	D	D	D	D	D	6 609
33429	Other communications equipment manufacturing	7	10	5	f	D	D	D	D	D	D	D	1 299
334290	Other communications equipment manufacturing	7	10	5	f	D	D	D	D	D	D	D	1 299
3344	Semiconductor and other electronic component manufacturing	_	133	66	11 224	544 736	5 797	11 383	212 400	3 094 965	1 459 717	4 624 732	100 621
33441	Semiconductor and other electronic component		100	~~~	11 001	E44 700	F 707	11 000	010 400	0.004.005	1 450 74-	4 004 700	100,004
334412	manufacturing Bare printed circuit board	-	133 25	66 10	11 224 1 421	544 736 45 723	5 797 742	11 383 1 526	212 400 24 655	3 094 965 93 198	1 459 717 67 580	4 624 732 162 281	100 621 4 670
334413	manufacturing Semiconductor and related device manufacturing		32	18	5 139	45 723 291 011	2 864	5 445	116 912	2 601 613	1 004 344	3 659 489	4 670 75 006
334418	Printed circuit assembly (electronic assembly)												
334419	manufacturing Other electronic component manufacturing	2 1	29 32	24 10	2 199 2 176	94 793 101 128	1 135 856	2 224 1 772	32 520 31 562	180 521 190 697	239 421 133 725	423 770 332 751	13 579 6 897

See footnotes at end of table.

[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]

					allon on geo	graphic areas i	onowed by ,	See Append	IX D. 1 OI IIICO	ining of abbrevia		13, 366 milouud	
			A establis	II hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MIDDLESEX-Con.												
334 3345	Computer and electronic product manufacturing—Con. Navigational, measuring, electromedical, and control instruments manufacturing	1	148	81	15 354	1 016 582	4 272	8 173	176 966	2 627 515	1 426 039	3 998 711	80 684
33451	Navigational, measuring, electromedical, and control												
334510	instruments manufacturing Electromedical and electrotherapeutic	1	148	81	15 354	1 016 582	4 272	8 173	176 966	2 627 515	1 426 039	3 998 711	80 684
334511	apparatus manufacturing Search, detection, navigation, guidance, aeronautical, and nautical	8	22	12	1 402	85 769	484	987	17 148	226 309	106 551	333 791	7 956
334513	system and instrument manufacturing Instruments and related products manufacturing for measuring, displaying, and	-	15	9	i	D	D	D	D	D	D	D	D
334515	controlling industrial process variables Instrument manufacturing for measuring and testing electricity and electrical	-	17	13	1 784	88 624	634	1 067	24 365	189 113	128 380	318 505	5 378
334516	signals	5	22	11	962	54 062	312	601	10 729	147 497	128 470	272 666	3 785
334517	instrument manufacturing	1	20	8	1 664	100 314	609	1 259	26 269	234 447	164 203	402 503	8 936
334519	manufacturing Other measuring and controlling device manufacturing	-	12 33	9 15	g 1 784	D 109 097	D 844	D 1 662	D 36 610	D 206 269	D 102 469	D 314 767	D 4 508
3346	Manufacturing and reproducing magnetic and optical media	3	12	6	g	D	D	D	D	D	D	D	D
33461	Manufacturing and reproducing magnetic and optical media	3	12	6	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	3	62	27	2 908	119 843	1 520	2 934	48 064	210 712	179 695	393 511	13 055
3353	Electrical equipment manufacturing	4	21	10	799	39 027	385	628	9 311	58 843	53 457	115 889	D
33531	Electrical equipment manufacturing	4	21	10	799	39 027	385	628	9 311	58 843	53 457	115 889	D
3359	Other electrical equipment and component manufacturing	4	32	14	g	D	D	D	D	D	D	D	D
33592	Communication and energy wire and cable manufacturing.	3	8	4	696	18 892	90	198	2 774	11 216	14 012	24 852	D
335929	Other communication and energy wire manufacturing .	2	5	- 2	635	16 276	55	130	1 556	6 206	9 607	15 469	D
33599	All other electrical equipment and component manufacturing	5	15	6	533	29 846	368	806	16 054	54 597	47 281	102 139	6 352
336	Transportation equipment manufacturing	2	41	19	1 403	66 121	928	1 897	36 384	168 003	145 152	310 410	6 104
3363	Motor vehicle parts manufacturing	3	20	8	f 400	00 121 D	520 D	D	00 004 D	D	143 132 D	D	3 803
337	Furniture and related product												
3371	manufacturing Household and institutional furniture and kitchen cabinet	3	84	15	1 654	59 984	1 185	2 427	35 725	124 049	90 893	215 331	5 402
00740	manufacturing	2	65	7	f	D	D	D	D	D	D	D	3 292
33712 337127	Household and institutional furniture manufacturing Institutional furniture	-	31	3	658	23 017	454	953	12 815	50 054	38 128	87 824	2 957
	manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
3372 33721	Office furniture (including fixtures) manufacturing Office furniture (including	4	14	7	655	26 371	462	941	15 536	55 036	37 384	91 752	2 010
00721	fixtures) manufacturing	4	14	7	655	26 371	462	941	15 536	55 036	37 384	91 752	2 010
339	Miscellaneous manufacturing	4	233	66	7 861	352 887	4 362	8 626	137 580	1 101 924	378 700	1 489 263	39 076
3391	Medical equipment and supplies manufacturing	4	111	38	4 896	238 489	2 525	5 055	84 639	820 081	174 143	1 007 128	27 458
33911 339112	Medical equipment and supplies manufacturing Surgical and medical	4	111	38	4 896	238 489	2 525	5 055	84 639	820 081	174 143	1 007 128	27 458
339112	instrument manufacturing	4	34	22	3 327	160 780	1 636	3 218	50 804	669 308	113 066	788 011	20 250
	supplies manufacturing	2	13	7	546	27 589	331	744	13 436	64 332	17 979	82 799	4 403

See footnotes at end of table.

[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]

			A			ployees		oduction worl					
NAICS			establisi	hments <sup>2</sup>									<b>T</b> -4-1
code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MIDDLESEX—Con.												
339 3399	Miscellaneous manufacturing-Con. Other miscellaneous manufacturing	3	122	28	2 965	114 398	1 837	3 571	52 941	281 843	204 557	482 135	11 618
33999	All other miscellaneous manufacturing	3	70	18	2 141	85 764	1 292	2 550	38 638	221 543	158 871	375 692	9 279
339991	Gasket, packing, and sealing device manufacturing	3	70	3	636	85 764 28 531	386	2 550 777	12 915	65 779	36 346	375 692 101 996	9 2/9 D
339999	All other miscellaneous manufacturing	-	, 50	11	1 250	47 438	693	1 383	18 538	135 114	114 179	244 772	7 407
	NORFOLK												
31-33	Manufacturing	1	813	304	32 586	1 453 240	19 018	37 067	624 239	r4 177 358	'3 752 204	7 961 629	182 709
311	Food manufacturing	1	55	14	1 324	50 850	638	1 296	19 301	131 893	242 533	375 718	3 027
3115	Dairy product manufacturing	- -	3	3	f 1 524	50 850 D	030 D	1 290 D	D	131 093 D	242 333 D	575 718 D	5 027 D
31151	Dairy product (except frozen)												
311511	manufacturing	-	2 2	2 2	f	D D	D D	D D	D	D D	D D	D D	D D
313	Textile mills	2	14	6	533	21 658	388	807	12 759	36 986	40 387	80 375	2 155
322	Paper manufacturing	3	16	10	995	41 089	699	1 453	23 819	95 145	114 464	211 486	D
3222	Converted paper product manufacturing	3	15	9	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	2	118	27	2 021	83 513	1 384	2 679	48 609	167 558	92 719	260 560	9 461
3231	Printing and related support activities	2	118	27	2 021	83 513	1 384	2 679	48 609	167 558	92 719	260 560	9 461
32311 323110	Printing Commercial lithographic	2	104	25	1 871	78 015	1 265	2 459	44 966	158 360	90 221	248 724	9 245
020110	printing	1	53	17	1 176	52 921	761	1 499	28 656	99 107	58 935	158 049	7 243
325	Chemical manufacturing	2	40	20	2 337	104 468	1 124	1 959	34 113	'429 829	'257 025	'708 742	22 642
3254	Pharmaceutical and medicine manufacturing	1	8	4	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing	1	8	4	g	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	2	29	21	1 228	53 251	819	1 716	26 668	120 386	128 642	248 826	3 978
3261	Plastics product manufacturing	1	21	16	f	D	D	D	D	D	D	D	D
32619 326199	Other plastics product manufacturing All other plastics product	1	16	12	740	35 774	442	899	15 324	80 650	80 223	159 433	2 664
020100	manufacturing	1	16	12	740	35 774	442	899	15 324	80 650	80 223	159 433	2 664
327	Nonmetallic mineral product manufacturing	5	20	7	579	24 157	402	907	15 273	62 383	43 615	104 819	3 897
332	Fabricated metal product manufacturing	-	151	54	4 604	193 937	3 137	6 077	110 871	488 856	264 539	755 957	20 147
3323	Architectural and structural metals manufacturing	2	37	18	1 318	54 321	1 009	2 066	36 486	117 120	98 342	215 227	D
33232	Ornamental and architectural metal products												_
332322	Sheet metal work manufacturing	2	30 18	15 10	1 195 916	48 670 38 581	924 715	1 876 1 480	33 170 26 799	107 152 90 819	90 112 72 754	196 954 163 607	D
3327	Machine shops; turned product; and screw, nut, and bolt												
33271 332710	manufacturing Machine shops Machine shops	_	55 43 43	16 9	1 097 637	47 650 27 770	770 436	1 427 781	29 200 16 895 16 895	110 091 69 890	51 581 26 911	164 312 97 072	D 4 310
332710 3329	Other fabricated metal product	-		9	637	27 770	436	781		69 890	26 911	97 072	4 310
00001	manufacturing	-	22	10	1 420	61 484	816	1 540	26 887	154 288	79 715	238 036	6 121
33291 33299	Metal valve manufacturing All other fabricated metal product manufacturing		4	4	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product manufacturing		16					D				D	D
			-	-	-	-			_				_

See footnotes at end of table.

[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]

		. on a			allon on goo	grapino areao i	, ,	oco / oppone		ining of approvid			
			A establis	III hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	NORFOLK-Con.												
333	Machinery manufacturing	2	46	18	2 319	112 792	1 142	1 967	36 998	214 478	156 549	375 020	17 177
3332	Industrial machinery manufacturing	-	6	2	781	39 883	300	298	5 451	52 455	55 475	112 144	D
33329	Other industrial machinery manufacturing	_	5	2	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery manufacturing	-	3	1	f	D	D	D	D	D	D	D	D
3339	Other general purpose machinery manufacturing	2	19	9	g	D	D	D	D	D	D	D	7 836
33399	All other general purpose machinery manufacturing	_	16	7	f	D	D	D	D	D	D	D	D
333999	All other miscellaneous general purpose machinery manufacturing	_	9	5	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	_	78	40	6 846	375 774	3 024	6 152	114 542	1 540 314	1 547 427	3 064 518	61 914
3341	Computer and peripheral equipment manufacturing	_	12	7	g	D	D	D	D	D	D	D	26 160
33411	Computer and peripheral			_		_	_	_	_	_	_	_	
334112	equipment manufacturing Computer storage device manufacturing	-	12 2	7	g g	D	D	D	D	D	D	D	26 160 D
3342	Communications equipment manufacturing	4	6	4	f	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	2	26	13	994	51 290	601	1 279	21 684	156 157	76 605	230 042	19 582
33441	Semiconductor and other electronic component												
334413	manufacturing Semiconductor and related device manufacturing	2	26 7	13 6	994 592	51 290 36 880	601 338	1 279 734	21 684 15 394	156 157 118 567	76 605 44 986	230 042 163 965	19 582 D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	29	16	3 382	184 809	1 237	2 352	45 388	385 994	225 348	626 367	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing	_	29	16	3 382	184 809	1 237	2 352	45 388	385 994	225 348	626 367	D
334513	Instruments and related products manufacturing for measuring, displaying, and controlling industrial process		23	10	5 362	104 009	1 237	2 332	43 300	363 334	223 340	020 307	U
334515	variables Instrument manufacturing for measuring and testing electricity and electrical	-	4	3	g	D	D	D	D	D	D	D	D
335	signals Electrical equipment, appliance, and	-	5	4	f	D	D	D	D	D	D	D	D
3353	Component manufacturing	-	23	15	3 181	116 979	2 141	3 947	55 965	306 657	232 974	541 197	D
	manufacturing	-	10	4	f	D	D	D	D	D	D	D	1 046
33531	Electrical equipment manufacturing	-	10	4	f	D	D	D	D	D	D	D	1 046
3359	Other electrical equipment and component manufacturing	-	9	8	g	D	D	D	D	D	D	D	D
33593 335931	Wiring device manufacturing Current-carrying wiring device manufacturing	-	4	4	g	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	1	52	12	778	29 538	611	1 199	19 945	78 161	50 752	128 939	1 499
339	Miscellaneous manufacturing	2	108	47	4 305	188 027	2 412	4 579	70 214	346 582	339 584	707 780	16 998
3391	Medical equipment and supplies manufacturing	2	38	19	2 237	107 869	1 172	2 240	36 872	186 776	198 685	407 546	12 640
33911	Medical equipment and supplies manufacturing	2	38	19	2 237	107 869	1 172	2 240	36 872	186 776	198 685	407 546	12 640
339112	Surgical and medical instrument manufacturing	3	12	7	1 125	62 920	501	1 004	17 953	79 391	118 260	219 033	7 928
339113	Surgical appliance and supplies manufacturing	-	6	6	606	23 099	407	687	10 261	72 581	32 678	106 236	D
3399	Other miscellaneous manufacturing	3	70	28	2 068	80 158	1 240	2 339	33 342	159 806	140 899	300 234	4 358
33992	Sporting and athletic goods manufacturing	6	6	5	613	26 627	315	530	8 931	45 017	47 023	91 186	1 492
339920	Sporting and athletic goods manufacturing	6	6	5	613	26 627	315	530	8 931	45 017	47 023	91 186	1 492
33999	All other miscellaneous manufacturing	1	30	10	653	24 560	440	916	10 974	55 741	44 548	100 075	1 643

[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]

	and geographical deminions, see note at		A establish	JI		ployees		oduction worl		ining of abbrevia			
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	PLYMOUTH												
31-33	Manufacturing	2	620	178	13 261	517 322	8 723	17 457	268 304	1 280 522	850 496	2 134 108	51 978
311	Food manufacturing	1	49	20	1 244	35 830	851	1 586	22 057	154 502	94 342	251 570	4 299
3118	Bakeries and tortilla manufacturing	1	24	13	621	14 513	372	694	8 481	44 353	21 122	65 124	1 084
31181	Bread and bakery product manufacturing	1	23	12	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	2	82	17	1 478	53 363	1 034	2 093	31 280	109 509	55 838	165 202	5 571
3231	Printing and related support activities	2	82	17	1 478	53 363	1 034	2 093	31 280	109 509	55 838	165 202	5 571
32311 323110	Printing Commercial lithographic	3	72	15	1 304	46 814	894	1 797	26 273	97 521	54 367	151 732	4 834
	printing	2	43	13	1 033	37 415	699	1 456	21 068	72 968	44 816	117 434	2 865
325	Chemical manufacturing	4	17	6	572	24 114	339	696	11 338	72 353	45 455	118 382	3 041
326	Plastics and rubber products manufacturing	3	22	8	706	22 939	534	1 130	14 781	59 561	57 859	116 831	4 237
3261	Plastics product manufacturing	5	17	6	f	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	6	12	5	557	18 196	408	858	11 105	40 825	29 821	70 294	3 545
326199	All other plastics product manufacturing	6	12	5	557	18 196	408	858	11 105	40 825	29 821	70 294	3 545
332	Fabricated metal product manufacturing	3	116	26	1 733	69 883	1 258	2 553	43 204	133 846	64 843	197 357	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	5	59	8	524	22 302	395	801	14 909	40 926	15 915	57 743	D
3328	Coating, engraving, heat treating, and allied activities	-	10	5	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, and allied activities	-	10	5	f	D	D	D	D	D	D	D	D
333	Machinery manufacturing	1	50	15	928	43 907	557	1 129	20 251	89 225	53 365	144 013	3 515
334	Computer and electronic product manufacturing	2	43	22	1 392	67 435	690	1 389	23 211	137 669	77 553	214 433	D
3344	Semiconductor and other electronic component manufacturing	2	19	11	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	2	19	11	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	2	16	8	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing	2	16	8	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	1	13	5	f	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	1	34	9	620	22 126	439	908	12 160	56 582	37 996	94 413	1 248
339	Miscellaneous manufacturing	1	60	16	1 290	54 452	781	1 451	24 074	168 631	73 142	245 911	5 283
3391	Medical equipment and supplies manufacturing	2	21	9	787	34 362	486	875	15 439	112 683	45 163	160 181	3 567
33911	Medical equipment and supplies manufacturing	2	21	9	787	34 362	486	875	15 439	112 683	45 163	160 181	3 567
339112	Surgical and medical instrument manufacturing	-	9	7	588	27 319	336	603	10 294	91 577	29 905	123 866	5 507 D
3399	Other miscellaneous manufacturing	_	39	7	503	20 090	295	576	8 635	55 948	27 979	85 730	1 716

[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]

		ona				graphic areas		, occ rippone					
			A establis	hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SUFFOLK												
31-33	Manufacturing	1	468	142	17 893	786 398	10 682	21 803	365 223	2 361 083	1 521 073	3 909 976	134 154
311	Food manufacturing	1	96	33	3 687	110 343	2 716	5 312	67 098	359 357	446 929	805 055	14 201
3116	Animal slaughtering and processing	1	12	9	f	D	D	D	D	D	D	D	D
31161 311612	Animal slaughtering and processing Meat processed from	1	12	9	f	D	D	D	D	D	D	D	D
o	carcasses	-	9	6	f	D	D	D	D	D	D	D	D
3117	Seafood product preparation and packaging	-	9	6	777	22 656	603	1 027	13 362	96 097	158 797	254 763	D
31171 311712	Seafood product preparation and packaging Fresh and frozen seafood	-	9	6	777	22 656	603	1 027	13 362	96 097	158 797	254 763	D
	processing	-	9	6	777	22 656	603	1 027	13 362	96 097	158 797	254 763	D
3118	Bakeries and tortilla manufacturing	3	52	10	1 514	41 219	1 081	2 068	26 268	100 345	61 330	161 275	6 679
31181 311812	Bread and bakery product manufacturing Commercial bakeries	3 4	46 7	10 5	g 1 034	D 30 981	D 768	D 1 515	D 19 633	D 76 411	D 44 086	D 120 064	6 553 5 993
315	Apparel manufacturing	1	27	11	1 195	42 849	821	1 468	12 125	103 501	91 109	185 108	1 362
3152	Cut and sew apparel manufacturing	1	22	10	g	D	D	D	D	D	D	D	D
31523 315234	Women's and girls' cut and sew apparel manufacturing Women's and girls' cut and sew suit, coat, tailored	1	6	4	f	D	D	D	D	D	D	D	D
	jacket, and skirt manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	2	91	23	1 873	82 983	1 299	2 599	49 292	167 019	92 932	259 075	10 602
3231	Printing and related support activities	2	91	23	1 873	82 983	1 299	2 599	49 292	167 019	92 932	259 075	10 602
32311	Printing	2	78	21	1 605	70 739	1 103	2 225	41 211	139 261	86 570	224 877	9 111
323110	Commercial lithographic printing	2	44	13	1 179	56 565	805	1 679	32 789	112 477	72 295	183 834	8 157
325	Chemical manufacturing	2	19	5	1 307	77 756	520	1 097	29 384	720 856	76 548	790 652	29 341
3254	Pharmaceutical and medicine manufacturing	1	9	4	1 162	69 103	467	988	27 162	695 057	48 066	736 346	28 190
32541 325413	Pharmaceutical and medicine manufacturing In-vitro diagnostic substance	1	9	4	1 162	69 103	467	988	27 162	695 057	48 066	736 346	28 190
	manufacturing	9	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	-	35	10	1 883	100 202	1 308	3 002	61 830	266 831	110 292	384 285	D
3322	Cutlery and handtool manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
332211	Cutlery and flatware (except precious) manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	-	22	10	3 171	166 198	967	1 914	42 978	209 560	193 811	433 310	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	6	2	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control												
334515	instruments manufacturing Instrument manufacturing for measuring and testing electricity and electrical	-	6	2	h	D	D	D	D	D	D	D	D
	signals	-	1	1	h	D	D	D	D	D	D	D	D
339 3399	Miscellaneous manufacturing Other miscellaneous	2	66	10	1 129	54 763	521	1 025	14 071	97 556	146 918	246 182	2 200
0000	manufacturing	2	45	7	928	46 876	410	800	10 953	77 782	142 991	222 513	1 878

[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]

			A										
			establis	nments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WORCESTER												
31-33	Manufacturing	1	1 243	435	50 060	2 155 257	32 624	63 049	1 068 201	5 870 004	4 531 540	10 452 765	342 131
311	Food manufacturing	3	58	15	1 199	36 329	804	1 480	22 646	94 089	109 728	203 219	9 824
3118	Bakeries and tortilla manufacturing	4	34	8	532	14 320	349	627	9 003	35 682	35 829	71 327	1 207
31181	Bread and bakery product manufacturing	4	34	8	532	14 320	349	627	9 003	35 682	35 829	71 327	1 207
312	Beverage and tobacco product manufacturing	9	7	1	f	D	D	D	D	D	D	D	D
3121 31211	Beverage manufacturing Soft drink and ice	9	7	1	Ť	D	D	D	D	D	D	D	D
312111	Soft drink and te Soft drink manufacturing	9 9	3 3	1 1	f	D D	D D	D D	D	D D	D D	D D	D D
313	Textile mills	4	21	10	1 026	35 459	756	1 652	22 929	105 973	138 465	235 758	D
3133	Textile and fabric finishing and fabric coating mills	3	11	6	628	25 783	462	1 042	14 731	92 872	113 743	197 380	D
314	Textile product mills	1	18	5	726	21 630	534	972	11 142	53 737	57 342	111 414	1 007
3149	Other textile product mills	1	11	4	f	D	D	D	D	D	D	D	D
31499 314999	All other textile product mills All other miscellaneous textile	-	8	3	617	18 811	451	807	9 802	49 379	51 816	100 395	901
	product mills	-	8	3	617	18 811	451	807	9 802	49 379	51 816	100 395	901
321	Wood product manufacturing	2	37	8	593	16 104	431	791	10 643	29 538	28 984	58 289	1 494
3219	Other wood product manufacturing	1	30	7	f	D	D	D	D	D	D	D	D
322	Paper manufacturing	1	36	26	3 420	147 839	2 406	4 845	91 313	386 644	431 385	825 550	19 529
3222	Converted paper product manufacturing	-	32	22	2 955	121 713	2 104	4 186	76 222	311 079	339 752	659 326	14 669
32221	Paperboard container manufacturing	-	15	11	884	33 525	615	1 257	19 805	85 820	107 758	194 084	9 929
322211 32222	Corrugated and solid fiber box manufacturing Paper bag and coated and	-	12	9	f	D	D	D	D	D	D	D	D
322222	treated paper manufacturing Coated and laminated paper	-	6	2	1 043	49 120	695	1 353	26 338	70 812	134 363	211 757	1 276
32223	manufacturing Stationery product	-	6	2	1 043	49 120	695	1 353	26 338	70 812	134 363	211 757	1 276
322232	manufacturing Envelope manufacturing	1 1	6 5	5 5	672 f	25 338 D	524 D	1 021 D	21 490 D	48 584 D	52 143 D	102 193 D	1 972 D
323	Printing and related support activities	2	97	20	1 683	63 157	1 182	2 066	38 556	119 297	66 892	186 869	7 423
3231	Printing and related support activities	2	97	20	1 683	63 157	1 182	2 066	38 556	119 297	66 892	186 869	7 423
32311 323110	Printing Commercial lithographic	2	83	18	1 580	59 151	1 104	1 916	35 990	112 834	64 971	178 230	6 853
525110	printing	-	45	11	1 109	41 210	779	1 316	25 853	78 039	43 180	121 576	5 472
325	Chemical manufacturing	-	53	26	2 108	107 428	1 071	2 211	46 144	819 589	658 466	1 475 822	22 260
3254	Pharmaceutical and medicine manufacturing	-	9	4	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing	-	9	4	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation manufacturing	-	6	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing	1	20	9	657	32 508	327	685	12 394	88 455	137 206	226 237	3 672
32599 325991	All other chemical product and preparation manufacturing Custom compounding of	1	19	9	f	D	D	D	D	D	D	D	D
	purchased resins	-	13	8	572	28 600	273	580	10 274	71 311	124 228	196 116	D
326	Plastics and rubber products manufacturing	-	103	58	6 664	197 867	5 120	8 189	126 446	687 906	475 630	1 167 665	41 079
3261	Plastics product manufacturing	-	99	56	i	D	D	D	D	D	D	D	D
32619 326199	Other plastics product manufacturing All other plastics product manufacturing	-	73 72	44 44	5 411 i	148 531 D	4 222 D	6 604 D	97 664 D	586 877 D	380 111 D	970 301 D	D 35 357
		. –	12	- 44	. 1	. 0		D	. 0	D		D	33 337

See footnotes at end of table.

[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]

			А	.11		ployees		oduction wor					
NALCO			establis		Airein	ployees	FR						
NAICS	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WORCESTER-Con.												
327	Nonmetallic mineral product manufacturing	2	43	21	3 613	175 409	2 287	4 983	79 930	367 265	224 386	592 841	16 177
3272	Glass and glass product manufacturing	4	7	5	1 030	48 765	701	1 594	22 622	90 627	67 151	158 325	D
32721	Glass and glass product manufacturing	4	7	5	1 030	48 765	701	1 594	22 622	90 627	67 151	158 325	D
327215	Glass product manufacturing made of purchased glass	8	5	4	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product manufacturing	-	11	9	g	D	D	D	D	D	D	D	D
32791	Abrasive product manufacturing	_	9	8	1 883	99 516	1 053	2 307	39 399	196 619	107 874	304 073	8 205
327910	Abrasive product manufacturing	-	9	8	1 883	99 516	1 053	2 307	39 399	196 619	107 874	304 073	8 205
331	Primary metal manufacturing	2	21	9	781	29 513	565	1 252	19 918	53 811	72 819	126 624	D
332	Fabricated metal product manufacturing	1	272	83	8 081	318 266	5 845	11 439	187 693	635 630	507 934	1 165 787	38 983
3321	Forging and stamping	-	15	10	1 220	51 266	939	1 877	34 431	145 852	122 221	285 856	8 104
33211 332111	Forging and stamping Iron and steel forging	-	15 2	10 2	1 220 f	51 266 D	939 D	1 877 D	34 431 D	145 852 D	122 221 D	285 856 D	8 104 D
3322	Cutlery and handtool manufacturing	_	11	7	g	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing	_	11	7	g	D	D	D	D	D	D	D	D
332212	Hand and edge tool manufacturing	-	9	5	1 165	37 656	845	1 528	22 495	77 768	35 348	116 183	3 187
3323	Architectural and structural metals manufacturing	1	42	13	980	36 132	705	1 432	21 510	48 976	39 229	102 947	3 773
33232	Ornamental and architectural metal products												
332322	manufacturing Sheet metal work manufacturing	2 3	27 24	7 6	545 f	17 866 D	394 D	779 D	10 218 D	30 252 D	16 108 D	47 427 D	1 360 D
3326	Spring and wire product manufacturing	-	18	10	816	27 961	637	1 234	17 243	61 826	63 124	126 346	8 981
33261	Spring and wire product manufacturing	_	18	10	816	27 961	637	1 234	17 243	61 826	63 124	126 346	8 981
332618	Other fabricated wire product manufacturing	1	13	8	f	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	2	127	25	1 469	58 238	1 106	2 064	37 872	109 443	50 939	163 990	3 685
33271	Machine shops	3	111	17	958	37 022	739	1 421	25 422	68 178	28 526	96 869	2 440
332710 33272	Machine shops Turned product and screw, nut, and bolt manufacturing	3	111 16	17 8	958 511	37 022 21 216	739 367	1 421 643	25 422 12 450	68 178 41 265	28 526 22 413	96 869 67 121	2 440 1 245
3329	Other fabricated metal product manufacturing	_	30	8	g	D	D	D	D	D	D	D	4 054
33291	Metal valve manufacturing	-	9	4	770	43 298	466	957	18 350	63 284	125 996	171 959	D
332911 33299	Industrial valve manufacturing All other fabricated metal	-	8	4	f	D	D	D	D	D	D	D	D
	product manufacturing	-	21	4	f	D	D	D	D	D	D	D	D
333 3333	Machinery manufacturing	1	146	48	4 608	228 489	2 878	5 950	114 206	404 105	281 049	699 749	22 644
	Commercial and service industry machinery manufacturing	-	15	8	788	34 672	525	1 134	18 694	72 868	28 330	101 212	3 727
33331	Commercial and service industry machinery manufacturing	_	15	8	788	34 672	525	1 134	18 694	72 868	28 330	101 212	3 727
333314	Optical instrument and lens manufacturing	-	14	7	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery manufacturing	-	71	19	2 179	109 318	1 402	2 882	56 938	175 273	133 499	316 227	13 261
33351	Metalworking machinery manufacturing	_	71	19	2 179	109 318	1 402	2 882	56 938	175 273	133 499	316 227	13 261
333511	Industrial mold manufacturing	-	32	8	992	46 643	675	1 379	24 818	71 699	61 106	135 698	D
3339	Other general purpose machinery manufacturing	1	28	10	666	32 634	374	744	14 600	64 714	47 282	112 899	D

[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]

				JI		ployees		oduction worl		9		-,	
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WORCESTER-Con.												
334	Computer and electronic product manufacturing	_	78	34	6 694	421 651	3 004	5 842	117 151	1 263 782	817 945	2 094 011	110 153
3342	Communications equipment manufacturing	_	13	8	g	D	D	D	D	D	D	D	D
33429	Other communications				_								
334290	equipment manufacturing Other communications equipment manufacturing	_	6 6	4	g	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	_	26	11	2 158	117 464	1 434	2 702	60 723	310 710	298 731	622 291	57 976
33441	Semiconductor and other electronic component												
334412	manufacturing Bare printed circuit board	-	26	11	2 158	117 464	1 434	2 702	60 723	310 710	298 731	622 291	57 976
334413	manufacturing Semiconductor and related device manufacturing	_	6 7	2	f g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	26	9	1 536	122 859	336	628	10 625	351 926	173 212	522 274	32 278
33451	Navigational, measuring, electromedical, and control												
334516	instruments manufacturing Analytical laboratory instrument manufacturing	-	26 6	9 2	1 536 g	122 859 D	336 D	628 D	10 625 D	351 926 D	173 212 D	522 274 D	32 278 D
335	Electrical equipment, appliance, and component manufacturing	3	33	17	2 650	130 873	1 700	3 686	68 190	341 244	286 511	627 845	13 575
3353	Electrical equipment manufacturing	2	9	4	f	D	D	D	D	D	D	D	5 499
33531	Electrical equipment manufacturing	2	9	4	f	D	D	D	D	D	D	D	5 499
3359	Other electrical equipment and component manufacturing	3	22	12	1 866	87 992	1 213	2 673	45 966	269 441	246 985	518 394	D
33592	Communication and energy wire and cable manufacturing.	3	12	9	1 375	66 208	950	2 137	37 900	221 440	215 191	438 624	6 187
335929	Other communication and energy wire manufacturing.	3	11	9	g	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	_	74	26	2 336	87 931	1 503	3 000	41 676	159 625	107 710	267 079	3 604
3371	Household and institutional furniture and kitchen cabinet manufacturing	1	49	16	g	D	D	D	D	D	D	D	D
33712	Household and institutional furniture manufacturing	_	35	14	g	D	D	D	D	D	D	D	1 330
337122	Nonupholstered wood household furniture manufacturing	1	23	8	624	17 931	521	1 106	12 524	25 922	37 628	62 953	D
3372	Office furniture (including fixtures) manufacturing	_	23	10	g	D	D	D	D	D	D	D	1 549
33721	Office furniture (including fixtures) manufacturing		23	10		D	D	D	D	D	D	D	1 540
337214	Office furniture (except wood) manufacturing	_	23	2	g f	D	D	D		D	D	D	1 549 D
339	Miscellaneous manufacturing	2	110	20	2 448	84 726	1 779	3 221	48 079	214 173	99 172	314 436	19 852
3391	Medical equipment and supplies manufacturing	-	42	7	1 407	52 913	1 042	1 754	31 004	143 816	44 333	189 043	14 321
33911	Medical equipment and supplies manufacturing	_	42	7	1 407	52 913	1 042	1 754	31 004	143 816	44 333	189 043	14 321
339115	Ophthalmic goods	-	5	3	1 080	40 593	791	1 226	23 693	108 172	30 173	139 077	10 905
3399	Other miscellaneous manufacturing	4	68	13	1 041	31 813	737	1 467	17 075	70 357	54 839	125 393	5 531
33999	All other miscellaneous manufacturing	5	32	9	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous manufacturing	6	23	5	569	15 381	413	826	8 621	35 252	32 519	68 002	D

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more. <sup>2</sup>Includes establishments with payroll at any time during the year. <sup>3</sup>Industries 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 2,499 employees; k–25,000 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 employees or more. <sup>4</sup>Number 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]

						graphic areas	ionowed by ,	occ Append					
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	ACTON												
31-33	Manufacturing	3	42	16	2 222	98 755	703	1 266	22 889	175 599	115 747	285 002	7 700
334	Computer and electronic product	5	12	7	808	48 128	136	253	6 117	87 999	40 921	127 352	4 129
335	manufacturing Electrical equipment, appliance, and	5	12		000	40 120	130	200	0 117	67 999	40 921	127 332	4 129
	component manufacturing	9	3	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing	1	2	1	f	D	D	D	D	D	D	D	D
33592	Communication and energy wire and cable manufacturing.	_	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication and energy wire manufacturing .	_	1	1	f	D	D	D	D	D	D	D	D
	ACUSHNET												
31-33	Manufacturing	9	12	3	g	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	9	1	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing	9	1	1	g	D	D	D	D	D	D	D	D
33992	Sporting and athletic goods					_	_	_	_		_	_	_
339920	manufacturing Sporting and athletic goods manufacturing	9 9	1	1	g	D	D	D	D	D	D	D	D
	AGAWAM	5			g	D		U			J	D	D
31-33	Manufacturing	_	60	21	2 030	76 760	1 448	2 838	45 667	224 034	185 148	408 258	8 626
332	Fabricated metal product manufacturing	_	24	11	752	31 762	508	1 069	19 465	73 823	55 862	128 963	4 275
3327	Machine shops; turned product;												
	and screw, nut, and bolt manufacturing	-	18	8	632	27 176	419	917	16 374	61 173	51 359	112 092	D
	AMESBURY												
31-33	Manufacturing	5	42	17	1 563	55 195	1 198	2 291	37 776	152 725	143 095	296 733	6 222
	ANDOVER												
31-33	Manufacturing	-	35	20	11 182	613 392	5 558	10 802	251 642	2 727 203	887 485	3 665 652	136 013
325	Chemical manufacturing	1	7	6	2 872	173 158	1 535	3 447	88 104	966 358	271 035	1 199 604	57 914
3254	Pharmaceutical and medicine manufacturing	2	3	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing	2	3	3	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation manufacturing	2	2	2	g	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing		11	7	6 306	353 254	2 802	5 283	126 933	1 664 571	488 215	2 240 737	64 104
3345	Navigational, measuring,			/	0 300	333 234	2 002	5 205	120 933	1 004 371	400 213	2 240 737	04 104
	electromedical, and control instruments manufacturing	-	5	5	6 165	346 109	2 745	5 159	124 506	1 655 013	472 979	2 215 943	63 797
33451	Navigational, measuring, electromedical, and control												
334510	instruments manufacturing Electromedical and	-	5	5	6 165	346 109	2 745	5 159	124 506	1 655 013	472 979	2 215 943	63 797
334511	electrotherapeutic apparatus manufacturing Search, detection, navigation, guidance, aeronautical, and nautical	-	2	2	g	D	D	D	D	D	D	D	D
	system and instrument manufacturing	_	2	2	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing		3	2	g	D	D	D	D	D	D	D	D
3359	Other electrical equipment and		2	1	_	D	D	D	D	D	D	D	D
33599	component manufacturing All other electrical equipment	_	2		g	D	D	D		D	U	D	D
	and component manufacturing	-	2	1	g	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment and component manufacturing	_	2	1	g	D	D	D	D	D	D	D	D
	ASHLAND		_		9	5		2				2	2
31-33	Manufacturing	-	32	9	1 011	45 605	535	1 101	17 696	121 724	111 408	235 174	3 477
339	Miscellaneous manufacturing	-	5	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing	_	2	1	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous					-		_	_	_	_	_	-
339999	manufacturing All other miscellaneous manufacturing	_	2	1	f	D	D	D	D	D	D	D	D
			. 2						. 0				5

[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]

				<u> </u>	5 1	, ,			ining of abbrevia		-,	, , ,	
		A establist	II hments <sup>2</sup>	All em	ployees	Pro	oduction work	kers					
Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)	
ATHOL													
Manufacturing	-	11	6	1 184	35 722	850	1 392	21 609	67 915	32 969	102 588	3 259	
Fabricated metal product manufacturing	-	1	1	f	D	D	D	D	D	D	D	D	
Cutlery and handtool manufacturing	-	1	1	f	D	D	D	D	D	D	D	D	
Cutlery and handtool manufacturing	_	1	1	f	D	D	D	D	D	D	D	D	
Hand and edge tool manufacturing	-	1	1	f	D	D	D	D	D	D	D	D	
ATTLEBORO													
Manufacturing	-	127	48	6 633	265 428	4 024	7 614	96 944	757 179	604 296	1 365 864	37 538	
Fabricated metal product manufacturing	3	34	9	711	30 304	519	1 026	17 282	59 379	40 442	99 928	2 377	
Transportation equipment manufacturing	-	1	1	g	D	D	D	D	D	D	D	D	
Motor vehicle parts manufacturing	-	1	1	g	D	D	D	D	D	D	D	D	
electronic equipment													
Other motor vehicle electrical	-	1	1	g	D	D	D	D	D	D	D	D	
manufacturing	-	1	1	g	D	D	D	D	D	D	D	D	
Other miscellaneous	-											6 189	
Jewelry and silverware	-											D	
Jewelry (except costume)	-	24		1 495	46 228	1 107	1 820	24 550	184 812	144 131	328 026	D	
Jewelers' material and lapidary work	-			858								2 656 D	
-	-	5	2		U	D	D	U	D	U	D	D	
		07	10	4 750	00,000		0 400	40,004	017 700	014.440	400,004	0.440	
-	_											9 143 D	
			5	001	05 057	501	004	10 000	30 040	33 301	110 044	D	
Manufacturing	1	47	9	938	42 978	442	840	13 358	147 397	70 311	222 123	3 795	
BEDFORD													
Manufacturing	2	29	17	2 519	135 030	1 099	2 153	39 153	309 516	229 648	572 799	32 787	
Computer and electronic product manufacturing	2	17	12	1 821	102 223	732	1 407	26 523	237 476	194 627	468 002	D	
Navigational, measuring, electromedical, and control					/								
Navigational, measuring,	1	9	6	842	56 351	184	364	8 097	85 301	57 044	1/6 0/6	15 100	
electromedical, and control instruments manufacturing	1	9	6	842	56 351	184	364	8 097	85 301	57 044	176 076	15 100	
BELLINGHAM													
Manufacturing	2	28	9	562	23 867	376	754	12 586	46 675	38 051	84 136	6 212	
		0.5		0 707	004 004	1 000	0 700	70 077	007 000	077.455	0.47 400	04 040	
	_											31 816 D	
			-	9	U	D	D	D	D		D	D	
manufacturing	-	3	3	g	D	D	D	D	D	D	D	D	
manufacturing Semiconductor machinery	-	3	3	g	D	D	D	D	D	D	D	D	
Computer and electronic product	-											D	
Semiconductor and other	-	10	/	1 258	62 175	666	1 352	26 199	115 920	/5 4/9	196 102	7 657	
manufacturing	-	3	3	544	24 899	378	738	14 855	38 926	34 824	74 204	3 030	
Semiconductor and other electronic component manufacturing	_	3	3	544	24 899	378	738	14 855	38 926	34 824	74 204	3 030	
	ATHOL Manufacturing Fabricated metal product manufacturing Cutlery and handtool manufacturing Cutlery and handtool manufacturing Cutlery and handtool manufacturing ATTLEBORO Manufacturing ATTLEBORO Manufacturing ATTLEBORO Manufacturing Transportation equipment manufacturing Transportation equipment manufacturing Motor vehicle electrical and electronic equipment manufacturing Motor vehicle electrical and electronic equipment manufacturing Motor vehicle electrical and electronic equipment manufacturing Other motor vehicle electrical and electronic equipment manufacturing Other motor vehicle electrical and electronic equipment manufacturing Biscellaneous manufacturing Jewelry and silverware manufacturing Jewelry and silverware manufacturing Jewelry and silverware manufacturing AUBURN Manufacturing BEDFORD Manufacturing Computer and electronic product manufacturing Navigational, measuring, electromedical, and control instruments manufacturing Navigational, measuring, electromedical, and control instruments manufacturing BELLINGHAM Manufacturing Cother industrial machinery manufacturing Semiconductor and other electronic component	E1         ATHOL         Manufacturing         Fabricated metal product         manufacturing         Cutlery and handtool         manufacturing         Manufacturing         Cutlery and handtool         manufacturing         Hand and edge tool         manufacturing         ATTLEBORO         Manufacturing         AttriceBoro         Manufacturing         Motor vehicle parts         manufacturing         Motor vehicle electrical and electronic equipment         manufacturing         Motor vehicle electrical and electronic equipment         manufacturing         Other miscellaneous         manufacturing         Jewelry and silverware         manufacturing         manufacturing         Jewelry (except costume)         manufacturing         Jewelry (except costume)         manufacturing         Jewelry (avai silverware         manufacturing         Manufacturing         Manufacturing         Manufacturing         Manufacturing         Manufacturing         Navigational, measuring, electromedical, and control instrum	Geographic area and industry       Et       Total         ATHOL       -       11         Manufacturing       -       11         Fabricated metal product       -       1         Cutlery and handtool       -       1         Cutlery and handtool       -       1         Manufacturing       -       1         ATTLEBORO       -       1         Manufacturing       -       1         Motor vehicle electrical and electronic equipment manufacturing       -       1         Motor vehicle electrical and electronic equipment manufacturing       -       1         Motor vehicle electrical and electronic equipment manufacturing       -       1         Miscellaneous manufacturing       -       1         Miscellaneous manufacturing       -       13         Jewelry and silverware manufacturing       -       24         Jewelry except costume) manufacturing       -       6         BARNSTABLE TOWN       -       6         Manufacturing       -       17         Navigational, measuring, electromedical, and control instruments manufacturing       1         Jewelry and silverware manufacturing       -       6         BARNSTABLE TOWN       -	EI       Total       employ- ees or more         ATHOL       -       11       6         ATHOL       -       1       1         Cullery and handtool manufacturing       -       1       1         Cutlery and handtool manufacturing       -       1       1         Cutlery and handtool manufacturing       -       1       1         Manufacturing       -       1       1         ATTLEBORO       -       1       1         Manufacturing       -       1       1         Motor vehicle parts manufacturing       -       1       1         Motor vehicle electrical and electronic equipment manufacturing       -       1       1         Motor vehicle electrical and electronic equipment manufacturing       -       30       14         Jewelry and silverware manufacturing       -       30       14         Jewelry and silverware manufacturing       -       24       11         Machinery manufacturing       -       27       16         Manufacturing       -       27       16         Manufacturing       -       27       16         Manufacturing       -       27       16         Manuf	Geographic area and industry         establishments <sup>2</sup> Attent biographic rotal           Manufacturing         -         11         6         1 184           Fabricated metal product manufacturing         -         1         1         f           Cutlery and handtool manufacturing         -         1         1         f           Cutlery and handtool manufacturing         -         1         1         f           ATTLEBORO         -         1         1         f           AttrLegoro         -         1         1         g           Manufacturing         -         1         1         g           Monufacturing         -         1         1         g           Motor vehicle parts manufacturing         -         1         1         g           Miscellaneous manufacturing         -         30         14         1 642           Jewelry and silvervare manufacturing         -         30         14         1 642           Jewelry and silvervare manufacturing         -         30         14         1 642           Jewelry and silvervare manufacturing         -         5         2         f           Manufacturing         -         27	An enhance of the second secon	Au employees         Au employees         Autemptoyees           Autemptoyees         Autemptoyees         Autemptoyees         Autemptoyees         Autemptoyees           Autemptoyees         Autemptoyees         Autemptoyees         Autemptoyees           Autemptoyees         Payroll         Autemptoyees           Autemptoyees         Autemptoyees         Autemptoyees           Autemptoyees <th c<="" td=""><td>Geographic area and industry         establishments?         Att entrupyees         Prayoid (\$1,050)         Prayoid Number?         Prayoid (\$1,050)         Number?         Prayoid (\$1,050)</td><td>Protection manufacture         Protection manufacture           Geographic area and industry           E         Total         Min part office of order of order of order of order         Number (\$1,000)         Number (\$1,000)         House (\$1,000)         Number (\$1,000)           ATHOL Manufacturing         -         -         1         6         1         1         6         0         D<td>Geographic area and industry         Feature intermedia         An introduction         Feature intermedia         <thf< td=""><td>Conjugation area and industry         interminent intermi</td><td>Genergicts and and rules by         intermediation         Product constant         Product constant         Tage         <thtage< th="">         Tage         <thtage< th=""></thtage<></thtage<></td></thf<></td></td></th>	<td>Geographic area and industry         establishments?         Att entrupyees         Prayoid (\$1,050)         Prayoid Number?         Prayoid (\$1,050)         Number?         Prayoid (\$1,050)</td> <td>Protection manufacture         Protection manufacture           Geographic area and industry           E         Total         Min part office of order of order of order of order         Number (\$1,000)         Number (\$1,000)         House (\$1,000)         Number (\$1,000)           ATHOL Manufacturing         -         -         1         6         1         1         6         0         D<td>Geographic area and industry         Feature intermedia         An introduction         Feature intermedia         <thf< td=""><td>Conjugation area and industry         interminent intermi</td><td>Genergicts and and rules by         intermediation         Product constant         Product constant         Tage         <thtage< th="">         Tage         <thtage< th=""></thtage<></thtage<></td></thf<></td></td>	Geographic area and industry         establishments?         Att entrupyees         Prayoid (\$1,050)         Prayoid Number?         Prayoid (\$1,050)         Number?         Prayoid (\$1,050)	Protection manufacture         Protection manufacture           Geographic area and industry           E         Total         Min part office of order of order of order of order         Number (\$1,000)         Number (\$1,000)         House (\$1,000)         Number (\$1,000)           ATHOL Manufacturing         -         -         1         6         1         1         6         0         D <td>Geographic area and industry         Feature intermedia         An introduction         Feature intermedia         <thf< td=""><td>Conjugation area and industry         interminent intermi</td><td>Genergicts and and rules by         intermediation         Product constant         Product constant         Tage         <thtage< th="">         Tage         <thtage< th=""></thtage<></thtage<></td></thf<></td>	Geographic area and industry         Feature intermedia         An introduction         Feature intermedia         Feature intermedia <thf< td=""><td>Conjugation area and industry         interminent intermi</td><td>Genergicts and and rules by         intermediation         Product constant         Product constant         Tage         <thtage< th="">         Tage         <thtage< th=""></thtage<></thtage<></td></thf<>	Conjugation area and industry         interminent intermi	Genergicts and and rules by         intermediation         Product constant         Product constant         Tage         Tage <thtage< th="">         Tage         <thtage< th=""></thtage<></thtage<>

See footnotes at end of table.

[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]

					ation on goo	grapino areas i	onowed by ,	occ Append		ining of approvid			
			A establist	ll hments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BILLERICA												
31-33	Manufacturing	3	112	48	4 670	241 749	2 327	4 772	87 102	520 646	514 602	1 053 400	24 848
333	Machinery manufacturing	7	18	6	1 255	72 868	630	1 313	27 335	184 894	163 803	359 090	7 334
3332	Industrial machinery manufacturing	9	6	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery manufacturing	9	6	2	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery manufacturing	9	2	2	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	1	31	20	1 755	103 706	618	1 272	24 970	185 825	235 270	420 841	8 196
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	12	9	1 233	73 236	398	860	15 792	132 730	192 717	322 333	4 746
33451	Navigational, measuring, electromedical, and control instruments manufacturing	_	12	9	1 233	73 236	398	860	15 792	132 730	192 717	322 333	4 746
	BOSTON												
31-33	Manufacturing	1	396	123	15 955	716 576	9 299	18 866	325 402	2 165 937	1 344 895	3 538 949	123 468
311	Food manufacturing	2	80	29	2 607	73 608	1 904	3 551	44 629	232 754	339 095	571 501	9 785
3117	Seafood product preparation and packaging	-	9	6	777	22 656	603	1 027	13 362	96 097	158 797	254 763	D
31171	Seafood product preparation and packaging	_	9	6	777	22 656	603	1 027	13 362	96 097	158 797	254 763	D
311712	Fresh and frozen seafood processing	-	9	6	777	22 656	603	1 027	13 362	96 097	158 797	254 763	D
3118	Bakeries and tortilla manufacturing	5	42	8	f	D	D	D	D	D	D	D	D
31181	Bread and bakery product manufacturing	5	37	8	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	8	5	3	f	D	D	D	D	D	D	D	D
315 3152	Apparel manufacturing Cut and sew apparel	1	27	11	1 195	42 849	821	1 468	12 125	103 501	91 109	185 108	1 362
3132	manufacturing	1	22	10	g	D	D	D	D	D	D	D	D
31523 315234	Women's and girls' cut and sew apparel manufacturing Women's and girls' cut and sew suit, coat, tailored jacket, and skirt	1	6	4	f	D	D	D	D	D	D	D	D
	manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	2	80	21	1 783	78 522	1 240	2 472	46 772	159 277	89 186	247 670	D
3231	Printing and related support activities	2	80	21	1 783	78 522	1 240	2 472	46 772	159 277	89 186	247 670	D
32311	Printing Commercial lithographic	2	69	19	g	D	D	D	D	D	D	D	D
323110	printing	2	38	11	1 111	53 230	763	1 584	30 992	106 493	68 900	174 611	D
325	Chemical manufacturing	2	13	5	1 249	74 728	498	1 054	28 620	711 738	69 931	774 776	29 117
3254	Pharmaceutical and medicine manufacturing	1	8	4	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing	1	8	4	g	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance manufacturing	9	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing		27	8	1 732	94 443	1 198	2 769	58 154	256 430	105 189	368 754	D
3322	Cutlery and handtool manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
332211	Cutlery and flatware (except precious) manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	-	18	8	3 087	163 126	911	1 800	41 421	202 780	189 544	422 210	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	5	1	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring,												
334515	electromedical, and control instruments manufacturing Instrument manufacturing for measuring and testing electricity and electrical	-	5	1	h	D	D	D	D	D	D	D	D
200	signals	-	1 50	1	h	D	D	D	D 12 016	D 02 955	D	D	D
339 3399	Miscellaneous manufacturing Other miscellaneous	2	58	9	1 074	53 125	481	958	13 016	93 855	145 339	240 930	2 172
0039	manufacturing	2	41	7	f	D	D	D	D	D	D	D	D

[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]

						graphic areas	ionowed by ,	oce rippene					
			A establis	nments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BRAINTREE												
31-33	Manufacturing	2	41	15	1 842	90 954	965	1 957	32 331	160 349	163 638	347 107	14 161
339	Miscellaneous manufacturing	-	5	4	875	50 193	365	737	12 725	49 540	104 416	173 870	6 010
3391	Medical equipment and supplies manufacturing	-	4	4	f	D	D	D	D	D	D	D	D
33911 339112	Medical equipment and supplies manufacturing Surgical and medical instrument manufacturing	-	4	4	f	D	D	D	D	D	D	D	D
	BROCKTON			-		_	_		_	_	_	_	
31-33	Manufacturing	1	113	37	2 912	102 159	2 131	4 183	62 909	218 832	210 822	433 525	7 552
311	Food manufacturing	1	16	9	725	20 783	534	977	13 392	49 970	51 076	100 983	2 841
	BURLINGTON												
31-33	Manufacturing	6	52	21	2 080	109 042	941	1 774	33 583	254 801	156 054	413 910	8 967
334	Computer and electronic product manufacturing	7	15	10	1 118	65 854	356	704	14 073	174 366	102 077	277 284	6 593
3345	Navigational, measuring, electromedical, and control instruments manufacturing	9	5	5	661	42 454	212	450	8 644	111 880	75 165	187 149	3 938
33451 334510	Navigational, measuring, electromedical, and control instruments manufacturing Electromedical and	9	5	5	661	42 454	212	450	8 644	111 880	75 165	187 149	3 938
	electrotherapeutic apparatus manufacturing	9	3	3	f	D	D	D	D	D	D	D	D
	CAMBRIDGE												
31-33	Manufacturing	7	100	36	5 241	263 830	2 761	5 531	93 170	870 538	347 341	1 234 243	59 216
311	Food manufacturing	-	17	6	1 008	32 703	798	1 641	21 703	82 762	58 656	139 528	1 545
3113	Sugar and confectionery product manufacturing	-	6	3	773	25 447	650	1 340	18 263	62 191	42 889	102 631	955
325	Chemical manufacturing	9	12	8	1 808	116 707	559	1 092	25 046	554 447	192 023	766 241	42 237
3254	Pharmaceutical and medicine manufacturing	9	10	8	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing	9	10	8	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation manufacturing	9	5	3	g	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	3	18	5	1 030	57 031	541	1 087	18 843	93 454	36 873	130 327	11 705
3344	Semiconductor and other electronic component manufacturing	-	4	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component												
334413	manufacturing	-	4	1	f	D	D	D	D	D	D	D	D
339	device manufacturing	- 3	4	1	f 577	D 21 362	D 399	D 760	D	D 74 131	D 20 961	D 95 114	D 1 305
339	Miscellaneous manufacturing	3	9	5	577	21 302	399	760	11 787	74 131	20 901	95 114	1 303
31-33	CANTON Manufacturing	2	75	37	5 662	234 050	3 527	6 866	106 904	573 865	513 370	1 088 137	22 633
332	Fabricated metal product manufacturing	_	10	4	522	22 396	435	965	16 383	56 380	45 296	101 897	55
334	Computer and electronic product manufacturing	-	10	5	1 058	50 313	490	938	15 236	88 906	107 320	193 113	5 703
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing	_	2	2	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	_	4	4	g	D	D	D	D	D	D	D	D
33593 335931	Wiring device manufacturing	-	3	3	g	D	D	D	D	D	D	D	D
000901	Current-carrying wiring device manufacturing	-	3	3	g	D	D	D	D	D	D	D	D
31-33	CHARLTON Manufacturing	_	20	4	515	19 069	360	727	10 993	39 601	33 617	73 812	1 827
2.00			20	-1	010		000	, _ /		00 001	00 0171	.5 612	. 027

See footnotes at end of table.

[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]

			establis	hments <sup>2</sup>	All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	CHELMSFORD												
31-33	Manufacturing	1	83	30	4 424	261 996	1 796	3 373	61 893	750 175	410 817	1 160 734	42 490
333	Machinery manufacturing	1	6	3	f	D	D	D	D	D	D	D	D
3332	Industrial machinery manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	2	28	15	2 495	172 054	689	1 327	27 165	558 028	278 808	835 282	17 636
3341	Computer and peripheral equipment manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	_	2	1	f	D	D	D	D	D	D	D	D
334111	Electronic computer manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
3342	Communications equipment manufacturing	4	9	5	1 260	79 283	452	870	19 585	220 982	140 673	365 522	8 620
33421	Telephone apparatus manufacturing	2	5	2	681	45 959	255	512	13 061	134 358	113 111	252 945	6 751
334210	Telephone apparatus manufacturing	2	5	2	681	45 959	255	512	13 061	134 358	113 111	252 945	6 751
	CHELSEA												
31-33	Manufacturing	-	51	18	1 743	64 217	1 225	2 594	36 546	181 475	164 537	345 812	9 930
311	Food manufacturing	-	9	3	941	33 604	697	1 497	20 681	118 381	99 661	217 251	D
	CHICOPEE												
31-33	Manufacturing	1	103	39	5 321	217 597	3 544	7 081	115 774	716 838	482 872	1 216 404	26 882
323	Printing and related support activities	-	5	3	562	20 719	432	907	13 690	73 555	55 897	129 248	1 880
3231	Printing and related support activities	-	5	3	562	20 719	432	907	13 690	73 555	55 897	129 248	1 880
32311	Printing	-	4	3	f	D	D	D	D	D	D	D	D
333	Machinery manufacturing	5	13	7	1 037	41 809	714	1 197	23 814	108 448	80 878	189 890	5 275
3333	Commercial and service industry machinery manufacturing	9	1	1	f	D	D	D	D	D	D	D	D
33331	Commercial and service industry machinery						_	_	_	_		_	_
333315	manufacturing Photographic and	9	1	1	f	D	D	D	D	D	D	D	D
	photocopying equipment manufacturing	9	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	-	15	4	1 860	83 472	1 155	2 392	38 184	382 894	202 910	600 070	D
3391	Medical equipment and supplies manufacturing	-	7	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment and supplies manufacturing	-	7	2	f	D	D	D	D	D	D	D	D
339112	Surgical and medical instrument manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing	-	8	2	g	D	D	D	D	D	D	D	D
33992	Sporting and athletic goods manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
339920	Sporting and athletic goods manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
	CLINTON												
31-33	Manufacturing	-	38	19	3 577	98 618	2 630	3 601	60 540	382 326	253 309	643 725	24 642
326	Plastics and rubber products manufacturing	_	8	6	g	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing	-	8	6	g	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	_	8	6	g	D	D	D	D	D	D	D	D
326199	All other plastics product manufacturing	-	8	6		D	D	D	D	D	D	D	D

[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]

	and geographical deminions, see note at		A	ll hments <sup>2</sup>		ployees		oduction worl					
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	DANVERS												
31-33	Manufacturing	4	86	26	4 110	176 234	2 527	5 145	71 435	405 120	268 080	681 810	31 799
311	Food manufacturing	9	7	3	f	D	D	D	D	D	D	D	3 835
334	Computer and electronic product manufacturing	7	9	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	-	8	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment and supplies manufacturing	-	5	2	g	D	D	D	D	D	D	D	D
33911 339113	Medical equipment and supplies manufacturing Surgical appliance and supplies manufacturing	-	5	2	g	D D	D D	D D	D D	D D	D D	D D	D D
	DEDHAM												
31-33	Manufacturing	-	19	5	594	21 179	429	806	11 625	62 363	35 203	97 575	2 421
	DUDLEY												
31-33	Manufacturing	2	16	8	1 212	37 384	1 008	1 662	30 874	89 045	42 854	132 379	5 898
339	Miscellaneous manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
3391	Medical equipment and supplies manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment and supplies manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
339115	Ophthalmic goods manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
	EASTHAMPTON												
31-33	Manufacturing	1	38	13	1 551	54 673	1 227	2 192	37 198	113 442	70 952	184 308	6 495
326	Plastics and rubber products manufacturing	_	4	3	970	33 830	819	1 401	25 530	68 801	42 161	111 276	D
3261	Plastics product manufacturing	-	4	3	970	33 830	819	1 401	25 530	68 801	42 161	111 276	D
32612	Plastics pipe, pipe fitting, and unlaminated profile shape												
326121	manufacturing Unlaminated plastics profile shape manufacturing	-	2 2	2 2	f	D D	D D	D D	D D	D D	D D	D D	D D
	EAST LONGMEADOW												
31-33	Manufacturing	-	34	16	3 112	127 938	2 302	4 578	76 999	331 496	231 289	561 873	11 294
332	Fabricated metal product manufacturing	-	8	6	736	41 561	370	843	14 916	128 566	47 842	176 384	D
3322	Cutlery and handtool manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
332213	Saw blade and handsaw manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	-	5	3	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing	-	2	1	g	D	D	D	D	D	D	D	D
33993	Doll, toy, and game manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
339932	Game, toy, and children's vehicle manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
	EASTON												
31-33	Manufacturing	1	37	13	936	37 750	656	1 335	22 192	100 167	73 394	173 291	5 567
	EVERETT												
31-33 323	Manufacturing Printing and related support activities	3	67 12	17	1 543 543	63 886 27 589	1 019 390	2 089 814	36 236 17 455	120 503 46 714	102 422 31 415	222 593 77 809	5 062 680
3231	Printing and related support activities	3	12	4	543	27 589	390	814	17 455	46 714	31 415	77 809	680
32311 323110	Printing Commercial lithographic	3	11	4	f	D	D	D	D	D	D	D	680
	printing	3	7	4	508	26 051	365	761	16 492	44 102	30 533	74 301	640

See footnotes at end of table.

[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]

			Δ	ll hments <sup>2</sup>		ployees	-	oduction wor					
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	FALL RIVER												
31-33	Manufacturing	2	195	74	11 707	370 928	9 004	18 714	229 727	937 778	750 563	1 706 441	69 060
313	Textile mills	2	15	9	4 568	139 373	3 786	8 430	101 576	281 632	327 758	609 497	44 042
3132	Fabric mills	-	6	3	h	D	D	D	D	D	D	D	D
31321 313210	Broadwoven fabric mills Broadwoven fabric mills	-	3 3	2 2	h h	D D	D D	D D	D D	D D	D D	D D	D D
3133	Textile and fabric finishing and fabric coating mills	9	8	6	g	D	D	D	D	D	D	D	D
31331	Textile and fabric finishing mills	9	7	5	g	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills	9	6	5	g	D	D	D	D	D	D	D	D
314	Textile product mills	1	16	10	987	22 982	829	1 532	16 123	86 532	52 166	136 005	D
3141	Textile furnishings mills	2	10	8	763	16 815	649	1 200	12 226	74 107	41 916	112 664	D
31412 314121	Curtain and linen mills Curtain and drapery mills	2 2	10 6	8 5	763 540	16 815 11 591	649 476	1 200 884	12 226 8 984	74 107 65 078	41 916 34 765	112 664 96 539	D D
315	Apparel manufacturing	4	28	19	1 596	33 426	1 296	2 316	22 396	46 280	82 678	130 850	683
3152	Cut and sew apparel manufacturing	4	25	16	1 517	31 873	1 229	2 211	21 218	43 841	80 914	126 679	D
31522	Men's and boys' cut and sew apparel manufacturing	6	3	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	-	8	3	654	24 621	592	1 407	20 691	151 402	49 811	200 821	1 030
3351	Electric lighting equipment manufacturing	_	3	3	f	D	D	D	D	D	D	D	D
33512 335122	Lighting fixture manufacturing Commercial, industrial, and	-	3	3	f	D	D	D	D	D	D	D	D
555122	institutional electric lighting fixture manufacturing	-	3	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	-	8	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment and supplies manufacturing	-	4	2	g	D	D	D	D	D	D	D	D
33911	Medical equipment and supplies manufacturing	_	4	2	g	D	D	D	D	D	D	D	D
339112	Surgical and medical instrument manufacturing	-	2	2	g	D	D	D	D	D	D	D	D
	FITCHBURG												
31-33	Manufacturing	2	83	27	2 215	100 118	1 442	3 073	53 944	254 173	192 617	447 669	18 978
322	Paper manufacturing	3	9	6	646	30 356	445	971	18 923	79 368	76 616	156 271	4 860
	FOXFOROUGH												
	FOXBOROUGH				1 500		570		10 750	107.010	400,000		4 949
31-33	Manufacturing	1	16	6	1 560	81 030	572	1 141	16 758	187 848	103 988	304 736	1 849
334	Computer and electronic product manufacturing	-	3	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	2	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control												
334513	instruments manufacturing Instruments and related products manufacturing for measuring, displaying, and controlling industrial process variables	-	2	2	g	D	D	D	D	D	D	D	D
	FRAMINGHAM												
31-33	Manufacturing	1	75	19	1 641	71 353	1 079	1 991	41 575	506 447	288 001	789 850	12 224
51 00	See footnotes at end of table.			. 13	. 1041		. 10/5	1 331	1 575		. 200 0011	, 55, 6501	12 224

[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]

						graphic areas	lonowed by ,	See Append	IX D. TOT MEA	ining of abbrevia		513, 366 introduct	
			A establis	hments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	FRANKLIN												
31-33	Manufacturing	-	64	37	5 355	263 653	3 055	6 191	112 965	1 255 026	1 595 981	2 821 792	35 156
311	Food manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
3115	Dairy product manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
311511	Fluid milk manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	1	13	9	804	34 889	573	1 129	21 153	84 711	63 084	148 913	2 932
333	Machinery manufacturing	-	6	3	905	45 490	371	441	7 936	63 769	58 085	127 046	D
3332	Industrial machinery manufacturing	_	2	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery												
333298	manufacturing All other industrial machinery	-	2	1	f	D	D	D	D	D	D	D	D
004	manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	-	9	6	g	D	D	D	D	D	D	D	22 451
3341	Computer and peripheral equipment manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
33411	Computer and peripheral												
334112	equipment manufacturing Computer storage device	-	1	1	g	D	D	D	D	D	D	D	D
	manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
04.00	GARDNER		45	47	4	50.077		0.000	00.040	74 070	05 700	470 447	0.004
31-33	Manufacturing	2	45	17	1 577	53 677	1 131	2 399	33 949	71 873	95 732	179 117	6 391
31-33	GLOUCESTER	2	51	18	2 990	152 744	1 674	2 880	65 953	436 239	304 254	735 787	01 574
31-33	Manufacturing	2	9	4	2 990 f	152 744 D	1 674 D	2 880 D	05 953 D	436 239 D	304 254 D	735 787 D	21 574 D
3117	Seafood product preparation and												
31171	packaging	8	6	4	f	D	D	D	D	D	D	D	D
31171	Seafood product preparation and packaging Fresh and frozen seafood	8	6	4	f	D	D	D	D	D	D	D	D
511/12	processing	8	6	4	f	D	D	D	D	D	D	D	D
333	Machinery manufacturing	-	6	4	g	D	D	D	D	D	D	D	D
3332	Industrial machinery manufacturing	-	3	2	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery manufacturing	_	2	1	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
	GRAFTON			•		5	5	5		5		5	5
31-33	Manufacturing	_	15	7	916	39 149	675	1 303	25 779	130 158	94 559	241 377	6 434
332	Fabricated metal product								_				_
3321	manufacturing Forging and stamping	_	4	1	f f	D	D	D	D	D	D	D	D
33211	Forging and stamping Iron and steel forging	_	1	1	f	D	D	D	D	D	D	D	D
332111		-	1	1	f	D	D	D	D	D	D	D	D
04.00	GREENFIELD					05,000	450	014	10 110	54 044	00,400	70.005	5 000
31-33	Manufacturing	1	28	11	690	25 060	452	911	13 419	51 011	28 429	79 935	5 003
31-33	HAVERHILL Manufacturing	3	109	35	2 675	102 575	1 782	3 561	54 588	214 905	172 488	387 891	6 049
01-00	HINGHAM	5	103	55	2 075	102 575	1 702	5 501	34 300	214 903	172 400	307 091	0 049
31-33	Manufacturing	2	32	12	814	34 341	456	935	14 591	91 733	39 998	132 252	1 942
	HOLDEN		-										
31-33	Manufacturing	_	14	7	558	25 963	386	806	16 597	59 376	38 015	96 572	2 988
	HOLLISTON												
31-33	Manufacturing	1	49	12	991	40 707	641	1 231	22 133	88 195	60 598	149 634	5 561
	HOLYOKE												
31-33	Manufacturing	_	81	41	2 897	111 664	1 978	4 047	62 270	278 788	349 317	631 069	14 483
322	Paper manufacturing	-	16	12	1 077	44 084	796	1 713	27 933	118 100	159 249	283 658	6 504
3222	Converted paper product		14	10	f	D	D	D	D	D	D	D	D
	manufacturing	-	4			U						U	
333	Machinery manufacturing	_	10	5	594	28 926	260	468	10 120	78 267	127 228	201 633	3 209
	See footnotes at end of table												

See footnotes at end of table.

[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]

	and goographical dominiono, ooo noto a		01 100101		allon on goo	grapino aroao	, ionomou by	, 000 , ippoint		aning of abbrothe	and office		
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	HOPKINTON												
31-33	Manufacturing	1	17	6	605	38 968	209	435	9 775	82 504	37 558	122 221	3 508
31-33	HUDSON Manufacturing	_	83	31	3 861	192 208	2 592	5 312	98 856	2 129 544	937 471	3 099 565	17 327
332	Fabricated metal product												
334	manufacturing Computer and electronic product	3	23	8	873	30 984	604	1 255	16 130	72 301	37 908	107 452	1 535
	manufacturing	-	12	8	g	D	D	D	D	D	D	D	11 467
3344	Semiconductor and other electronic component manufacturing	-	3	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	_	3	3	g	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
	IPSWICH												
31-33	Manufacturing	2	41	9	519	20 182	397	847	13 932	46 105	22 749	67 277	3 534
	LAWRENCE												
31-33	Manufacturing	1	115	43	5 259	'202 601	'3 621	7 557	'115 354	'458 612	'350 727	820 122	16 468
313 3133	Textile mills Textile and fabric finishing and	-	1	1	f	D	D	D	D	D	D	D	D
	fabric coating mills	-	1	1	f	D	D	D	D	D	D	D	D
31331 313312	Textile and fabric finishing mills	-	1	1	f	D	D	D	D	D	D	D	D
	mills	-	1	1	f	D	D	D	D	D	D	D	D
325 339	Chemical manufacturing Miscellaneous manufacturing	2	<sup>r</sup> 8	r4 6	'544 796	'19 269 29 498	'416 459	'926 959	'8 239 14 335	'52 173 64 523	'38 178 42 936	'90 068 109 237	D 3 979
3399	Other miscellaneous manufacturing	-	9	3	f	D	D	D	D	D	D	D	D
	LEOMINSTER												
31-33	Manufacturing	2	118	48	4 620	178 339	3 409	6 906	104 792	463 187	498 625	957 059	57 173
326	Plastics and rubber products manufacturing	_	34	19	1 865	58 474	1 515	3 078	39 343	173 411	148 902	318 385	12 960
3261	Plastics product manufacturing	-	34	19	1 865	58 474	1 515	3 078	39 343	173 411	148 902	318 385	12 960
32619	Other plastics product manufacturing	_	30	19	1 845	57 895	1 500	3 049	38 947	171 885	146 437	314 379	12 890
326199	All other plastics product manufacturing	-	30	19	1 845	57 895	1 500	3 049	38 947	171 885	146 437	314 379	12 890
	LEXINGTON												
31-33	Manufacturing	1	21	6	1 457	90 559	528	810	21 197	165 910	154 913	332 263	14 516
334	Computer and electronic product manufacturing	1	10	5	1 344	86 904	448	658	19 005	158 258	148 072	317 769	13 933
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	6	4	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing	-	6	4	g	D	D	D	D	D	D	D	D
	LOWELL												
31-33	Manufacturing	2	100 8	44 6	5 101 773	225 584 25 127	2 833 674	5 888	88 933	511 909 68 744	401 325 116 324	926 081 193 594	25 172
313 334	Textile mills Computer and electronic product	2	°	0	//3	25 127	674	1 402	18 488	00 744	110 324	193 394	5 730
	manufacturing	1	17	11	2 192	119 911	581	1 211	22 244	256 573	111 755	373 782	7 736
3344	Semiconductor and other electronic component manufacturing	-	13	8	1 862	100 195	509	1 066	19 665	213 738	87 629	306 622	6 543
33441	Semiconductor and other electronic component			-		400 10-		4 00-	40.05-			000.005	0 = 15
334419	manufacturing Other electronic component manufacturing	_	13 2	8	1 862 g	100 195 D	509 D	1 066 D	19 665 D	213 738 D	87 629 D	306 622 D	6 543 D
	LUDLOW				5								
31-33	Manufacturing	2	39	15	1 261	39 296	916	1 847	24 455	90 247	79 779	168 439	D

[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]

			Δ	JI		ployees		oduction worl					
			establis	hments <sup>2</sup>						-			
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	LYNN												
31-33	Manufacturing	_	63	23	6 472	400 598	3 534	7 145	192 834	1 519 271	1 695 729	3 211 075	106 714
311	Food manufacturing	_	7	5	g	D	D	D	D	D	D	D	D
3115	Dairy product manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen)					6		D				5	
311511	manufacturing Fluid milk manufacturing	_	1	1	f	D D	D D	D D	D	D D	D D	D D	D D
336	Transportation equipment manufacturing	-	1	1	h	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	-	1	1	h	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing	_	1	1	h	D	D	D	D	D	D	D	D
336412	Aircraft engine and engine parts manufacturing	-	1	1	h	D	D	D	D	D	D	D	D
	MALDEN												
31-33	Manufacturing	-	55	19	1 493	61 750	967	2 022	34 193	143 385	116 468	258 317	3 803
311	Food manufacturing	-	9	5	666	26 313	347	726	10 158	69 111	66 250	135 628	1 782
	MANSFIELD												
31-33	Manufacturing	3	27	13	1 937	91 894	1 237	2 594	47 359	226 757	217 931	436 618	14 108
	MARLBOROUGH												
31-33	Manufacturing	1	88	35	5 376	334 897	2 085	4 163	80 497	756 081	681 293	1 369 282	71 739
325	Chemical manufacturing	1	6	3	f	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
32599 325998	All other chemical product and preparation manufacturing All other miscellaneous	-	1	1	f	D	D	D	D	D	D	D	D
020000	chemical product and preparation manufacturing .	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	1	20	13	2 561	198 450	526	1 111	24 648	489 344	231 493	665 055	9 005
3345	Navigational, measuring, electromedical, and control		4	3	1 833	157 220	276	606	12 888	410 613	158 883	514 497	D
33451	instruments manufacturing Navigational, measuring,		-	5	1 000	137 220	270	000	12 000	410 013	100 000	514 497	D
334511	electromedical, and control instruments manufacturing Search, detection, navigation, guidance, aeronautical, and nautical	-	4	3	1 833	157 220	276	606	12 888	410 613	158 883	514 497	D
	system and instrument manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
	MAYNARD												
31-33	Manufacturing	4	14	5	1 012	79 925	411	879	24 684	70 936	85 703	156 109	11 010
334	Computer and electronic product manufacturing	3	6	4	939	76 770	347	775	22 291	64 225	83 028	146 837	D
3341	Computer and peripheral equipment manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
334111	Electronic computer manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
	MEDFORD												
31-33	Manufacturing	3	46	8	682	24 550	465	877	12 725	45 565	34 646	80 355	1 754
	MEDWAY												
31-33	Manufacturing	4	18	8	781	32 514	466	766	13 903	56 436	53 916	110 477	3 051
339	Miscellaneous manufacturing	5	6	5	516	22 223	282	445	8 340	36 282	40 598	76 702	1 275
3399	Other miscellaneous manufacturing	5	5	5	f	D	D	D	D	D	D	D	D
	METHUEN												
31-33	Manufacturing	1	42	15	2 093	'88 486	1 337	2 163	r43 366	308 588	202 530	513 104	26 226
334	Computer and electronic product manufacturing	1	9	6	1 367	58 455	827	1 155	25 879	128 011	109 946	240 693	D
3344	Semiconductor and other electronic component manufacturing	1	3	2	587	22 289	475	417	16 030	22 529	17 337	39 563	D
33441	Semiconductor and other electronic component		3	2	507	22 209	475	417	10 030	22 529	17 337	39 303	U
	See footnotes at end of table	1	3	2	587	22 289	475	417	16 030	22 529	17 337	39 563	D

See footnotes at end of table.

[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]

			or table.		anon on geo	graphic areas	ionowed by ,	, occ rippene		aning of approvid			
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MIDDLEBOROUGH												
31-33	Manufacturing	2	27	14	1 273	52 568	771	1 529	25 136	175 713	85 500	264 633	3 461
	MILFORD												
31-33	Manufacturing	-	36	14	2 187	150 364	854	1 609	33 263	559 594	289 878	846 754	32 163
334	Computer and electronic product manufacturing	-	5	3	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	4	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control												
334516	instruments manufacturing Analytical laboratory instrument manufacturing	-	4	2 1	f	D	D D	D D	D	D D	D D	D D	D
	MILLBURY												
31-33	Manufacturing	4	26	11	661	26 974	478	963	16 368	52 044	43 344	95 767	5 560
	NATICK												
31-33	Manufacturing	5	45	16	1 426	82 815	668	1 153	22 969	190 829	120 847	316 655	8 548
334 3345	Computer and electronic product manufacturing Navigational, measuring,	5	11	7	802	55 791	240	407	7 553	113 858	70 860	187 902	4 373
33451	electromedical, and control instruments manufacturing Navigational, measuring,	5	8	6	f	D	D	D	D	D	D	D	D
	electromedical, and control instruments manufacturing	5	8	6	f	D	D	D	D	D	D	D	D
31-33	NEEDHAM	2	37	16	1 417	68 198	647	1 236	19 715	177 910	195 118	377 331	4 769
334	Manufacturing Computer and electronic product	2	37	10	1 417	00 190	047	1 230	19715	177 910	195 116	377 331	4 709
3342	manufacturing	4	3	6	672	41 009 D	177 D	359 D	6 190 D	98 549 D	53 033 D	153 764 D	1 881 D
	manufacturing	4	3	3	1	U	D	D		U	U	U	D
	NEW BEDFORD												
31-33 311	Manufacturing	1	154 38	57 12	7 386 1 528	237 216 42 478	5 469 1 082	10 931 2 199	147 953 24 096	543 637 161 690	647 556 230 103	1 203 527 390 760	18 292 4 443
3117	Seafood product preparation and packaging	2	21	10	1 003	26 111	842	1 758	17 083	81 461	204 001	284 376	4 443 D
31171	Seafood product preparation and packaging	2	21	10	1 003	26 111	842	1 758	17 083	81 461	204 001	284 376	D
311712	Fresh and frozen seafood processing	2	17	10	f	D	D	D	D	D	D	D	D
313	Textile mills	1	11	4	514	15 600 17 145	424	878	11 588	30 998	24 371	55 388	666 D
315 3152	Apparel manufacturing Cut and sew apparel	5	11	4	743	17 145	659	1 136	13 572	31 654	20 356	51 836	D
	manufacturing	5	11	4	743	17 145	659	1 136	13 572	31 654	20 356	51 836	D
31522 315222	Men's and boys' cut and sew apparel manufacturing Men's and boys' cut and sew suit, coat, and overcoat	5	2	2	f	D	D	D	D	D	D	D	D
000	manufacturing	5	2	2	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	1	8	3	554	21 615	368	823	10 141	44 850	27 249	75 218	851
332	Fabricated metal product manufacturing	4	17	7	582	19 603	474	926	13 929	36 213	26 182	63 013	1 048
334	Computer and electronic product manufacturing	_	7	4	898	24 506	607	1 297	13 728	42 362	38 155	85 745	D
3344	Semiconductor and other electronic component		4	4	f	D	D	D	D	-12 002 D	D	D	D
33441	manufacturing		4	4		U		U		U	U	U	U
334414	electronic component manufacturing Electronic capacitor manufacturing	-	4	4	f	D	D	D	D	D	D	D	D
	NEWBURYPORT		'	'	'	5		5			5	5	5
31-33	Manufacturing	2	71	28	2 460	108 717	1 584	3 150	57 869	301 651	199 095	504 755	10 185
	NEWTON												
31-33	Manufacturing	2	70	14	1 823	88 367	985	1 981	35 840	133 285	239 342	377 364	7 584
334	Computer and electronic product manufacturing	3	13	6	664	33 117	302	648	9 931	65 544	63 358	129 225	1 758
	See footnotes at and of table	5	.0	0	004	20	002	0.0	0 001			00	

See footnotes at end of table.

[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]

					iution on geo	graphic areas	ionoweaby ,	oce Append	IX D. TOTHICO	aning of approvid	alono and bymb		
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	NORTH ADAMS												
31-33	Manufacturing	-	24	8	790	25 192	599	1 155	16 393	52 673	29 545	82 105	1 445
	NORTHAMPTON												
31-33	Manufacturing	_	46	20	1 466	61 178	953	1 919	29 712	168 150	190 541	359 683	7 566
31-33	Manufacturing	1	44	24	3 706	160 731	1 976	4 206	76 250	392 819	621 124	1 220 555	26 367
334	Computer and electronic product												
	manufacturing	-	14	7	1 702	70 557	910	2 015	37 194	172 234	465 416	845 867	14 091
3342	Communications equipment manufacturing	-	2	1	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus manufacturing		1	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	8	5	4	828	43 870	192	341	10 481	107 075	62 975	171 536	D
3353	Electrical equipment	0		4	020	43 870	152	341	10 401	107 075	02 975	171 330	D
	manufacturing	9	2	1	f	D	D	D	D	D	D	D	D
33531 335314	Electrical equipment manufacturing Relay and industrial control	9	2	1	f	D	D	D	D	D	D	D	D
000014	manufacturing	9	2	1	f	D	D	D	D	D	D	D	D
	NORTH ATTLEBOROUGH												
31-33	Manufacturing	3	70	20	2 867	93 619	2 251	4 822	61 931	139 539	146 797	282 611	7 815
332	Fabricated metal product manufacturing	4	16	5	1 094	32 421	1 001	2 338	27 475	47 655	13 356	59 100	1 939
3326	Spring and wire product manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
33261	Spring and wire product												
332618	Other fabricated wire product	-	1	1	f f	D	D D	D	D	D	D	D	D
339	manufacturing Miscellaneous manufacturing	3	20	6	923	28 131	644	1 281	13 758	19 288	94 530	113 629	D
3399	Other miscellaneous							_					_
33991	manufacturing	3	18	6	Ť	D	D	D	D	D	D	D	D
	manufacturing	1	14	5	f	D	D	D	D	D	D	D	1 583
	NORTHBOROUGH												
31-33	Manufacturing	3	27	7	749	28 923	500	990	13 660	67 085	69 338	136 949	2 088
	NORTHBRIDGE												
31-33	Manufacturing	4	20	8	726	28 024	449	888	12 936	61 081	61 452	123 366	7 773
04.00	NORTON		07			00,000	100	070	14.074	47.000	00,000	75 007	4 000
31-33	Manufacturing	2	27	11	639	23 336	498	970	14 071	47 260	28 006	75 297	1 699
31-33	NORWOOD Manufacturing	_	70	26	2 252	108 322	1 383	2 621	49 275	243 066	154 081	392 276	31 855
325	Chemical manufacturing	_	6	4	567	24 732	353	479	10 674	25 911	21 992	48 738	D
334	Computer and electronic product										50.040		10,150
3344	manufacturing	-	14	8	797	44 484	453	940	17 239	125 698	59 810	183 654	19 456
0011	electronic component manufacturing	-	9	6	571	33 243	365	789	14 721	107 500	40 734	146 364	D
33441	Semiconductor and other												
	electronic component manufacturing	-	9	6	571	33 243	365	789	14 721	107 500	40 734	146 364	D
	OXFORD												
31-33	Manufacturing	1	30	10	831	33 019	628	1 315	20 205	79 702	121 254	200 090	4 121
	PALMER												
31-33	Manufacturing	3	47	14	l f	D	D	D	D	D	D	D	4 000
	See footnotes at end of table												

See footnotes at end of table.

[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]

terms,					ation on geog	graphic areas	onowed by ,	See Append	IN D. TOT MEE			513, 366 Introduc	
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	PEABODY												
31-33	Manufacturing	1	92	30	3 589	179 533	1 877	3 716	68 296	372 227	332 820	708 192	24 943
334	Computer and electronic product			_		/							
3345	manufacturing	-	10	7	1 641	89 941	716	1 575	23 437	157 056	143 280	302 514	6 767
	Navigational, measuring, electromedical, and control instruments manufacturing	-	5	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control												
334517	instruments manufacturing Irradiation apparatus	-	5	2	g	D	D	D	D	D	D	D	D
	manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
	PITTSFIELD												
31-33	Manufacturing	1	61	24	2 757	115 977	1 437	2 948	43 993	240 072	121 853	368 633	17 494
326	Plastics and rubber products manufacturing	7	9	6	f	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing	7	9	6	f	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	8	8	5	f	D	D	D	D	D	D	D	D
326199	All other plastics product manufacturing	8	8	5	f	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												
334511	instruments manufacturing Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	-	3	1	f	D	D	D	D	D	D	D	D
	manufacturing	-	1	1	Ť	D	D	D	D	D	D	D	D
01.00	PLYMOUTH		40	15	1 000	44.050	000	1 000	00 500	00.004	E1 7E0	145 000	7 750
31-33	Manufacturing	4	43	15	1 206	44 953	886	1 838	26 509	92 204	51 758	145 089	7 758
04.00	QUINCY		07		707	07 400	505	4 000	10.005	100,005	104.040		
31-33	Manufacturing	r1	67	9	727	27 106	535	1 060	16 985	<sup>r</sup> 98 695	r124 642	r223 096	D
	RANDOLPH			10				4 000		107 010	400.007		4 400
31-33	Manufacturing	1	29	16	1 211	50 757	797	1 639	27 161	137 840	102 267	240 145	4 428
	RAYNHAM												
31-33	Manufacturing	-	13	4	690	38 068	392	903	18 722	276 385	69 830	366 337	D
	ROCKLAND												
31-33	Manufacturing	-	53	20	1 366	64 806	762	1 607	25 118	189 154	97 648	283 311	10 054
	SALEM												
31-33	Manufacturing	2	61	15	1 302	50 065	898	1 807	28 213	92 505	73 129	166 875	3 639
	SHARON												
31-33	Manufacturing	5	12	7	712	34 164	417	805	16 181	69 167	34 852	106 817	4 834
	SHREWSBURY												
31-33	Manufacturing	_	39	11	1 198	59 082	761	1 519	27 626	98 117	152 815	232 783	4 471
332	Fabricated metal product				1.00	00 002		1 010	27 020		102 010	202 700	
002	manufacturing	-	8	2	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
33291 332911	Metal valve manufacturing Industrial valve manufacturing	-	2	2 2	f	D	D	D	D	D	D	D	D
	SOMERVILLE			2		5		J				5	U
31-33	Manufacturing	4	75	14	2 109	87 343	1 326	2 653	37 123	174 524	122 401	297 528	7 341
322	Paper manufacturing	_	1	14	_ 109 f	07 343 D	1 320 D	2 033 D	57 125 D	174 J24	122 401 D	297 520 D	7 341 D
3222	Converted paper product					D		2				D	2
32223	manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
32223	manufacturing Die-cut paper and	-	1	1	f	D	D	D	D	D	D	D	D
	paperboard office supplies manufacturing	_	1	1	f	D	D	D	D	D	D	D	D

[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]

terms, e						graphic areas	ionowed by ,	oce rippene					
			A establis	III hments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SOUTHBRIDGE												
31-33	Manufacturing	_	33	13	1 884	74 162	1 289	2 371	36 449	179 966	75 349	255 990	11 036
332	Fabricated metal product		10	-			D	D				D	D
3322	manufacturing Cutlery and handtool	-	13	5	1	D	D	D	D	D	D	D	D
OOLL	manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
	SOUTH HADLEY												
31-33	Manufacturing	-	17	7	761	28 417	510	1 119	17 259	61 453	71 479	134 098	3 188
	SPENCER												
31-33	Manufacturing	-	19	3	1 172	54 666	788	1 546	29 710	69 311	133 359	210 921	1 322
322	Paper manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
32222	Paper bag and coated and										_		_
322222	treated paper manufacturing Coated and laminated paper manufacturing	_	1	1	f	D	D	D	D	D	D D	D	D
	SPRINGFIELD												
31-33	Manufacturing	-	158	53	5 929	241 846	4 291	8 870	148 150	548 642	503 781	1 064 580	35 158
311	Food manufacturing	1	15	6	601	18 335	459	1 006	10 901	36 045	58 479	95 853	D
326	Plastics and rubber products manufacturing	_	4	3	f	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing	_	4	3	f	D	D	D	D	D	D	D	D
32611	Plastics packaging materials and unlaminated film and												
326113	sheet manufacturing Unlaminated plastics film and	-	1	1	f	D	D	D	D	D	D	D	D
	sheet (except packaging) manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	-	35	16	2 205	89 159	1 635	3 265	59 139	173 075	86 054	263 001	8 052
3329	Other fabricated metal product manufacturing	_	4	3	g	D	D	D	D	D	D	D	D
33291 332912	Metal valve manufacturing Fluid power valve and hose	-	1	1	f	D	D	D	D	D	D	D	D
	fitting manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33299 332994	All other fabricated metal product manufacturing Small arms manufacturing	-	3	2 1	f	D	D	D	D	D	D	D	D
002004	Ũ					D	D	D				U	D
31-33	STOUGHTON	2	64	21	1 370	54 252	874	1 737	28 728	113 918	70 607	185 632	3 039
31-33	Manufacturing	2	04	21	1 370	54 252	0/4	1 737	20 720	113 910	70 007	105 032	3 039
	SUDBURY					_	_	_	_	_	_	_	_
31-33		-	10	1	g	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	-	3	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control					_		_	_	_		_	_
334511	instruments manufacturing Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	-	1	1	g	D	D	D	D	D	D	D	D
	manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
	TAUNTON												
31-33	Manufacturing	1	75	32	r4 219	181 886	2 120	4 060	60 176	'326 097	587 068	920 132	37 901
334	Computer and electronic product manufacturing	-	6	5	g	D	D	D	D	D	D	D	D
3342	Communications equipment manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
33422	Radio and television broadcasting and wireless communications equipment												
334220	manufacturing Radio and television broadcasting and wireless communications equipment	-	1	1	g	D	D	D	D	D	D	D	D
1	manufacturing	. –	1	1	l g	D	D	D	l D	D	D	D	D

See footnotes at end of table.

[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]

	and geographical deminions, see note at			JI		ployees		oduction worl					
NAICS code	Geographic area and industry			With 20 em- ploy-							Total cost of	Total value of	Total capital expendi-
		E1	Total	ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	materials (\$1,000)	shipments (\$1,000)	tures (\$1,000)
	TEWKSBURY												
31-33	Manufacturing	1	36	9	3 354	222 170	812	1 451	33 167	586 120	279 037	843 501	11 391
334	Computer and electronic product manufacturing	_	5	4	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
33451 334511	Navigational, measuring, electromedical, and control instruments manufacturing Search, detection,	_	1	1	g	D	D	D	D	D	D	D	D
	navigation, guidance, aeronautical, and nautical system and instrument manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
	WAKEFIELD												
31-33	Manufacturing	1	45	15	1 777	103 880	605	1 200	16 999	131 632	223 813	353 103	6 947
334	Computer and electronic product manufacturing	-	8	4	1 089	78 405	121	219	3 195	75 155	177 962	250 072	4 416
3342	Communications equipment manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
	WALPOLE												
31-33 325	Manufacturing	-	38	11	1 902 f	68 130 D	942 D	1 710 D	25 779 D	336 907 D	104 978 D	459 429 D	12 053 D
3254	Pharmaceutical and medicine manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
	WALTHAM												
31-33	Manufacturing	1	141	38	5 447	251 347	2 817	5 395	102 919	421 210	317 536	801 779	29 094
325 3259	Chemical manufacturing Other chemical product and preparation manufacturing	_	4	1	g	D	D	D	D	D	D	D	D
32599	All other chemical product and				g								
325992	preparation manufacturing Photographic film, paper, plate, and chemical manufacturing	-	2	1	g	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	1	27	11	2 451	114 257	1 000	2 006	34 226	231 239	175 205	441 673	13 917
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	15	6	1 751	84 762	600	1 198	22 575	187 469	133 759	352 697	10 780
33451	Navigational, measuring, electromedical, and control instruments manufacturing	_	15	6	1 751	84 762	600	1 198	22 575	187 469	133 759	352 697	10 780
334513	Instruments and related products manufacturing for measuring, displaying, and controlling industrial process					01.102		1 100	22 010		100 100	002 007	
334516	variables Analytical laboratory instrument manufacturing	-	2 4	2 2	f 805	D 45 297	D 307	D 633	D 14 096	D 113 867	D 63 674	D 177 022	D 2 359
31-33	WAREHAM Manufacturing	4	38	12	766	29 121	500	1 025	14 922	88 724	48 931	137 523	3 952
2.00	WATERTOWN					_0 .21		. 020		00 124			C COL
31-33	Manufacturing	7	57	22	2 494	107 376	1 511	3 075	43 863	388 110	118 574	521 529	13 946
334	Computer and electronic product manufacturing	1	6	5	527	23 603	208	404	6 005	42 490	26 258	75 366	1 996
339	Miscellaneous manufacturing	9	5	3	f	D	D	D	D	D	D	D	D
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
339112	Surgical and medical instrument manufacturing	9	1	1	f	D	D	D	D	D	D	D	D
	WEBSTER												
31-33	Manufacturing	1	29	5	677	25 961	495	1 074	14 774	66 076	81 288	141 040	1 462

[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]

	and geographical delinitions, see note at		establis	JI		ployees		oduction worl					
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WESTBOROUGH												
31-33	Manufacturing	-	48	24	3 006	162 208	1 464	3 043	67 897	719 800	502 363	1 226 726	26 206
325	Chemical manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing		1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	1	12	7	1 041	64 876	297	695	16 272	92 290	192 922	288 378	6 811
3344	Semiconductor and other electronic component manufacturing	_	5	3	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	-	5	3	f	D	D	D	D	D	D	D	D
	WESTFIELD												
31-33	Manufacturing	3	95	36	3 358	131 639	2 402	4 950	80 584	270 395	242 210	514 040	15 255
322	Paper manufacturing	-	7	5	678	21 962	535	1 097	16 631	46 846	80 294	129 431	1 501
3222	Converted paper product manufacturing	-	7	5	678	21 962	535	1 097	16 631	46 846	80 294	129 431	1 501
332	Fabricated metal product manufacturing	1	36	10	1 124	51 264	852	1 842	35 184	104 557	57 278	159 866	8 664
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	-	25	5	650	33 621	482	1 092	23 753	63 860	26 107	88 643	D
33271 332710	Machine shops Machine shops	-	22 22	5 5	635 635	33 221 33 221	473 473	1 075 1 075	23 477 23 477	63 059 63 059	25 638 25 638	87 373 87 373	6 776 6 776
333	Machinery manufacturing	7	15	9	768	32 550	408	860	12 753	68 166	46 145	114 750	1 544
	WESTFORD												
31-33	Manufacturing	-	31	12	1 221	52 552	916	1 895	36 051	550 258	237 926	832 141	2 795
	WEST SPRINGFIELD												
31-33	Manufacturing	4	77	20	2 028	73 037	1 297	2 530	40 078	199 288	268 951	470 451	12 767
	WESTWOOD												
31-33	Manufacturing	-	9	6	1 294	76 139	586	1 069	22 585	139 198	110 128	254 682	D
334	Computer and electronic product manufacturing	1	3	3	765	52 230	271	424	14 380	94 958	71 215	171 528	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	2	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control												
334515	instruments manufacturing Instrument manufacturing for measuring and testing	-	2	2	f	D	D	D	D	D	D	D	D
	electricity and electrical signals	-	2	2	f	D	D	D	D	D	D	D	D
	WEYMOUTH												
31-33	Manufacturing	1	49	10	934	34 020	659	1 190	19 879	84 460	44 144	126 832	3 186
	WILBRAHAM												
31-33	Manufacturing	-	10	3	f	D	D	D	D	D	D	D	D
311 3115	Food manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
3115	Dairy product manufacturing	_											U
311520	manufacturing Ice cream and frozen dessert manufacturing	_	1	1	f	D	D	D	D	D	D	D	D D

See footnotes at end of table.

[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]

	and geographical dominiono, eee note at		0. 100.0.	0	allon on goo	grapino aroao i	, ionou by	0007.000		and a characteria			
			A establisl	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WILMINGTON												
31-33	Manufacturing	2	100	52	8 216	420 758	4 587	9 516	183 416	1 091 335	637 884	1 765 737	83 323
323	Printing and related support activities	-	13	6	541	27 277	359	741	15 543	55 951	53 203	109 170	1 798
3231	Printing and related support activities	-	13	6	541	27 277	359	741	15 543	55 951	53 203	109 170	1 798
32311	Printing	-	13	6	541	27 277	359	741	15 543	55 951	53 203	109 170	1 798
332	Fabricated metal product manufacturing	2	18	5	1 621	95 236	668	1 447	26 984	209 039	101 157	312 744	8 346
3329	Other fabricated metal product manufacturing	-	3	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product manufacturing	_	2	1	f	D	D	D	D	D	D	D	D
332993	Ammunition (except small arms) manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery manufacturing	5	12	8	1 495	75 966	778	1 680	32 330	132 904	100 700	236 624	14 028
3332	Industrial machinery manufacturing	9	4	3	703	29 023	487	1 105	16 531	76 681	40 957	114 883	D
33329	Other industrial machinery manufacturing	9	3	3	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery manufacturing	9	1	1	f	D	D	D	D	D	D	D	D
3339	Other general purpose machinery manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	1	25	17	3 127	150 914	1 881	3 811	73 805	521 364	243 732	792 807	43 466
3344	Semiconductor and other electronic component manufacturing	1	10	6	1 516	74 805	879	1 772	31 450	345 863	149 103	523 505	38 728
33441	Semiconductor and other electronic component												
334413	manufacturing	1	10	6	1 516	74 805	879	1 772	31 450	345 863	149 103	523 505	38 728
334418	device manufacturing Printed circuit assembly (electronic assembly)	-	2	1	f	D	D	D	D	D	D	D	D
3345	manufacturing Navigational, measuring,	5	5	5	f	D	D	D	D	D	D	D	D
33451	electromedical, and control instruments manufacturing	-	8	7	975	52 435	585	1 198	28 557	128 477	64 321	191 684	3 482
33451	Navigational, measuring, electromedical, and control instruments manufacturing		8	7	975	52 435	585	1 198	28 557	128 477	64 321	191 684	3 482
334519	Other measuring and controlling device												
335	manufacturing	-	3	3	603	32 518	438	881	21 517	56 845	25 563	84 712	880
	component manufacturing	3	6	5	551	28 934	414	885	16 782	76 434	60 011	136 666	2 275
	WOBURN	_											
31-33 323	Manufacturing	2	155	57	5 356	245 144	3 315	6 321	104 925	751 597	380 740	1 115 492	39 470
0004	activities	5	26	10	527	18 054	392	677	10 987	34 504	18 101	52 424	1 395
3231	Printing and related support activities	5	26	10	527	18 054	392	677	10 987	34 504	18 101	52 424	1 395
332	Fabricated metal product manufacturing	1	25	8	637	28 724	387	821	14 845	66 737	28 145	93 125	1 627
334	Computer and electronic product manufacturing	2	26	15	1 900	96 276	1 105	1 857	27 033	373 764	170 572	530 206	25 020
3344	Semiconductor and other electronic component manufacturing	_	10	7	1 296	53 494	937	1 561	22 301	187 877	127 326	303 814	20 364
33441	Semiconductor and other electronic component												
334413	Semiconductor and related device manufacturing	-	10 2	7 2	1 296 f	53 494 D	937 D	1 561 D	22 301 D	187 877 D	127 326 D	303 814 D	20 364 D
339	Miscellaneous manufacturing	6	23	8	853	40 146	525	1 057	18 629	99 226	42 089	141 727	3 262
3399	Other miscellaneous manufacturing	8	9	3	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous manufacturing	9	6	2	f f	D	D	D	D	D	D	D	D

[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]

			A									, 300 millioddol	
			establis	nments <sup>2</sup>	All em	ployees	Pro	oduction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WORCESTER												
31-33	Manufacturing	2	239	84	9 977	442 697	6 343	12 685	216 311	948 335	644 749	1 616 639	54 500
312	Beverage and tobacco product manufacturing	9	2	1	f	D	D	D	D	D	D	D	D
3121	Beverage manufacturing	9	2	1	f	D	D	D	D	D	D	D	D
31211 312111	Soft drink and ice manufacturing Soft drink manufacturing	9 9	2 2	1 1	f	D D	D D	D D	D D	D D	D D	D D	D D
322	Paper manufacturing	1	7	7	565	19 676	413	762	14 504	45 505	48 586	95 736	1 130
3222	Converted paper product manufacturing	1	7	7	565	19 676	413	762	14 504	45 505	48 586	95 736	1 130
327	Nonmetallic mineral product manufacturing	-	10	7	1 798	95 614	997	2 140	36 524	199 439	100 193	299 308	D
3279	Other nonmetallic mineral product manufacturing	-	4	4	g	D	D	D	D	D	D	D	D
32791 327910	Abrasive product manufacturing Abrasive product	-	4	4	g	D	D	D	D	D	D	D	D
527910	manufacturing	-	4	4	g	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	2	69	23	1 608	59 803	1 228	2 408	38 185	114 999	78 491	196 585	6 666
3321	Forging and stamping	1	5	5	574	22 146	469	962	15 581	50 490	32 530	84 469	D
33211	Forging and stamping	1	5	5	574	22 146	469	962	15 581	50 490	32 530	84 469	D
333	Machinery manufacturing	-	24	6	893	47 807	515	1 094	20 955	73 472	63 366	141 649	4 134
3335	Metalworking machinery manufacturing	-	14	4	638	34 824	353	731	14 564	53 678	47 618	103 987	3 406
33351	Metalworking machinery manufacturing	-	14	4	638	34 824	353	731	14 564	53 678	47 618	103 987	3 406
334	Computer and electronic product manufacturing	-	6	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component												
334413	manufacturing Semiconductor and related	-	4	2	f	D	D	D	D	D	D	D	D
	device manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
337 3372	Furniture and related product manufacturing	-	12	6	947	45 151	460	970	15 550	83 239	39 101	122 602	1 126
3372	Office furniture (including fixtures) manufacturing	-	8	4	852	42 852	382	855	13 954	78 955	35 647	114 855	1 026
33721 337214	Office furniture (including fixtures) manufacturing Office furniture (except wood)	-	8	4	852	42 852	382	855	13 954	78 955	35 647	114 855	1 026
	manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
31-33	Manufacturing	1	118	31	3 702	148 787	2 528	5 146	85 268	402 040	349 159	744 431	25 905
322	Paper manufacturing	-	11	7	1 697	74 978	1 085	2 406	40 694	209 168	168 317	372 839	14 274
3221	Pulp, paper, and paperboard mills	_	5	5	g	D	D	D	D	D	D	D	13 519
32212 322121	Paper mills Paper (except newsprint)	-	5	5	g	D	D	D	D	D	D	D	13 519
522121	mills	-	5	5	g	D	D	D	D	D	D	D	13 519
326	Plastics and rubber products manufacturing	-	9	5	535	20 006	381	683	13 234	52 113	76 091	128 367	2 392
	BALANCE OF BRISTOL COUNTY												
31-33	Manufacturing	2	38	8	623	22 312	423	827	12 166	66 717	74 199	141 603	D
	BALANCE OF ESSEX COUNTY												
31-33	Manufacturing	1	152	33	2 775	109 780	1 855	3 584	63 525	275 713	178 705	460 108	14 934
332	Fabricated metal product manufacturing	2	46	12	740	32 251	553	1 155	21 390	66 748	28 708	94 727	2 542
	See footnotes at end of table.												

See footnotes at end of table.

[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]

						graphic areas	onowed by ,	oce rippene					
			establis	III hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BALANCE OF FRANKLIN COUNTY												
31-33	Manufacturing	2	92	36	4 345	150 901	3 119	6 197	92 491	568 278	375 455	926 313	82 043
326	Plastics and rubber products manufacturing	1	8	7	f	D	D	D	D	D	D	D	10 711
3261	Plastics product manufacturing	1	8	7	f	D	D	D	D	D	D	D	10 711
32619 326199	Other plastics product manufacturing All other plastics product manufacturing	4 4	2	2	f	D D	D D	D D	D	D	D D	D D	D
332	Fabricated metal product manufacturing	3	17	8	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	-	5	3	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing	-	5	3	g	D	D	D	D	D	D	D	D
33999 339999	All other miscellaneous manufacturing All other miscellaneous manufacturing	-	4	3	g	D	D	D	D	D	D	D	D
	BALANCE OF HAMPDEN COUNTY												
31-33	Manufacturing	-	41	10	766	39 200	426	837	17 582	84 603	112 677	196 772	4 980
	BALANCE OF HAMPSHIRE COUNTY												
31-33	Manufacturing	2	63	12	839	29 995	521	1 045	16 247	79 374	103 686	181 954	13 222
	BALANCE OF MIDDLESEX COUNTY												
31-33	Manufacturing	-	137	52	6 845	319 605	3 392	6 969	119 486	1 087 207	1 051 315	2 137 387	51 769
312	Beverage and tobacco product manufacturing	-	4	3	f	D	D	D	D	D	D	D	D
3121	Beverage manufacturing	-	4	3	f	D	D	D	D	D	D	D	D
31211 312111	Soft drink and ice manufacturing Soft drink manufacturing	-	3	3 3	f	D D	D D	D D	D	D D	D D	D D	D D
326	Plastics and rubber products manufacturing	-	7	4	636	20 272	487	1 009	13 474	42 716	33 101	75 808	D
3261	Plastics product manufacturing	-	7	4	636	20 272	487	1 009	13 474	42 716	33 101	75 808	D
32619	Other plastics product manufacturing	_	5	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product manufacturing	_	5	4	f	D	D	D	D	D	D	D	D
333	Machinery manufacturing	3	14	6	507	27 350	282	559	11 149	55 763	49 220	104 703	3 982
334	Computer and electronic product manufacturing	-	28	12	1 933	87 305	746	1 529	31 657	271 449	236 313	523 208	7 637
3342	Communications equipment manufacturing	-	5	4	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus manufacturing	_	3	3	757	44 381	287	531	11 300	199 536	155 265	361 408	3 842
334210	Telephone apparatus manufacturing	-	3	3	757	44 381	287	531	11 300	199 536	155 265	361 408	3 842
3344	Semiconductor and other electronic component manufacturing	-	12	6	985	32 921	390	859	17 723	59 892	62 499	127 835	3 332
33441	Semiconductor and other electronic component												
334412	manufacturing Bare printed circuit board manufacturing	-	12 3	6 3	985 f	32 921 D	390 D	859 D	17 723 D	59 892 D	62 499 D	127 835 D	3 332 D
339	Miscellaneous manufacturing	_	7	4	f	D	D	D	D	D	D	D	4 833
3391	Medical equipment and supplies manufacturing	_	2	2	f	D	D	D	D	D	D	D	D
33911 339112	Medical equipment and supplies manufacturing Surgical and medical	-	2	2	f	D	D	D	D	D	D	D	D
	instrument manufacturing	-	1	1	l f	D	D	D	D D	D	D D	D	D

[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]

		-					-			-			
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BALANCE OF NORFOLK COUNTY												
31-33	Manufacturing	2	79	39	2 784	115 910	1 865	3 659	61 272	309 462	219 959	523 263	12 046
332	Fabricated metal product manufacturing	-	20	10	766	34 193	488	952	18 318	120 188	44 558	160 220	2 971
339	Miscellaneous manufacturing	3	17	11	996	42 927	601	1 188	18 026	92 619	80 687	174 833	4 073
3391	Medical equipment and supplies manufacturing	5	5	5	520	23 098	324	592	9 988	46 821	41 219	88 843	2 775
33911	Medical equipment and supplies manufacturing	5	5	5	520	23 098	324	592	9 988	46 821	41 219	88 843	2 775
	BALANCE OF PLYMOUTH COUNTY												
31-33	Manufacturing	2	109	21	1 869	75 959	1 179	2 452	37 461	162 646	136 252	299 844	7 884
	BALANCE OF WORCESTER COUNTY												
31-33	Manufacturing	1	268	78	8 308	369 813	5 189	10 070	163 369	1 146 678	827 556	1 975 486	49 224
326	Plastics and rubber products manufacturing	-	12	8	856	32 772	669	1 189	21 127	84 722	69 034	154 306	4 176
3261	Plastics product manufacturing	-	11	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	7	13	5	813	39 188	505	1 156	14 742	71 080	38 540	109 650	4 360
3272	Glass and glass product manufacturing	9	4	2	f	D	D	D	D	D	D	D	D
32721	Glass and glass product manufacturing	9	4	2	f	D	D	D	D	D	D	D	D
327215	Glass product manufacturing made of purchased glass	9	3	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	1	60	17	1 095	42 330	780	1 501	23 829	95 496	63 412	162 619	3 648
333	Machinery manufacturing	-	28	8	566	29 073	312	648	13 497	58 261	33 188	92 211	5 482
334	Computer and electronic product manufacturing	-	21	7	2 069	127 109	853	1 745	32 958	544 777	258 841	805 395	22 036
3342	Communications equipment manufacturing	-	2	1	g	D	D	D	D	D	D	D	D
33429	Other communications equipment manufacturing	_	2	1	g	D	D	D	D	D	D	D	D
334290	Other communications equipment manufacturing	-	2	1	g	D	D	D	D	D	D	D	D
	· · · · · ·	I	I	I	Ű				1				

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more. <sup>2</sup>Includes establishments with payroll at any time during the year. <sup>3</sup>Industries 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: 1–500 to 9.999 employees; 1–50,000 to 9.999 employees; 1–50,000 to 9.999 employees; 1–50,000 to 9.999 employees; 1–50,000 employees or more. <sup>4</sup>Number 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.

#### Detailed Statistics for the State: 2002 Table 5.

[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
MASSACHUSETTS	
Companies <sup>1</sup> number	N
All establishments <sup>2</sup> number.         Establishments with 1 to 19 employees       number.         Establishments with 20 to 99 employees       number.         Establishments with 100 employees or more       number.	8 859 5 941 2 167 751
All employees <sup>3</sup> number.           Total compensation         \$1,000.           Annual payroll         \$1,000.           Total fringe benefits         \$1,000.	'349 184 '19 294 526 '15 573 734 '3 720 792
Production workers, average for year	'210 629 '211 039 '213 869 '210 465 206 521
Production worker hours         1,000.           Production worker wages         \$1,000.	417 159 '7 029 948
Total cost of materials         \$1,000.           Materials, parts, containers, packaging, etc., used         \$1,000.           Resales         \$1,000.           Purchased fuels         \$1,000.           Purchased electricity         \$1,000.           Contract work         \$1,000.	'32 904 181 '27 497 586 '3 161 100 '354 972 '691 704 '1 198 819
Quantity of electricity purchased for heat and power       1,000 kWh.         Quantity of electricity generated less sold for heat and power       1,000 kWh.	<sup>r</sup> 8 244 300 351 203
Total value of shipments	'77 996 586 '4 246 499
Value added \$1,000	'44 508 791
Total inventories, beginning of year         \$1,000.           Finished goods inventories         \$1,000.           Work-in-process inventories         \$1,000.           Waterials and supplies inventories         \$1,000.	'9 952 222 '3 301 417 '2 848 501 '3 802 304
Total inventories, end of year         \$1,000.           Finished goods inventories         \$1,000.           Work-in-process inventories         \$1,000.           Materials and supplies inventories         \$1,000.	8 913 163 2 915 976 2 631 260 3 365 927
Gross value of depreciable assets (acquisition costs) at beginning of year\$1,000.       \$1,000.         Total capital expenditures (new and used)       \$1,000.         Buildings and other structures (new and used)       \$1,000.         Machinery and equipment (new and used)       \$1,000.         Machinery and equipment (new and used)       \$1,000.         Automobiles, trucks, etc., for highway use.       \$1,000.         Computers and peripheral data processing equipment       \$1,000.         All other expenditures for machinery and equipment       \$1,000.         Total retirements       \$1,000.         Gross value of depreciable assets at end of year.       \$1,000.	$\begin{array}{cccccc} 28 & 614 & 903 \\ 2 & 349 & 095 \\ 387 & 718 \\ 1 & 961 & 377 \\ & 75 & 564 \\ 240 & 655 \\ 1 & 645 & 158 \\ 1 & 688 & 055 \\ 29 & 075 & 943 \end{array}$
Depreciation charges during year \$1,000	2 186 952
Total rental payments         \$1,000           Buildings and other structures         \$1,000           Machinery and equipment.         \$1,000	1 095 204 661 062 434 142

<sup>1</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control. <sup>2</sup>Includes establishments with payroll at any time during the year. <sup>3</sup>Number 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 twothirds 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.

#### Manufacturing

#### **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 leasepurchase 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 work-force.

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;

#### Manufacturing

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:

- 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).

#### Manufacturing

#### **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 non-chocolate 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, spa-ghetti, 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;
- B-8 Appendix B

- 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:

- 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;

- 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

B-14 Appendix B

- 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:

- 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:

- 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;

- 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 MANUFAC-TURING

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 MANUFACTUR-ING

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) MANUFACTUR-ING

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 MANUFACTUR-ING

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 shook, 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 shook, 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 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

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 petro-chemicals) 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:

- 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 MANUFACTUR-ING

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;

- 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 repellant coatings for concrete and masonry, and/or 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 repellant 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

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 unlaminated 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) MANUFAC-TURING

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 lathecutting 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. Readymix 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 MANUFAC-TURING

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;
- B-52 Appendix B

- 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:

- 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 made 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

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 MANUFAC-TURING

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;
- 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 MANUFACTUR-ING

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:

- 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 woodworking 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 drycleaning 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 REFRIGERA-TION 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 REFRIGERA-TION 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 air-craft).

## 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 MANUFACTUR-ING

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 MANUFAC-TURING

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 MANUFACTUR-ING

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:

- 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:

- 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.

# 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 opto-electronic 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 variators.

## 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 MANUFACTUR-ING

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 RESIDEN-TIAL, 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 nonelectric 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; switch-gear 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 consumertype 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 fiberoptic 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 noncurrentcarrying 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:

- 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

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 able 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 MANUFACTUR-ING

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and selfpropelled 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 fiber-glass. 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 officetype 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 officetype 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:

- 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, electromedical 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 administrativerecord 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 productionoriented 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 sub-sectors (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 twothirds 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

## MASSACHUSETTS

All **Balance of Metropolitan Areas (MAs)** shown in 1997 have been converted to Balance of County records.

**Acushnet** is now tabulated separately due to a population increase. It was included in a Balance of MA record in 1997.

**Barnstable Town** changed name from Barnstable before 1990, but this change was not submitted to the Census Bureau until January 1999.

**Brewster** is now tabulated separately due to a population increase. It was included in a Balance of MA record in 1997.

**Dudley** is now tabulated separately due to a population increase. It was included in a Balance of MA record in 1997.

**Harvard** is no longer tabulated separately due to a population decrease. This change adds territory to the Balance of Worcester County.

**Mashpee** is now tabulated separately due to a population increase. It was included in a Balance of MA record in 1997.

**Rehoboth** is now tabulated separately due to a population increase. It was included in a Balance of MA record in 1997.

**Tyngsborough** is now tabulated separately due to a population increase. It was included in a Balance of MA record in 1997.

**Balance of Worcester County** includes Harvard, which is no longer tabulated separately due to a population decrease.

## Appendix E. Metropolitan and Micropolitan Statistical Areas

## BOSTON-WORCESTER-MANCHESTER, MA-NH COMBINED STATISTICAL AREA

## Boston-Cambridge-Quincy, MA-NH Metropolitan Statistical Area

## **Boston-Quincy, MA Metropolitan Division**

Norfolk County, MA

Plymouth County, MA

Suffolk County, MA

## Cambridge-Newton-Framingham, MA Metropolitan Division

Middlesex County, MA

## Essex County, MA Metropolitan Division

Essex County, MA

## Rockingham County-Strafford County, NH Metropolitan Division

Rockingham County, NH Strafford County, NH

## Concord, NH Micropolitan Statistical Area

Merrimack County, NH

## Laconia, NH Micropolitan Statistical Area

Belknap County, NH

## Manchester-Nashua, NH Metropolitan Statistical Area

Hillsborough County, NH

## Worcester, MA Metropolitan Statistical Area

Worcester County, MA

## BARNSTABLE TOWN, MA METROPOLITAN STATISTICAL AREA

Barnstable County, MA

## PITTSFIELD, MA METROPOLITAN STATISTICAL AREA

Berkshire County, MA

## 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

## SPRINGFIELD, MA METROPOLITAN STATISTICAL AREA

Franklin County, MA

Hampden County, MA

Hampshire County, MA