

Oregon: 2002

Issued September 2005

EC02-31A-OR (RV)

2002 Economic Census

Manufacturing

Geographic Area Series



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CONTENTS

Introduction to the Economic Census	v
Manufacturing	ix
Tables	
1. Industry Statistics for the State: 2002	1
2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002	13
3. Industry Statistics for Counties: 2002	32
4. Industry Statistics for Places: 2002	42
5. Detailed Statistics for the State: 2002	54
Appendixes	
A. Explanation of Terms	A-1
B. NAICS Codes, Titles, and Descriptions	B-1
C. Methodology	C-1
D. Geographic Notes	D-1
E. Metropolitan Areas and Micropolitan Statistical Areas	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	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information
52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Food Services
81	Other Services (except Public Administration)

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

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

RELATIONSHIP TO HISTORICAL INDUSTRY CLASSIFICATIONS

Prior to the 1997 Economic Census, data were published according to the Standard Industrial Classification (SIC) system. While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The 1997 Economic Census *Bridge Between NAICS and SIC* demonstrates the relationships between NAICS and SIC industries. Where changes are significant, it may not be possible to construct time series that include data for points both before and after 1997.

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

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

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company. (For selected industries, only payroll, employment, and classification are collected for individual establishments, while other data are collected on a consolidated basis.)

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for states, metropolitan and micropolitan statistical areas, counties, and corporate municipalities (places) including cities, towns, townships, villages, and boroughs. Respondents were required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from administrative sources is used as a basis for coding.

AVAILABILITY OF ADDITIONAL DATA

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

HISTORICAL INFORMATION

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

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart

from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some service trades in 1933. Censuses of construction, manufacturing, and the other business censuses were suspended during World War II.

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

The range of industries covered in the economic census expanded between 1967 and 2002. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity. New for 2002 is coverage of four industries classified in the agriculture, forestry, and fishing sector under the SIC system: landscape architectural services, landscaping services, veterinary services, and pet care services.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. Reports for 1997 were published primarily on the Internet and copies of 1992 reports are also available there. CD-ROMs issued from the 1987, 1992, and 1997 Economic Censuses contain databases that include all or nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for the 2002 Economic Census and related surveys is published in the *Guide to the 2002 Economic Census* at www.census.gov/econ/census02/guide. More information on the methodology, procedures, and history of the census will be published in the *History of the 2002 Economic Census* at www.census.gov/econ/www/history.html.

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Manufacturing

SCOPE

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

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

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

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

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

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

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

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

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

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

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

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

REPORTS

The following reports provide statistics on this sector:

Industry Series. There are 473 reports, each covering a single NAICS industry (six-digit code). These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. The industry reports also include data for states with 100 employees or more in the industry. The data in industry reports are preliminary and subject to change in the following reports.

Geographic Area Series. There are 51 separate reports, one for each state and the District of Columbia. Each state report presents similar statistics at the “all manufacturing” level for each state and its metropolitan and micropolitan areas with 250 employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

Subject Series:

- **Industry-Product Analysis Summary.** This report presents value of shipments, value of product shipments, percentage of product shipments of the total value of shipments, and percentage of distribution of value of product shipments on the NAICS six-digit industry level and by the six- and seven-digit product code levels. It also includes miscellaneous receipts at the six- and seven-digit product code levels by NAICS six-digit industry levels.
- **General Summary.** This report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.
- **Product Summary.** This report summarizes the products data published in the industry reports. This report also includes a table with data for products that are primary to more than one industry, which are not in the industry reports.
- **Materials Summary.** This report summarizes the materials data published in the industry reports.
- **Concentration Ratio Summary.** This report publishes data on the percentage of value of shipments and value added accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Herfindahl-Herschmann indexes for each industry.
- **Location of Manufacturing Plants Summary.** This report contains statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

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

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

GEOGRAPHIC AREAS COVERED

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

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

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

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 2002 data are expressed in 2002 dollars, and 1997 data, in 1997 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

COMPARABILITY OF THE 1997 AND 2002 ECONOMIC CENSUSES

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

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

RELIABILITY OF DATA

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

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

DISCLOSURE

In accordance with federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments in a specific industry or geographic area is not considered a disclosure; therefore, this information may be released even though other information is withheld. Techniques employed to limit disclosure are discussed at www.census.gov/epcd/ec02/disclosure.htm.

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

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 55,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data. In addition to the ASM, the Census Bureau conducts the Current Industrial Reports (CIR) program. The CIR program publishes selected detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) Program, which publishes detailed statistics for manufacturing industries at the U.S. level.

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

CONTACTS FOR DATA USERS

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

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with these data:

A	Standard error of 100 percent or more
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue
N	Not available or not comparable
S	Withheld because estimates did not meet publication standards
X	Not applicable
Z	Less than half the unit shown
a	0 to 19 employees
b	20 to 99 employees
c	100 to 249 employees

e	250 to 499 employees
f	500 to 999 employees
g	1,000 to 2,499 employees
h	2,500 to 4,999 employees
i	5,000 to 9,999 employees
j	10,000 to 24,999 employees
k	25,000 to 49,999 employees
l	50,000 to 99,999 employees
m	100,000 employees or more
p	10 to 19 percent estimated
q	20 to 29 percent estimated
r	Revised
s	Sampling error exceeds 40 percent
nsk	Not specified by kind
-	Represents zero (page image/print only)
(CC)	Consolidated city
(IC)	Independent city

Table 1. Industry Statistics for the State: 2002

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
OREGON													
31-33	Manufacturing	1	'5 597	1 515	'184 151	'7 173 223	'130 491	'254 545	'4 275 579	'26 440 699	'19 556 927	'45 864 552	'1 265 365
311	Food manufacturing	2	461	150	20 661	602 609	15 384	30 090	392 883	3 207 245	2 582 454	5 744 076	147 336
3111	Animal food manufacturing	-	17	5	321	11 543	171	368	5 471	48 823	64 282	112 923	1 924
31111	Animal food manufacturing	-	17	5	321	11 543	171	368	5 471	48 823	64 282	112 923	1 924
311119	Other animal food manufacturing	-	15	5	e	D	D	D	D	D	D	D	D
3112	Grain and oilseed milling	3	13	6	367	15 330	304	666	11 675	138 100	132 564	268 648	4 942
31121	Flour milling and malt manufacturing	-	6	2	c	D	D	D	D	D	D	D	D
311211	Flour milling	-	5	2	107	4 937	78	186	3 305	10 204	44 366	53 871	D
31122	Starch and vegetable fats and oils manufacturing	-	4	2	c	D	D	D	D	D	D	D	683
31123	Breakfast cereal manufacturing	7	3	2	c	D	D	D	D	D	D	D	D
311230	Breakfast cereal manufacturing	7	3	2	c	D	D	D	D	D	D	D	D
3113	Sugar and confectionery product manufacturing	1	34	4	440	14 746	333	737	11 291	45 746	46 631	94 264	930
31131	Sugar manufacturing	-	1	1	c	D	D	D	D	D	D	D	D
311313	Beet sugar manufacturing ...	-	1	1	c	D	D	D	D	D	D	D	D
31133	Confectionery manufacturing from purchased chocolate ...	4	21	3	126	2 649	73	139	1 701	7 919	3 244	11 111	328
311330	Confectionery manufacturing from purchased chocolate ..	4	21	3	126	2 649	73	139	1 701	7 919	3 244	11 111	328
3114	Fruit and vegetable preserving and specialty food manufacturing	3	77	44	8 963	233 212	7 665	14 979	175 712	1 463 853	882 686	2 303 925	65 687
31141	Frozen food manufacturing	3	34	23	6 413	166 863	5 647	11 152	129 046	1 110 013	637 934	1 708 964	D
311411	Frozen fruit, juice, and vegetable manufacturing ...	3	24	20	6 101	157 613	5 414	10 640	122 972	1 062 966	608 259	1 632 275	36 017
311412	Frozen specialty food manufacturing	-	10	3	312	9 250	233	512	6 074	47 047	29 675	76 689	D
31142	Fruit and vegetable canning, pickling, and drying	3	43	21	2 550	66 349	2 018	3 827	46 666	353 840	244 752	594 961	D
311421	Fruit and vegetable canning .	3	30	14	1 748	42 852	1 404	2 513	30 305	258 671	177 696	431 921	11 398
311422	Specialty canning	2	3	2	251	8 116	195	398	4 593	40 386	3 843	44 228	D
311423	Dried and dehydrated food manufacturing	2	10	5	551	15 381	419	916	11 768	54 783	63 213	118 812	D
3115	Dairy product manufacturing	1	28	20	1 934	73 118	1 243	2 543	39 553	305 969	670 441	974 763	23 401
31151	Dairy product (except frozen) manufacturing	1	25	17	1 729	64 410	1 112	2 287	35 117	280 174	641 751	920 523	20 721
311511	Fluid milk manufacturing	2	13	12	1 010	38 852	579	1 175	20 370	168 742	324 775	494 079	10 035
311513	Cheese manufacturing	-	8	3	f	D	D	D	D	D	D	D	D
311514	Dry, condensed, and evaporated dairy product manufacturing	-	3	1	c	D	D	D	D	D	D	D	D
31152	Ice cream and frozen dessert manufacturing	-	3	3	205	8 708	131	256	4 436	25 795	28 690	54 240	2 680
311520	Ice cream and frozen dessert manufacturing	-	3	3	205	8 708	131	256	4 436	25 795	28 690	54 240	2 680
3116	Animal slaughtering and processing	1	62	14	1 547	42 275	1 355	2 709	32 244	127 417	160 064	287 568	5 041
31161	Animal slaughtering and processing	1	62	14	1 547	42 275	1 355	2 709	32 244	127 417	160 064	287 568	5 041
311611	Animal (except poultry) slaughtering	3	30	3	374	9 763	337	713	7 976	11 253	56 689	67 811	1 174
311612	Meat processed from carcasses	1	25	9	1 056	29 298	938	1 842	22 263	106 683	92 239	199 177	3 661
3117	Seafood product preparation and packaging	3	18	9	860	20 804	775	1 451	17 061	54 236	105 779	159 931	3 992
31171	Seafood product preparation and packaging	3	18	9	860	20 804	775	1 451	17 061	54 236	105 779	159 931	3 992
311712	Fresh and frozen seafood processing	3	16	8	f	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing	4	142	31	4 361	126 484	2 376	4 292	69 717	683 744	289 627	972 715	22 057
31181	Bread and bakery product manufacturing	6	125	23	3 378	88 579	1 638	2 867	40 549	443 225	124 907	568 886	17 041
311811	Retail bakeries	3	77	6	550	8 545	299	395	4 393	14 753	7 286	22 043	461
311812	Commercial bakeries	7	43	15	2 571	73 387	1 124	2 048	31 688	413 162	97 220	511 006	13 058
311813	Frozen cakes, pies, and other pastries manufacturing	-	5	2	257	6 647	215	424	4 468	15 310	20 401	35 837	3 522
31182	Cookie, cracker, and pasta manufacturing	-	13	6	828	34 526	621	1 215	27 107	234 308	151 290	384 078	D
311821	Cookie and cracker manufacturing	-	7	3	643	29 583	484	1 000	23 685	200 606	94 388	293 738	D
311822	Flour mixes and dough manufacturing from purchased flour	-	5	3	c	D	D	D	D	D	D	D	1 087
31183	Tortilla manufacturing	-	4	2	155	3 379	117	210	2 061	6 211	13 430	19 751	D
311830	Tortilla manufacturing	-	4	2	155	3 379	117	210	2 061	6 211	13 430	19 751	D

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			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
OREGON—Con.													
311	Food manufacturing—Con.												
3119	Other food manufacturing	1	70	17	1 868	65 097	1 162	2 345	30 159	339 357	230 380	569 339	19 362
31191	Snack food manufacturing	—	12	6	e	D	D	D	D	D	D	D	4 502
311919	Other snack food manufacturing	—	7	3	310	10 377	240	472	5 623	30 730	23 728	54 315	D
31192	Coffee and tea manufacturing	—	7	2	553	23 188	134	263	4 196	74 447	48 339	122 338	D
311920	Coffee and tea manufacturing	—	7	2	553	23 188	134	263	4 196	74 447	48 339	122 338	D
31194	Seasoning and dressing manufacturing	1	11	3	e	D	D	D	D	D	D	D	D
311941	Mayonnaise, dressing, and other prepared sauce manufacturing	—	8	3	242	8 340	193	396	5 842	56 393	39 601	95 564	996
31199	All other food manufacturing	2	38	5	611	17 503	481	1 012	11 061	74 338	78 463	152 763	6 671
311991	Perishable prepared food manufacturing	—	14	3	469	12 923	371	794	7 595	56 967	61 139	118 094	D
311999	All other miscellaneous food manufacturing	9	24	2	142	4 580	110	218	3 466	17 371	17 324	34 669	D
312	Beverage and tobacco product manufacturing	3	114	19	1 900	69 925	759	1 417	23 376	248 270	309 843	552 675	32 925
3121	Beverage manufacturing	3	114	19	1 900	69 925	759	1 417	23 376	248 270	309 843	552 675	32 925
31211	Soft drink and ice manufacturing	3	25	7	765	30 095	220	430	6 861	102 350	217 158	318 229	11 513
312111	Soft drink manufacturing	2	9	6	662	26 914	170	342	5 630	92 419	210 172	301 313	10 768
31212	Breweries	4	16	5	380	16 220	215	421	7 824	75 790	43 133	118 806	D
312120	Breweries	4	16	5	380	16 220	215	421	7 824	75 790	43 133	118 806	D
31213	Wineries	3	71	6	f	D	D	D	D	D	D	D	15 785
312130	Wineries	3	71	6	f	D	D	D	D	D	D	D	15 785
313	Textile mills	4	20	2	184	5 107	149	293	3 708	13 453	17 601	30 751	306
3133	Textile and fabric finishing and fabric coating mills	8	10	1	104	2 856	84	174	2 108	6 707	7 535	13 975	167
31331	Textile and fabric finishing mills	8	10	1	104	2 856	84	174	2 108	6 707	7 535	13 975	167
313311	Broadwoven fabric finishing mills	8	9	1	c	D	D	D	D	D	D	D	D
314	Textile product mills	2	96	10	988	25 652	707	1 360	14 691	69 125	47 668	115 690	2 219
3141	Textile furnishings mills	1	29	3	399	10 204	294	605	5 855	31 504	27 083	58 148	637
31412	Curtain and linen mills	1	26	3	e	D	D	D	D	D	D	D	D
314121	Curtain and drapery mills	3	23	2	c	D	D	D	D	D	D	D	194
314129	Other household textile product mills	—	3	1	c	D	D	D	D	D	D	D	D
3149	Other textile product mills	3	67	7	589	15 448	413	755	8 836	37 621	20 585	57 542	1 582
31491	Textile bag and canvas mills	5	32	3	e	D	D	D	D	D	D	D	734
314912	Canvas and related product mills	4	29	2	214	6 513	129	229	3 121	13 508	7 083	20 554	702
31499	All other textile product mills	2	35	4	e	D	D	D	D	D	D	D	848
314999	All other miscellaneous textile product mills	2	34	4	319	7 886	232	422	5 018	23 171	11 554	33 953	D
315	Apparel manufacturing	2	77	15	1 283	22 775	1 000	1 556	15 723	35 872	22 492	60 754	D
3152	Cut and sew apparel manufacturing	1	63	14	1 137	19 458	879	1 333	13 458	31 154	17 741	51 252	D
31521	Cut and sew apparel contractors	3	42	5	445	7 791	403	640	6 644	10 921	1 197	12 935	D
315212	Women's, girls', and infants' cut and sew apparel contractors	3	35	4	358	6 370	325	499	5 461	8 792	1 063	10 672	42
31522	Men's and boys' cut and sew apparel manufacturing	—	8	4	201	5 416	141	275	2 860	10 324	9 938	20 970	D
315228	Men's and boys' cut and sew other outerwear manufacturing	—	4	2	109	2 918	62	123	1 082	7 551	7 357	15 463	D
31523	Women's and girls' cut and sew apparel manufacturing	3	10	2	321	3 551	204	244	2 703	5 417	4 283	10 581	D
315239	Women's and girls' cut and sew other outerwear manufacturing	2	5	2	314	3 376	199	238	2 624	5 115	4 029	10 025	D
31529	Other cut and sew apparel manufacturing	1	3	3	170	2 700	131	174	1 251	4 492	2 323	6 766	D
315299	All other cut and sew apparel manufacturing	1	3	3	170	2 700	131	174	1 251	4 492	2 323	6 766	D
3159	Apparel accessories and other apparel manufacturing	3	11	1	112	2 447	92	167	1 640	3 861	3 042	6 936	36
31599	Apparel accessories and other apparel manufacturing	3	11	1	112	2 447	92	167	1 640	3 861	3 042	6 936	36
316	Leather and allied product manufacturing	6	24	5	408	11 551	285	507	5 588	20 915	19 815	43 311	D
3162	Footwear manufacturing	8	5	2	c	D	D	D	D	D	D	D	D
31621	Footwear manufacturing	8	5	2	c	D	D	D	D	D	D	D	D
316214	Women's footwear (except athletic) manufacturing	9	1	1	c	D	D	D	D	D	D	D	D

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NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
OREGON—Con.													
316	Leather and allied product manufacturing—Con.												
3169	Other leather and allied product manufacturing	1	15	3	154	3 528	103	185	1 939	8 689	5 435	14 293	D
31699	Other leather and allied product manufacturing	1	15	3	154	3 528	103	185	1 939	8 689	5 435	14 293	D
316999	All other leather goods manufacturing	—	6	3	130	2 906	85	155	1 636	6 864	4 769	11 802	93
321	Wood product manufacturing	—	'530	'271	'32 915	'1 093 553	'28 352	'57 516	'873 187	'2 362 569	'5 050 236	'7 397 741	'131 396
3211	Sawmills and wood preservation	—	134	82	8 753	344 370	7 618	16 405	277 028	805 068	1 982 670	2 796 693	58 478
32111	Sawmills and wood preservation	—	134	82	8 753	344 370	7 618	16 405	277 028	805 068	1 982 670	2 796 693	58 478
321113	Sawmills	—	116	71	8 201	325 833	7 191	15 540	264 365	741 271	1 826 243	2 583 479	54 009
321114	Wood preservation	—	18	11	552	18 537	427	865	12 663	63 797	156 427	213 214	4 469
3212	Veneer, plywood, and engineered wood product manufacturing	—	'111	'86	'12 144	'425 650	'10 668	'22 040	'351 136	'872 798	'1 990 481	'2 859 102	'45 445
32121	Veneer, plywood, and engineered wood product manufacturing	—	'111	'86	'12 144	'425 650	'10 668	'22 040	'351 136	'872 798	'1 990 481	'2 859 102	'45 445
321211	Hardwood veneer and plywood manufacturing	—	14	10	2 670	92 454	2 380	4 914	76 951	161 198	451 527	606 008	6 758
321212	Softwood veneer and plywood manufacturing	—	37	31	5 438	186 067	4 898	10 302	159 491	256 902	903 540	1 159 646	12 801
321213	Engineered wood member (except truss) manufacturing	—	'19	'15	'1 507	'50 318	'1 302	'2 743	'41 210	'149 976	'316 645	'470 630	'11 408
321214	Truss manufacturing	—	20	12	487	14 496	338	605	8 165	31 932	26 953	58 638	1 003
321219	Reconstituted wood product manufacturing	—	21	18	2 042	82 315	1 750	3 476	65 319	272 790	291 816	564 180	13 475
3219	Other wood product manufacturing	1	285	103	12 018	323 533	10 066	19 071	245 023	684 703	1 077 085	1 741 946	27 473
32191	Millwork	1	145	66	8 366	218 458	7 194	13 671	173 128	464 122	846 147	1 293 544	19 595
321911	Wood window and door manufacturing	1	37	25	3 522	96 936	3 011	5 706	74 273	218 108	280 530	491 788	7 960
321912	Cut stock, resawing lumber, and planing	1	68	30	3 692	93 352	3 188	6 053	76 312	175 932	466 513	634 163	8 715
321918	Other millwork (including flooring)	—	40	11	1 152	28 170	995	1 912	22 543	70 082	99 104	167 593	2 920
32192	Wood container and pallet manufacturing	—	35	6	427	10 029	347	661	6 946	19 121	22 710	41 490	2 890
321920	Wood container and pallet manufacturing	—	35	6	427	10 029	347	661	6 946	19 121	22 710	41 490	2 890
32199	All other wood product manufacturing	2	105	31	3 225	95 046	2 525	4 739	64 949	201 460	208 228	406 912	4 988
321991	Manufactured home (mobile home) manufacturing	2	14	12	2 117	62 905	1 686	3 120	43 137	126 907	145 046	271 389	1 893
321992	Prefabricated wood building manufacturing	1	21	4	237	7 894	167	336	4 930	12 451	13 577	25 991	398
321999	All other miscellaneous wood product manufacturing	2	70	15	871	24 247	672	1 283	16 882	62 102	49 605	109 532	2 697
322	Paper manufacturing	—	54	34	6 614	346 546	4 993	10 427	238 283	1 379 361	1 347 618	2 718 490	157 788
3221	Pulp, paper, and paperboard mills	—	12	11	4 517	265 193	3 449	7 354	187 564	1 170 865	1 051 325	2 217 090	119 725
32211	Pulp mills	—	1	1	c	D	D	D	D	D	D	D	D
322110	Pulp mills	—	1	1	c	D	D	D	D	D	D	D	D
32212	Paper mills	—	7	6	3 041	172 322	2 433	5 167	128 027	747 139	573 162	1 319 455	D
322121	Paper (except newsprint) mills	—	5	4	g	D	D	D	D	D	D	D	53 610
322122	Newsprint mills	—	2	2	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	—	4	4	g	D	D	D	D	D	D	D	D
322130	Paperboard mills	—	4	4	g	D	D	D	D	D	D	D	D
3222	Converted paper product manufacturing	—	42	23	2 097	81 353	1 544	3 073	50 719	208 496	296 293	501 400	38 063
32221	Paperboard container manufacturing	—	17	12	1 137	47 353	822	1 658	28 530	124 246	178 799	299 957	35 380
322211	Corrugated and solid fiber box manufacturing	1	13	10	998	41 523	748	1 513	25 747	92 386	163 197	252 758	D
322212	Folding paperboard box manufacturing	—	3	2	c	D	D	D	D	D	D	D	D
32222	Paper bag and coated and treated paper manufacturing	—	13	6	646	23 257	523	1 012	16 256	61 059	96 333	154 264	1 430
322221	Coated and laminated packaging paper and plastics film manufacturing	—	1	1	c	D	D	D	D	D	D	D	D
322222	Coated and laminated paper manufacturing	2	6	1	c	D	D	D	D	D	D	D	83
322224	Uncoated paper and multiwall bag manufacturing	—	4	3	223	6 875	190	370	5 227	14 496	29 339	44 040	D
32223	Stationery product manufacturing	—	4	3	204	6 450	121	260	3 767	13 897	15 325	32 014	D
322233	Stationery, tablet, and related product manufacturing	—	2	2	c	D	D	D	D	D	D	D	D
32229	Other converted paper product manufacturing	—	8	2	110	4 293	78	143	2 166	9 294	5 836	15 165	D
322299	All other converted paper product manufacturing	—	8	2	110	4 293	78	143	2 166	9 294	5 836	15 165	D

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			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
OREGON—Con.													
323	Printing and related support activities	1	'550	'97	'7 660	'269 229	'5 543	'10 255	'169 016	'584 871	'380 288	'963 609	'47 378
3231	Printing and related support activities	1	'550	'97	'7 660	'269 229	'5 543	'10 255	'169 016	'584 871	'380 288	'963 609	'47 378
32311	Printing	1	'496	'85	'7 008	'244 624	'5 055	'9 350	'153 503	'543 699	'366 515	'908 296	'43 854
323110	Commercial lithographic printing	1	'239	45	'3 881	'140 611	'2 762	'5 115	'86 939	'305 085	'213 313	'517 592	'20 641
323112	Commercial flexographic printing	1	14	9	443	18 297	284	565	8 850	51 657	30 114	80 786	3 006
323113	Commercial screen printing ..	'4	64	'5	'477	'12 850	'338	'587	'7 289	'23 478	'17 333	'40 749	'1 161
323114	Quick printing	3	114	7	720	19 891	543	884	13 363	44 644	15 454	59 942	1 802
323115	Digital printing	-	15	2	209	7 952	140	246	4 360	17 987	9 916	27 924	1 034
323116	Manifold business forms printing	-	14	10	582	20 260	469	942	15 847	48 197	41 916	90 358	3 977
323117	Books printing	4	5	3	433	16 844	325	619	12 002	36 096	29 272	65 078	D
323118	Blankbook, looseleaf binders, and devices manufacturing ..	2	5	3	133	3 565	106	243	2 310	7 429	5 777	13 397	D
323119	Other commercial printing ..	3	25	1	c	D	D	D	D	D	D	D	1 359
32312	Support activities for printing...	1	54	12	652	24 605	488	905	15 513	41 172	13 773	55 313	3 524
323121	Tradebinding and related work	2	31	6	369	12 376	299	591	9 082	20 780	5 300	26 217	2 122
323122	Prepress services	-	23	6	283	12 229	189	314	6 431	20 392	8 473	29 096	1 402
324	Petroleum and coal products manufacturing	1	'19	9	'612	'27 432	'469	'967	'18 654	'108 047	'182 714	'295 488	'6 936
3241	Petroleum and coal products manufacturing	1	'19	9	'612	'27 432	'469	'967	'18 654	'108 047	'182 714	'295 488	'6 936
32412	Asphalt paving, roofing, and saturated materials manufacturing	-	12	7	501	21 963	390	810	15 378	76 870	106 557	182 335	D
324121	Asphalt paving mixture and block manufacturing	-	8	4	199	7 431	153	266	5 133	17 140	18 056	35 486	2 558
324122	Asphalt shingle and coating materials manufacturing ..	-	4	3	302	14 532	237	544	10 245	59 730	88 501	146 849	D
325	Chemical manufacturing	1	176	53	3 711	170 635	2 325	4 418	85 054	892 542	642 723	1 533 009	38 062
3251	Basic chemical manufacturing ...	1	22	8	632	31 526	420	760	14 506	146 339	73 243	220 302	9 220
32513	Synthetic dye and pigment manufacturing	-	2	1	c	D	D	D	D	D	D	D	D
325132	Synthetic organic dye and pigment manufacturing ...	-	1	1	c	D	D	D	D	D	D	D	D
32519	Other basic organic chemical manufacturing	2	10	7	358	16 355	272	603	11 161	93 271	58 007	153 169	D
325191	Gum and wood chemical manufacturing	-	2	2	c	D	D	D	D	D	D	D	D
325199	All other basic organic chemical manufacturing....	5	7	5	c	D	D	D	D	D	D	D	D
3252	Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	-	13	6	350	19 217	255	524	13 540	85 622	138 100	222 332	3 548
32521	Resin and synthetic rubber manufacturing	-	13	6	350	19 217	255	524	13 540	85 622	138 100	222 332	3 548
325211	Plastics material and resin manufacturing	-	11	6	e	D	D	D	D	D	D	D	D
3253	Pesticide, fertilizer, and other agricultural chemical manufacturing	2	15	5	e	D	D	D	D	D	D	D	1 003
32531	Fertilizer manufacturing	2	9	4	196	7 900	124	267	4 217	29 054	30 593	59 364	726
325314	Fertilizer (mixing only) manufacturing	4	7	3	c	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing	2	33	12	652	25 391	434	703	10 722	77 707	33 128	111 051	D
32541	Pharmaceutical and medicine manufacturing	2	33	12	652	25 391	434	703	10 722	77 707	33 128	111 051	D
325411	Medicinal and botanical manufacturing	5	10	2	149	4 893	104	225	2 730	15 414	9 480	23 881	D
325412	Pharmaceutical preparation manufacturing	1	13	6	c	D	D	D	D	D	D	D	1 046
325413	In-vitro diagnostic substance manufacturing	-	3	1	c	D	D	D	D	D	D	D	42
325414	Biological product (except diagnostic) manufacturing ..	3	7	3	160	5 763	115	115	2 699	17 884	10 389	29 605	1 263
3255	Paint, coating, and adhesive manufacturing	3	25	7	501	20 580	275	542	8 161	76 904	82 470	157 372	1 067
32551	Paint and coating manufacturing	3	19	5	406	17 668	213	419	6 562	67 536	72 058	138 769	912
325510	Paint and coating manufacturing	3	19	5	406	17 668	213	419	6 562	67 536	72 058	138 769	912
3256	Soap, cleaning compound, and toilet preparation manufacturing ..	4	29	6	e	D	D	D	D	D	D	D	D
32561	Soap and cleaning compound manufacturing	3	19	5	e	D	D	D	D	D	D	D	D
325611	Soap and other detergent manufacturing	4	9	2	146	7 497	42	84	1 761	26 229	13 550	39 515	882
325612	Polish and other sanitation good manufacturing	1	8	3	c	D	D	D	D	D	D	D	D

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		E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)					Wages (\$1,000)
OREGON—Con.													
325 3259	Chemical manufacturing—Con. Other chemical product and preparation manufacturing	—	39	9	934	47 744	581	1 224	27 005	407 019	247 346	655 109	16 291
32591 325910 32599	Printing ink manufacturing Printing ink manufacturing All other chemical product and preparation manufacturing	5 5 —	12 12 27	5 5 4	275 275 659	12 172 12 172 35 572	167 167 414	334 334 890	6 796 6 796 20 209	30 569 30 569 376 450	34 818 34 818 212 528	65 570 65 570 589 539	687 687 15 604
325992	Photographic film, paper, plate, and chemical manufacturing	—	6	1	e	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product and preparation manufacturing	—	13	3	c	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	1	195	68	6 579	206 908	5 067	10 035	130 753	573 139	468 114	1 039 666	26 136
3261	Plastics product manufacturing	1	155	55	5 703	179 039	4 392	8 752	112 457	495 269	402 168	895 813	23 963
32611	Plastics packaging materials and unlaminated film and sheet manufacturing	—	10	6	f	D	D	D	D	D	D	D	4 668
326113	Unlaminated plastics film and sheet (except packaging) manufacturing	—	8	5	490	23 102	352	713	13 461	60 391	51 565	113 940	D
32612	Plastics pipe, pipe fitting, and unlaminated profile shape manufacturing	3	12	5	367	10 896	295	624	8 442	29 004	53 441	82 615	3 061
326121	Unlaminated plastics profile shape manufacturing	9	5	1	116	4 371	91	193	3 050	9 672	6 522	16 235	533
326122	Plastics pipe and pipe fitting manufacturing	2	7	4	251	6 525	204	431	5 392	19 332	46 919	66 380	2 528
32614	Polystyrene foam product manufacturing	—	6	3	198	5 812	134	304	3 259	20 440	15 058	35 352	915
326140	Polystyrene foam product manufacturing	—	6	3	198	5 812	134	304	3 259	20 440	15 058	35 352	915
32615	Urethane and other foam product (except polystyrene) manufacturing	—	8	3	274	6 426	221	314	3 530	20 006	22 440	42 324	595
326150	Urethane and other foam product (except polystyrene) manufacturing	—	8	3	274	6 426	221	314	3 530	20 006	22 440	42 324	595
32619	Other plastics product manufacturing	1	113	37	4 285	129 446	3 321	6 643	81 422	353 749	240 582	590 879	14 583
326191	Plastics plumbing fixture manufacturing	2	9	4	e	D	D	D	D	D	D	D	D
326199	All other plastics product manufacturing	1	101	33	3 955	120 530	3 034	6 055	74 328	326 879	223 562	546 965	13 977
3262	Rubber product manufacturing	1	40	13	876	27 869	675	1 283	18 296	77 870	65 946	143 853	2 173
32621	Tire manufacturing	—	15	5	e	D	D	D	D	D	D	D	D
326212	Tire retreading	—	12	4	343	10 171	248	509	6 263	25 565	32 090	57 444	D
32629	Other rubber product manufacturing	2	24	8	486	15 285	390	695	10 386	44 120	28 276	72 484	1 554
326291	Rubber product manufacturing for mechanical use	4	11	4	233	7 007	193	321	5 083	15 878	13 433	29 276	428
326299	All other rubber product manufacturing	1	13	4	253	8 278	197	374	5 303	28 242	14 843	43 208	1 126
327	Nonmetallic mineral product manufacturing	1	255	59	4 254	157 785	3 177	6 272	111 323	434 552	349 962	793 057	39 142
3271	Clay product and refractory manufacturing	2	31	3	204	6 372	160	290	4 462	15 988	4 182	18 247	258
32712	Clay building material and refractories manufacturing	2	11	2	c	D	D	D	D	D	D	D	215
3272	Glass and glass product manufacturing	1	57	14	1 252	44 304	955	1 848	32 650	105 445	75 292	189 086	18 812
32721	Glass and glass product manufacturing	1	57	14	1 252	44 304	955	1 848	32 650	105 445	75 292	189 086	18 812
327211	Flat glass manufacturing	4	2	2	c	D	D	D	D	D	D	D	D
327212	Other pressed and blown glass and glassware manufacturing	2	16	4	212	7 164	175	352	5 761	12 307	14 536	33 013	D
327213	Glass container manufacturing	—	1	1	c	D	D	D	D	D	D	D	D
327215	Glass product manufacturing made of purchased glass	2	38	7	673	23 084	488	946	16 067	44 548	40 615	83 724	4 841
3273	Cement and concrete product manufacturing	1	132	37	2 327	87 849	1 686	3 420	60 045	255 866	223 418	481 442	17 691
32731	Cement manufacturing	1	5	2	149	7 679	106	193	5 098	23 938	34 778	60 558	D
327310	Cement manufacturing	1	5	2	149	7 679	106	193	5 098	23 938	34 778	60 558	D
32732	Ready-mix concrete manufacturing	1	78	24	1 351	50 993	978	2 037	35 647	151 123	128 120	279 057	11 760
327320	Ready-mix concrete manufacturing	1	78	24	1 351	50 993	978	2 037	35 647	151 123	128 120	279 057	11 760
32733	Concrete pipe, brick, and block manufacturing	2	24	7	374	14 173	233	496	8 012	29 607	33 428	64 499	D
327331	Concrete block and brick manufacturing	3	19	3	225	8 519	116	229	4 296	18 733	26 344	44 160	1 381
327332	Concrete pipe manufacturing	—	5	4	149	5 654	117	267	3 716	10 874	7 084	20 339	D

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		E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)					Wages (\$1,000)
OREGON—Con.													
327	Nonmetallic mineral product manufacturing—Con.												
3273	Cement and concrete product manufacturing—Con.												
32739	Other concrete product manufacturing	—	25	4	453	15 004	369	694	11 288	51 198	27 092	77 328	2 407
327390	Other concrete product manufacturing	—	25	4	453	15 004	369	694	11 288	51 198	27 092	77 328	2 407
3279	Other nonmetallic mineral product manufacturing	2	30	5	436	17 790	348	653	12 991	51 657	41 776	93 211	2 300
32799	All other nonmetallic mineral product manufacturing	3	26	3	e	D	D	D	D	D	D	D	D
327991	Cut stone and stone product manufacturing	3	15	1	106	3 617	76	145	2 532	7 326	3 159	10 469	125
327993	Mineral wool manufacturing .	2	3	2	c	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	—	72	32	7 829	340 014	5 723	11 600	214 532	774 234	853 912	1 667 434	37 194
3311	Iron and steel mills and ferroalloy manufacturing	—	4	4	1 227	57 544	899	1 828	37 602	173 369	334 196	523 513	8 591
33111	Iron and steel mills and ferroalloy manufacturing	—	4	4	1 227	57 544	899	1 828	37 602	173 369	334 196	523 513	8 591
331111	Iron and steel mills	—	4	4	1 227	57 544	899	1 828	37 602	173 369	334 196	523 513	8 591
3312	Steel product manufacturing from purchased steel	—	5	1	c	D	D	D	D	D	D	D	D
33121	Iron and steel pipe and tube manufacturing from purchased steel	—	3	1	c	D	D	D	D	D	D	D	D
331210	Iron and steel pipe and tube manufacturing from purchased steel	—	3	1	c	D	D	D	D	D	D	D	D
3313	Alumina and aluminum production and processing	—	7	5	740	29 735	565	1 173	20 495	9 419	149 914	179 166	D
33131	Alumina and aluminum production and processing ...	—	7	5	740	29 735	565	1 173	20 495	9 419	149 914	179 166	D
331314	Secondary smelting and alloying of aluminum	—	1	1	c	D	D	D	D	D	D	D	D
331316	Aluminum extruded product manufacturing	—	4	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production and processing	—	6	4	g	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, and alloying	9	1	1	c	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing	9	1	1	c	D	D	D	D	D	D	D	D
33149	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and alloying	—	5	3	g	D	D	D	D	D	D	D	D
331491	Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding	—	3	2	g	D	D	D	D	D	D	D	D
3315	Foundries	—	50	18	4 176	162 787	3 098	6 008	98 824	454 003	202 427	660 364	14 962
33151	Ferrous metal foundries	—	16	7	1 951	82 929	1 333	2 759	45 698	225 193	116 163	343 619	6 701
331512	Steel investment foundries ..	—	2	2	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	7	4	1 098	50 845	653	1 417	23 228	130 751	85 738	216 543	5 009
33152	Nonferrous metal foundries	—	34	11	2 225	79 858	1 765	3 249	53 126	228 810	86 264	316 745	8 261
331521	Aluminum die-casting foundries	—	4	3	226	8 472	191	407	6 752	19 852	12 669	32 454	338
331522	Nonferrous (except aluminum) die-casting foundries	—	7	4	1 554	56 662	1 214	2 156	36 775	163 740	58 881	224 295	6 912
331524	Aluminum foundries (except die-casting)	2	6	1	c	D	D	D	D	D	D	D	274
331525	Copper foundries (except die-casting)	7	14	2	146	4 191	127	221	3 188	12 918	4 481	17 399	436
331528	Other nonferrous foundries (except die-casting)	—	3	1	c	D	D	D	D	D	D	D	301
332	Fabricated metal product manufacturing	1	958	198	15 366	569 592	11 179	22 256	351 792	*1 449 932	892 397	*2 352 304	82 450
3321	Forging and stamping	3	31	11	823	30 859	617	1 316	19 862	64 007	40 893	104 536	2 217
33211	Forging and stamping	3	31	11	823	30 859	617	1 316	19 862	64 007	40 893	104 536	2 217
332114	Custom roll forming	—	6	4	239	9 941	183	407	6 336	18 298	9 763	27 999	360
332116	Metal stamping	5	16	6	489	17 306	367	775	10 904	38 123	25 780	63 758	1 273
3322	Cutlery and handtool manufacturing	—	31	10	2 062	89 937	1 297	2 830	41 921	431 153	132 995	564 431	11 238
33221	Cutlery and handtool manufacturing	—	31	10	2 062	89 937	1 297	2 830	41 921	431 153	132 995	564 431	11 238
332212	Hand and edge tool manufacturing	—	21	6	f	D	D	D	D	D	D	D	D
332213	Saw blade and handsaw manufacturing	—	7	3	g	D	D	D	D	D	D	D	D

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OREGON—Con.													
332	Fabricated metal product manufacturing—Con.												
3323	Architectural and structural metals manufacturing	1	'248	'61	'4 532	'167 547	'3 261	'6 442	'104 632	'357 183	'324 630	'680 300	'18 094
33231	Plate work and fabricated structural product manufacturing	1	101	23	1 689	67 146	1 172	2 391	39 414	134 136	154 889	288 613	8 105
332311	Prefabricated metal building and component manufacturing	1	12	3	116	4 531	74	155	1 992	14 345	12 466	27 139	719
332312	Fabricated structural metal manufacturing	1	75	14	1 210	50 383	815	1 690	29 427	96 314	129 655	226 229	4 127
332313	Plate work manufacturing	—	14	6	363	12 232	283	546	7 995	23 477	12 768	35 245	3 259
33232	Ornamental and architectural metal products manufacturing	1	'147	'38	'2 843	'100 401	'2 089	'4 051	'65 218	'223 047	'169 741	'391 687	'9 989
332321	Metal window and door manufacturing	—	12	5	472	13 787	351	776	9 116	48 623	43 324	90 872	3 557
332322	Sheet metal work manufacturing	1	'88	'28	'1 871	'64 675	'1 389	'2 654	'42 177	'140 223	'101 041	'241 443	'5 543
332323	Ornamental and architectural metal work manufacturing ..	4	47	5	500	21 939	349	621	13 925	34 201	25 376	59 372	889
3324	Boiler, tank, and shipping container manufacturing	1	23	10	690	28 603	478	977	17 083	63 547	110 264	176 697	5 947
33241	Power boiler and heat exchanger manufacturing	1	4	4	338	14 235	198	361	6 797	29 177	66 214	95 776	3 755
332410	Power boiler and heat exchanger manufacturing ..	1	4	4	338	14 235	198	361	6 797	29 177	66 214	95 776	3 755
33242	Metal tank (heavy gauge) manufacturing	1	8	3	158	6 610	120	277	4 124	11 775	10 556	23 533	1 854
332420	Metal tank (heavy gauge) manufacturing	1	8	3	158	6 610	120	277	4 124	11 775	10 556	23 533	1 854
33243	Metal can, box, and other metal container (light gauge) manufacturing	—	11	3	194	7 758	160	339	6 162	22 595	33 494	57 388	338
332439	Other metal container manufacturing	1	8	2	c	D	D	D	D	D	D	D	275
3325	Hardware manufacturing	6	10	4	412	10 761	332	405	5 987	42 855	42 726	85 651	2 284
33251	Hardware manufacturing	6	10	4	412	10 761	332	405	5 987	42 855	42 726	85 651	2 284
332510	Hardware manufacturing	6	10	4	412	10 761	332	405	5 987	42 855	42 726	85 651	2 284
3326	Spring and wire product manufacturing	5	31	12	774	24 378	574	1 161	15 019	56 595	31 343	94 100	1 816
33261	Spring and wire product manufacturing	5	31	12	774	24 378	574	1 161	15 019	56 595	31 343	94 100	1 816
332612	Spring (light gauge) manufacturing	—	4	4	149	4 936	111	220	3 534	9 835	4 721	14 323	D
332618	Other fabricated wire product manufacturing	5	23	8	588	18 099	433	885	10 516	44 128	24 332	74 855	1 539
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	2	378	52	3 564	131 948	2 666	5 263	88 370	255 572	114 589	372 485	29 649
33271	Machine shops	2	342	37	2 900	104 134	2 139	4 191	67 867	200 196	91 288	292 031	12 782
332710	Machine shops	2	342	37	2 900	104 134	2 139	4 191	67 867	200 196	91 288	292 031	12 782
33272	Turned product and screw, nut, and bolt manufacturing	1	36	15	664	27 814	527	1 072	20 503	55 376	23 301	80 454	16 867
332721	Precision turned product manufacturing	—	26	12	526	22 386	418	853	16 485	44 181	14 965	60 251	16 439
332722	Bolt, nut, screw, rivet, and washer manufacturing	4	10	3	138	5 428	109	219	4 018	11 195	8 336	20 203	428
3328	Coating, engraving, heat treating, and allied activities	2	85	17	1 144	36 478	934	1 784	26 307	77 605	27 874	105 766	4 147
33281	Coating, engraving, heat treating, and allied activities ..	2	85	17	1 144	36 478	934	1 784	26 307	77 605	27 874	105 766	4 147
332811	Metal heat treating	3	12	2	150	5 648	119	240	3 827	15 364	3 644	19 016	1 562
332812	Metal coating, engraving (except jewelry and silverware), and allied services to manufacturers ..	3	31	8	398	13 279	313	641	9 376	30 173	15 139	45 518	1 646
332813	Electroplating, plating, polishing, anodizing, and coloring	2	42	7	596	17 551	502	903	13 104	32 068	9 091	41 232	939
3329	Other fabricated metal product manufacturing	'3	'121	'21	'1 365	'49 081	'1 020	'2 078	'32 611	'101 415	'67 083	'168 338	'7 058
33299	All other fabricated metal product manufacturing	'3	'112	'20	'1 281	'45 969	'959	'1 941	'31 042	'92 648	'60 191	'152 461	D
332992	Small arms ammunition manufacturing	2	5	1	102	3 937	72	146	2 314	7 110	4 397	11 555	D
332996	Fabricated pipe and pipe fitting manufacturing	3	11	5	371	13 640	296	642	9 805	27 190	22 174	49 439	1 468
332999	All other miscellaneous fabricated metal product manufacturing	'3	'83	'13	'731	'24 589	'538	'1 053	'16 557	'51 924	'31 419	'82 847	'3 051
333	Machinery manufacturing	2	381	124	10 550	438 095	6 400	12 150	216 977	1 051 061	838 410	1 861 593	62 223

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OREGON—Con.													
333	Machinery manufacturing—Con.												
3331	Agriculture, construction, and mining machinery manufacturing	2	56	25	1 877	77 332	1 172	2 351	41 917	144 045	190 251	341 091	7 075
33311	Agricultural implement manufacturing	1	29	12	605	20 557	420	834	13 173	45 726	38 577	84 870	2 096
333111	Farm machinery and equipment manufacturing ..	1	29	12	605	20 557	420	834	13 173	45 726	38 577	84 870	2 096
33312	Construction machinery manufacturing	'5	'20	'6	'712	'32 358	'402	'804	'15 735	'62 761	'77 485	'140 039	'3 651
333120	Construction machinery manufacturing	'5	'20	'6	'712	'32 358	'402	'804	'15 735	'62 761	'77 485	'140 039	'3 651
33313	Mining and oil and gas field machinery manufacturing	—	'7	'7	'560	'24 417	'350	'713	'13 009	'35 558	'74 189	'116 182	'1 328
333131	Mining machinery and equipment manufacturing ..	—	6	6	f	D	D	D	D	D	D	D	D
3332	Industrial machinery manufacturing	3	91	34	2 929	122 478	1 513	2 674	51 074	368 717	230 319	572 652	27 314
33321	Sawmill and woodworking machinery manufacturing	—	29	13	760	32 973	425	868	15 326	58 636	37 630	96 683	2 788
333210	Sawmill and woodworking machinery manufacturing ..	—	29	13	760	32 973	425	868	15 326	58 636	37 630	96 683	2 788
33329	Other industrial machinery manufacturing	4	55	19	2 084	85 199	1 042	1 712	33 757	298 596	187 219	460 744	24 455
333291	Paper industry machinery manufacturing	6	9	2	c	D	D	D	D	D	D	D	473
333294	Food product machinery manufacturing	2	17	4	231	8 784	160	282	4 780	20 480	7 851	27 832	283
333295	Semiconductor machinery manufacturing	5	6	5	1 167	46 403	534	773	16 722	169 302	136 578	283 034	20 006
333298	All other industrial machinery manufacturing	—	19	8	516	22 124	228	437	7 392	91 721	34 093	124 064	3 649
3333	Commercial and service industry machinery manufacturing	—	30	8	1 057	44 702	716	1 512	22 651	102 736	50 757	154 205	3 382
33331	Commercial and service industry machinery manufacturing	—	30	8	1 057	44 702	716	1 512	22 651	102 736	50 757	154 205	3 382
333314	Optical instrument and lens manufacturing	—	7	4	669	28 375	490	1 010	16 599	75 313	27 835	102 863	2 180
333319	Other commercial and service industry machinery manufacturing	—	16	3	333	13 963	193	427	5 189	24 195	19 742	44 258	1 173
3334	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	2	15	5	507	19 812	362	789	11 253	51 509	40 110	83 153	1 432
33341	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	2	15	5	507	19 812	362	789	11 253	51 509	40 110	83 153	1 432
333411	Air purification equipment manufacturing	—	4	2	387	15 390	271	610	8 498	38 938	30 872	61 344	514
333415	Air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment manufacturing	8	7	3	111	4 102	84	168	2 577	11 797	8 684	20 481	899
3335	Metalworking machinery manufacturing	2	77	15	981	37 869	618	1 154	21 779	83 283	40 821	124 069	6 822
33351	Metalworking machinery manufacturing	2	77	15	981	37 869	618	1 154	21 779	83 283	40 821	124 069	6 822
333511	Industrial mold manufacturing	—	29	5	319	11 873	236	408	8 287	23 405	7 652	31 161	4 379
333512	Machine tool (metal cutting types) manufacturing	1	4	2	135	5 972	59	80	2 328	11 867	5 556	17 225	D
333514	Special die and tool, die set, jig, and fixture manufacturing	9	23	1	127	4 870	90	185	2 884	7 519	3 563	11 094	290
333515	Cutting tool and machine tool accessory manufacturing...	—	13	4	274	10 132	148	307	5 446	31 112	16 129	46 313	886
3336	Engine, turbine, and power transmission equipment manufacturing	—	14	5	259	9 086	183	359	5 177	19 459	8 005	27 160	1 365
33361	Engine, turbine, and power transmission equipment manufacturing	—	14	5	259	9 086	183	359	5 177	19 459	8 005	27 160	1 365
333613	Mechanical power transmission equipment manufacturing	1	7	2	159	5 846	122	230	3 352	10 512	4 157	14 849	277
3339	Other general purpose machinery manufacturing	1	98	32	2 940	126 816	1 836	3 311	63 126	281 312	278 147	559 263	14 833
33391	Pump and compressor manufacturing	1	12	5	474	21 909	224	398	8 932	38 105	93 503	133 430	1 691
333911	Pump and pumping equipment manufacturing ..	1	7	5	434	20 202	200	350	8 091	32 515	87 723	122 109	1 272

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

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
OREGON—Con.													
333	Machinery manufacturing—Con.												
3339	Other general purpose machinery manufacturing—Con.												
33392	Material handling equipment manufacturing	—	33	13	1 439	65 047	897	1 525	32 184	156 638	131 002	286 731	9 872
333922	Conveyor and conveying equipment manufacturing	—	13	7	f	D	D	D	D	D	D	D	2 447
333923	Overhead travelling crane, hoist, and monorail system manufacturing	—	4	1	e	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, and stacker machinery manufacturing	1	15	5	502	25 674	253	519	9 469	52 463	34 385	88 411	D
33399	All other general purpose machinery manufacturing	2	53	14	1 027	39 860	715	1 388	22 010	86 569	53 642	139 102	3 270
333991	Power-driven handtool manufacturing	—	3	1	c	D	D	D	D	D	D	D	D
333995	Fluid power cylinder and actuator manufacturing	—	8	4	231	9 552	153	287	5 508	24 339	9 981	34 410	840
333999	All other miscellaneous general purpose machinery manufacturing	6	30	5	417	14 533	266	445	6 129	27 677	19 858	47 783	1 178
334	Computer and electronic product manufacturing	—	274	116	31 364	1 712 179	15 798	28 613	723 382	10 474 003	2 854 597	13 227 884	318 302
3341	Computer and peripheral equipment manufacturing	—	32	12	8 224	505 207	2 845	5 451	203 535	765 851	818 280	1 575 026	77 403
33411	Computer and peripheral equipment manufacturing	—	32	12	8 224	505 207	2 845	5 451	203 535	765 851	818 280	1 575 026	77 403
334111	Electronic computer manufacturing	6	8	3	e	D	D	D	D	D	D	D	D
334113	Computer terminal manufacturing	—	3	1	e	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment manufacturing	—	20	8	7 612	465 970	2 534	4 897	188 265	590 880	724 425	1 309 264	64 012
3342	Communications equipment manufacturing	1	28	10	2 611	84 670	1 428	2 256	42 549	242 944	197 709	438 522	43 067
33421	Telephone apparatus manufacturing	1	5	1	154	4 619	119	188	2 261	12 705	8 312	20 969	D
334210	Telephone apparatus manufacturing	1	5	1	154	4 619	119	188	2 261	12 705	8 312	20 969	D
33422	Radio and television broadcasting and wireless communications equipment manufacturing	2	10	5	1 793	52 724	979	1 395	30 005	156 679	120 406	275 994	D
334220	Radio and television broadcasting and wireless communications equipment manufacturing	2	10	5	1 793	52 724	979	1 395	30 005	156 679	120 406	275 994	D
33429	Other communications equipment manufacturing	—	13	4	664	27 327	330	673	10 283	73 560	68 991	141 559	D
334290	Other communications equipment manufacturing	—	13	4	664	27 327	330	673	10 283	73 560	68 991	141 559	D
3343	Audio and video equipment manufacturing	4	15	6	552	23 761	238	443	8 055	52 963	58 932	112 634	10 949
33431	Audio and video equipment manufacturing	4	15	6	552	23 761	238	443	8 055	52 963	58 932	112 634	10 949
334310	Audio and video equipment manufacturing	4	15	6	552	23 761	238	443	8 055	52 963	58 932	112 634	10 949
3344	Semiconductor and other electronic component manufacturing	—	97	46	12 444	626 868	8 301	15 667	343 479	8 532 102	1 247 735	9 661 085	139 643
33441	Semiconductor and other electronic component manufacturing	—	97	46	12 444	626 868	8 301	15 667	343 479	8 532 102	1 247 735	9 661 085	139 643
334412	Bare printed circuit board manufacturing	—	16	5	1 599	62 094	1 135	1 619	31 882	116 273	67 791	178 676	12 508
334413	Semiconductor and related device manufacturing	—	27	17	8 831	499 247	5 749	11 239	275 033	8 254 814	1 042 666	9 184 906	118 299
334416	Electronic coil, transformer, and other inductor manufacturing	1	6	2	124	2 985	92	177	1 745	6 285	2 453	8 728	189
334418	Printed circuit assembly (electronic assembly) manufacturing	1	19	13	954	31 694	597	1 098	15 123	76 250	91 841	167 721	D
334419	Other electronic component manufacturing	—	25	8	861	28 734	676	1 441	18 602	72 887	41 285	113 467	4 878
3345	Navigational, measuring, electromedical, and control instruments manufacturing	—	90	39	7 012	453 726	2 649	4 087	117 040	837 709	512 185	1 378 248	45 784
33451	Navigational, measuring, electromedical, and control instruments manufacturing	—	90	39	7 012	453 726	2 649	4 087	117 040	837 709	512 185	1 378 248	45 784
334510	Electromedical and electrotherapeutic apparatus manufacturing	—	12	6	1 361	57 577	826	892	31 382	145 177	99 186	251 933	3 681
334511	Search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing	—	10	6	629	39 352	291	619	10 897	107 914	56 781	163 862	3 648

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

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

NAICS code	Geographic area and industry	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)					Wages (\$1,000)
OREGON—Con.													
334	Computer and electronic product manufacturing—Con.												
3345	Navigational, measuring, electromedical, and control instruments manufacturing—Con.												
33451	Navigational, measuring, electromedical, and control instruments manufacturing—Con.												
334514	Totalizing fluid meter and counting device manufacturing	—	5	4	303	11 229	155	253	3 991	13 557	15 459	29 262	469
334515	Instrument manufacturing for measuring and testing electricity and electrical signals	—	24	11	3 921	310 379	1 020	1 669	61 033	498 161	300 019	818 343	36 640
334516	Analytical laboratory instrument manufacturing ..	—	9	4	390	18 058	175	285	4 444	34 758	19 013	54 917	343
334519	Other measuring and controlling device manufacturing	1	14	4	267	10 842	107	214	2 862	25 945	14 381	40 500	690
3346	Manufacturing and reproducing magnetic and optical media.....	1	12	3	521	17 947	337	709	8 724	42 434	19 756	62 369	1 456
33461	Manufacturing and reproducing magnetic and optical media...	1	12	3	521	17 947	337	709	8 724	42 434	19 756	62 369	1 456
334612	Prerecorded compact disc (except software), tape, and record reproducing	1	8	3	504	17 308	324	697	8 357	41 189	19 425	60 793	D
335	Electrical equipment, appliance, and component manufacturing	1	'70	18	'2 484	'107 178	'1 524	'3 180	'48 143	'246 455	'267 710	'523 725	'21 384
3351	Electric lighting equipment manufacturing	2	15	4	e	D	D	D	D	D	D	D	D
33512	Lighting fixture manufacturing ..	2	13	3	360	11 763	243	513	6 024	26 554	8 356	34 910	421
335121	Residential electric lighting fixture manufacturing	—	6	1	e	D	D	D	D	D	D	D	D
3353	Electrical equipment manufacturing	2	25	6	502	17 225	332	610	8 846	59 851	65 784	125 307	D
33531	Electrical equipment manufacturing	2	25	6	502	17 225	332	610	8 846	59 851	65 784	125 307	D
335311	Power, distribution, and specialty transformer manufacturing	—	4	2	c	D	D	D	D	D	D	D	D
335313	Switchgear and switchboard apparatus manufacturing ...	5	5	3	192	6 806	123	239	3 670	20 106	19 181	39 339	422
3359	Other electrical equipment and component manufacturing	—	'27	7	'1 545	'75 028	'898	'1 954	'31 723	'150 475	'189 434	'350 170	'19 514
33591	Battery manufacturing	—	4	2	e	D	D	D	D	D	D	D	D
335911	Storage battery manufacturing	—	4	2	e	D	D	D	D	D	D	D	D
33592	Communication and energy wire and cable manufacturing ..	—	4	2	c	D	D	D	D	D	D	D	D
335929	Other communication and energy wire manufacturing ..	—	3	2	c	D	D	D	D	D	D	D	D
33593	Wiring device manufacturing ...	—	6	1	c	D	D	D	D	D	D	D	222
335931	Current-carrying wiring device manufacturing	—	5	1	126	5 598	59	117	1 942	12 250	5 737	18 014	D
33599	All other electrical equipment and component manufacturing	—	'13	2	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment and component manufacturing ..	—	'11	2	'842	'49 037	'356	'846	'14 676	'60 502	'83 954	'153 317	D
336	Transportation equipment manufacturing	—	239	66	13 246	500 312	10 552	20 268	357 961	1 251 436	1 718 087	2 977 325	44 333
3361	Motor vehicle manufacturing	—	8	2	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck manufacturing	—	3	2	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck manufacturing	—	3	2	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer manufacturing	—	57	25	5 977	191 750	4 867	9 397	133 853	509 282	717 432	1 228 619	10 213
33621	Motor vehicle body and trailer manufacturing	—	57	25	5 977	191 750	4 867	9 397	133 853	509 282	717 432	1 228 619	10 213
336211	Motor vehicle body manufacturing	8	18	2	155	5 438	121	250	3 615	10 050	15 820	25 827	261
336212	Truck trailer manufacturing ..	—	6	4	348	10 333	272	531	7 185	17 962	29 930	47 560	232
336213	Motor home manufacturing ..	—	5	5	3 513	115 669	2 797	5 235	81 786	319 970	453 499	781 462	D
336214	Travel trailer and camper manufacturing	—	28	14	1 961	60 310	1 677	3 381	41 267	161 300	218 183	373 770	D

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

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
OREGON—Con.													
336	Transportation equipment manufacturing—Con.												
3363	Motor vehicle parts manufacturing	2	75	13	1 564	66 126	1 073	1 855	42 242	201 288	139 258	341 409	D
33632	Motor vehicle electrical and electronic equipment manufacturing	1	14	3	355	17 213	183	374	8 194	44 585	33 063	77 269	1 023
336322	Other motor vehicle electrical and electronic equipment manufacturing	1	14	3	355	17 213	183	374	8 194	44 585	33 063	77 269	1 023
33635	Motor vehicle transmission and power train parts manufacturing	—	6	2	349	15 400	261	409	10 668	54 721	39 101	94 222	546
336350	Motor vehicle transmission and power train parts manufacturing	—	6	2	349	15 400	261	409	10 668	54 721	39 101	94 222	546
33639	Other motor vehicle parts manufacturing	2	26	7	729	28 044	525	860	19 269	92 343	50 215	143 418	5 999
336399	All other motor vehicle parts manufacturing	2	26	7	729	28 044	525	860	19 269	92 343	50 215	143 418	5 999
3364	Aerospace product and parts manufacturing	—	25	5	1 840	108 757	1 351	3 024	78 462	292 050	84 867	388 939	D
33641	Aerospace product and parts manufacturing	—	25	5	1 840	108 757	1 351	3 024	78 462	292 050	84 867	388 939	D
336411	Aircraft manufacturing	4	5	1	227	6 667	176	388	3 793	4 618	9 245	15 532	227
336413	Other aircraft parts and auxiliary equipment manufacturing	—	17	4	1 594	101 518	1 158	2 619	74 252	286 341	74 688	371 382	D
3365	Railroad rolling stock manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
3366	Ship and boat building	1	42	12	g	D	D	D	D	D	D	D	4 388
33661	Ship and boat building	1	42	12	g	D	D	D	D	D	D	D	4 388
336611	Ship building and repairing ..	3	17	5	e	D	D	D	D	D	D	D	2 666
336612	Boat building	—	25	7	870	25 373	670	1 324	16 336	64 751	81 731	146 482	1 722
3369	Other transportation equipment manufacturing	1	31	8	742	20 703	596	1 186	15 376	53 966	41 980	91 054	D
33699	Other transportation equipment manufacturing	1	31	8	742	20 703	596	1 186	15 376	53 966	41 980	91 054	D
336991	Motorcycle, bicycle, and parts manufacturing	3	17	4	248	8 001	193	368	5 891	20 596	10 726	30 966	D
336999	All other transportation equipment manufacturing ..	—	14	4	494	12 702	403	818	9 485	33 370	31 254	60 088	702
337	Furniture and related product manufacturing	2	420	80	7 037	204 724	5 377	10 576	130 719	550 495	354 175	901 900	31 390
3371	Household and institutional furniture and kitchen cabinet manufacturing	3	335	51	5 055	137 834	3 982	7 868	94 021	381 643	256 876	635 989	25 020
33711	Wood kitchen cabinet and countertop manufacturing	1	204	26	2 506	71 699	1 926	3 902	48 958	179 585	117 011	296 720	18 523
337110	Wood kitchen cabinet and countertop manufacturing ..	1	204	26	2 506	71 699	1 926	3 902	48 958	179 585	117 011	296 720	18 523
33712	Household and institutional furniture manufacturing	4	131	25	2 549	66 135	2 056	3 966	45 063	202 058	139 865	339 269	6 497
337121	Upholstered household furniture manufacturing	2	38	10	903	21 323	745	1 444	14 513	43 194	48 668	91 312	1 751
337122	Nonupholstered wood household furniture manufacturing	6	72	13	1 319	33 801	1 086	2 144	25 145	135 516	75 016	208 855	4 262
337127	Institutional furniture manufacturing	—	10	2	261	9 058	176	279	3 905	16 872	11 936	28 406	426
3372	Office furniture (including fixtures) manufacturing	1	78	24	1 655	54 685	1 152	2 165	29 541	129 456	63 199	192 324	4 663
33721	Office furniture (including fixtures) manufacturing	1	78	24	1 655	54 685	1 152	2 165	29 541	129 456	63 199	192 324	4 663
337211	Wood office furniture manufacturing	2	10	3	c	D	D	D	D	D	D	D	248
337212	Custom architectural woodwork and millwork manufacturing	—	27	11	866	31 862	590	1 102	16 736	74 882	31 557	106 020	D
337214	Office furniture (except wood) manufacturing	1	3	1	c	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, and locker manufacturing	3	38	9	511	14 487	373	695	8 661	34 253	18 073	52 118	729
3379	Other furniture related product manufacturing	—	7	5	327	12 205	243	543	7 157	39 396	34 100	73 587	1 707
33791	Mattress manufacturing	—	5	4	c	D	D	D	D	D	D	D	D
337910	Mattress manufacturing	—	5	4	c	D	D	D	D	D	D	D	D

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

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

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
OREGON—Con.													
339	Miscellaneous manufacturing	2	612	'89	'8 506	'291 422	'5 728	'10 789	'149 834	'713 122	'356 111	'1 064 070	'37 374
3391	Medical equipment and supplies manufacturing	2	235	29	3 492	139 574	2 265	4 423	68 199	336 871	126 514	461 992	21 272
33911	Medical equipment and supplies manufacturing	2	235	29	3 492	139 574	2 265	4 423	68 199	336 871	126 514	461 992	21 272
339111	Laboratory apparatus and furniture manufacturing	1	11	2	240	7 001	174	369	3 901	13 154	10 414	23 488	662
339112	Surgical and medical instrument manufacturing	2	20	4	408	18 624	212	418	7 219	52 126	14 786	65 949	4 706
339113	Surgical appliance and supplies manufacturing	2	23	5	258	9 350	189	383	5 101	22 132	13 124	34 822	993
339114	Dental equipment and supplies manufacturing	1	35	8	1 408	68 844	811	1 719	27 809	178 528	67 204	245 306	12 294
339115	Ophthalmic goods manufacturing	1	12	4	226	7 238	181	281	4 774	19 354	9 933	29 677	767
339116	Dental laboratories	5	134	6	952	28 517	698	1 253	19 395	51 577	11 053	62 750	1 850
3399	Other miscellaneous manufacturing	2	377	'60	'5 014	'151 848	'3 463	'6 366	'81 635	'376 251	'229 597	'602 078	'16 102
33991	Jewelry and silverware manufacturing	3	26	3	176	4 169	111	222	2 200	9 780	7 842	17 496	249
339911	Jewelry (except costume) manufacturing	3	22	3	171	4 042	107	217	2 138	9 642	7 641	17 157	243
33992	Sporting and athletic goods manufacturing	3	63	14	996	29 563	675	1 218	14 797	75 565	52 070	128 028	5 237
339920	Sporting and athletic goods manufacturing	3	63	14	996	29 563	675	1 218	14 797	75 565	52 070	128 028	5 237
33993	Doll, toy, and game manufacturing	3	24	3	207	5 616	173	310	3 750	11 167	5 633	16 888	443
339932	Game, toy, and children's vehicle manufacturing	3	20	3	192	5 320	164	291	3 600	10 659	5 316	15 975	D
33994	Office supplies (except paper) manufacturing	5	19	4	391	10 997	285	502	5 718	33 085	34 254	67 768	908
339942	Lead pencil and art good manufacturing	7	8	1	211	5 368	172	304	3 260	17 849	17 495	35 434	532
339944	Carbon paper and inked ribbon manufacturing	—	4	2	120	3 790	67	106	1 413	11 374	14 534	26 247	281
33995	Sign manufacturing	—	'114	'14	'1 218	'42 563	'797	'1 526	'23 108	'79 269	'49 657	'130 377	'2 908
339950	Sign manufacturing	—	'114	'14	'1 218	'42 563	'797	'1 526	'23 108	'79 269	'49 657	'130 377	'2 908
33999	All other miscellaneous manufacturing	2	'131	22	'2 026	'58 940	'1 422	'2 588	'32 062	'167 385	'80 141	'241 521	'6 357
339991	Gasket, packing, and sealing device manufacturing	1	8	2	186	6 199	129	252	3 636	15 519	7 000	22 635	702
339992	Musical instrument manufacturing	—	18	2	238	8 734	147	219	2 885	17 276	7 952	24 817	490
339994	Broom, brush, and mop manufacturing	2	6	3	729	20 988	591	1 165	13 429	84 004	35 802	116 136	1 542
339999	All other miscellaneous manufacturing	2	'95	15	'861	'22 624	'545	'935	'11 875	'49 108	'28 894	'75 962	'3 592

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

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

³Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

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

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

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

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

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
	ALBANY-CORVALLIS-LEBANON, OR COMBINED STATISTICAL AREA												
31-33	Manufacturing	-	285	84	14 291	663 802	9 400	19 033	434 109	1 224 314	1 181 617	2 411 524	96 999
311	Food manufacturing	-	23	5	f	D	D	D	D	D	D	D	4 941
3114	Fruit and vegetable preserving and specialty food manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
31141	Frozen food manufacturing	-	2	1	e	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, and vegetable manufacturing ...	-	1	1	e	D	D	D	D	D	D	D	D
3116	Animal slaughtering and processing	1	8	2	e	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing	1	8	2	e	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	1	4	2	e	D	D	D	D	D	D	D	D
321	Wood product manufacturing	-	47	28	2 941	100 111	2 482	5 095	77 942	203 265	455 363	658 647	10 665
3211	Sawmills and wood preservation ..	-	15	9	826	32 009	727	1 618	26 087	51 629	197 560	252 628	3 354
32111	Sawmills and wood preservation	-	15	9	826	32 009	727	1 618	26 087	51 629	197 560	252 628	3 354
321113	Sawmills	-	14	9	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, and engineered wood product manufacturing	-	16	12	1 333	46 413	1 158	2 374	37 210	100 283	206 904	305 140	D
32121	Veneer, plywood, and engineered wood product manufacturing	-	16	12	1 333	46 413	1 158	2 374	37 210	100 283	206 904	305 140	D
321212	Softwood veneer and plywood manufacturing	-	4	4	671	20 460	574	1 087	14 928	36 276	104 543	138 777	D
321219	Reconstituted wood product manufacturing	1	7	5	e	D	D	D	D	D	D	D	D
3219	Other wood product manufacturing	-	16	7	782	21 689	597	1 103	14 645	51 353	50 899	100 879	D
32199	All other wood product manufacturing	-	6	4	f	D	D	D	D	D	D	D	1 155
321991	Manufactured home (mobile home) manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
322	Paper manufacturing	-	4	4	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, and paperboard mills	-	3	3	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	e	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	-	8	4	e	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing ..	-	7	3	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	-	13	3	e	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	-	7	5	1 789	92 933	1 243	2 743	59 754	153 882	135 654	288 112	12 920
3314	Nonferrous metal (except aluminum) production and processing	-	2	2	g	D	D	D	D	D	D	D	D
33149	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and alloying	-	2	2	g	D	D	D	D	D	D	D	D
331491	Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding	-	2	2	g	D	D	D	D	D	D	D	D
3315	Foundries	-	4	2	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	4	2	e	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	-	3	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	2	45	7	434	17 346	325	624	11 455	34 406	18 193	52 426	1 654
333	Machinery manufacturing	2	15	5	e	D	D	D	D	D	D	D	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
ALBANY-CORVALLIS-LEBANON, OR COMBINED STATISTICAL AREA—Con.													
334	Computer and electronic product manufacturing	-	17	6	h	D	D	D	D	D	D	D	D
3341	Computer and peripheral equipment manufacturing	-	5	2	h	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	-	5	2	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment manufacturing ..	-	4	2	h	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	4	22	5	375	9 566	284	537	6 056	21 040	14 410	35 572	D
339	Miscellaneous manufacturing	1	26	4	305	9 673	204	364	5 284	19 618	7 637	26 874	D
Albany-Lebanon, OR Micropolitan Statistical Area													
31-33	Manufacturing	-	182	65	8 328	334 562	6 493	13 043	235 925	953 390	882 606	1 829 786	76 268
311	Food manufacturing	-	17	5	943	25 426	797	1 541	21 096	67 618	94 409	161 371	4 917
3114	Fruit and vegetable preserving and specialty food manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
31141	Frozen food manufacturing	-	1	1	e	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, and vegetable manufacturing ...	-	1	1	e	D	D	D	D	D	D	D	D
3116	Animal slaughtering and processing	1	7	2	329	7 108	315	590	6 324	20 221	23 743	43 947	673
31161	Animal slaughtering and processing	1	7	2	329	7 108	315	590	6 324	20 221	23 743	43 947	673
311612	Meat processed from carcasses	1	3	2	e	D	D	D	D	D	D	D	D
321	Wood product manufacturing	-	36	24	2 482	83 460	2 066	4 180	63 673	175 390	378 189	549 595	9 301
3211	Sawmills and wood preservation .	-	11	6	485	19 005	421	914	15 208	31 074	130 172	161 411	2 348
32111	Sawmills and wood preservation	-	11	6	485	19 005	421	914	15 208	31 074	130 172	161 411	2 348
321113	Sawmills	-	10	6	e	D	D	D	D	D	D	D	D
3212	Veneer, plywood, and engineered wood product manufacturing	-	12	11	1 229	43 128	1 060	2 185	34 093	93 577	198 147	288 948	5 495
32121	Veneer, plywood, and engineered wood product manufacturing	-	12	11	1 229	43 128	1 060	2 185	34 093	93 577	198 147	288 948	5 495
321212	Softwood veneer and plywood manufacturing	-	4	4	671	20 460	574	1 087	14 928	36 276	104 543	138 777	D
321219	Reconstituted wood product manufacturing	1	5	4	389	17 250	337	759	14 642	44 424	73 393	117 242	D
3219	Other wood product manufacturing	-	13	7	768	21 327	585	1 081	14 372	50 739	49 870	99 236	1 458
32199	All other wood product manufacturing	-	5	4	645	18 013	494	924	12 487	41 839	41 708	82 339	1 155
321991	Manufactured home (mobile home) manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
322	Paper manufacturing	-	3	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, and paperboard mills	-	3	3	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	e	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	-	7	5	1 789	92 933	1 243	2 743	59 754	153 882	135 654	288 112	12 920
3314	Nonferrous metal (except aluminum) production and processing	-	2	2	g	D	D	D	D	D	D	D	D
33149	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and alloying	-	2	2	g	D	D	D	D	D	D	D	D
331491	Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding	-	2	2	g	D	D	D	D	D	D	D	D
3315	Foundries	-	4	2	e	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	4	2	e	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	-	3	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	2	39	7	419	16 746	311	597	10 998	33 312	17 649	50 780	1 616

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
ALBANY-CORVALLIS-LEBANON, OR COMBINED STATISTICAL AREA—Con.													
Albany-Lebanon, OR Micropolitan Statistical Area—Con.													
333	Machinery manufacturing	2	8	3	251	10 091	183	335	5 837	21 277	11 559	32 636	475
337	Furniture and related product manufacturing	4	15	4	292	7 666	219	405	4 648	16 547	11 812	28 496	794
Corvallis, OR Metropolitan Statistical Area													
31-33	Manufacturing	—	103	19	5 963	329 240	2 907	5 990	198 184	270 924	299 011	581 738	20 731
321	Wood product manufacturing	—	11	4	459	16 651	416	915	14 269	27 875	77 174	109 052	1 364
3211	Sawmills and wood preservation	—	4	3	341	13 004	306	704	10 879	20 555	67 388	91 217	1 006
32111	Sawmills and wood preservation	—	4	3	341	13 004	306	704	10 879	20 555	67 388	91 217	1 006
321113	Sawmills	—	4	3	341	13 004	306	704	10 879	20 555	67 388	91 217	1 006
334	Computer and electronic product manufacturing	—	11	4	4 617	282 266	1 902	3 945	167 076	182 918	181 367	364 915	D
3341	Computer and peripheral equipment manufacturing	—	4	2	h	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	—	4	2	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment manufacturing	—	3	2	h	D	D	D	D	D	D	D	D
BEND-PRINEVILLE, OR COMBINED STATISTICAL AREA													
31-33	Manufacturing	1	271	59	6 446	189 704	5 115	9 382	125 146	449 113	456 113	894 292	18 133
321	Wood product manufacturing	—	36	23	3 076	74 962	2 692	4 664	59 191	169 477	241 733	406 407	8 233
3219	Other wood product manufacturing	—	26	18	h	D	D	D	D	D	D	D	D
32191	Millwork	—	19	15	h	D	D	D	D	D	D	D	D
321911	Wood window and door manufacturing	—	7	7	g	D	D	D	D	D	D	D	D
321912	Cut stock, resawing lumber, and planing	—	8	6	f	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring)	—	4	2	f	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	1	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	2	32	3	e	D	D	D	D	D	D	D	772
336	Transportation equipment manufacturing	1	19	4	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer manufacturing	—	4	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body and trailer manufacturing	—	4	2	f	D	D	D	D	D	D	D	D
336213	Motor home manufacturing	—	1	1	e	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	2	31	3	273	7 612	203	344	4 835	14 347	10 522	24 990	D
339	Miscellaneous manufacturing	2	41	4	e	D	D	D	D	D	D	D	D
Bend, OR Metropolitan Statistical Area													
31-33	Manufacturing	1	245	52	5 053	155 814	3 898	7 036	97 788	365 085	343 247	699 061	14 745
321	Wood product manufacturing	—	27	18	1 884	47 566	1 642	2 626	36 451	100 655	147 768	245 344	5 107
3219	Other wood product manufacturing	—	19	14	1 656	40 713	1 450	2 389	31 560	91 214	133 725	220 847	4 360
32191	Millwork	—	14	11	1 447	34 637	1 293	2 077	27 498	78 753	123 255	197 880	3 599
321911	Wood window and door manufacturing	—	6	6	898	24 737	783	1 395	19 208	62 561	73 273	132 361	2 537
321912	Cut stock, resawing lumber, and planing	—	6	4	e	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	1	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	2	31	3	259	8 680	202	401	5 727	16 970	9 020	26 178	772

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
	BEND-PRINEVILLE, OR COMBINED STATISTICAL AREA—Con.												
	Bend, OR Metropolitan Statistical Area—Con.												
336	Transportation equipment manufacturing	1	17	3	797	24 247	680	1 401	18 081	57 047	67 665	118 528	1 338
3362	Motor vehicle body and trailer manufacturing	—	2	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body and trailer manufacturing	—	2	1	f	D	D	D	D	D	D	D	D
336213	Motor home manufacturing ..	—	1	1	e	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	1	28	3	268	7 488	200	339	4 754	14 118	10 351	24 590	327
339	Miscellaneous manufacturing	2	39	4	332	9 553	242	415	5 268	17 564	15 901	33 182	596
	Prineville, OR Micropolitan Statistical Area												
31-33	Manufacturing	1	26	7	1 393	33 890	1 217	2 346	27 358	84 028	112 866	195 231	3 388
321	Wood product manufacturing	—	9	5	1 192	27 396	1 050	2 038	22 740	68 822	93 965	161 063	3 126
3219	Other wood product manufacturing	—	7	4	g	D	D	D	D	D	D	D	D
32191	Millwork	—	5	4	g	D	D	D	D	D	D	D	D
321911	Wood window and door manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring)	—	2	1	e	D	D	D	D	D	D	D	D
	ASTORIA, OR MICROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	—	48	12	840	24 355	659	1 210	16 789	62 620	102 787	166 400	1 833
311	Food manufacturing	—	15	4	342	7 454	275	493	5 595	25 705	46 521	71 988	779
	BROOKINGS, OR MICROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	—	29	3	640	25 349	550	1 244	19 519	42 566	88 157	132 182	D
321	Wood product manufacturing	—	6	2	e	D	D	D	D	D	D	D	D
3212	Veneer, plywood, and engineered wood product manufacturing	—	2	1	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, and engineered wood product manufacturing	—	2	1	e	D	D	D	D	D	D	D	D
321212	Softwood veneer and plywood manufacturing	—	1	1	e	D	D	D	D	D	D	D	D
	CITY OF THE DALLES, OR MICROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	—	26	5	396	18 820	314	595	13 751	1 776	108 827	129 075	2 805
	COOS BAY, OR MICROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	1	76	13	1 534	51 671	1 268	2 604	40 798	116 405	234 521	350 160	5 090
311	Food manufacturing	8	11	2	296	7 325	257	497	5 502	12 860	31 752	44 946	808
321	Wood product manufacturing	—	18	7	802	27 202	711	1 508	23 639	45 586	150 818	195 271	2 025
3211	Sawmills and wood preservation ..	—	8	4	256	9 400	230	510	8 184	30 088	79 119	109 627	794
32111	Sawmills and wood preservation	—	8	4	256	9 400	230	510	8 184	30 088	79 119	109 627	794
3212	Veneer, plywood, and engineered wood product manufacturing	—	2	2	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, and engineered wood product manufacturing	—	2	2	e	D	D	D	D	D	D	D	D
321212	Softwood veneer and plywood manufacturing	—	2	2	e	D	D	D	D	D	D	D	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
EUGENE-SPRINGFIELD, OR METROPOLITAN STATISTICAL AREA													
31-33	Manufacturing	1	612	160	19 296	720 717	13 832	27 000	442 383	2 393 189	2 361 840	4 751 919	163 328
311	Food manufacturing	7	53	12	1 183	39 377	722	1 395	21 979	189 141	115 161	303 835	7 016
3118	Bakeries and tortilla manufacturing	9	14	2	f	D	D	D	D	D	D	D	D
31181	Bread and bakery product manufacturing	9	13	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries	9	5	2	e	D	D	D	D	D	D	D	D
312	Beverage and tobacco product manufacturing	-	11	2	268	8 078	50	72	1 504	30 745	27 647	60 217	5 444
3121	Beverage manufacturing	-	11	2	268	8 078	50	72	1 504	30 745	27 647	60 217	5 444
321	Wood product manufacturing	-	77	42	5 280	201 568	4 460	9 439	155 455	470 416	963 768	1 436 280	26 549
3211	Sawmills and wood preservation	-	21	15	1 863	83 783	1 556	3 455	63 278	246 370	472 020	720 556	12 160
32111	Sawmills and wood preservation	-	21	15	1 863	83 783	1 556	3 455	63 278	246 370	472 020	720 556	12 160
321113	Sawmills	-	17	11	1 660	77 369	1 405	3 152	59 293	218 919	418 063	642 402	D
3212	Veneer, plywood, and engineered wood product manufacturing	-	25	20	3 023	106 192	2 601	5 386	84 584	190 885	460 817	652 533	13 821
32121	Veneer, plywood, and engineered wood product manufacturing	-	25	20	3 023	106 192	2 601	5 386	84 584	190 885	460 817	652 533	13 821
321211	Hardwood veneer and plywood manufacturing	-	4	3	773	27 837	641	1 356	20 368	48 488	115 224	160 970	D
321212	Softwood veneer and plywood manufacturing	2	9	8	1 135	38 900	1 010	2 028	32 879	56 229	177 806	235 643	2 277
321213	Engineered wood member (except truss) manufacturing	-	5	5	821	27 273	727	1 552	22 719	66 346	125 103	192 294	9 155
3219	Other wood product manufacturing	3	31	7	394	11 593	303	598	7 593	33 161	30 931	63 191	568
322	Paper manufacturing	-	3	2	e	D	D	D	D	D	D	D	D
3221	Pulp, paper, and paperboard mills	-	1	1	e	D	D	D	D	D	D	D	D
32213	Paperboard mills	-	1	1	e	D	D	D	D	D	D	D	D
322130	Paperboard mills	-	1	1	e	D	D	D	D	D	D	D	D
323	Printing and related support activities	-	47	10	748	24 182	516	926	14 927	55 859	25 874	81 759	3 709
3231	Printing and related support activities	-	47	10	748	24 182	516	926	14 927	55 859	25 874	81 759	3 709
32311	Printing	-	43	10	736	23 941	509	917	14 768	55 340	25 685	81 051	D
323110	Commercial lithographic printing	-	21	7	490	16 784	332	618	9 919	35 473	16 051	51 700	2 991
325	Chemical manufacturing	1	21	8	767	37 744	466	837	16 911	193 333	146 969	338 767	8 239
3251	Basic chemical manufacturing	-	3	3	e	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	5	19	4	268	8 141	205	419	5 352	23 632	30 788	51 758	1 684
327	Nonmetallic mineral product manufacturing	4	38	6	494	15 900	322	693	9 687	46 026	48 972	94 785	3 147
3273	Cement and concrete product manufacturing	6	11	4	315	9 369	184	406	4 757	22 498	33 645	56 061	2 352
332	Fabricated metal product manufacturing	3	93	18	1 293	47 101	1 000	1 875	32 360	100 629	67 248	166 981	5 712
3323	Architectural and structural metals manufacturing	3	28	6	476	17 938	393	788	13 894	39 347	29 633	68 380	2 384
33232	Ornamental and architectural metal products manufacturing	3	20	5	378	14 195	314	607	11 365	25 236	22 102	46 912	1 922
332322	Sheet metal work manufacturing	-	14	4	280	8 810	242	460	7 030	19 232	13 227	31 909	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	1	31	5	e	D	D	D	D	D	D	D	D
33271	Machine shops	1	30	5	351	14 061	233	452	8 333	30 394	13 892	44 276	1 454
332710	Machine shops	1	30	5	351	14 061	233	452	8 333	30 394	13 892	44 276	1 454

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
EUGENE-SPRINGFIELD, OR METROPOLITAN STATISTICAL AREA—Con.													
333	Machinery manufacturing	3	48	20	1 210	54 025	765	1 571	27 057	91 733	94 234	190 278	4 765
3331	Agriculture, construction, and mining machinery manufacturing	4	6	4	325	14 159	221	461	8 696	22 321	37 090	65 529	D
3332	Industrial machinery manufacturing	—	11	5	283	16 073	126	268	5 017	22 880	23 344	45 526	D
3339	Other general purpose machinery manufacturing	3	12	7	384	15 951	251	517	8 569	30 010	21 868	51 061	1 008
334	Computer and electronic product manufacturing	—	13	7	1 767	74 520	907	1 213	21 259	575 592	165 721	722 659	38 917
3341	Computer and peripheral equipment manufacturing	—	1	1	e	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	—	1	1	e	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment manufacturing ..	—	1	1	e	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	—	3	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	—	3	2	f	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
3346	Manufacturing and reproducing magnetic and optical media.....	—	1	1	e	D	D	D	D	D	D	D	D
33461	Manufacturing and reproducing magnetic and optical media...	—	1	1	e	D	D	D	D	D	D	D	D
334612	Prerecorded compact disc (except software), tape, and record reproducing	—	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	—	27	9	3 435	113 298	2 641	4 887	77 615	302 158	432 481	750 062	7 442
3362	Motor vehicle body and trailer manufacturing	—	11	7	3 219	107 367	2 494	4 632	73 683	288 100	420 393	724 145	6 865
33621	Motor vehicle body and trailer manufacturing	—	11	7	3 219	107 367	2 494	4 632	73 683	288 100	420 393	724 145	6 865
336213	Motor home manufacturing ..	—	4	4	h	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	6	48	9	1 172	34 925	864	1 773	22 030	134 552	59 667	192 593	4 349
3371	Household and institutional furniture and kitchen cabinet manufacturing	6	34	5	897	26 858	666	1 382	17 251	119 398	50 669	168 291	3 364
33711	Wood kitchen cabinet and countertop manufacturing	2	18	3	e	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet and countertop manufacturing ..	2	18	3	e	D	D	D	D	D	D	D	D
33712	Household and institutional furniture manufacturing	7	16	2	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture manufacturing	8	12	2	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) manufacturing	1	14	4	275	8 067	198	391	4 779	15 154	8 998	24 302	985
33721	Office furniture (including fixtures) manufacturing	1	14	4	275	8 067	198	391	4 779	15 154	8 998	24 302	985
339	Miscellaneous manufacturing	2	70	7	695	24 801	433	827	12 679	54 657	24 261	77 728	1 418
3399	Other miscellaneous manufacturing	2	39	4	467	16 697	284	543	8 371	35 494	18 427	52 346	762
33995	Sign manufacturing.....	—	14	2	278	11 933	159	299	5 882	22 613	9 530	31 679	285
339950	Sign manufacturing.....	—	14	2	278	11 933	159	299	5 882	22 613	9 530	31 679	285

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
GRANTS PASS, OR MICROPOLITAN STATISTICAL AREA													
31-33	Manufacturing	1	133	25	2 831	84 405	2 115	4 330	51 166	199 997	191 375	393 759	22 362
321	Wood product manufacturing	-	18	8	920	27 955	776	1 570	19 760	55 136	104 022	162 077	906
3212	Veneer, plywood, and engineered wood product manufacturing	-	4	4	475	14 461	433	948	12 162	28 500	66 562	97 225	151
32121	Veneer, plywood, and engineered wood product manufacturing	-	4	4	475	14 461	433	948	12 162	28 500	66 562	97 225	151
321212	Softwood veneer and plywood manufacturing	-	2	2	e	D	D	D	D	D	D	D	D
3219	Other wood product manufacturing	-	10	2	e	D	D	D	D	D	D	D	632
332	Fabricated metal product manufacturing	1	26	4	391	10 141	257	557	6 461	18 299	8 576	26 270	3 631
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	-	14	3	e	D	D	D	D	D	D	D	3 147
33271	Machine shops	-	12	1	268	6 079	176	403	3 754	11 058	4 742	15 193	D
332710	Machine shops	-	12	1	268	6 079	176	403	3 754	11 058	4 742	15 193	D
334	Computer and electronic product manufacturing	-	8	5	471	17 331	263	586	5 884	39 714	18 704	59 185	373
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	5	4	e	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing	-	5	4	e	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	-	11	2	e	D	D	D	D	D	D	D	D
3371	Household and institutional furniture and kitchen cabinet manufacturing	-	9	2	e	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet and countertop manufacturing	-	6	1	e	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet and countertop manufacturing	-	6	1	e	D	D	D	D	D	D	D	D
HOOD RIVER, OR MICROPOLITAN STATISTICAL AREA													
31-33	Manufacturing	2	54	13	f	D	D	D	D	D	D	D	1 586
339	Miscellaneous manufacturing	1	14	3	260	5 858	216	390	4 038	14 378	7 449	22 482	306
3399	Other miscellaneous manufacturing	-	13	3	e	D	D	D	D	D	D	D	D
KLAMATH FALLS, OR MICROPOLITAN STATISTICAL AREA													
31-33	Manufacturing	-	71	22	2 500	85 219	2 105	4 371	64 568	293 640	296 628	590 913	18 758
321	Wood product manufacturing	-	14	9	1 414	53 301	1 252	2 641	44 082	166 388	208 090	373 085	5 542
3212	Veneer, plywood, and engineered wood product manufacturing	-	6	5	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, and engineered wood product manufacturing	-	6	5	f	D	D	D	D	D	D	D	D
321211	Hardwood veneer and plywood manufacturing	-	1	1	e	D	D	D	D	D	D	D	D
321219	Reconstituted wood product manufacturing	-	4	4	e	D	D	D	D	D	D	D	D
3219	Other wood product manufacturing	-	5	2	e	D	D	D	D	D	D	D	D
32191	Millwork	-	4	2	e	D	D	D	D	D	D	D	D
321911	Wood window and door manufacturing	-	2	2	e	D	D	D	D	D	D	D	D
333	Machinery manufacturing	-	7	3	e	D	D	D	D	D	D	D	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
LA GRANDE, OR MICROPOLITAN STATISTICAL AREA													
31-33	Manufacturing	-	31	8	1 366	46 173	1 181	2 323	34 726	97 439	180 078	275 300	6 203
321	Wood product manufacturing	-	7	4	f	D	D	D	D	D	D	D	D
3211	Sawmills and wood preservation	-	2	2	e	D	D	D	D	D	D	D	D
32111	Sawmills and wood preservation	-	2	2	e	D	D	D	D	D	D	D	D
321113	Sawmills	-	2	2	e	D	D	D	D	D	D	D	D
3212	Veneer, plywood, and engineered wood product manufacturing	-	3	2	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, and engineered wood product manufacturing	-	3	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	-	5	3	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer manufacturing	-	3	3	541	17 448	463	958	11 232	34 207	59 425	92 149	D
33621	Motor vehicle body and trailer manufacturing	-	3	3	541	17 448	463	958	11 232	34 207	59 425	92 149	D
336214	Travel trailer and camper manufacturing	-	3	3	541	17 448	463	958	11 232	34 207	59 425	92 149	D
MEDFORD, OR METROPOLITAN STATISTICAL AREA													
31-33	Manufacturing	-	310	71	6 552	221 758	5 120	10 159	159 976	811 621	884 038	1 687 676	30 955
311	Food manufacturing	5	25	6	350	8 907	259	535	6 279	42 759	34 713	77 477	1 687
321	Wood product manufacturing	-	40	21	2 869	95 233	2 511	5 050	79 676	232 155	535 932	763 070	5 766
3212	Veneer, plywood, and engineered wood product manufacturing	-	15	12	1 750	61 391	1 541	3 139	52 166	176 676	395 731	569 815	4 235
32121	Veneer, plywood, and engineered wood product manufacturing	-	15	12	1 750	61 391	1 541	3 139	52 166	176 676	395 731	569 815	4 235
321211	Hardwood veneer and plywood manufacturing	-	1	1	e	D	D	D	D	D	D	D	D
321212	Softwood veneer and plywood manufacturing	-	8	6	1 010	35 500	908	1 972	31 848	64 564	214 571	278 736	D
3219	Other wood product manufacturing	-	21	7	1 011	28 406	889	1 731	23 767	47 819	88 459	131 862	654
32191	Millwork	-	8	6	842	24 251	759	1 504	21 218	38 081	79 984	113 659	491
321911	Wood window and door manufacturing	-	1	1	e	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring)	-	4	4	e	D	D	D	D	D	D	D	D
323	Printing and related support activities	-	25	5	464	15 570	355	643	10 730	26 969	21 913	48 621	1 209
3231	Printing and related support activities	-	25	5	464	15 570	355	643	10 730	26 969	21 913	48 621	1 209
32311	Printing	-	23	5	e	D	D	D	D	D	D	D	D
325	Chemical manufacturing	-	11	5	555	27 218	432	856	19 331	343 174	157 650	501 110	D
3259	Other chemical product and preparation manufacturing	-	2	1	e	D	D	D	D	D	D	D	D
32599	All other chemical product and preparation manufacturing	-	2	1	e	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, and chemical manufacturing	-	1	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	-	17	4	274	8 930	203	433	6 425	27 563	18 747	45 237	2 337
333	Machinery manufacturing	1	20	5	417	15 303	224	449	7 769	38 953	21 730	60 168	1 234
334	Computer and electronic product manufacturing	3	12	4	254	9 247	149	295	4 010	13 747	15 021	28 713	D
336	Transportation equipment manufacturing	2	18	4	299	10 600	195	380	6 349	20 247	26 780	45 835	811
339	Miscellaneous manufacturing	2	42	7	374	10 388	285	529	6 465	23 176	6 969	30 147	1 559
3399	Other miscellaneous manufacturing	1	28	6	289	7 735	222	398	5 000	17 791	4 984	22 792	1 387

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

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			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
ONTARIO, OR-ID MICROPOLITAN STATISTICAL AREA													
31-33	Manufacturing	1	51	12	2 452	58 668	2 224	4 248	46 752	459 802	280 015	742 310	18 011
311	Food manufacturing	-	8	4	g	D	D	D	D	D	D	D	D
3114	Fruit and vegetable preserving and specialty food manufacturing	-	3	3	g	D	D	D	D	D	D	D	D
31141	Frozen food manufacturing	-	2	2	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, and vegetable manufacturing ...	-	2	2	g	D	D	D	D	D	D	D	D
321	Wood product manufacturing	-	5	3	e	D	D	D	D	D	D	D	D
3219	Other wood product manufacturing	-	4	2	e	D	D	D	D	D	D	D	D
32191	Millwork	-	2	2	e	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring)	-	1	1	e	D	D	D	D	D	D	D	D
PENDLETON-HERMISTON, OR MICROPOLITAN STATISTICAL AREA													
31-33	Manufacturing	2	84	30	4 597	133 961	3 986	7 877	102 117	495 044	611 235	1 103 661	26 002
311	Food manufacturing	3	28	18	2 993	85 591	2 618	5 234	65 975	352 059	417 196	769 362	23 232
3114	Fruit and vegetable preserving and specialty food manufacturing	4	13	12	2 482	68 559	2 223	4 483	54 632	294 794	265 266	561 493	15 322
31141	Frozen food manufacturing	3	8	8	2 312	62 724	2 084	4 199	50 665	271 963	245 479	517 497	14 023
311411	Frozen fruit, juice, and vegetable manufacturing ...	3	8	8	2 312	62 724	2 084	4 199	50 665	271 963	245 479	517 497	14 023
3118	Bakeries and tortilla manufacturing	-	4	2	e	D	D	D	D	D	D	D	D
321	Wood product manufacturing	1	7	3	539	15 749	454	769	11 821	25 637	61 729	86 449	958
3219	Other wood product manufacturing	-	4	1	e	D	D	D	D	D	D	D	276
32199	All other wood product manufacturing	-	2	1	e	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) manufacturing	-	1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	-	5	2	f	D	D	D	D	D	D	D	205
3362	Motor vehicle body and trailer manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body and trailer manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
336214	Travel trailer and camper manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
PORTLAND-VANCOUVER-BEAVERTON, OR-WA METROPOLITAN STATISTICAL AREA													
31-33	Manufacturing	-	'3 256	919	'110 748	'4 643 324	'73 675	'143 139	'2 534 413	'19 267 535	'11 357 506	'30 517 533	'855 023
311	Food manufacturing	1	206	75	8 471	274 633	5 381	10 604	156 246	1 582 186	1 165 520	2 741 950	84 680
3114	Fruit and vegetable preserving and specialty food manufacturing	-	26	14	1 399	40 190	1 104	2 162	24 724	220 437	199 619	415 437	23 815
31141	Frozen food manufacturing	-	9	5	e	D	D	D	D	D	D	D	D
311412	Frozen specialty food manufacturing	-	5	3	e	D	D	D	D	D	D	D	D
31142	Fruit and vegetable canning, pickling, and drying	-	17	9	f	D	D	D	D	D	D	D	D
311421	Fruit and vegetable canning ..	-	14	8	f	D	D	D	D	D	D	D	D
3115	Dairy product manufacturing	1	15	13	1 015	39 315	714	1 608	25 037	175 170	361 476	537 388	15 016
31151	Dairy product (except frozen) manufacturing	1	13	11	f	D	D	D	D	D	D	D	D
311511	Fluid milk manufacturing	1	8	8	708	26 655	477	1 070	16 361	122 797	296 996	420 248	D
3116	Animal slaughtering and processing	1	22	6	441	13 878	377	849	9 846	57 868	40 822	98 886	1 427
31161	Animal slaughtering and processing	1	22	6	441	13 878	377	849	9 846	57 868	40 822	98 886	1 427
311612	Meat processed from carcasses	1	12	4	319	9 654	269	622	6 636	52 598	25 189	78 105	1 220

See footnotes at end of table.

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

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		E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)					Wages (\$1,000)
PORTLAND-VANCOUVER-BEAVERTON, OR-WA METROPOLITAN STATISTICAL AREA—Con.													
311	Food manufacturing—Con.												
3118	Bakeries and tortilla manufacturing	3	74	26	3 219	96 799	1 726	3 133	55 364	589 123	203 201	791 495	15 749
31181	Bread and bakery product manufacturing	6	62	22	g	D	D	D	D	D	D	D	D
311811	Retail bakeries	2	33	7	331	5 531	191	269	2 921	9 278	4 923	14 202	D
311812	Commercial bakeries	6	27	14	2 085	57 376	914	1 609	25 352	358 960	74 976	434 432	11 573
31182	Cookie, cracker, and pasta manufacturing	—	11	4	f	D	D	D	D	D	D	D	D
311821	Cookie and cracker manufacturing	—	7	3	643	29 583	484	1 000	23 685	200 606	94 388	293 738	2 419
3119	Other food manufacturing	—	43	11	1 991	68 776	1 228	2 386	34 184	467 973	247 867	715 161	24 641
31191	Snack food manufacturing	—	6	3	f	D	D	D	D	D	D	D	D
311919	Other snack food manufacturing	—	3	2	f	D	D	D	D	D	D	D	D
31192	Coffee and tea manufacturing	—	4	2	f	D	D	D	D	D	D	D	D
311920	Coffee and tea manufacturing	—	4	2	f	D	D	D	D	D	D	D	D
31199	All other food manufacturing	1	25	3	510	14 831	400	860	9 087	65 327	70 007	135 315	D
311991	Perishable prepared food manufacturing	—	10	2	e	D	D	D	D	D	D	D	D
312	Beverage and tobacco product manufacturing	2	57	8	981	39 310	406	776	13 248	147 877	167 453	308 370	18 882
3121	Beverage manufacturing	2	57	8	981	39 310	406	776	13 248	147 877	167 453	308 370	18 882
31211	Soft drink and ice manufacturing	—	9	2	353	15 969	103	201	3 437	56 886	113 794	169 017	5 702
312111	Soft drink manufacturing	—	4	2	e	D	D	D	D	D	D	D	D
31213	Wineries	2	40	3	406	13 215	191	349	5 134	41 489	24 653	60 960	10 382
312130	Wineries	2	40	3	406	13 215	191	349	5 134	41 489	24 653	60 960	10 382
313	Textile mills	—	14	2	e	D	D	D	D	D	D	D	D
3132	Fabric mills	—	7	2	e	D	D	D	D	D	D	D	D
314	Textile product mills	2	49	8	661	17 619	477	971	10 298	48 783	37 655	85 272	1 534
3141	Textile furnishings mills	1	16	3	e	D	D	D	D	D	D	D	D
31412	Curtain and linen mills	—	14	3	e	D	D	D	D	D	D	D	D
3149	Other textile product mills	3	33	5	e	D	D	D	D	D	D	D	D
315	Apparel manufacturing	3	52	12	g	D	D	D	D	D	D	D	D
3152	Cut and sew apparel manufacturing	2	43	11	f	D	D	D	D	D	D	D	D
31521	Cut and sew apparel contractors	4	30	6	443	7 197	385	642	5 862	9 292	1 289	12 043	41
315212	Women's, girls', and infants' cut and sew apparel contractors	6	25	4	e	D	D	D	D	D	D	D	35
31523	Women's and girls' cut and sew apparel manufacturing	2	7	1	e	D	D	D	D	D	D	D	D
315239	Women's and girls' cut and sew other outerwear manufacturing	2	4	1	e	D	D	D	D	D	D	D	D
316	Leather and allied product manufacturing	5	12	4	371	10 879	247	474	4 867	20 042	17 971	40 591	361
321	Wood product manufacturing	1	175	70	5 603	181 564	4 658	9 503	135 288	436 073	834 429	1 260 072	23 303
3211	Sawmills and wood preservation	—	42	21	2 230	82 190	1 961	4 194	66 942	190 652	489 997	675 594	11 876
32111	Sawmills and wood preservation	—	42	21	2 230	82 190	1 961	4 194	66 942	190 652	489 997	675 594	11 876
321113	Sawmills	—	33	16	1 941	72 135	1 752	3 772	60 949	163 130	420 318	584 194	10 217
321114	Wood preservation	—	9	5	289	10 055	209	422	5 993	27 522	69 679	91 400	1 659
3212	Veneer, plywood, and engineered wood product manufacturing	1	28	17	839	29 292	663	1 438	20 309	63 730	107 768	171 229	2 663
32121	Veneer, plywood, and engineered wood product manufacturing	1	28	17	839	29 292	663	1 438	20 309	63 730	107 768	171 229	2 663
321214	Truss manufacturing	—	12	8	398	13 314	269	582	6 944	30 090	23 466	53 423	1 192

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
PORTLAND-VANCOUVER-BEAVERTON, OR-WA METROPOLITAN STATISTICAL AREA—Con.													
321	Wood product manufacturing—Con.												
3219	Other wood product manufacturing	4	105	32	2 534	70 082	2 034	3 871	48 037	181 691	236 664	413 249	8 764
32191	Millwork	4	57	18	1 680	46 945	1 340	2 567	31 318	132 397	185 058	312 783	5 085
321911	Wood window and door manufacturing	4	18	9	822	23 115	634	1 145	14 636	47 652	58 504	106 473	D
321912	Cut stock, resawing lumber, and planing	4	20	8	703	19 893	573	1 144	13 788	76 878	118 385	190 319	2 951
32192	Wood container and pallet manufacturing	1	18	6	334	7 659	271	527	5 491	13 443	17 568	30 806	2 925
321920	Wood container and pallet manufacturing	1	18	6	334	7 659	271	527	5 491	13 443	17 568	30 806	2 925
32199	All other wood product manufacturing	4	30	8	520	15 478	423	777	11 228	35 851	34 038	69 660	754
321999	All other miscellaneous wood product manufacturing	4	22	5	274	8 032	227	429	6 229	17 252	14 657	31 701	446
322	Paper manufacturing	—	50	31	6 186	312 910	4 915	10 135	229 979	925 779	1 139 973	2 052 442	104 592
3221	Pulp, paper, and paperboard mills	—	7	6	3 708	216 359	3 028	6 341	166 678	684 970	788 818	1 460 421	90 384
32212	Paper mills	—	7	6	3 708	216 359	3 028	6 341	166 678	684 970	788 818	1 460 421	90 384
322121	Paper (except newsprint) mills	—	5	4	h	D	D	D	D	D	D	D	D
322122	Newsprint mills	—	2	2	f	D	D	D	D	D	D	D	D
3222	Converted paper product manufacturing	—	43	25	2 478	96 551	1 887	3 794	63 301	240 809	351 155	592 021	14 208
32221	Paperboard container manufacturing	—	16	11	g	D	D	D	D	D	D	D	D
322211	Corrugated and solid fiber box manufacturing	1	12	9	841	34 365	652	1 332	21 970	76 972	129 388	204 343	D
32222	Paper bag and coated and treated paper manufacturing ..	—	14	8	f	D	D	D	D	D	D	D	D
322224	Uncoated paper and multiwall bag manufacturing	—	5	5	e	D	D	D	D	D	D	D	D
32229	Other converted paper product manufacturing	—	9	3	e	D	D	D	D	D	D	D	D
323	Printing and related support activities	1	'360	'73	'5 805	'210 780	'4 213	'7 945	'130 869	'458 593	'324 095	'783 165	'36 260
3231	Printing and related support activities	1	'360	'73	'5 805	'210 780	'4 213	'7 945	'130 869	'458 593	'324 095	'783 165	'36 260
32311	Printing	1	'317	'62	'5 222	'188 076	'3 774	'7 123	'116 556	'420 658	'310 975	'731 742	'32 885
323110	Commercial lithographic printing	—	'143	29	'2 827	'108 452	'2 001	'3 822	'67 272	'236 158	'194 658	'431 613	'16 148
323112	Commercial flexographic printing	2	13	9	486	19 514	324	656	9 656	54 342	32 249	85 631	2 940
323113	Commercial screen printing ..	'4	35	'5	'361	'10 681	'251	'464	'5 696	'17 540	'13 689	'31 183	D
323114	Quick printing	3	77	5	530	14 239	411	664	9 954	31 814	10 848	42 536	1 323
323116	Manifold business forms printing	—	10	7	362	12 910	294	561	9 847	32 453	31 009	63 791	D
32312	Support activities for printing...	1	43	11	583	22 704	439	822	14 313	37 935	13 120	51 423	3 375
323121	Tradebinding and related work	2	25	6	344	11 753	280	556	8 654	19 699	5 120	24 956	2 096
324	Petroleum and coal products manufacturing	1	'12	6	'435	'20 745	'333	'712	'14 204	'92 946	'165 592	'262 980	D
3241	Petroleum and coal products manufacturing	1	'12	6	'435	'20 745	'333	'712	'14 204	'92 946	'165 592	'262 980	D
32412	Asphalt paving, roofing, and saturated materials manufacturing	—	6	4	e	D	D	D	D	D	D	D	D
324122	Asphalt shingle and coating materials manufacturing ..	—	4	3	302	14 532	237	544	10 245	59 730	88 501	146 849	3 048
325	Chemical manufacturing	2	125	30	2 000	87 952	1 178	2 192	38 646	343 149	300 250	641 987	12 911
3254	Pharmaceutical and medicine manufacturing	2	25	9	f	D	D	D	D	D	D	D	2 814
32541	Pharmaceutical and medicine manufacturing	2	25	9	f	D	D	D	D	D	D	D	2 814
325411	Medicinal and botanical manufacturing	2	11	5	271	7 754	212	411	4 452	24 735	24 802	48 663	1 328
3255	Paint, coating, and adhesive manufacturing	2	20	4	314	14 337	173	308	5 027	68 503	63 951	131 476	1 193
3256	Soap, cleaning compound, and toilet preparation manufacturing ..	3	19	4	299	12 623	145	228	4 277	48 214	27 855	75 851	3 341
32561	Soap and cleaning compound manufacturing	3	14	4	269	11 440	122	185	3 607	41 213	25 022	66 017	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)					
PORTLAND-VANCOUVER-BEAVERTON, OR-WA METROPOLITAN STATISTICAL AREA—Con.														
325	Chemical manufacturing—Con.													
3259	Other chemical product and preparation manufacturing	1	34	8	f	D	D	D	D	D	D	D	D	
32591	Printing ink manufacturing	5	13	5	e	D	D	D	D	D	D	D	D	
325910	Printing ink manufacturing	5	13	5	e	D	D	D	D	D	D	D	D	
32599	All other chemical product and preparation manufacturing	—	21	3	e	D	D	D	D	D	D	D	D	
326	Plastics and rubber products manufacturing	1	128	60		5 262	165 872	3 900	7 638	98 648	432 935	350 845	782 527	20 631
3261	Plastics product manufacturing	1	109	50		4 666	146 743	3 461	6 804	86 735	381 222	309 042	689 081	18 970
32611	Plastics packaging materials and unlaminated film and sheet manufacturing	—	8	5		314	11 264	232	438	6 091	23 856	35 636	59 280	636
326113	Unlaminated plastics film and sheet (except packaging) manufacturing	—	6	4	e	D	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, and unlaminated profile shape manufacturing	5	10	4		309	10 728	214	463	7 136	22 816	40 986	61 818	D
32615	Urethane and other foam product (except polystyrene) manufacturing	—	8	4	e	D	D	D	D	D	D	D	D	D
326150	Urethane and other foam product (except polystyrene) manufacturing	—	8	4	e	D	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	1	76	34		3 461	108 918	2 621	5 180	65 505	292 961	187 121	479 566	12 458
326199	All other plastics product manufacturing	1	74	33	h	D	D	D	D	D	D	D	D	D
3262	Rubber product manufacturing	1	19	10		596	19 129	439	834	11 913	51 713	41 803	93 446	1 661
32629	Other rubber product manufacturing	2	11	7	e	D	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	2	119	33		2 568	98 905	1 974	3 783	70 113	277 307	194 036	474 089	27 015
3272	Glass and glass product manufacturing	2	31	13		1 075	39 926	824	1 588	28 776	106 096	68 482	176 928	17 381
32721	Glass and glass product manufacturing	2	31	13		1 075	39 926	824	1 588	28 776	106 096	68 482	176 928	17 381
327215	Glass product manufacturing made of purchased glass	3	24	7		624	22 233	463	893	15 244	45 553	43 879	88 013	D
3273	Cement and concrete product manufacturing	1	54	13		982	39 304	742	1 439	27 086	121 824	90 101	214 156	7 800
32732	Ready-mix concrete manufacturing	—	24	8		531	23 612	395	816	16 684	72 909	64 611	138 087	6 275
327320	Ready-mix concrete manufacturing	—	24	8		531	23 612	395	816	16 684	72 909	64 611	138 087	6 275
3279	Other nonmetallic mineral product manufacturing	2	15	4	e	D	D	D	D	D	D	D	D	1 619
32799	All other nonmetallic mineral product manufacturing	2	13	3		295	12 204	239	440	9 192	30 183	29 100	59 163	D
331	Primary metal manufacturing	—	48	21		5 419	217 900	4 009	7 908	134 832	602 050	642 581	1 266 328	22 579
3311	Iron and steel mills and ferroalloy manufacturing	—	4	4	g	D	D	D	D	D	D	D	D	D
33111	Iron and steel mills and ferroalloy manufacturing	—	4	4	g	D	D	D	D	D	D	D	D	D
331111	Iron and steel mills	—	4	4	g	D	D	D	D	D	D	D	D	D
3313	Alumina and aluminum production and processing	—	9	4	f	D	D	D	D	D	D	D	D	D
33131	Alumina and aluminum production and processing	—	9	4	f	D	D	D	D	D	D	D	D	D
331316	Aluminum extruded product manufacturing	—	4	2	f	D	D	D	D	D	D	D	D	D
3315	Foundries	—	28	11	h	D	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	12	6		1 911	81 544	1 300	2 692	44 650	222 032	114 629	338 910	6 620
331512	Steel investment foundries	—	2	2	f	D	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	6	4	g	D	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	16	5	g	D	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	—	2	1	g	D	D	D	D	D	D	D	D	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
PORTLAND-VANCOUVER-BEAVERTON, OR-WA METROPOLITAN STATISTICAL AREA—Con.													
332	Fabricated metal product manufacturing	1	638	147	11 773	450 678	8 473	17 139	275 740	1 173 911	679 517	1 857 026	68 111
3321	Forging and stamping.....	4	21	6	573	22 812	437	939	14 408	45 497	30 358	75 710	D
33211	Forging and stamping.....	4	21	6	573	22 812	437	939	14 408	45 497	30 358	75 710	D
332116	Metal stamping	6	11	3	332	12 785	251	524	7 968	25 774	19 222	44 974	D
3322	Cutlery and handtool manufacturing	—	20	10	g	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing	—	20	10	g	D	D	D	D	D	D	D	D
332212	Hand and edge tool manufacturing	—	14	7	f	D	D	D	D	D	D	D	D
332213	Saw blade and handsaw manufacturing	—	5	2	f	D	D	D	D	D	D	D	D
3323	Architectural and structural metals manufacturing	1	154	40	3 113	120 209	2 192	4 406	74 751	240 743	205 744	441 531	15 238
33231	Plate work and fabricated structural product manufacturing	1	66	16	1 390	56 434	976	1 936	34 758	98 035	124 957	222 033	9 348
332312	Fabricated structural metal manufacturing	1	56	13	1 160	49 633	792	1 597	30 371	85 182	118 257	203 361	6 283
33232	Ornamental and architectural metal products manufacturing	1	88	24	1 723	63 775	1 216	2 470	39 993	142 708	80 787	219 498	5 890
332321	Metal window and door manufacturing	—	8	2	316	9 432	227	540	6 095	33 226	23 976	55 646	D
332322	Sheet metal work manufacturing	1	52	19	1 131	41 240	798	1 559	25 914	86 500	43 345	127 602	3 233
332323	Ornamental and architectural metal work manufacturing ..	2	28	3	276	13 103	191	371	7 984	22 982	13 466	36 250	D
3324	Boiler, tank, and shipping container manufacturing	—	19	11	696	28 672	481	977	17 123	63 148	108 455	173 896	5 889
33241	Power boiler and heat exchanger manufacturing	1	4	4	338	14 235	198	361	6 797	29 177	66 214	95 776	3 755
332410	Power boiler and heat exchanger manufacturing ..	1	4	4	338	14 235	198	361	6 797	29 177	66 214	95 776	3 755
3325	Hardware manufacturing	—	6	3	e	D	D	D	D	D	D	D	D
33251	Hardware manufacturing	—	6	3	e	D	D	D	D	D	D	D	D
332510	Hardware manufacturing	—	6	3	e	D	D	D	D	D	D	D	D
3326	Spring and wire product manufacturing	5	24	10	683	22 580	501	1 032	13 655	53 376	28 866	88 290	D
33261	Spring and wire product manufacturing	5	24	10	683	22 580	501	1 032	13 655	53 376	28 866	88 290	D
332618	Other fabricated wire product manufacturing	6	16	6	497	16 301	360	756	9 152	40 909	21 855	69 045	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	2	266	36	2 515	96 240	1 901	3 770	64 858	185 595	86 613	272 773	22 736
33271	Machine shops	2	238	26	2 054	76 188	1 543	3 035	50 357	141 682	69 730	211 709	9 348
332710	Machine shops	2	238	26	2 054	76 188	1 543	3 035	50 357	141 682	69 730	211 709	9 348
33272	Turned product and screw, nut, and bolt manufacturing	1	28	10	461	20 052	358	735	14 501	43 913	16 883	61 064	13 388
332721	Precision turned product manufacturing	—	21	8	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, and allied activities	3	63	15	899	30 401	717	1 477	21 612	71 974	25 928	97 932	3 686
33281	Coating, engraving, heat treating, and allied activities ..	3	63	15	899	30 401	717	1 477	21 612	71 974	25 928	97 932	3 686
332812	Metal coating, engraving (silverware), and allied services to manufacturers ..	3	23	7	346	11 632	271	572	8 271	25 748	13 634	39 415	D
332813	Electroplating, plating, polishing, anodizing, and coloring	2	30	5	386	12 639	313	624	9 144	24 301	7 056	31 357	D
3329	Other fabricated metal product manufacturing	2	65	16	932	33 918	694	1 425	23 322	69 349	45 010	114 241	5 154
33299	All other fabricated metal product manufacturing	2	57	15	853	30 996	636	1 295	21 861	61 020	38 378	99 062	D
332999	All other miscellaneous fabricated metal product manufacturing	2	43	12	556	18 684	406	789	12 968	38 271	22 418	60 509	2 275
333	Machinery manufacturing	2	229	78	8 085	348 793	4 632	8 641	164 815	793 888	681 014	1 439 503	44 834

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
PORTLAND-VANCOUVER-BEAVERTON, OR-WA METROPOLITAN STATISTICAL AREA—Con.													
333	Machinery manufacturing—Con.												
3331	Agriculture, construction, and mining machinery manufacturing	2	17	10	861	40 214	474	945	18 921	72 099	112 911	185 269	3 758
33312	Construction machinery manufacturing	14	18	14	1455	122 219	1239	1489	19 989	141 961	150 462	192 520	D
333120	Construction machinery manufacturing	14	18	14	1455	122 219	1239	1489	19 989	141 961	150 462	192 520	D
33313	Mining and oil and gas field machinery manufacturing	—	14	14	e	D	D	D	D	D	D	D	D
333131	Mining machinery and equipment manufacturing ..	—	4	4	e	D	D	D	D	D	D	D	D
3332	Industrial machinery manufacturing	4	66	26	2 898	117 395	1 463	2 547	49 971	293 594	202 825	469 218	18 150
33321	Sawmill and woodworking machinery manufacturing	1	15	7	424	14 375	252	513	7 952	30 284	16 090	47 199	D
333210	Sawmill and woodworking machinery manufacturing ..	1	15	7	424	14 375	252	513	7 952	30 284	16 090	47 199	D
33329	Other industrial machinery manufacturing	4	44	17	2 240	92 533	1 081	1 782	37 150	259 659	186 076	419 312	D
333291	Paper industry machinery manufacturing	3	12	4	e	D	D	D	D	D	D	D	D
333295	Semiconductor machinery manufacturing	5	7	5	g	D	D	D	D	D	D	D	D
333298	All other industrial machinery manufacturing	2	18	7	f	D	D	D	D	D	D	D	3 716
3333	Commercial and service industry machinery manufacturing	—	20	7	1 029	43 807	653	1 391	22 954	97 891	62 113	159 458	3 035
33331	Commercial and service industry machinery manufacturing	—	20	7	1 029	43 807	653	1 391	22 954	97 891	62 113	159 458	3 035
333314	Optical instrument and lens manufacturing	—	6	4	f	D	D	D	D	D	D	D	D
333319	Other commercial and service industry machinery manufacturing	—	8	2	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	1	9	5	522	21 200	360	781	11 197	55 453	43 463	90 553	D
33341	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	1	9	5	522	21 200	360	781	11 197	55 453	43 463	90 553	D
333411	Air purification equipment manufacturing	—	3	2	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery manufacturing	1	49	8	e	D	D	D	D	D	D	D	4 969
33351	Metalworking machinery manufacturing	1	49	8	e	D	D	D	D	D	D	D	4 969
3339	Other general purpose machinery manufacturing	1	60	19	2 176	101 366	1 294	2 282	47 490	222 729	237 843	461 317	12 411
33391	Pump and compressor manufacturing	—	6	6	f	D	D	D	D	D	D	D	D
333911	Pump and pumping equipment manufacturing ..	—	6	6	f	D	D	D	D	D	D	D	D
33392	Material handling equipment manufacturing	—	18	7	991	49 901	567	841	22 188	113 933	104 120	217 597	8 411
333922	Conveyor and conveying equipment manufacturing ..	1	6	3	e	D	D	D	D	D	D	D	D
333923	Overhead traveling crane, hoist, and monorail system manufacturing	—	2	1	e	D	D	D	D	D	D	D	D
333924	Industrial truck, tractor, trailer, and stacker machinery manufacturing ..	—	9	3	363	21 474	153	329	6 614	41 592	27 358	69 667	D
33399	All other general purpose machinery manufacturing	2	36	6	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	—	215	97	26 181	1 428 152	13 625	25 377	581 702	10 084 998	2 939 394	12 940 483	291 313
3341	Computer and peripheral equipment manufacturing	—	26	10	3 528	219 307	867	1 580	37 819	570 165	610 206	1 170 792	62 903
33411	Computer and peripheral equipment manufacturing	—	26	10	3 528	219 307	867	1 580	37 819	570 165	610 206	1 170 792	62 903
334111	Electronic computer manufacturing	6	6	3	e	D	D	D	D	D	D	D	D
334113	Computer terminal manufacturing	—	2	1	e	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment manufacturing ..	—	16	6	2 930	180 790	556	1 026	22 634	395 878	517 786	907 149	49 592

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
PORTLAND-VANCOUVER-BEAVERTON, OR-WA METROPOLITAN STATISTICAL AREA—Con.													
334	Computer and electronic product manufacturing—Con.												
3342	Communications equipment manufacturing	1	19	8	g	D	D	D	D	D	D	D	D
33422	Radio and television broadcasting and wireless communications equipment manufacturing	2	6	4	1 683	48 022	936	1 288	28 924	157 690	110 580	267 296	D
334220	Radio and television broadcasting and wireless communications equipment manufacturing	2	6	4	1 683	48 022	936	1 288	28 924	157 690	110 580	267 296	D
33429	Other communications equipment manufacturing	—	9	3	f	D	D	D	D	D	D	D	D
334290	Other communications equipment manufacturing ..	—	9	3	f	D	D	D	D	D	D	D	D
3343	Audio and video equipment manufacturing	1	11	5	690	31 546	394	1 253	19 271	87 350	269 811	353 600	D
33431	Audio and video equipment manufacturing	1	11	5	690	31 546	394	1 253	19 271	87 350	269 811	353 600	D
334310	Audio and video equipment manufacturing	1	11	5	690	31 546	394	1 253	19 271	87 350	269 811	353 600	D
3344	Semiconductor and other electronic component manufacturing	—	82	44	12 652	652 966	8 401	16 479	366 839	8 352 732	1 366 796	9 623 540	134 439
33441	Semiconductor and other electronic component manufacturing	—	82	44	12 652	652 966	8 401	16 479	366 839	8 352 732	1 366 796	9 623 540	134 439
334412	Bare printed circuit board manufacturing	—	12	4	g	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	—	28	21	9 589	537 035	6 293	12 784	306 944	8 099 624	1 182 377	9 193 572	114 962
334418	Printed circuit assembly (electronic assembly) manufacturing	2	14	11	834	32 402	473	968	13 513	76 707	96 133	172 452	D
334419	Other electronic component manufacturing	—	18	6	f	D	D	D	D	D	D	D	5 349
3345	Navigational, measuring, electromedical, and control instruments manufacturing	1	65	28	6 693	440 778	2 496	3 737	114 219	824 974	500 712	1 352 833	46 718
33451	Navigational, measuring, electromedical, and control instruments manufacturing ...	1	65	28	6 693	440 778	2 496	3 737	114 219	824 974	500 712	1 352 833	46 718
334510	Electromedical and electrotherapeutic apparatus manufacturing ...	3	11	5	1 852	80 842	1 030	1 251	37 100	209 988	127 002	344 495	D
334511	Search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing	—	6	3	327	24 162	162	366	8 071	79 785	43 089	121 871	D
334514	Totalizing fluid meter and counting device manufacturing	—	5	2	e	D	D	D	D	D	D	D	D
334515	Instrument manufacturing for measuring and testing electricity and electrical signals	—	20	9	3 859	308 742	967	1 558	59 852	494 472	298 256	812 946	36 552
335	Electrical equipment, appliance, and component manufacturing	1	53	17	2 204	95 727	1 320	2 741	41 487	217 937	224 553	449 838	D
3351	Electric lighting equipment manufacturing	1	11	5	e	D	D	D	D	D	D	D	D
33512	Lighting fixture manufacturing ..	1	9	4	e	D	D	D	D	D	D	D	D
335121	Residential electric lighting fixture manufacturing	—	3	1	e	D	D	D	D	D	D	D	D
3353	Electrical equipment manufacturing	3	21	6	e	D	D	D	D	D	D	D	D
33531	Electrical equipment manufacturing	3	21	6	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing	—	18	6	1 329	66 953	732	1 606	26 565	125 209	154 159	288 404	D
33591	Battery manufacturing	—	3	2	e	D	D	D	D	D	D	D	D
335911	Storage battery manufacturing	—	3	2	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment and component manufacturing	—	9	2	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment and component manufacturing ..	—	8	2	f	D	D	D	D	D	D	D	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
PORTLAND-VANCOUVER-BEAVERTON, OR-WA METROPOLITAN STATISTICAL AREA—Con.													
336	Transportation equipment manufacturing	-	124	36	6 722	291 424	5 316	10 230	213 384	673 392	936 773	1 618 170	31 717
3361	Motor vehicle manufacturing	-	5	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck manufacturing	-	3	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck manufacturing	-	3	1	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer manufacturing	1	19	7	827	24 034	682	1 360	16 293	45 562	75 886	120 809	D
33621	Motor vehicle body and trailer manufacturing	1	19	7	827	24 034	682	1 360	16 293	45 562	75 886	120 809	D
336212	Truck trailer manufacturing ..	-	3	2	e	D	D	D	D	D	D	D	D
336214	Travel trailer and camper manufacturing	-	10	4	479	13 305	408	821	8 944	25 786	43 098	68 365	D
3363	Motor vehicle parts manufacturing	1	49	16	g	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical and electronic equipment manufacturing	-	7	3	331	15 886	163	336	7 303	40 734	28 906	69 261	D
336322	Other motor vehicle electrical and electronic equipment manufacturing	-	7	3	331	15 886	163	336	7 303	40 734	28 906	69 261	D
33635	Motor vehicle transmission and power train parts manufacturing	-	6	2	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission and power train parts manufacturing	-	6	2	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts manufacturing	2	17	9	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts manufacturing	2	17	9	f	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	-	14	3	1 517	98 415	1 099	2 485	72 269	276 135	61 109	348 705	D
33641	Aerospace product and parts manufacturing	-	14	3	1 517	98 415	1 099	2 485	72 269	276 135	61 109	348 705	D
336413	Other aircraft parts and auxiliary equipment manufacturing	-	11	3	g	D	D	D	D	D	D	D	D
3365	Railroad rolling stock manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
3366	Ship and boat building	1	20	5	519	21 170	421	897	15 509	34 208	20 357	54 565	2 716
33661	Ship and boat building	1	20	5	519	21 170	421	897	15 509	34 208	20 357	54 565	2 716
336611	Ship building and repairing ..	1	13	4	e	D	D	D	D	D	D	D	D
3369	Other transportation equipment manufacturing	1	16	3	e	D	D	D	D	D	D	D	1 505
33699	Other transportation equipment manufacturing	1	16	3	e	D	D	D	D	D	D	D	1 505
336999	All other transportation equipment manufacturing ..	1	9	1	e	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	1	252	52	4 366	131 698	3 358	6 558	83 913	326 991	218 194	544 768	D
3371	Household and institutional furniture and kitchen cabinet manufacturing	1	197	32	2 936	79 932	2 359	4 584	56 165	190 297	140 986	331 183	D
33711	Wood kitchen cabinet and countertop manufacturing	1	123	16	1 499	44 744	1 149	2 303	30 403	106 371	64 821	171 408	3 527
337110	Wood kitchen cabinet and countertop manufacturing ..	1	123	16	1 499	44 744	1 149	2 303	30 403	106 371	64 821	171 408	3 527
33712	Household and institutional furniture manufacturing	2	74	16	1 437	35 188	1 210	2 281	25 762	83 926	76 165	159 775	D
337121	Upholstered household furniture manufacturing	2	31	10	874	20 593	720	1 379	13 889	42 382	46 351	88 208	D
337122	Nonupholstered wood household furniture manufacturing	2	32	5	417	9 730	372	664	8 060	21 967	22 111	44 208	D
3372	Office furniture (including fixtures) manufacturing	1	47	15	g	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) manufacturing	1	47	15	g	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork and millwork manufacturing	-	22	9	732	27 855	502	949	14 507	66 862	26 385	92 761	D
337215	Showcase, partition, shelving, and locker manufacturing	3	20	5	252	7 823	180	349	4 413	16 132	9 517	25 544	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
PORTLAND-VANCOUVER-BEAVERTON, OR-WA METROPOLITAN STATISTICAL AREA—Con.													
337	Furniture and related product manufacturing—Con.												
3379	Other furniture related product manufacturing	—	8	5	e	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	2	'338	'59	'6 278	'226 510	'4 183	'7 971	'113 188	'569 003	'287 217	'854 228	'28 930
3391	Medical equipment and supplies manufacturing	2	136	26	3 061	124 939	1 979	3 817	59 601	304 390	121 048	423 707	20 038
33911	Medical equipment and supplies manufacturing	2	136	26	3 061	124 939	1 979	3 817	59 601	304 390	121 048	423 707	20 038
339111	Laboratory apparatus and furniture manufacturing	—	7	2	255	8 916	191	414	4 731	16 421	13 054	29 079	686
339112	Surgical and medical instrument manufacturing ..	2	15	3	297	14 193	145	293	5 349	44 309	12 008	55 365	4 405
339113	Surgical appliance and supplies manufacturing	5	13	4	267	9 756	196	327	4 847	22 203	17 255	39 234	1 236
339114	Dental equipment and supplies manufacturing	1	22	7	1 316	65 510	752	1 608	26 074	170 558	63 448	233 750	11 951
339116	Dental laboratories	5	72	7	772	21 831	565	993	15 393	39 758	8 477	48 330	1 333
3399	Other miscellaneous manufacturing	2	'202	'33	'3 217	'101 571	'2 204	'4 154	'53 587	'264 613	'166 169	'430 521	'8 892
33992	Sporting and athletic goods manufacturing	3	35	7	511	17 149	284	528	7 206	44 661	32 300	77 708	1 745
339920	Sporting and athletic goods manufacturing	3	35	7	511	17 149	284	528	7 206	44 661	32 300	77 708	1 745
33994	Office supplies (except paper) manufacturing	5	13	4	e	D	D	D	D	D	D	D	D
33995	Sign manufacturing	—	'58	'8	'684	'24 087	'462	'916	'13 608	'44 366	'32 065	'78 308	'2 219
339950	Sign manufacturing	—	'58	'8	'684	'24 087	'462	'916	'13 608	'44 366	'32 065	'78 308	'2 219
33999	All other miscellaneous manufacturing	2	68	12	1 535	46 847	1 111	2 068	25 337	136 931	65 826	199 508	3 737
339994	Broom, brush, and mop manufacturing	2	4	3	f	D	D	D	D	D	D	D	D
339999	All other miscellaneous manufacturing	3	45	6	428	12 228	284	521	6 491	23 807	16 822	40 530	1 079
ROSEBURG, OR MICROPOLITAN STATISTICAL AREA													
31-33	Manufacturing	—	139	45	6 070	209 405	5 117	10 291	159 251	417 251	853 203	1 266 593	30 297
321	Wood product manufacturing	—	35	25	4 303	151 054	3 843	7 943	126 501	255 811	712 199	965 837	23 235
3211	Sawmills and wood preservation ..	—	15	12	1 575	60 347	1 350	2 841	47 406	125 279	308 740	435 077	13 444
32111	Sawmills and wood preservation	—	15	12	1 575	60 347	1 350	2 841	47 406	125 279	308 740	435 077	13 444
321113	Sawmills	—	15	12	1 575	60 347	1 350	2 841	47 406	125 279	308 740	435 077	13 444
3212	Veneer, plywood, and engineered wood product manufacturing....	—	8	8	g	D	D	D	D	D	D	D	9 159
32121	Veneer, plywood, and engineered wood product manufacturing	—	8	8	g	D	D	D	D	D	D	D	9 159
321211	Hardwood veneer and plywood manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
321212	Softwood veneer and plywood manufacturing	—	3	3	g	D	D	D	D	D	D	D	D
321219	Reconstituted wood product manufacturing	—	1	1	e	D	D	D	D	D	D	D	D
3219	Other wood product manufacturing	2	12	5	e	D	D	D	D	D	D	D	632
336	Transportation equipment manufacturing	—	10	5	515	13 960	476	967	12 294	41 577	46 052	84 739	1 291
3366	Ship and boat building	—	2	2	e	D	D	D	D	D	D	D	D
33661	Ship and boat building	—	2	2	e	D	D	D	D	D	D	D	D
336612	Boat building	—	1	1	e	D	D	D	D	D	D	D	D
SALEM, OR METROPOLITAN STATISTICAL AREA													
31-33	Manufacturing	3	438	135	13 200	423 179	10 124	19 477	268 147	1 311 350	1 196 569	2 486 387	71 048

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
SALEM, OR METROPOLITAN STATISTICAL AREA—Con.													
311	Food manufacturing	4	51	25	4 168	110 009	3 508	6 858	79 312	614 534	355 237	930 133	22 075
3114	Fruit and vegetable preserving and specialty food manufacturing	5	17	14	3 367	86 213	2 896	5 707	63 487	533 012	260 895	754 810	14 032
31141	Frozen food manufacturing	5	10	8	2 301	62 779	1 959	4 045	46 434	421 656	217 839	600 479	12 482
311411	Frozen fruit, juice, and vegetable manufacturing ...	5	10	8	2 301	62 779	1 959	4 045	46 434	421 656	217 839	600 479	12 482
31142	Fruit and vegetable canning, pickling, and drying	8	7	6	1 066	23 434	937	1 662	17 053	111 356	43 056	154 331	1 550
311421	Fruit and vegetable canning .	9	5	4	f	D	D	D	D	D	D	D	D
3119	Other food manufacturing	—	6	4	295	9 735	233	516	5 138	34 465	27 516	61 964	D
31191	Snack food manufacturing	—	4	3	e	D	D	D	D	D	D	D	D
315	Apparel manufacturing	—	8	4	e	D	D	D	D	D	D	D	D
3152	Cut and sew apparel manufacturing	—	7	4	e	D	D	D	D	D	D	D	D
321	Wood product manufacturing	1	47	25	2 020	63 203	1 613	3 176	45 608	120 487	247 118	370 496	6 254
3212	Veneer, plywood, and engineered wood product manufacturing	—	7	6	386	12 042	309	598	9 045	37 082	68 959	108 541	2 564
32121	Veneer, plywood, and engineered wood product manufacturing	—	7	6	386	12 042	309	598	9 045	37 082	68 959	108 541	2 564
3219	Other wood product manufacturing	2	34	16	1 446	43 372	1 138	2 201	30 030	75 888	113 596	189 240	2 752
32191	Millwork	2	16	9	462	11 534	373	728	8 517	21 443	49 826	70 976	1 557
321912	Cut stock, resawing lumber, and planing	1	7	5	253	6 260	192	367	4 469	11 937	39 980	51 562	479
32199	All other wood product manufacturing	2	13	7	942	30 973	728	1 410	20 861	52 687	62 788	115 509	1 165
321991	Manufactured home (mobile home) manufacturing	2	6	6	829	27 145	653	1 261	18 519	47 851	53 580	101 465	D
323	Printing and related support activities	1	33	5	366	12 438	289	505	9 076	30 911	20 823	51 745	5 804
3231	Printing and related support activities	1	33	5	366	12 438	289	505	9 076	30 911	20 823	51 745	5 804
32311	Printing	1	32	5	e	D	D	D	D	D	D	D	D
325	Chemical manufacturing	2	12	9	381	17 070	222	483	8 009	57 421	65 553	122 565	1 620
326	Plastics and rubber products manufacturing	1	18	6	756	20 905	643	1 394	16 221	51 611	46 607	98 334	3 145
3261	Plastics product manufacturing ..	1	16	6	f	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	1	11	4	663	18 060	556	1 198	13 685	44 026	42 021	85 895	D
326199	All other plastics product manufacturing	—	7	2	f	D	D	D	D	D	D	D	1 170
332	Fabricated metal product manufacturing	2	81	20	1 386	46 847	993	1 778	26 800	119 957	127 344	252 175	6 574
3323	Architectural and structural metals manufacturing	—	36	11	814	27 660	553	997	15 213	60 978	83 025	147 835	2 971
33231	Plate work and fabricated structural product manufacturing	1	19	4	294	10 431	186	368	5 548	20 442	35 704	57 027	1 055
33232	Ornamental and architectural metal products manufacturing	—	17	7	520	17 229	367	629	9 665	40 536	47 321	90 808	1 916
332322	Sheet metal work manufacturing	—	10	5	389	13 641	280	497	8 032	33 497	40 447	76 481	809
333	Machinery manufacturing	2	36	9	540	19 820	351	690	11 055	41 734	29 440	71 868	1 743
334	Computer and electronic product manufacturing	—	15	7	1 611	71 724	1 110	2 195	36 321	136 379	115 008	265 124	12 758
3344	Semiconductor and other electronic component manufacturing	—	6	4	g	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	—	6	4	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board manufacturing	—	1	1	e	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	—	3	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	3	40	4	309	9 706	209	395	5 315	20 085	13 278	31 281	1 143

See footnotes at end of table.

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

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

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

³Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more.

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

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

Table 3. Industry Statistics for Counties: 2002

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
BAKER													
31-33	Manufacturing	-	22	6	560	16 958	482	859	13 731	44 437	72 953	118 657	2 439
BENTON													
31-33	Manufacturing	-	103	19	5 963	329 240	2 907	5 990	198 184	270 924	299 011	581 738	20 731
334	Computer and electronic product manufacturing	-	11	4	4 617	282 266	1 902	3 945	167 076	182 918	181 367	364 915	D
3341	Computer and peripheral equipment manufacturing	-	4	2	h	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	-	4	2	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment manufacturing ..	-	3	2	h	D	D	D	D	D	D	D	D
CLACKAMAS													
31-33	Manufacturing	1	588	150	17 809	746 726	11 287	21 577	359 625	2 036 297	1 850 137	3 885 737	142 596
311	Food manufacturing	5	31	12	f	D	D	D	D	D	D	D	6 311
321	Wood product manufacturing	2	35	13	1 231	37 437	1 041	2 081	28 823	89 511	161 364	248 999	2 696
3211	Sawmills and wood preservation .	1	10	5	611	18 538	577	1 180	16 835	43 658	103 568	148 847	1 611
32111	Sawmills and wood preservation	1	10	5	611	18 538	577	1 180	16 835	43 658	103 568	148 847	1 611
321113	Sawmills	1	10	5	611	18 538	577	1 180	16 835	43 658	103 568	148 847	1 611
3219	Other wood product manufacturing	5	22	6	512	15 563	391	744	10 115	37 459	48 615	82 648	D
322	Paper manufacturing	-	8	5	688	33 819	532	1 119	23 743	97 401	196 398	292 177	D
3221	Pulp, paper, and paperboard mills	-	2	2	f	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	-	24	11	848	28 239	650	1 283	17 219	70 713	58 406	127 954	1 650
3261	Plastics product manufacturing ..	-	21	9	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	2	24	5	f	D	D	D	D	D	D	D	3 741
331	Primary metal manufacturing	-	10	5	1 127	42 948	900	1 803	29 897	118 805	44 688	165 528	2 316
3315	Foundries	-	9	5	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	5	3	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries ..	-	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	-	154	26	2 688	115 305	1 830	3 939	63 090	421 751	137 830	564 563	18 236
3322	Cutlery and handtool manufacturing	-	6	2	g	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing	-	6	2	g	D	D	D	D	D	D	D	D
332213	Saw blade and handsaw manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
3323	Architectural and structural metals manufacturing	-	36	5	562	24 639	380	774	14 134	49 552	42 955	91 377	3 890
333	Machinery manufacturing	2	53	16	1 630	67 824	1 060	1 920	37 128	196 903	138 337	332 951	9 310
3339	Other general purpose machinery manufacturing	1	20	9	1 018	42 290	669	1 184	22 177	128 767	96 128	221 836	6 176
334	Computer and electronic product manufacturing	-	29	17	h	D	D	D	D	D	D	D	D
3341	Computer and peripheral equipment manufacturing	-	2	2	h	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	-	2	2	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment manufacturing ..	-	2	2	h	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	-	11	6	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	-	11	6	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	10	6	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing ...	-	10	6	g	D	D	D	D	D	D	D	D
334510	Electromedical and electrotherapeutic apparatus manufacturing ...	-	2	1	f	D	D	D	D	D	D	D	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
CLACKAMAS—Con.													
336	Transportation equipment manufacturing	2	25	6	f	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	2	54	6	626	16 050	525	991	12 111	31 520	27 899	59 611	D
3371	Household and institutional furniture and kitchen cabinet manufacturing	1	46	4	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	1	56	12	f	D	D	D	D	D	D	D	2 787
3399	Other miscellaneous manufacturing	1	33	8	f	D	D	D	D	D	D	D	D
CLATSOP													
31-33	Manufacturing	-	48	12	840	24 355	659	1 210	16 789	62 620	102 787	166 400	1 833
COLUMBIA													
31-33	Manufacturing	-	51	20	2 855	134 394	2 282	4 724	99 549	510 945	464 882	973 935	25 007
321	Wood product manufacturing	-	11	8	f	D	D	D	D	D	D	D	2 033
322	Paper manufacturing	-	4	2	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, and paperboard mills	-	2	2	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	2	2	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	2	2	g	D	D	D	D	D	D	D	D
COOS													
31-33	Manufacturing	1	76	13	1 534	51 671	1 268	2 604	40 798	116 405	234 521	350 160	5 090
321	Wood product manufacturing	-	18	7	802	27 202	711	1 508	23 639	45 586	150 818	195 271	2 025
CROOK													
31-33	Manufacturing	1	26	7	1 393	33 890	1 217	2 346	27 358	84 028	112 866	195 231	3 388
321	Wood product manufacturing	-	9	5	1 192	27 396	1 050	2 038	22 740	68 822	93 965	161 063	3 126
3219	Other wood product manufacturing	-	7	4	g	D	D	D	D	D	D	D	D
32191	Millwork	-	5	4	g	D	D	D	D	D	D	D	D
321911	Wood window and door manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
CURRY													
31-33	Manufacturing	-	29	3	640	25 349	550	1 244	19 519	42 566	88 157	132 182	D
DESCHUTES													
31-33	Manufacturing	1	245	52	5 053	155 814	3 898	7 036	97 788	365 085	343 247	699 061	14 745
321	Wood product manufacturing	-	27	18	1 884	47 566	1 642	2 626	36 451	100 655	147 768	245 344	5 107
3219	Other wood product manufacturing	-	19	14	1 656	40 713	1 450	2 389	31 560	91 214	133 725	220 847	4 360
32191	Millwork	-	14	11	1 447	34 637	1 293	2 077	27 498	78 753	123 255	197 880	3 599
321911	Wood window and door manufacturing	-	6	6	898	24 737	783	1 395	19 208	62 561	73 273	132 361	2 537
336	Transportation equipment manufacturing	1	17	3	797	24 247	680	1 401	18 081	57 047	67 665	118 528	1 338
3362	Motor vehicle body and trailer manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body and trailer manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
DOUGLAS													
31-33	Manufacturing	-	139	45	6 070	209 405	5 117	10 291	159 251	417 251	853 203	1 266 593	30 297
321	Wood product manufacturing	-	35	25	4 303	151 054	3 843	7 943	126 501	255 811	712 199	965 837	23 235
3211	Sawmills and wood preservation	-	15	12	1 575	60 347	1 350	2 841	47 406	125 279	308 740	435 077	13 444
32111	Sawmills and wood preservation	-	15	12	1 575	60 347	1 350	2 841	47 406	125 279	308 740	435 077	13 444
321113	Sawmills	-	15	12	1 575	60 347	1 350	2 841	47 406	125 279	308 740	435 077	13 444
3212	Veneer, plywood, and engineered wood product manufacturing	-	8	8	g	D	D	D	D	D	D	D	9 159
32121	Veneer, plywood, and engineered wood product manufacturing	-	8	8	g	D	D	D	D	D	D	D	9 159
321211	Hardwood veneer and plywood manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
321212	Softwood veneer and plywood manufacturing	-	3	3	g	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	-	10	5	515	13 960	476	967	12 294	41 577	46 052	84 739	1 291

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
HOOD RIVER													
31-33	Manufacturing	2	54	13	f	D	D	D	D	D	D	D	1 586
JACKSON													
31-33	Manufacturing	—	310	71	6 552	221 758	5 120	10 159	159 976	811 621	884 038	1 687 676	30 955
321	Wood product manufacturing	—	140	21	2 869	195 233	2 511	5 050	79 676	232 155	535 932	763 070	5 766
3212	Veneer, plywood, and engineered wood product manufacturing	—	15	12	1 750	161 391	1 541	3 139	52 166	176 676	395 731	569 815	4 235
32121	Veneer, plywood, and engineered wood product manufacturing	—	15	12	1 750	161 391	1 541	3 139	52 166	176 676	395 731	569 815	4 235
321212	Softwood veneer and plywood manufacturing	—	8	6	1 010	35 500	908	1 972	31 848	64 564	214 571	278 736	D
3219	Other wood product manufacturing	—	21	7	1 011	28 406	889	1 731	23 767	47 819	88 459	131 862	654
32191	Millwork	—	8	6	842	24 251	759	1 504	21 218	38 081	79 984	113 659	491
325	Chemical manufacturing	—	11	5	f	D	D	D	D	D	D	D	D
JEFFERSON													
31-33	Manufacturing	—	22	6	1 699	49 777	1 379	2 938	38 893	60 392	214 179	274 103	4 280
321	Wood product manufacturing	—	4	1	g	D	D	D	D	D	D	D	D
3219	Other wood product manufacturing	—	3	1	g	D	D	D	D	D	D	D	D
32191	Millwork	—	2	1	g	D	D	D	D	D	D	D	D
321912	Cut stock, resawing lumber, and planing	—	1	1	g	D	D	D	D	D	D	D	D
JOSEPHINE													
31-33	Manufacturing	1	133	25	2 831	84 405	2 115	4 330	51 166	199 997	191 375	393 759	22 362
321	Wood product manufacturing	—	18	8	920	27 955	776	1 570	19 760	55 136	104 022	162 077	906
KLAMATH													
31-33	Manufacturing	—	71	22	2 500	85 219	2 105	4 371	64 568	293 640	296 628	590 913	18 758
321	Wood product manufacturing	—	14	9	1 414	53 301	1 252	2 641	44 082	166 388	208 090	373 085	5 542
3212	Veneer, plywood, and engineered wood product manufacturing	—	6	5	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, and engineered wood product manufacturing	—	6	5	f	D	D	D	D	D	D	D	D
LANE													
31-33	Manufacturing	1	612	160	19 296	720 717	13 832	27 000	442 383	2 393 189	2 361 840	4 751 919	163 328
311	Food manufacturing	7	53	12	1 183	39 377	722	1 395	21 979	189 141	115 161	303 835	7 016
3118	Bakeries and tortilla manufacturing	9	14	2	f	D	D	D	D	D	D	D	D
31181	Bread and bakery product manufacturing	9	13	2	f	D	D	D	D	D	D	D	D
321	Wood product manufacturing	—	77	42	5 280	201 568	4 460	9 439	155 455	470 416	963 768	1 436 280	26 549
3211	Sawmills and wood preservation	—	21	15	1 863	83 783	1 556	3 455	63 278	246 370	472 020	720 556	12 160
32111	Sawmills and wood preservation	—	21	15	1 863	83 783	1 556	3 455	63 278	246 370	472 020	720 556	12 160
321113	Sawmills	—	17	11	1 660	77 369	1 405	3 152	59 293	218 919	418 063	642 402	D
3212	Veneer, plywood, and engineered wood product manufacturing	—	25	20	3 023	106 192	2 601	5 386	84 584	190 885	460 817	652 533	13 821
32121	Veneer, plywood, and engineered wood product manufacturing	—	25	20	3 023	106 192	2 601	5 386	84 584	190 885	460 817	652 533	13 821
321211	Hardwood veneer and plywood manufacturing	—	4	3	773	27 837	641	1 356	20 368	48 488	115 224	160 970	D
321212	Softwood veneer and plywood manufacturing	2	9	8	1 135	38 900	1 010	2 028	32 879	56 229	177 806	235 643	2 277
321213	Engineered wood member (except truss) manufacturing	—	5	5	821	27 273	727	1 552	22 719	66 346	125 103	192 294	9 155
323	Printing and related support activities	—	47	10	748	24 182	516	926	14 927	55 859	25 874	81 759	3 709
3231	Printing and related support activities	—	47	10	748	24 182	516	926	14 927	55 859	25 874	81 759	3 709
32311	Printing	—	43	10	736	23 941	509	917	14 768	55 340	25 685	81 051	D
325	Chemical manufacturing	1	21	8	767	37 744	466	837	16 911	193 333	146 969	338 767	8 239
332	Fabricated metal product manufacturing	13	93	18	1 293	47 101	1 000	1 875	32 360	100 629	67 248	166 981	5 712
333	Machinery manufacturing	3	48	20	1 210	54 025	765	1 571	27 057	91 733	94 234	190 278	4 765

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
LANE—Con.													
334	Computer and electronic product manufacturing	—	13	7	1 767	74 520	907	1 213	21 259	575 592	165 721	722 659	38 917
3344	Semiconductor and other electronic component manufacturing	—	3	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	—	3	2	f	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	—	27	9	3 435	113 298	2 641	4 887	77 615	302 158	432 481	750 062	7 442
3362	Motor vehicle body and trailer manufacturing	—	11	7	3 219	107 367	2 494	4 632	73 683	288 100	420 393	724 145	6 865
33621	Motor vehicle body and trailer manufacturing	—	11	7	3 219	107 367	2 494	4 632	73 683	288 100	420 393	724 145	6 865
336213	Motor home manufacturing ..	—	4	4	h	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	6	48	9	1 172	34 925	864	1 773	22 030	134 552	59 667	192 593	4 349
3371	Household and institutional furniture and kitchen cabinet manufacturing	6	34	5	897	26 858	666	1 382	17 251	119 398	50 669	168 291	3 364
33712	Household and institutional furniture manufacturing	7	16	2	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture manufacturing	8	12	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	'2	'70	7	'695	'24 801	'433	'827	'12 679	'54 657	'24 261	'77 728	D
LINCOLN													
31-33	Manufacturing	1	56	4	949	43 795	665	1 398	24 335	194 619	203 848	397 136	5 309
LINN													
31-33	Manufacturing	—	182	65	8 328	334 562	6 493	13 043	235 925	953 390	882 606	1 829 786	76 268
311	Food manufacturing	—	17	5	943	25 426	797	1 541	21 096	67 618	94 409	161 371	D
3114	Fruit and vegetable preserving and specialty food manufacturing	—	2	2	f	D	D	D	D	D	D	D	D
321	Wood product manufacturing	—	36	24	2 482	83 460	2 066	4 180	63 673	175 390	378 189	549 595	9 301
3212	Veneer, plywood, and engineered wood product manufacturing	—	12	11	1 229	43 128	1 060	2 185	34 093	93 577	198 147	288 948	5 495
32121	Veneer, plywood, and engineered wood product manufacturing	—	12	11	1 229	43 128	1 060	2 185	34 093	93 577	198 147	288 948	5 495
321212	Softwood veneer and plywood manufacturing	—	4	4	671	20 460	574	1 087	14 928	36 276	104 543	138 777	D
3219	Other wood product manufacturing	—	13	7	768	21 327	585	1 081	14 372	50 739	49 870	99 236	1 458
32199	All other wood product manufacturing	—	5	4	645	18 013	494	924	12 487	41 839	41 708	82 339	1 155
321991	Manufactured home (mobile home) manufacturing	—	2	2	f	D	D	D	D	D	D	D	D
322	Paper manufacturing	—	3	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, and paperboard mills	—	3	3	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	—	7	5	g	D	D	D	D	D	D	D	12 920
3314	Nonferrous metal (except aluminum) production and processing	—	2	2	g	D	D	D	D	D	D	D	D
33149	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and alloying	—	2	2	g	D	D	D	D	D	D	D	D
331491	Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding	—	2	2	g	D	D	D	D	D	D	D	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)					Wages (\$1,000)
MALHEUR													
31-33	Manufacturing	-	28	2	g	D	D	D	D	D	D	D	
311	Food manufacturing	-	5	2	g	D	D	D	D	D	D	D	
3114	Fruit and vegetable preserving and specialty food manufacturing	-	1	1	g	D	D	D	D	D	D	D	
31141	Frozen food manufacturing	-	1	1	g	D	D	D	D	D	D	D	
311411	Frozen fruit, juice, and vegetable manufacturing ...	-	1	1	g	D	D	D	D	D	D	D	
MARION													
31-33	Manufacturing	3	378	113	11 388	364 514	8 735	16 700	229 963	1 173 708	1 033 925	2 185 182	61 568
311	Food manufacturing	4	46	22	h	D	D	D	D	D	D	D	
3114	Fruit and vegetable preserving and specialty food manufacturing	6	14	11	h	D	D	D	D	D	D	D	
31141	Frozen food manufacturing	5	9	7	g	D	D	D	D	D	D	D	
311411	Frozen fruit, juice, and vegetable manufacturing ...	5	9	7	g	D	D	D	D	D	D	D	
31142	Fruit and vegetable canning, pickling, and drying	9	5	4	f	D	D	D	D	D	D	D	
311421	Fruit and vegetable canning .	9	4	3	f	D	D	D	D	D	D	D	
321	Wood product manufacturing	1	37	18	1 671	50 084	1 327	2 554	35 429	103 114	155 966	261 176	4 086
3219	Other wood product manufacturing	2	28	13	g	D	D	D	D	D	D	D	
32199	All other wood product manufacturing	2	12	7	f	D	D	D	D	D	D	D	
321991	Manufactured home (mobile home) manufacturing	2	6	6	829	27 145	653	1 261	18 519	47 851	53 580	101 465	D
326	Plastics and rubber products manufacturing	-	15	5	f	D	D	D	D	D	D	D	
3261	Plastics product manufacturing ..	-	13	5	f	D	D	D	D	D	D	D	
32619	Other plastics product manufacturing	-	9	3	f	D	D	D	D	D	D	D	
326199	All other plastics product manufacturing	-	6	2	f	D	D	D	D	D	D	D	
332	Fabricated metal product manufacturing	2	70	18	1 243	41 561	880	1 594	23 212	109 995	122 913	237 774	5 493
3323	Architectural and structural metals manufacturing	-	30	10	f	D	D	D	D	D	D	D	
334	Computer and electronic product manufacturing	-	13	6	g	D	D	D	D	D	D	D	
3344	Semiconductor and other electronic component manufacturing	-	5	3	g	D	D	D	D	D	D	D	
33441	Semiconductor and other electronic component manufacturing	-	5	3	g	D	D	D	D	D	D	D	
334413	Semiconductor and related device manufacturing	-	3	1	f	D	D	D	D	D	D	D	
MORROW													
31-33	Manufacturing	-	8	5	f	D	D	D	D	D	D	D	
311	Food manufacturing	-	5	5	f	D	D	D	D	D	D	D	
3114	Fruit and vegetable preserving and specialty food manufacturing	-	4	4	f	D	D	D	D	D	D	D	
31141	Frozen food manufacturing	-	2	2	f	D	D	D	D	D	D	D	
311411	Frozen fruit, juice, and vegetable manufacturing ...	-	2	2	f	D	D	D	D	D	D	D	
MULTNOMAH													
31-33	Manufacturing	1	'1 220	318	'36 442	'1 404 238	'25 923	'50 502	'900 825	'4 015 118	'3 705 318	'7 695 385	'245 340

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
MULTNOMAH—Con.													
311	Food manufacturing	—	97	35	4 290	144 428	2 517	5 047	80 939	747 250	579 454	1 319 874	44 415
3114	Fruit and vegetable preserving and specialty food manufacturing	—	8	6	781	23 330	602	1 237	14 066	105 064	86 726	186 494	20 372
3115	Dairy product manufacturing	—	6	5	f	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing	—	45	13	1 857	56 515	1 022	1 929	37 058	284 230	144 719	428 057	7 577
31181	Bread and bakery product manufacturing	—	38	11	g	D	D	D	D	D	D	D	6 030
311812	Commercial bakeries	—	17	8	g	D	D	D	D	D	D	D	5 211
3119	Other food manufacturing	—	20	5	786	31 867	312	609	10 302	205 221	99 410	304 136	7 765
31192	Coffee and tea manufacturing	—	3	2	f	D	D	D	D	D	D	D	D
311920	Coffee and tea manufacturing	—	3	2	f	D	D	D	D	D	D	D	D
315	Apparel manufacturing	2	24	7	f	D	D	D	D	D	D	D	D
3152	Cut and sew apparel manufacturing	1	20	7	f	D	D	D	D	D	D	D	D
322	Paper manufacturing	—	16	10	1 026	40 321	761	1 589	27 090	100 489	147 290	243 526	D
3222	Converted paper product manufacturing	—	16	10	1 026	40 321	761	1 589	27 090	100 489	147 290	243 526	D
323	Printing and related support activities	1	'205	42	'3 595	'135 243	'2 648	'5 060	'86 580	'288 963	'211 435	'500 084	D
3231	Printing and related support activities	1	'205	42	'3 595	'135 243	'2 648	'5 060	'86 580	'288 963	'211 435	'500 084	D
32311	Printing	1	'171	31	'3 042	'113 429	'2 235	'4 283	'72 917	'252 875	'198 754	'450 991	D
323110	Commercial lithographic printing	—	84	14	g	D	D	D	D	D	D	D	D
32312	Support activities for printing	1	34	11	553	21 814	413	777	13 663	36 088	12 681	49 093	3 247
325	Chemical manufacturing	3	52	11	805	35 680	505	946	16 844	119 711	107 317	225 886	D
326	Plastics and rubber products manufacturing	—	31	13	1 283	36 422	950	1 753	21 090	107 365	87 867	195 042	4 109
3261	Plastics product manufacturing	—	21	7	f	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	—	15	5	f	D	D	D	D	D	D	D	2 814
326199	All other plastics product manufacturing	—	15	5	f	D	D	D	D	D	D	D	2 814
327	Nonmetallic mineral product manufacturing	1	46	12	1 093	42 781	844	1 644	30 766	128 768	67 142	199 161	15 039
331	Primary metal manufacturing	—	23	10	3 600	145 610	2 594	5 037	85 592	404 193	497 589	897 518	16 167
3311	Iron and steel mills and ferroalloy manufacturing	—	2	2	f	D	D	D	D	D	D	D	D
33111	Iron and steel mills and ferroalloy manufacturing	—	2	2	f	D	D	D	D	D	D	D	D
331111	Iron and steel mills	—	2	2	f	D	D	D	D	D	D	D	D
3313	Alumina and aluminum production and processing	—	6	4	f	D	D	D	D	D	D	D	D
33131	Alumina and aluminum production and processing	—	6	4	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product manufacturing	—	4	2	f	D	D	D	D	D	D	D	D
3315	Foundries	—	13	3	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	4	2	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	—	2	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	—	9	1	g	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	—	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	2	216	62	4 359	159 566	3 260	6 572	104 602	378 093	262 111	642 493	28 758
3323	Architectural and structural metals manufacturing	1	50	13	838	31 884	599	1 243	20 408	73 346	60 085	131 850	3 763
33232	Ornamental and architectural metal products manufacturing	1	31	8	529	20 517	378	809	13 306	49 558	38 052	86 562	2 500
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	2	80	15	f	D	D	D	D	D	D	D	15 755
33271	Machine shops	1	70	12	823	29 606	617	1 235	19 825	52 358	30 554	84 387	D
332710	Machine shops	1	70	12	823	29 606	617	1 235	19 825	52 358	30 554	84 387	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
MULTNOMAH—Con.													
332	Fabricated metal product manufacturing—Con.												
3328	Coating, engraving, heat treating, and allied activities	3	28	10	550	18 427	445	907	12 986	39 775	15 130	54 922	1 763
33281	Coating, engraving, heat treating, and allied activities ..	3	28	10	550	18 427	445	907	12 986	39 775	15 130	54 922	1 763
333	Machinery manufacturing	—	71	22	1 810	84 690	941	1 719	37 398	147 128	192 824	341 889	D
3332	Industrial machinery manufacturing	2	20	8	518	22 335	223	404	8 940	35 893	29 429	64 166	2 181
3339	Other general purpose machinery manufacturing	—	18	3	f	D	D	D	D	D	D	D	3 723
334	Computer and electronic product manufacturing	—	40	11	h	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	—	12	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	—	12	3	g	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	—	6	3	g	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	—	53	19	h	D	D	D	D	D	D	D	D
3361	Motor vehicle manufacturing	—	2	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck manufacturing	—	2	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck manufacturing	—	2	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts manufacturing	1	22	5	f	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	—	4	3	g	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing	—	4	3	g	D	D	D	D	D	D	D	D
336413	Other aircraft parts and auxiliary equipment manufacturing	—	3	3	g	D	D	D	D	D	D	D	D
3365	Railroad rolling stock manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	1	88	19	1 573	53 890	1 136	2 223	31 678	132 542	79 427	211 244	D
3371	Household and institutional furniture and kitchen cabinet manufacturing	2	60	7	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) manufacturing	—	25	10	739	28 558	496	953	15 124	71 596	28 969	100 017	2 724
33721	Office furniture (including fixtures) manufacturing	—	25	10	739	28 558	496	953	15 124	71 596	28 969	100 017	2 724
337212	Custom architectural woodwork and millwork manufacturing	—	12	7	605	24 296	397	765	12 450	59 916	22 042	81 431	D
339	Miscellaneous manufacturing	3	147	22	g	D	D	D	D	D	D	D	5 173
3391	Medical equipment and supplies manufacturing	4	48	8	f	D	D	D	D	D	D	D	1 600
33911	Medical equipment and supplies manufacturing	4	48	8	f	D	D	D	D	D	D	D	1 600
339116	Dental laboratories	5	30	5	f	D	D	D	D	D	D	D	1 001
3399	Other miscellaneous manufacturing	3	99	14	g	D	D	D	D	D	D	D	3 573
33999	All other miscellaneous manufacturing	3	32	6	963	27 657	767	1 463	17 449	97 222	45 309	138 827	1 909
339994	Broom, brush, and mop manufacturing	2	4	3	f	D	D	D	D	D	D	D	D
POLK													
31-33	Manufacturing	1	60	22	1 812	58 665	1 389	2 777	38 184	137 642	162 644	301 205	9 480
TILLAMOOK													
31-33	Manufacturing	—	22	8	1 298	43 499	1 075	2 191	30 674	151 736	322 097	469 448	4 623
311	Food manufacturing	—	8	3	f	D	D	D	D	D	D	D	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
UMATILLA													
31-33	Manufacturing	3	76	25	h	D	D	D	D	D	D	D	D
311	Food manufacturing	4	23	13	g	D	D	D	D	D	D	D	D
3114	Fruit and vegetable preserving and specialty food manufacturing	6	9	8	g	D	D	D	D	D	D	D	D
31141	Frozen food manufacturing	5	6	6	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, and vegetable manufacturing ...	5	6	6	g	D	D	D	D	D	D	D	D
321	Wood product manufacturing	1	7	3	539	15 749	454	769	11 821	25 637	61 729	86 449	958
336	Transportation equipment manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body and trailer manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
336214	Travel trailer and camper manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
UNION													
31-33	Manufacturing	-	31	8	1 366	46 173	1 181	2 323	34 726	97 439	180 078	275 300	6 203
321	Wood product manufacturing	-	7	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	-	5	3	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer manufacturing	-	3	3	541	17 448	463	958	11 232	34 207	59 425	92 149	D
33621	Motor vehicle body and trailer manufacturing	-	3	3	541	17 448	463	958	11 232	34 207	59 425	92 149	D
336214	Travel trailer and camper manufacturing	-	3	3	541	17 448	463	958	11 232	34 207	59 425	92 149	D
WASHINGTON													
31-33	Manufacturing	-	763	255	33 506	1 529 404	20 321	38 360	686 954	10 436 863	2 948 477	13 289 807	261 813
311	Food manufacturing	4	29	13	1 563	47 643	1 122	2 271	29 101	394 127	161 790	557 645	19 734
3118	Bakeries and tortilla manufacturing	8	8	4	f	D	D	D	D	D	D	D	D
31181	Bread and bakery product manufacturing	9	6	3	f	D	D	D	D	D	D	D	D
3119	Other food manufacturing	-	8	4	508	14 931	403	870	9 017	67 466	71 552	138 856	D
321	Wood product manufacturing	3	29	17	1 621	50 316	1 363	2 712	37 551	125 415	200 327	325 544	8 985
3219	Other wood product manufacturing	6	18	10	964	26 070	799	1 516	17 881	64 041	92 556	156 414	4 601
32191	Millwork	6	10	7	824	22 568	687	1 309	15 849	57 172	83 568	140 733	D
322	Paper manufacturing	1	11	6	f	D	D	D	D	D	D	D	D
3222	Converted paper product manufacturing	1	10	6	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	2	73	19	1 402	48 252	993	1 823	28 933	116 509	67 775	183 307	10 859
3231	Printing and related support activities	2	73	19	1 402	48 252	993	1 823	28 933	116 509	67 775	183 307	10 859
32311	Printing	2	70	19	1 386	47 832	980	1 801	28 611	115 491	67 617	182 087	D
323110	Commercial lithographic printing	1	27	11	565	21 414	351	658	11 979	38 792	25 213	63 932	1 549
326	Plastics and rubber products manufacturing	2	38	16	1 833	59 243	1 310	2 534	31 930	154 687	102 942	256 445	6 889
3261	Plastics product manufacturing ..	2	33	15	g	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	2	26	12	1 516	49 374	1 105	2 097	26 435	127 680	73 678	201 680	D
326199	All other plastics product manufacturing	2	25	12	g	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	1	154	40	3 397	129 108	2 415	4 815	77 225	287 374	201 119	485 376	13 794
3323	Architectural and structural metals manufacturing	1	42	14	1 148	43 220	814	1 638	26 702	84 538	60 795	143 101	D
33232	Ornamental and architectural metal products manufacturing	1	27	13	922	33 494	647	1 281	20 614	71 893	28 387	97 477	2 607
332322	Sheet metal work manufacturing	1	20	10	617	22 454	424	793	13 769	46 821	20 293	65 495	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	1	69	11	711	28 354	534	1 056	18 290	56 416	20 369	76 719	2 577
33271	Machine shops	1	64	9	633	25 018	470	918	15 934	49 914	18 400	68 169	2 264
332710	Machine shops	1	64	9	633	25 018	470	918	15 934	49 914	18 400	68 169	2 264

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
WASHINGTON—Con.													
333	Machinery manufacturing	3	57	22	2 723	108 307	1 626	3 091	51 450	307 538	223 589	497 283	16 883
3332	Industrial machinery manufacturing	6	19	9	1 306	48 349	679	1 100	19 351	177 772	134 852	287 587	11 135
33329	Other industrial machinery manufacturing	6	17	8	g	D	D	D	D	D	D	D	D
333295	Semiconductor machinery manufacturing	6	4	3	f	D	D	D	D	D	D	D	D
3333	Commercial and service industry machinery manufacturing	—	7	4	665	28 138	489	1 008	16 458	74 969	27 523	102 244	2 171
33331	Commercial and service industry machinery manufacturing	—	7	4	665	28 138	489	1 008	16 458	74 969	27 523	102 244	2 171
333314	Optical instrument and lens manufacturing	—	4	4	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	—	106	51	14 174	825 239	7 088	12 426	299 946	8 443 415	1 424 926	9 799 428	142 521
3341	Computer and peripheral equipment manufacturing	2	17	6	f	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	2	17	6	f	D	D	D	D	D	D	D	D
3342	Communications equipment manufacturing	1	11	7	2 284	72 547	1 241	1 880	37 916	224 531	173 712	396 266	D
33422	Radio and television broadcasting and wireless communications equipment manufacturing	1	4	3	g	D	D	D	D	D	D	D	D
334220	Radio and television broadcasting and wireless communications equipment manufacturing	1	4	3	g	D	D	D	D	D	D	D	D
33429	Other communications equipment manufacturing	—	5	3	f	D	D	D	D	D	D	D	D
334290	Other communications equipment manufacturing ..	—	5	3	f	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	—	41	23	i	D	D	D	D	D	D	D	44 409
33441	Semiconductor and other electronic component manufacturing	—	41	23	i	D	D	D	D	D	D	D	44 409
334412	Bare printed circuit board manufacturing	—	8	3	g	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	—	11	8	h	D	D	D	D	D	D	D	28 731
3345	Navigational, measuring, electromedical, and control instruments manufacturing	—	30	13	h	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing ...	—	30	13	h	D	D	D	D	D	D	D	D
334515	Instrument manufacturing for measuring and testing electricity and electrical signals	—	15	8	3 811	306 259	939	1 496	59 043	489 025	295 219	804 462	D
335	Electrical equipment, appliance, and component manufacturing	1	19	8	1 272	64 806	641	1 390	23 033	100 404	114 270	223 614	D
3359	Other electrical equipment and component manufacturing	—	9	5	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment and component manufacturing	—	5	2	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment and component manufacturing ..	—	4	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	1	27	6	685	30 722	407	830	16 984	80 129	66 632	145 753	1 530
3363	Motor vehicle parts manufacturing	—	12	5	f	D	D	D	D	D	D	D	1 214
337	Furniture and related product manufacturing	1	56	19	1 595	43 273	1 250	2 504	28 215	117 556	90 109	207 694	3 475
3371	Household and institutional furniture and kitchen cabinet manufacturing	1	46	15	1 322	34 949	1 055	2 131	24 077	94 753	73 288	167 750	D
33711	Wood kitchen cabinet and countertop manufacturing	1	27	6	657	18 713	496	1 044	12 836	57 867	40 171	98 105	1 706
337110	Wood kitchen cabinet and countertop manufacturing ..	1	27	6	657	18 713	496	1 044	12 836	57 867	40 171	98 105	1 706
33712	Household and institutional furniture manufacturing	2	19	9	665	16 236	559	1 087	11 241	36 886	33 117	69 645	D
337121	Upholstered household furniture manufacturing	2	12	7	597	14 528	501	971	9 846	31 340	30 188	61 247	1 394

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)					Wages (\$1,000)
WASHINGTON—Con.													
339	Miscellaneous manufacturing	2	80	15	g	D	D	D	D	D	D	7 614	
3391	Medical equipment and supplies manufacturing	2	38	7	f	D	D	D	D	D	D	D	
33911	Medical equipment and supplies manufacturing	2	38	7	f	D	D	D	D	D	D	D	
3399	Other miscellaneous manufacturing	2	42	8	f	D	D	D	D	D	D	D	
YAMHILL													
31-33	Manufacturing	—	177	50	5 438	225 556	3 656	7 306	128 007	578 773	705 659	1 301 542	56 822
321	Wood product manufacturing	—	18	8	795	30 410	656	1 400	22 698	72 587	173 101	245 522	3 331
339	Miscellaneous manufacturing	1	14	5	1 240	61 787	673	1 436	23 096	162 738	57 438	220 096	D
3391	Medical equipment and supplies manufacturing	1	9	3	g	D	D	D	D	D	D	D	D
33911	Medical equipment and supplies manufacturing	1	9	3	g	D	D	D	D	D	D	D	D
339114	Dental equipment and supplies manufacturing	1	5	3	g	D	D	D	D	D	D	D	D

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

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

³Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: f—500 to 999 employees; g—1,000 to 2,499 employees; h—2,500 to 4,999 employees; i—5,000 to 9,999 employees; j—10,000 to 24,999 employees; k—25,000 to 49,999 employees; l—50,000 to 99,999 employees; m—100,000 employees or more.

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

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

Table 4. Industry Statistics for Places: 2002

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
ALBANY													
31-33	Manufacturing	-	65	19	2 216	77 010	1 771	3 462	56 837	157 898	182 257	338 881	11 924
311	Food manufacturing	-	9	4	f	D	D	D	D	D	D	D	D
3114	Fruit and vegetable preserving and specialty food manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	-	3	3	f	D	D	D	D	D	D	D	D
ASHLAND													
31-33	Manufacturing	1	51	9	560	18 075	350	688	9 245	54 144	37 685	91 153	D
BEAVERTON													
31-33	Manufacturing	2	110	37	7 817	412 035	3 702	6 370	132 694	1 144 372	598 034	1 751 119	44 542
311	Food manufacturing	6	11	7	1 081	32 102	711	1 415	17 273	303 409	84 461	388 638	12 033
3118	Bakeries and tortilla manufacturing	8	6	4	f	D	D	D	D	D	D	D	D
31181	Bread and bakery product manufacturing	9	5	3	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	-	6	3	602	20 236	444	877	11 503	77 023	21 807	99 208	D
3261	Plastics product manufacturing ..	-	5	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
333	Machinery manufacturing	-	9	4	939	36 289	650	972	18 202	116 337	63 127	154 979	D
3333	Commercial and service industry machinery manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
33331	Commercial and service industry machinery manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
333314	Optical instrument and lens manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	-	22	11	3 960	284 145	974	1 507	59 658	560 281	339 589	931 016	20 236
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	8	6	3 390	260 198	692	934	50 475	462 356	262 032	756 079	16 204
33451	Navigational, measuring, electromedical, and control instruments manufacturing ..	-	8	6	3 390	260 198	692	934	50 475	462 356	262 032	756 079	16 204
334515	Instrument manufacturing for measuring and testing electricity and electrical signals	-	6	5	h	D	D	D	D	D	D	D	D
BEND													
31-33	Manufacturing	1	136	33	3 420	110 598	2 626	4 978	69 140	265 197	234 776	490 832	11 397
321	Wood product manufacturing	1	14	10	1 242	33 542	1 068	1 870	25 229	77 632	89 771	165 667	3 654
3219	Other wood product manufacturing	1	10	8	1 106	29 488	952	1 718	22 417	72 630	80 135	149 810	3 238
32191	Millwork	-	7	6	f	D	D	D	D	D	D	D	D
321911	Wood window and door manufacturing	-	5	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	1	10	2	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body and trailer manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
CANBY													
31-33	Manufacturing	1	30	8	835	27 760	652	1 265	17 996	91 382	93 208	184 929	5 106
CORVALLIS													
31-33	Manufacturing	-	53	9	5 001	294 920	2 191	4 495	175 908	177 572	160 168	339 671	16 052
334	Computer and electronic product manufacturing	-	7	3	h	D	D	D	D	D	D	D	D
3341	Computer and peripheral equipment manufacturing	-	2	1	h	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	-	2	1	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment manufacturing ..	-	1	1	h	D	D	D	D	D	D	D	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)					Wages (\$1,000)
DALLAS													
31-33	Manufacturing	-	12	5	660	24 562	510	980	16 134	45 953	92 968	138 753	D
EUGENE													
31-33	Manufacturing	2	313	81	8 633	314 919	5 779	10 770	164 919	1 246 628	777 326	1 990 162	72 245
311	Food manufacturing	6	32	7	840	26 536	462	865	12 974	95 752	67 757	163 047	4 941
3118	Bakeries and tortilla manufacturing	9	11	2	f	D	D	D	D	D	D	D	D
31181	Bread and bakery product manufacturing	9	10	2	f	D	D	D	D	D	D	D	D
321	Wood product manufacturing	1	29	13	1 569	54 066	1 338	2 789	42 263	151 775	267 285	410 247	7 191
3212	Veneer, plywood, and engineered wood product manufacturing	2	10	7	1 157	40 375	1 021	2 154	33 366	102 714	183 212	282 088	D
32121	Veneer, plywood, and engineered wood product manufacturing	2	10	7	1 157	40 375	1 021	2 154	33 366	102 714	183 212	282 088	D
321212	Softwood veneer and plywood manufacturing	5	2	2	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	1	32	8	590	19 777	409	732	12 016	41 693	19 631	61 415	3 222
3231	Printing and related support activities	1	32	8	590	19 777	409	732	12 016	41 693	19 631	61 415	3 222
32311	Printing	1	31	8	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	13	38	10	662	21 778	542	983	15 322	145 543	31 456	176 648	3 385
333	Machinery manufacturing	4	29	15	790	36 518	460	949	16 268	65 460	69 744	133 913	3 616
334	Computer and electronic product manufacturing	-	9	5	1 357	60 401	651	691	14 486	538 619	150 108	669 941	D
3344	Semiconductor and other electronic component manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	6	27	7	1 025	30 517	760	1 563	19 297	126 252	54 942	179 599	3 469
3371	Household and institutional furniture and kitchen cabinet manufacturing	6	20	4	833	25 127	617	1 285	16 065	116 008	48 654	162 885	D
33712	Household and institutional furniture manufacturing	7	11	2	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture manufacturing	8	8	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	1	43	4	530	20 012	329	635	10 162	42 379	18 100	59 736	1 045
FOREST GROVE													
31-33	Manufacturing	2	39	15	2 107	74 349	1 572	2 247	41 180	149 638	110 404	255 740	12 600
334	Computer and electronic product manufacturing	-	5	3	g	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	-	5	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	-	5	3	g	D	D	D	D	D	D	D	D
334412	Bare printed circuit board manufacturing	-	3	3	g	D	D	D	D	D	D	D	D
GRANTS PASS													
31-33	Manufacturing	-	71	17	1 872	54 423	1 518	3 286	38 911	128 337	137 088	267 324	D
321	Wood product manufacturing	-	7	5	f	D	D	D	D	D	D	D	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)					Wages (\$1,000)
GRESHAM													
31-33	Manufacturing	-	75	27	4 822	255 355	3 470	7 539	180 672	837 341	263 045	1 077 744	69 999
311	Food manufacturing	-	6	3	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	-	6	4	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	-	3	3	f	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	-	4	1	g	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
336413	Other aircraft parts and auxiliary equipment manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
HERMISTON													
31-33	Manufacturing	-	14	5	672	18 237	534	1 011	12 759	40 436	43 061	83 620	958
HILLSBORO													
31-33	Manufacturing	2	163	51	6 776	296 082	3 938	7 140	122 845	779 381	628 269	1 389 467	97 976
332	Fabricated metal product manufacturing	5	43	9	741	27 339	569	1 099	17 526	54 478	32 106	85 442	2 398
333	Machinery manufacturing	8	14	5	738	30 190	334	745	12 394	120 236	85 039	205 087	4 296
3332	Industrial machinery manufacturing	8	5	3	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery manufacturing	8	5	3	f	D	D	D	D	D	D	D	D
333295	Semiconductor machinery manufacturing	8	2	2	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	-	28	14	h	D	D	D	D	D	D	D	82 443
3341	Computer and peripheral equipment manufacturing	-	6	2	f	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	-	6	2	f	D	D	D	D	D	D	D	D
3342	Communications equipment manufacturing	1	2	2	g	D	D	D	D	D	D	D	D
33422	Radio and television broadcasting and wireless communications equipment manufacturing	1	2	2	g	D	D	D	D	D	D	D	D
334220	Radio and television broadcasting and wireless communications equipment manufacturing	1	2	2	g	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	-	11	7	f	D	D	D	D	D	D	D	14 228
33441	Semiconductor and other electronic component manufacturing	-	11	7	f	D	D	D	D	D	D	D	14 228
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	8	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing	-	8	3	f	D	D	D	D	D	D	D	D
334515	Instrument manufacturing for measuring and testing electricity and electrical signals	-	4	2	f	D	D	D	D	D	D	D	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
JUNCTION CITY													
31-33	Manufacturing	-	12	4	996	31 403	837	1 473	22 448	54 232	102 576	171 577	1 130
336	Transportation equipment manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body and trailer manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
336213	Motor home manufacturing ..	-	1	1	f	D	D	D	D	D	D	D	D
KLAMATH FALLS													
31-33	Manufacturing	-	30	9	855	29 273	676	1 351	19 374	136 330	70 752	207 496	14 707
LAKE OSWEGO													
31-33	Manufacturing	1	46	13	1 132	55 769	669	1 258	19 909	121 742	87 657	207 557	7 203
LEBANON													
31-33	Manufacturing	1	15	8	641	29 903	445	950	18 137	76 777	55 682	133 587	6 067
MCMINNVILLE													
31-33	Manufacturing	-	61	17	1 595	56 556	1 115	2 239	35 067	150 571	209 877	383 641	8 461
MEDFORD													
31-33	Manufacturing	1	73	15	1 476	50 617	1 174	2 272	38 029	131 454	137 833	269 246	5 704
321	Wood product manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
3212	Veneer, plywood, and engineered wood product manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, and engineered wood product manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
MILWAUKIE													
31-33	Manufacturing	-	45	11	1 806	78 016	1 241	2 692	40 554	364 267	87 389	451 166	12 816
332	Fabricated metal product manufacturing	-	16	5	g	D	D	D	D	D	D	D	11 024
3322	Cutlery and handtool manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
332213	Saw blade and handsaw manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
NEWBERG													
31-33	Manufacturing	-	47	16	2 318	116 458	1 430	2 877	58 462	251 254	241 919	493 756	34 299
339	Miscellaneous manufacturing	1	6	4	g	D	D	D	D	D	D	D	D
3391	Medical equipment and supplies manufacturing	1	5	3	g	D	D	D	D	D	D	D	D
33911	Medical equipment and supplies manufacturing	1	5	3	g	D	D	D	D	D	D	D	D
339114	Dental equipment and supplies manufacturing	1	3	3	g	D	D	D	D	D	D	D	D
ONTARIO													
31-33	Manufacturing	-	14	1	g	D	D	D	D	D	D	D	D
311	Food manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
3114	Fruit and vegetable preserving and specialty food manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
31141	Frozen food manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, and vegetable manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
OREGON CITY													
31-33	Manufacturing	-	43	9	891	37 059	627	1 353	22 499	65 836	109 100	176 473	D
PENDLETON													
31-33	Manufacturing	-	18	5	567	19 937	496	988	15 503	55 780	112 952	166 704	2 480

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
PORTLAND													
31-33	Manufacturing	1	'1 099	280	'30 642	'1 111 866	'21 760	'41 573	'698 418	'3 109 033	'3 364 446	'6 469 224	'171 522
311	Food manufacturing	-	89	31	3 636	119 844	2 274	4 576	74 894	677 567	527 113	1 197 668	D
3114	Fruit and vegetable preserving and specialty food manufacturing	-	6	4	f	D	D	D	D	D	D	D	D
3115	Dairy product manufacturing	-	6	5	f	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing	-	41	13	1 838	56 192	1 012	1 915	36 905	283 626	144 397	427 131	7 558
31181	Bread and bakery product manufacturing	-	34	11	g	D	D	D	D	D	D	D	6 011
311812	Commercial bakeries	-	17	8	g	D	D	D	D	D	D	D	5 211
315	Apparel manufacturing	2	24	6	551	8 458	392	614	6 270	12 653	9 757	24 193	341
3152	Cut and sew apparel manufacturing	2	19	6	f	D	D	D	D	D	D	D	D
322	Paper manufacturing	-	15	9	f	D	D	D	D	D	D	D	D
3222	Converted paper product manufacturing	-	15	9	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	1	'192	40	'3 162	'117 846	'2 316	'4 344	'74 160	'239 411	'165 692	'406 296	'20 146
3231	Printing and related support activities	1	'192	40	'3 162	'117 846	'2 316	'4 344	'74 160	'239 411	'165 692	'406 296	'20 146
32311	Printing	1	'159	29	h	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	-	81	13	1 681	65 153	1 235	2 285	41 230	138 585	113 556	252 664	11 182
32312	Support activities for printing	1	33	11	f	D	D	D	D	D	D	D	D
325	Chemical manufacturing	3	46	8	602	28 165	321	625	11 197	102 683	96 776	198 260	D
326	Plastics and rubber products manufacturing	2	22	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	1	39	10	1 010	39 073	788	1 521	28 483	117 859	59 077	182 080	14 871
331	Primary metal manufacturing	-	20	9	h	D	D	D	D	D	D	D	D
3311	Iron and steel mills and ferroalloy manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
33111	Iron and steel mills and ferroalloy manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
331111	Iron and steel mills	-	2	2	f	D	D	D	D	D	D	D	D
3313	Alumina and aluminum production and processing	-	4	3	f	D	D	D	D	D	D	D	D
33131	Alumina and aluminum production and processing	-	4	3	f	D	D	D	D	D	D	D	D
331316	Aluminum extruded product manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
3315	Foundries	-	12	3	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	-	4	2	f	D	D	D	D	D	D	D	D
331513	Steel foundries (except investment)	-	2	2	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries	-	8	1	g	D	D	D	D	D	D	D	D
331522	Nonferrous (except aluminum) die-casting foundries	-	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	2	195	58	3 929	141 840	2 897	5 760	90 757	345 054	236 587	582 494	D
3323	Architectural and structural metals manufacturing	-	44	12	f	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	2	67	12	f	D	D	D	D	D	D	D	D
33271	Machine shops	2	60	10	632	22 099	467	920	14 539	42 926	16 454	59 387	3 410
332710	Machine shops	2	60	10	632	22 099	467	920	14 539	42 926	16 454	59 387	3 410
3328	Coating, engraving, heat treating, and allied activities	3	27	10	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, and allied activities ..	3	27	10	f	D	D	D	D	D	D	D	D
333	Machinery manufacturing	-	64	20	g	D	D	D	D	D	D	D	5 764

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)					Wages (\$1,000)
PORTLAND—Con.													
334	Computer and electronic product manufacturing	—	36	8	1 969	80 279	1 175	2 221	52 523	173 722	240 930	416 178	13 024
3344	Semiconductor and other electronic component manufacturing	—	10	1	g	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	—	10	1	g	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	—	4	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	—	50	18	3 490	130 593	2 934	5 251	101 508	238 250	740 652	979 285	21 250
3361	Motor vehicle manufacturing	—	2	1	g	D	D	D	D	D	D	D	D
33612	Heavy duty truck manufacturing	—	2	1	g	D	D	D	D	D	D	D	D
336120	Heavy duty truck manufacturing	—	2	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts manufacturing	1	20	5	f	D	D	D	D	D	D	D	D
3365	Railroad rolling stock manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
33651	Railroad rolling stock manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
336510	Railroad rolling stock manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	1	78	17	1 396	46 479	1 014	2 031	27 172	107 059	75 517	181 874	D
3371	Household and institutional furniture and kitchen cabinet manufacturing	2	55	7	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) manufacturing	1	20	8	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) manufacturing	1	20	8	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	3	131	20	2 335	69 271	1 794	3 316	44 968	191 249	92 020	280 853	4 778
3391	Medical equipment and supplies manufacturing	4	43	8	f	D	D	D	D	D	D	D	1 579
33911	Medical equipment and supplies manufacturing	4	43	8	f	D	D	D	D	D	D	D	1 579
339116	Dental laboratories	5	26	5	f	D	D	D	D	D	D	D	980
3399	Other miscellaneous manufacturing	3	88	12	g	D	D	D	D	D	D	D	3 199
33999	All other miscellaneous manufacturing	2	28	5	f	D	D	D	D	D	D	D	1 841
339994	Broom, brush, and mop manufacturing	2	4	3	f	D	D	D	D	D	D	D	D
PRINEVILLE													
31-33	Manufacturing	—	21	7	1 377	33 368	1 204	2 319	26 970	83 765	112 688	194 763	D
321	Wood product manufacturing	—	8	5	g	D	D	D	D	D	D	D	D
3219	Other wood product manufacturing	—	7	4	g	D	D	D	D	D	D	D	D
32191	Millwork	—	5	4	g	D	D	D	D	D	D	D	D
321911	Wood window and door manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
REDMOND													
31-33	Manufacturing	1	50	12	938	25 883	729	1 040	16 759	64 324	61 037	124 208	2 054
ST. HELENS													
31-33	Manufacturing	—	9	3	f	D	D	D	D	D	D	D	D
322	Paper manufacturing	—	2	1	f	D	D	D	D	D	D	D	D
3221	Pulp, paper, and paperboard mills	—	1	1	f	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	f	D	D	D	D	D	D	D	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	All establishments ²			All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
SALEM													
31-33	Manufacturing	3	198	63	6 362	216 677	4 804	8 954	129 537	593 719	547 246	1 156 026	40 803
311	Food manufacturing	6	25	15	2 200	58 299	1 830	3 416	40 462	245 616	190 168	434 387	14 849
3114	Fruit and vegetable preserving and specialty food manufacturing	8	11	8	1 592	39 979	1 384	2 484	29 173	180 004	113 460	293 464	7 614
31141	Frozen food manufacturing	8	6	4	738	20 252	644	1 273	15 224	86 503	79 025	165 528	6 559
311411	Frozen fruit, juice, and vegetable manufacturing ...	8	6	4	738	20 252	644	1 273	15 224	86 503	79 025	165 528	6 559
31142	Fruit and vegetable canning, pickling, and drying	9	5	4	854	19 727	740	1 211	13 949	93 501	34 435	127 936	1 055
311421	Fruit and vegetable canning ..	9	5	4	854	19 727	740	1 211	13 949	93 501	34 435	127 936	1 055
332	Fabricated metal product manufacturing	3	35	12	f	D	D	D	D	D	D	D	D
3323	Architectural and structural metals manufacturing	-	14	6	541	19 283	362	679	10 883	38 940	65 466	108 145	1 482
334	Computer and electronic product manufacturing	-	9	5	g	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	-	4	3	g	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	-	4	3	g	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
SHERWOOD													
31-33	Manufacturing	-	22	8	568	24 891	285	552	9 062	48 619	85 028	133 642	8 212
SPRINGFIELD													
31-33	Manufacturing	-	87	26	2 619	111 489	1 977	4 093	77 144	417 288	424 946	845 510	54 393
321	Wood product manufacturing	-	12	7	1 060	42 334	864	1 750	31 545	90 568	141 892	238 241	D
3212	Veneer, plywood, and engineered wood product manufacturing	-	5	4	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, and engineered wood product manufacturing	-	5	4	f	D	D	D	D	D	D	D	D
STAYTON													
31-33	Manufacturing	-	14	8	1 463	41 597	1 152	2 528	29 402	314 223	124 714	401 297	3 982
311	Food manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
3114	Fruit and vegetable preserving and specialty food manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
31141	Frozen food manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, and vegetable manufacturing ...	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing ..	-	2	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
326199	All other plastics product manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
TIGARD													
31-33	Manufacturing	1	107	30	2 699	121 129	1 746	3 496	61 605	319 032	221 122	539 058	17 170
332	Fabricated metal product manufacturing	-	18	6	648	26 068	455	987	14 730	72 616	55 532	128 533	1 969
334	Computer and electronic product manufacturing	1	19	9	f	D	D	D	D	D	D	D	9 683
TOLEDO													
31-33	Manufacturing	-	5	1	f	D	D	D	D	D	D	D	D

See footnotes at end of table.

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

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NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
TUALATIN													
31-33	Manufacturing	1	119	60	5 131	181 224	3 419	7 000	94 585	428 019	340 643	760 273	24 145
326	Plastics and rubber products manufacturing	4	11	5	669	22 064	455	883	9 644	43 094	44 671	87 690	1 719
3261	Plastics product manufacturing ..	4	11	5	669	22 064	455	883	9 644	43 094	44 671	87 690	1 719
32619	Other plastics product manufacturing	5	7	4	536	17 727	371	688	7 760	27 878	32 775	60 559	D
326199	All other plastics product manufacturing	5	6	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	1	32	13	808	32 275	591	1 132	20 747	69 134	28 927	97 304	2 407
334	Computer and electronic product manufacturing	—	8	6	f	D	D	D	D	D	D	D	D
3342	Communications equipment manufacturing	—	3	3	f	D	D	D	D	D	D	D	D
33429	Other communications equipment manufacturing	—	3	3	f	D	D	D	D	D	D	D	D
334290	Other communications equipment manufacturing ..	—	3	3	f	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	—	12	10	747	19 657	566	1 071	12 398	50 237	40 319	90 510	722
3371	Household and institutional furniture and kitchen cabinet manufacturing	1	8	6	506	12 577	393	738	8 784	30 138	25 204	55 065	D
WILSONVILLE													
31-33	Manufacturing	—	62	36	5 781	272 566	2 680	4 621	81 961	607 463	739 688	1 347 899	60 686
326	Plastics and rubber products manufacturing	—	5	4	501	14 778	373	743	9 026	43 605	30 542	74 092	1 003
3261	Plastics product manufacturing ..	—	5	4	501	14 778	373	743	9 026	43 605	30 542	74 092	1 003
334	Computer and electronic product manufacturing	—	10	9	h	D	D	D	D	D	D	D	D
3341	Computer and peripheral equipment manufacturing	—	2	2	h	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	—	2	2	h	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment manufacturing ..	—	2	2	h	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing ...	—	1	1	f	D	D	D	D	D	D	D	D
334510	Electromedical and electrotherapeutic apparatus manufacturing ...	—	1	1	f	D	D	D	D	D	D	D	D
WOODBURN													
31-33	Manufacturing	5	26	12	1 533	44 750	1 302	2 506	32 271	127 519	192 028	320 324	6 437
311	Food manufacturing	7	4	2	f	D	D	D	D	D	D	D	D
3114	Fruit and vegetable preserving and specialty food manufacturing	7	2	2	f	D	D	D	D	D	D	D	D
31141	Frozen food manufacturing	7	2	2	f	D	D	D	D	D	D	D	D
311411	Frozen fruit, juice, and vegetable manufacturing ...	7	2	2	f	D	D	D	D	D	D	D	D
321	Wood product manufacturing	2	8	6	658	19 090	546	1 032	13 333	29 515	75 360	107 147	1 966
3219	Other wood product manufacturing	3	4	4	548	15 644	453	839	10 756	23 711	48 599	71 976	D
BALANCE OF BENTON COUNTY													
31-33	Manufacturing	—	40	8	745	26 346	531	1 084	15 703	82 021	98 417	186 392	D

See footnotes at end of table.

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

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NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
BALANCE OF CLACKAMAS COUNTY													
31-33	Manufacturing	2	331	73	7 240	265 192	5 317	10 291	166 106	733 110	633 659	1 368 619	27 921
311	Food manufacturing	5	22	10	f	D	D	D	D	D	D	D	5 319
321	Wood product manufacturing	—	24	8	838	25 813	727	1 435	20 644	66 744	125 297	190 160	D
3211	Sawmills and wood preservation	—	7	4	531	15 851	506	1 026	14 581	38 560	89 991	130 172	1 186
32111	Sawmills and wood preservation	—	7	4	531	15 851	506	1 026	14 581	38 560	89 991	130 172	1 186
321113	Sawmills	—	7	4	531	15 851	506	1 026	14 581	38 560	89 991	130 172	1 186
331	Primary metal manufacturing	—	6	3	887	34 230	723	1 494	24 627	101 476	37 381	140 094	D
3315	Foundries	—	5	3	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries	—	3	2	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries ..	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	1	94	12	943	40 027	676	1 391	24 997	77 409	54 294	136 277	4 645
333	Machinery manufacturing	2	34	12	1 363	57 288	904	1 613	32 072	171 572	121 775	290 832	8 135
3339	Other general purpose machinery manufacturing	—	14	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	—	18	5	f	D	D	D	D	D	D	D	D
BALANCE OF COLUMBIA COUNTY													
31-33	Manufacturing	—	32	14	1 927	89 674	1 566	3 191	68 303	323 231	272 803	593 514	9 980
322	Paper manufacturing	—	2	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, and paperboard mills	—	1	1	g	D	D	D	D	D	D	D	D
32212	Paper mills	—	1	1	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	—	1	1	g	D	D	D	D	D	D	D	D
BALANCE OF COOS COUNTY													
31-33	Manufacturing	—	29	8	814	24 116	696	1 434	20 457	34 932	86 418	120 109	D
321	Wood product manufacturing	—	9	5	f	D	D	D	D	D	D	D	1 232
BALANCE OF DESCHUTES COUNTY													
31-33	Manufacturing	1	59	7	695	19 333	543	1 018	11 889	35 564	47 434	84 021	1 294
BALANCE OF DOUGLAS COUNTY													
31-33	Manufacturing	—	90	39	5 353	181 977	4 688	9 498	146 496	350 167	803 843	1 150 209	27 163
321	Wood product manufacturing	—	31	24	h	D	D	D	D	D	D	D	D
3211	Sawmills and wood preservation	—	13	11	g	D	D	D	D	D	D	D	D
32111	Sawmills and wood preservation	—	13	11	g	D	D	D	D	D	D	D	D
321113	Sawmills	—	13	11	g	D	D	D	D	D	D	D	D
3212	Veneer, plywood, and engineered wood product manufacturing	—	8	8	g	D	D	D	D	D	D	D	9 159
32121	Veneer, plywood, and engineered wood product manufacturing	—	8	8	g	D	D	D	D	D	D	D	9 159
321211	Hardwood veneer and plywood manufacturing	—	1	1	f	D	D	D	D	D	D	D	D
321212	Softwood veneer and plywood manufacturing	—	3	3	g	D	D	D	D	D	D	D	D
BALANCE OF HOOD RIVER COUNTY													
31-33	Manufacturing	3	28	8	f	D	D	D	D	D	D	D	823

See footnotes at end of table.

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

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			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
BALANCE OF JACKSON COUNTY													
31-33	Manufacturing	-	161	44	4 205	144 831	3 364	6 762	107 650	607 055	696 312	1 296 146	22 779
321	Wood product manufacturing	-	'32	'19	'2 274	'72 551	'1 972	'3 986	'59 572	'167 746	'443 804	'606 756	D
3212	Veneer, plywood, and engineered wood product manufacturing	-	'13	'10	g	D	D	D	D	D	D	D	D
32121	Veneer, plywood, and engineered wood product manufacturing	-	'13	'10	g	D	D	D	D	D	D	D	D
321212	Softwood veneer and plywood manufacturing	-	7	5	f	D	D	D	D	D	D	D	D
3219	Other wood product manufacturing	-	16	7	f	D	D	D	D	D	D	D	608
32191	Millwork	-	7	6	f	D	D	D	D	D	D	D	491
BALANCE OF JEFFERSON COUNTY													
31-33	Manufacturing	-	19	5	g	D	D	D	D	D	D	D	D
321	Wood product manufacturing	-	4	1	g	D	D	D	D	D	D	D	D
3219	Other wood product manufacturing	-	3	1	g	D	D	D	D	D	D	D	D
32191	Millwork	-	2	1	g	D	D	D	D	D	D	D	D
321912	Cut stock, resawing lumber, and planing	-	1	1	g	D	D	D	D	D	D	D	D
BALANCE OF JOSEPHINE COUNTY													
31-33	Manufacturing	1	62	8	959	29 982	597	1 044	12 255	71 660	54 287	126 435	D
BALANCE OF KLAMATH COUNTY													
31-33	Manufacturing	-	41	13	1 645	55 946	1 429	3 020	45 194	157 310	225 876	383 417	4 051
321	Wood product manufacturing	-	9	6	g	D	D	D	D	D	D	D	D
3212	Veneer, plywood, and engineered wood product manufacturing	-	4	3	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, and engineered wood product manufacturing	-	4	3	f	D	D	D	D	D	D	D	D
BALANCE OF LANE COUNTY													
31-33	Manufacturing	1	165	43	6 625	247 898	4 957	10 098	169 106	634 951	998 720	1 646 370	33 465
321	Wood product manufacturing	-	29	18	2 437	96 755	2 081	4 502	75 649	206 035	503 462	714 918	14 486
3211	Sawmills and wood preservation	-	13	9	1 177	53 475	1 014	2 253	42 418	140 831	325 421	470 417	8 097
32111	Sawmills and wood preservation	-	13	9	1 177	53 475	1 014	2 253	42 418	140 831	325 421	470 417	8 097
321113	Sawmills	-	11	7	g	D	D	D	D	D	D	D	D
3212	Veneer, plywood, and engineered wood product manufacturing	-	8	7	1 166	40 694	996	2 115	31 583	59 730	172 183	233 150	6 194
32121	Veneer, plywood, and engineered wood product manufacturing	-	8	7	1 166	40 694	996	2 115	31 583	59 730	172 183	233 150	6 194
321211	Hardwood veneer and plywood manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	-	8	2	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer manufacturing	-	3	2	g	D	D	D	D	D	D	D	D
33621	Motor vehicle body and trailer manufacturing	-	3	2	g	D	D	D	D	D	D	D	D
336213	Motor home manufacturing	-	2	2	g	D	D	D	D	D	D	D	D

See footnotes at end of table.

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			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
BALANCE OF LINN COUNTY													
31-33	Manufacturing	-	85	31	4 975	213 282	3 861	7 849	149 309	689 000	578 237	1 262 402	55 410
321	Wood product manufacturing	-	23	15	1 894	65 161	1 565	3 204	48 546	130 385	281 760	410 023	6 804
3212	Veneer, plywood, and engineered wood product manufacturing	-	6	5	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, and engineered wood product manufacturing	-	6	5	f	D	D	D	D	D	D	D	D
3219	Other wood product manufacturing	-	9	5	f	D	D	D	D	D	D	D	D
32199	All other wood product manufacturing	-	4	3	f	D	D	D	D	D	D	D	D
321991	Manufactured home (mobile home) manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
322	Paper manufacturing	-	3	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, and paperboard mills	-	3	3	g	D	D	D	D	D	D	D	D
32212	Paper mills	-	1	1	f	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills	-	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	-	3	2	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production and processing	-	1	1	f	D	D	D	D	D	D	D	D
33149	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and alloying	-	1	1	f	D	D	D	D	D	D	D	D
331491	Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding	-	1	1	f	D	D	D	D	D	D	D	D
BALANCE OF MARION COUNTY													
31-33	Manufacturing	3	117	28	1 885	55 356	1 377	2 484	34 354	139 621	96 701	235 513	7 636
311	Food manufacturing	5	16	6	534	14 063	474	855	11 506	42 205	22 609	65 669	1 016
BALANCE OF TILLAMOOK COUNTY													
31-33	Manufacturing	-	16	7	g	D	D	D	D	D	D	D	D
311	Food manufacturing	-	7	3	f	D	D	D	D	D	D	D	D
BALANCE OF UMATILLA COUNTY													
31-33	Manufacturing	3	35	12	2 508	69 953	2 210	4 376	53 065	276 189	294 981	570 345	14 128
311	Food manufacturing	4	10	6	1 813	49 402	1 597	3 224	37 795	206 199	199 890	406 789	D
3114	Fruit and vegetable preserving and specialty food manufacturing	6	5	4	g	D	D	D	D	D	D	D	D
31141	Frozen food manufacturing	6	3	3	1 515	41 008	1 372	2 778	32 687	174 266	145 538	319 913	9 420
311411	Frozen fruit, juice, and vegetable manufacturing	6	3	3	1 515	41 008	1 372	2 778	32 687	174 266	145 538	319 913	9 420
BALANCE OF UNION COUNTY													
31-33	Manufacturing	-	18	6	1 134	37 915	982	1 942	28 069	80 653	140 047	218 595	5 460
321	Wood product manufacturing	-	5	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body and trailer manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
336214	Travel trailer and camper manufacturing	-	2	2	f	D	D	D	D	D	D	D	D

See footnotes at end of table.

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

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

NAICS code	Geographic area and industry	E1	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
BALANCE OF WASHINGTON COUNTY													
31-33	Manufacturing	-	165	35	7 015	374 504	4 626	9 389	199 399	7 449 261	876 994	8 254 327	50 436
321	Wood product manufacturing	3	11	5	853	28 493	753	1 556	23 529	74 915	148 742	223 408	5 463
334	Computer and electronic product manufacturing	-	20	7	h	D	D	D	D	D	D	D	18 465
3344	Semiconductor and other electronic component manufacturing	-	8	5	h	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	-	8	5	h	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	-	3	3	h	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment and component manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment and component manufacturing ..	-	1	1	f	D	D	D	D	D	D	D	D
BALANCE OF YAMHILL COUNTY													
31-33	Manufacturing	-	54	13	1 248	45 334	957	1 895	30 444	161 602	230 838	386 674	13 170
321	Wood product manufacturing	-	8	6	602	24 678	504	1 103	18 706	60 594	151 503	211 893	D

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

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

³Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: f-500 to 999 employees; g-1,000 to 2,499 employees; h-2,500 to 4,999 employees; i-5,000 to 9,999 employees; j-10,000 to 24,999 employees; k-25,000 to 49,999 employees; l-50,000 to 99,999 employees; m-100,000 employees or more.

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

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

Table 5. Detailed Statistics for the State: 2002

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

Item	Value
OREGON	
Companies ¹	N
All establishments ²	'5 597
Establishments with 1 to 19 employees	'4 082
Establishments with 20 to 99 employees	1 106
Establishments with 100 employees or more	409
All employees ³	'184 151
Total compensation	\$1,000.. '8 967 720
Annual payroll	\$1,000.. '7 173 223
Total fringe benefits	\$1,000.. '1 794 497
Production workers, average for year	number.. '130 491
Production workers on March 12	number.. '127 947
Production workers on May 12	number.. '130 592
Production workers on August 12	number.. '133 709
Production workers on November 12	number.. '129 401
Production worker hours1,000.. '254 545
Production worker wages	\$1,000.. '4 275 579
Total cost of materials	\$1,000.. '19 556 927
Materials, parts, containers, packaging, etc., used	\$1,000.. '16 808 159
Resales	\$1,000.. '1 387 223
Purchased fuels	\$1,000.. '355 650
Purchased electricity	\$1,000.. '574 514
Contract work	\$1,000.. 431 381
Quantity of electricity purchased for heat and power	1,000 kWh.. '12 394 168
Quantity of electricity generated less sold for heat and power	1,000 kWh.. 337 142
Total value of shipments	\$1,000.. '45 864 552
Value of resales	\$1,000.. '1 749 353
Value added	\$1,000.. '26 440 699
Total inventories, beginning of year	\$1,000.. '4 678 518
Finished goods inventories	\$1,000.. '1 762 390
Work-in-process inventories	\$1,000.. 1 149 912
Materials and supplies inventories	\$1,000.. '1 766 216
Total inventories, end of year	\$1,000.. '4 889 011
Finished goods inventories	\$1,000.. '1 820 037
Work-in-process inventories	\$1,000.. 1 280 176
Materials and supplies inventories	\$1,000.. '1 788 798
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. '20 663 823
Total capital expenditures (new and used)	\$1,000.. '1 265 365
Buildings and other structures (new and used)	\$1,000.. 190 949
Machinery and equipment (new and used)	\$1,000.. '1 074 416
Automobiles, trucks, etc., for highway use	\$1,000.. 37 824
Computers and peripheral data processing equipment	\$1,000.. '129 166
All other expenditures for machinery and equipment	\$1,000.. '907 426
Total retirements	\$1,000.. 998 334
Gross value of depreciable assets at end of year	\$1,000.. '20 930 854
Depreciation charges during year	\$1,000.. '1 613 523
Total rental payments	\$1,000.. '476 897
Buildings and other structures	\$1,000.. '280 869
Machinery and equipment	\$1,000.. '196 028

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

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

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

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

Appendix A.

Explanation of Terms

COMPANY

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

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

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

Establishment

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

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

PAYROLL

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

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

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

TOTAL FRINGE BENEFITS

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

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

NUMBER OF EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period that included the 12th of the months specified on the report form. Included are employees on paid sick leave, paid holidays, and paid vacations; not included are proprietors and partners of unincorporated businesses.

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

The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November

Production Workers

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

All Other Employees

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

PRODUCTION-WORKER HOURS

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

COST OF MATERIALS

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

Included in this item are:

1. Cost of parts, components, containers, etc. Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
2. Cost of products bought and sold in the same condition.
3. Cost of fuels consumed for heat and power. Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
4. Cost of purchased electricity. The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
5. Cost of contract work. This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term "Contract Work" refers to the fee a company pays to another company to perform a service.

Specific materials consumed

In addition to the total cost of materials, which every establishment was required to report, information also was collected for most manufacturing industries on the consumption of major materials used in manufacturing. The inquiries were restricted to those materials that were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. If less than \$25,000 of a listed material was consumed by an establishment, the cost data could be reported in the "Cost of all other materials" Census material code 00970099.

Also, the cost of materials for small establishments for which administrative records or short forms were used was imputed into the "Materials not specified by kind" Census materials code 00971000.

QUANTITY OF ELECTRICITY PURCHASED FOR HEAT AND POWER

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

TOTAL VALUE OF SHIPMENTS

Includes the received or receivable net selling values, "Free on Board" (FOB) plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all

items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

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

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

1. reported contract work — receipts for work or services that a plant performed for others on their materials;
2. value of resales — sales of products bought and sold without further manufacture, processing, or assembly; and
3. other miscellaneous receipts — includes repair work, installation, sales of scrap, etc.

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

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

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

Duplication in cost of materials and value of shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication, since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to the paper manufacturing group of industries.

Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

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

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

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

Specialization and coverage ratio

An establishment is classified in a particular industry, if its shipments of primary products of that industry exceed in value its shipments of the products of any other single industry.

An establishment's shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.).

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

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

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

VALUE ADDED

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

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

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

TOTAL END-OF-YEAR INVENTORIES

This item is comprised of:

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

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

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

Inventory valuations include:

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

GROSS VALUE OF DEPRECIABLE/DEPLETABLE ASSETS AT BEGINNING OF YEAR

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

Gross value of depreciable/depletable assets includes:

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

Excluded are nondepreciable capital assets including inventories and intangible assets.

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

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

CAPITAL EXPENDITURES FOR NEW AND USED PLANT AND EQUIPMENT

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

These data include expenditures for:

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

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

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

RETIREMENTS OF DEPRECIABLE ASSETS

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

RENTAL PAYMENTS

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

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments.

However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

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

DEPRECIATION CHARGES FOR FIXED ASSETS

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

Appendix B.

NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

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

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

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

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

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

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

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

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

311 FOOD MANUFACTURING

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

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

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

3111 ANIMAL FOOD MANUFACTURING

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

31111 ANIMAL FOOD MANUFACTURING

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

311111 DOG AND CAT FOOD MANUFACTURING

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

311119 OTHER ANIMAL FOOD MANUFACTURING

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

3112 GRAIN AND OILSEED MILLING

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

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

31121 FLOUR MILLING AND MALT MANUFACTURING

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

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

311211 FLOUR MILLING

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

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

311212 RICE MILLING

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

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

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

311213 MALT MANUFACTURING

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

31122 STARCH AND VEGETABLE FATS AND OILS MANUFACTURING

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

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

311221 WET CORN MILLING

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

311222 SOYBEAN PROCESSING

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

311223 OTHER OILSEED PROCESSING

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

311225 FATS AND OILS REFINING AND BLENDING

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

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

31123 BREAKFAST CEREAL MANUFACTURING

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

311230 BREAKFAST CEREAL MANUFACTURING

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

3113 SUGAR AND CONFECTIONERY PRODUCT MANUFACTURING

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

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

31131 SUGAR MANUFACTURING

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

311311 SUGARCANE MILLS

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

311312 CANE SUGAR REFINING

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

311313 BEET SUGAR MANUFACTURING

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

31132 CHOCOLATE AND CONFECTIONERY MANUFACTURING FROM CACAO BEANS

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

311320 CHOCOLATE AND CONFECTIONERY MANUFACTURING FROM CACAO BEANS

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

31133 CONFECTIONERY MANUFACTURING FROM PURCHASED CHOCOLATE

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

311330 CONFECTIONERY MANUFACTURING FROM PURCHASED CHOCOLATE

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

31134 NONCHOCOLATE CONFECTIONERY MANUFACTURING

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

311340 NONCHOCOLATE CONFECTIONERY MANUFACTURING

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

3114 FRUIT AND VEGETABLE PRESERVING AND SPECIALTY FOOD MANUFACTURING

This industry group comprises establishments primarily engaged in the following:

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

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

31141 FROZEN FOOD MANUFACTURING

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

311411 FROZEN FRUIT, JUICE, AND VEGETABLE MANUFACTURING

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

311412 FROZEN SPECIALTY FOOD MANUFACTURING

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

31142 FRUIT AND VEGETABLE CANNING, PICKLING, AND DRYING

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

311421 FRUIT AND VEGETABLE CANNING

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

311422 SPECIALTY CANNING

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

311423 DRIED AND DEHYDRATED FOOD MANUFACTURING

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

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

3115 DAIRY PRODUCT MANUFACTURING

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

31151 DAIRY PRODUCT (EXCEPT FROZEN) MANUFACTURING

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

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

311511 FLUID MILK MANUFACTURING

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

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

311512 CREAMERY BUTTER MANUFACTURING

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

311513 CHEESE MANUFACTURING

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

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

311514 DRY, CONDENSED, AND EVAPORATED DAIRY PRODUCT MANUFACTURING

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

31152 ICE CREAM AND FROZEN DESSERT MANUFACTURING

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

311520 ICE CREAM AND FROZEN DESSERT MANUFACTURING

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

3116 ANIMAL SLAUGHTERING AND PROCESSING

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

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

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

31161 ANIMAL SLAUGHTERING AND PROCESSING

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

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

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

311611 ANIMAL (EXCEPT POULTRY) SLAUGHTERING

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

311612 MEAT PROCESSED FROM CARCASSES

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

311613 RENDERING AND MEAT BYPRODUCT PROCESSING

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

311615 POULTRY PROCESSING

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

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

3117 SEAFOOD PRODUCT PREPARATION AND PACKAGING

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

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

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

31171 SEAFOOD PRODUCT PREPARATION AND PACKAGING

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

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

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

311711 SEAFOOD CANNING

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

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

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

311712 FRESH AND FROZEN SEAFOOD PROCESSING

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

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

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

3118 Bakeries and Tortilla Manufacturing

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

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

31181 Bread and Bakery Product Manufacturing

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

311811 Retail Bakeries

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

311812 Commercial Bakeries

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

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing

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

31182 Cookie, Cracker, and Pasta Manufacturing

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

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

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

311821 Cookie and Cracker Manufacturing

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

311822 Flour Mixes and Dough Manufacturing from Purchased Flour

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

311823 Dry Pasta Manufacturing

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

311821 COOKIE AND CRACKER MANUFACTURING

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

311822 FLOUR MIXES AND DOUGH MANUFACTURING FROM PURCHASED FLOUR

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

311823 DRY PASTA MANUFACTURING

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

31183 TORTILLA MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 TORTILLA MANUFACTURING

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

3119 OTHER FOOD MANUFACTURING

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

31191 SNACK FOOD MANUFACTURING

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

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

311911 ROASTED NUTS AND PEANUT BUTTER MANUFACTURING

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

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

311919 OTHER SNACK FOOD MANUFACTURING

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

31192 COFFEE AND TEA MANUFACTURING

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

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

311920 COFFEE AND TEA MANUFACTURING

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

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

31193 FLAVORING SYRUP AND CONCENTRATE MANUFACTURING

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

311930 FLAVORING SYRUP AND CONCENTRATE MANUFACTURING

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

31194 SEASONING AND DRESSING MANUFACTURING

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

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

311941 MAYONNAISE, DRESSING, AND OTHER PREPARED SAUCE MANUFACTURING

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

311942 SPICE AND EXTRACT MANUFACTURING

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

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

31199 ALL OTHER FOOD MANUFACTURING

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

311991 PERISHABLE PREPARED FOOD MANUFACTURING

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

311999 ALL OTHER MISCELLANEOUS FOOD MANUFACTURING

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

312 BEVERAGE AND TOBACCO PRODUCT MANUFACTURING

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

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

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

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

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

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

3121 BEVERAGE MANUFACTURING

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

31211 SOFT DRINK AND ICE MANUFACTURING

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

1. Manufacturing soft drinks;

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

312111 SOFT DRINK MANUFACTURING

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

312112 BOTTLED WATER MANUFACTURING

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

312113 ICE MANUFACTURING

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

31212 BREWERIES

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

312120 BREWERIES

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

31213 WINERIES

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

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

312130 WINERIES

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

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

31214 DISTILLERIES

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

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

312140 DISTILLERIES

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

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

3122 TOBACCO MANUFACTURING

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

31221 TOBACCO STEMMING AND REDRYING

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

312210 TOBACCO STEMMING AND REDRYING

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

31222 TOBACCO PRODUCT MANUFACTURING

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

312221 CIGARETTE MANUFACTURING

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

312229 OTHER TOBACCO PRODUCT MANUFACTURING

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

313 TEXTILE MILLS

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

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

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

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

3131 FIBER, YARN, AND THREAD MILLS

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

31311 FIBER, YARN, AND THREAD MILLS

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

1. spinning yarn

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

313111 YARN SPINNING MILLS

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

313112 YARN TEXTURIZING, THROWING, AND TWISTING MILLS

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

313113 THREAD MILLS

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

3132 FABRIC MILLS

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

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

31321 BROADWOVEN FABRIC MILLS

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

313210 BROADWOVEN FABRIC MILLS

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

31322 NARROW FABRIC MILLS AND SCHIFFLI MACHINE EMBROIDERY

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

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

313221 NARROW FABRIC MILLS

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

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

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

313222 SCHIFFLI MACHINE EMBROIDERY

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

31323 NONWOVEN FABRIC MILLS

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

313230 NONWOVEN FABRIC MILLS

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

31324 KNIT FABRIC MILLS

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

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

313241 WEFT KNIT FABRIC MILLS

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

313249 OTHER KNIT FABRIC AND LACE MILLS

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

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

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

3133 TEXTILE AND FABRIC FINISHING AND FABRIC COATING MILLS

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

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

31331 TEXTILE AND FABRIC FINISHING MILLS

This industry comprises:

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

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

313311 BROADWOVEN FABRIC FINISHING MILLS

This U.S. industry comprises:

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

313312 TEXTILE AND FABRIC FINISHING (EXCEPT BROADWOVEN FABRIC) MILLS

This U.S. industry comprises:

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

31332 FABRIC COATING MILLS

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

313320 FABRIC COATING MILLS

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

314 TEXTILE PRODUCT MILLS

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

3141 TEXTILE FURNISHINGS MILLS

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

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

31411 CARPET AND RUG MILLS

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

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

314110 CARPET AND RUG MILLS

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

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

31412 CURTAIN AND LINEN MILLS

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

314121 CURTAIN AND DRAPERY MILLS

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

314129 OTHER HOUSEHOLD TEXTILE PRODUCT MILLS

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

3149 OTHER TEXTILE PRODUCT MILLS

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

31491 TEXTILE BAG AND CANVAS MILLS

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

314911 TEXTILE BAG MILLS

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

314912 CANVAS AND RELATED PRODUCT MILLS

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

31499 ALL OTHER TEXTILE PRODUCT MILLS

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

314991 ROPE, CORDAGE, AND TWINE MILLS

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

314992 TIRE CORD AND TIRE FABRIC MILLS

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

314999 ALL OTHER MISCELLANEOUS TEXTILE PRODUCT MILLS

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

315 APPAREL MANUFACTURING

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

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

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

3151 APPAREL KNITTING MILLS

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

31511 HOSIERY AND SOCK MILLS

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

315111 SHEER HOSIERY MILLS

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

315119 OTHER HOSIERY AND SOCK MILLS

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

31519 OTHER APPAREL KNITTING MILLS

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

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

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

315191 OUTERWEAR KNITTING MILLS

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

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

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

315192 UNDERWEAR AND NIGHTWEAR KNITTING MILLS

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

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

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

3152 CUT AND SEW APPAREL MANUFACTURING

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

31521 CUT AND SEW APPAREL CONTRACTORS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

31529 OTHER CUT AND SEW APPAREL MANUFACTURING

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

315291 INFANTS' CUT AND SEW APPAREL MANUFACTURING

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

315292 FUR AND LEATHER APPAREL MANUFACTURING

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

315299 ALL OTHER CUT AND SEW APPAREL MANUFACTURING

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

3159 APPAREL ACCESSORIES AND OTHER APPAREL MANUFACTURING

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

31599 APPAREL ACCESSORIES AND OTHER APPAREL MANUFACTURING

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

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

315991 HAT, CAP, AND MILLINERY MANUFACTURING

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

315992 GLOVE AND MITTEN MANUFACTURING

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

315993 MEN'S AND BOYS' NECKWEAR MANUFACTURING

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

315999 OTHER APPAREL ACCESSORIES AND OTHER APPAREL MANUFACTURING

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

316 LEATHER AND ALLIED PRODUCT MANUFACTURING

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

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

3161 LEATHER AND HIDE TANNING AND FINISHING

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

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

31611 LEATHER AND HIDE TANNING AND FINISHING

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

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

316110 LEATHER AND HIDE TANNING AND FINISHING

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

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

3162 FOOTWEAR MANUFACTURING

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

31621 FOOTWEAR MANUFACTURING

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

316211 RUBBER AND PLASTICS FOOTWEAR MANUFACTURING

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

316212 HOUSE SLIPPER MANUFACTURING

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

316213 MEN'S FOOTWEAR (EXCEPT ATHLETIC) MANUFACTURING

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

316214 WOMEN'S FOOTWEAR (EXCEPT ATHLETIC) MANUFACTURING

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

316219 OTHER FOOTWEAR MANUFACTURING

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

3169 OTHER LEATHER AND ALLIED PRODUCT MANUFACTURING

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

31699 OTHER LEATHER AND ALLIED PRODUCT MANUFACTURING

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

316991 LUGGAGE MANUFACTURING

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

316992 WOMEN'S HANDBAG AND PURSE MANUFACTURING

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

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

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

316999 ALL OTHER LEATHER GOOD MANUFACTURING

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

321 WOOD PRODUCT MANUFACTURING

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

3211 SAWMILLS AND WOOD PRESERVATION

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

32111 SAWMILLS AND WOOD PRESERVATION

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

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

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

321113 SAWMILLS

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

321114 WOOD PRESERVATION

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

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

3212 VENEER, PLYWOOD, AND ENGINEERED WOOD PRODUCT MANUFACTURING

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

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

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

32121 VENEER, PLYWOOD, AND ENGINEERED WOOD PRODUCT MANUFACTURING

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

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

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

321211 HARDWOOD VENEER AND PLYWOOD MANUFACTURING

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

321212 SOFTWOOD VENEER AND PLYWOOD MANUFACTURING

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

321213 ENGINEERED WOOD MEMBER (EXCEPT TRUSS) MANUFACTURING

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

321214 TRUSS MANUFACTURING

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

321219 RECONSTITUTED WOOD PRODUCT MANUFACTURING

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

3219 OTHER WOOD PRODUCT MANUFACTURING

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

32191 MILLWORK

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

321911 WOOD WINDOW AND DOOR MANUFACTURING

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

321912 CUT STOCK, RESAWING LUMBER, AND PLANING

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

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

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

321918 OTHER MILLWORK (INCLUDING FLOORING)

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

32192 WOOD CONTAINER AND PALLET MANUFACTURING

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

321920 WOOD CONTAINER AND PALLET MANUFACTURING

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

32199 ALL OTHER WOOD PRODUCT MANUFACTURING

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

321991 MANUFACTURED HOME (MOBILE HOME) MANUFACTURING

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

321992 PREFABRICATED WOOD BUILDING MANUFACTURING

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

321999 ALL OTHER MISCELLANEOUS WOOD PRODUCT MANUFACTURING

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

322 PAPER MANUFACTURING

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

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

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

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

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

3221 PULP, PAPER, AND PAPERBOARD MILLS

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

32211 PULP MILLS

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

322110 PULP MILLS

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

32212 PAPER MILLS

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

322121 PAPER (EXCEPT NEWSPRINT) MILLS

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

322122 NEWSPRINT MILLS

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

32213 PAPERBOARD MILLS

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

322130 PAPERBOARD MILLS

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

3222 CONVERTED PAPER PRODUCT MANUFACTURING

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

32221 PAPERBOARD CONTAINER MANUFACTURING

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

322211 CORRUGATED AND SOLID FIBER BOX MANUFACTURING

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

322212 FOLDING PAPERBOARD BOX MANUFACTURING

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

322213 SETUP PAPERBOARD BOX MANUFACTURING

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

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

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

322215 NONFOLDING SANITARY FOOD CONTAINER MANUFACTURING

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

32222 PAPER BAG AND COATED AND TREATED PAPER MANUFACTURING

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

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

322221 COATED AND LAMINATED PACKAGING PAPER AND PLASTICS FILM MANUFACTURING

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

1. cutting and coating paper and

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

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

322222 COATED AND LAMINATED PAPER MANUFACTURING

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

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

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

322223 PLASTICS, FOIL, AND COATED PAPER BAG MANUFACTURING

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

322224 UNCOATED PAPER AND MULTIWALL BAG MANUFACTURING

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

322225 LAMINATED ALUMINUM FOIL MANUFACTURING FOR FLEXIBLE PACKAGING USES

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

322226 SURFACE-COATED PAPERBOARD MANUFACTURING

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

32223 STATIONERY PRODUCT MANUFACTURING

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

322231 DIE-CUT PAPER AND PAPERBOARD OFFICE SUPPLIES MANUFACTURING

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

322232 ENVELOPE MANUFACTURING

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

322233 STATIONERY, TABLET, AND RELATED PRODUCT MANUFACTURING

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

32229 OTHER CONVERTED PAPER PRODUCT MANUFACTURING

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

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

Processes used include laminating or lining purchased paper or paperboard.

322291 SANITARY PAPER PRODUCT MANUFACTURING

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

322299 ALL OTHER CONVERTED PAPER PRODUCT MANUFACTURING

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

323 PRINTING AND RELATED SUPPORT ACTIVITIES

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

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

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

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

3231 PRINTING AND RELATED SUPPORT ACTIVITIES

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

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

32311 PRINTING

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

323110 COMMERCIAL LITHOGRAPHIC PRINTING

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

323111 COMMERCIAL GRAVURE PRINTING

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

323112 COMMERCIAL FLEXOGRAPHIC PRINTING

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

323113 COMMERCIAL SCREEN PRINTING

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

323114 QUICK PRINTING

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

323115 DIGITAL PRINTING

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

323116 MANIFOLD BUSINESS FORMS PRINTING

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

323117 BOOKS PRINTING

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

323118 BLANKBOOK, LOOSELEAF BINDERS, AND DEVICES MANUFACTURING

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

323119 OTHER COMMERCIAL PRINTING

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

32312 SUPPORT ACTIVITIES FOR PRINTING

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

323121 TRADEBINDING AND RELATED WORK

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

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

323122 PREPRESS SERVICES

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

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

324 PETROLEUM AND COAL PRODUCTS MANUFACTURING

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

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

3241 PETROLEUM AND COAL PRODUCTS MANUFACTURING

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

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

32411 PETROLEUM REFINERIES

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

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

324110 PETROLEUM REFINERIES

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

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

32412 ASPHALT PAVING, ROOFING, AND SATURATED MATERIALS MANUFACTURING

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

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

324121 ASPHALT PAVING MIXTURE AND BLOCK MANUFACTURING

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

324122 ASPHALT SHINGLE AND COATING MATERIALS MANUFACTURING

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

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

32419 OTHER PETROLEUM AND COAL PRODUCTS MANUFACTURING

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

324191 PETROLEUM LUBRICATING OIL AND GREASE MANUFACTURING

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

324199 ALL OTHER PETROLEUM AND COAL PRODUCTS MANUFACTURING

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

325 CHEMICAL MANUFACTURING

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

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

3251 BASIC CHEMICAL MANUFACTURING

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

32511 PETROCHEMICAL MANUFACTURING

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

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

325110 PETROCHEMICAL MANUFACTURING

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

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

32512 INDUSTRIAL GAS MANUFACTURING

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

325120 INDUSTRIAL GAS MANUFACTURING

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

32513 SYNTHETIC DYE AND PIGMENT MANUFACTURING

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

325131 INORGANIC DYE AND PIGMENT MANUFACTURING

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

325132 SYNTHETIC ORGANIC DYE AND PIGMENT MANUFACTURING

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

32518 OTHER BASIC INORGANIC CHEMICAL MANUFACTURING

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

325181 ALKALIES AND CHLORINE MANUFACTURING

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

325182 CARBON BLACK MANUFACTURING

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

325188 ALL OTHER BASIC INORGANIC CHEMICAL MANUFACTURING

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

32519 OTHER BASIC ORGANIC CHEMICAL MANUFACTURING

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

325191 GUM AND WOOD CHEMICAL MANUFACTURING

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

325192 CYCLIC CRUDE AND INTERMEDIATE MANUFACTURING

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

325193 ETHYL ALCOHOL MANUFACTURING

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

325199 ALL OTHER BASIC ORGANIC CHEMICAL MANUFACTURING

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

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

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

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

32521 RESIN AND SYNTHETIC RUBBER MANUFACTURING

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

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

325211 PLASTICS MATERIAL AND RESIN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in

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

325212 SYNTHETIC RUBBER MANUFACTURING

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

32522 ARTIFICIAL AND SYNTHETIC FIBERS AND FILAMENTS MANUFACTURING

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

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

325221 CELLULOSIC ORGANIC FIBER MANUFACTURING

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

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

325222 NONCELLULOSIC ORGANIC FIBER MANUFACTURING

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

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

3253 PESTICIDE, FERTILIZER, AND OTHER AGRICULTURAL CHEMICAL MANUFACTURING

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

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

32531 FERTILIZER MANUFACTURING

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

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

325311 NITROGENOUS FERTILIZER MANUFACTURING

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

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

325312 PHOSPHATIC FERTILIZER MANUFACTURING

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

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

325314 FERTILIZER (MIXING ONLY) MANUFACTURING

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

32532 PESTICIDE AND OTHER AGRICULTURAL CHEMICAL MANUFACTURING

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

325320 PESTICIDE AND OTHER AGRICULTURAL CHEMICAL MANUFACTURING

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

3254 PHARMACEUTICAL AND MEDICINE MANUFACTURING

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

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

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

32541 PHARMACEUTICAL AND MEDICINE MANUFACTURING

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

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

325411 MEDICINAL AND BOTANICAL MANUFACTURING

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

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

325412 PHARMACEUTICAL PREPARATION MANUFACTURING

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

325413 IN-VITRO DIAGNOSTIC SUBSTANCE MANUFACTURING

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

325414 BIOLOGICAL PRODUCT (EXCEPT DIAGNOSTIC) MANUFACTURING

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

3255 PAINT, COATING, AND ADHESIVE MANUFACTURING

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

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

32551 PAINT AND COATING MANUFACTURING

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

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

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

325510 PAINT AND COATING MANUFACTURING

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

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

32552 ADHESIVE MANUFACTURING

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

325520 ADHESIVE MANUFACTURING

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

3256 SOAP, CLEANING COMPOUND, AND TOILET PREPARATION MANUFACTURING

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

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

32561 SOAP AND CLEANING COMPOUND MANUFACTURING

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

325611 SOAP AND OTHER DETERGENT MANUFACTURING

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

325612 POLISH AND OTHER SANITATION GOOD MANUFACTURING

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

325613 SURFACE ACTIVE AGENT MANUFACTURING

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

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

32562 TOILET PREPARATION MANUFACTURING

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

325620 TOILET PREPARATION MANUFACTURING

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

3259 OTHER CHEMICAL PRODUCT AND PREPARATION MANUFACTURING

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

32591 PRINTING INK MANUFACTURING

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

325910 PRINTING INK MANUFACTURING

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

32592 EXPLOSIVES MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 EXPLOSIVES MANUFACTURING

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

32599 ALL OTHER CHEMICAL PRODUCT AND PREPARATION MANUFACTURING

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

325991 CUSTOM COMPOUNDING OF PURCHASED RESINS

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

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

325992 PHOTOGRAPHIC FILM, PAPER, PLATE, AND CHEMICAL MANUFACTURING

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

325998 ALL OTHER MISCELLANEOUS CHEMICAL PRODUCT AND PREPARATION MANUFACTURING

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

326 PLASTICS AND RUBBER PRODUCTS MANUFACTURING

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

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

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

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

3261 PLASTICS PRODUCT MANUFACTURING

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

32611 PLASTICS PACKAGING MATERIALS AND UNLAMINATED FILM AND SHEET MANUFACTURING

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

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

326111 PLASTICS BAG MANUFACTURING

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

1. converting plastics resins into plastics bags or

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

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

326112 PLASTICS PACKAGING FILM AND SHEET (INCLUDING LAMINATED) MANUFACTURING

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

326113 UNLAMINATED PLASTICS FILM AND SHEET (EXCEPT PACKAGING) MANUFACTURING

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

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

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

326121 UNLAMINATED PLASTICS PROFILE SHAPE MANUFACTURING

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

326122 PLASTICS PIPE AND PIPE FITTING MANUFACTURING

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

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

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

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

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

32614 POLYSTYRENE FOAM PRODUCT MANUFACTURING

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

326140 POLYSTYRENE FOAM PRODUCT MANUFACTURING

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

32615 URETHANE AND OTHER FOAM PRODUCT (EXCEPT POLYSTYRENE) MANUFACTURING

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

326150 URETHANE AND OTHER FOAM PRODUCT (EXCEPT POLYSTYRENE) MANUFACTURING

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

32616 PLASTICS BOTTLE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 PLASTICS BOTTLE MANUFACTURING

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

32619 OTHER PLASTICS PRODUCT MANUFACTURING

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

326191 PLASTICS PLUMBING FIXTURE MANUFACTURING

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

326192 RESILIENT FLOOR COVERING MANUFACTURING

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

326199 ALL OTHER PLASTICS PRODUCT MANUFACTURING

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

3262 RUBBER PRODUCT MANUFACTURING

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

32621 TIRE MANUFACTURING

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

326211 TIRE MANUFACTURING (EXCEPT RETREADING)

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

326212 TIRE RETREADING

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

32622 RUBBER AND PLASTICS HOSES AND BELTING MANUFACTURING

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

326220 RUBBER AND PLASTICS HOSES AND BELTING MANUFACTURING

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

32629 OTHER RUBBER PRODUCT MANUFACTURING

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

326291 RUBBER PRODUCT MANUFACTURING FOR MECHANICAL USE

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

326299 ALL OTHER RUBBER PRODUCT MANUFACTURING

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

327 NONMETALLIC MINERAL PRODUCT MANUFACTURING

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

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

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

3271 CLAY PRODUCT AND REFRACTORY MANUFACTURING

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

32711 POTTERY, CERAMICS, AND PLUMBING FIXTURE MANUFACTURING

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

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

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

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

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

327113 PORCELAIN ELECTRICAL SUPPLY MANUFACTURING

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

32712 CLAY BUILDING MATERIAL AND REFRACTORIES MANUFACTURING

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

327121 BRICK AND STRUCTURAL CLAY TILE MANUFACTURING

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

327122 CERAMIC WALL AND FLOOR TILE MANUFACTURING

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

327123 OTHER STRUCTURAL CLAY PRODUCT MANUFACTURING

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

327124 CLAY REFRACTORY MANUFACTURING

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

327125 NONCLAY REFRACTORY MANUFACTURING

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

3272 GLASS AND GLASS PRODUCT MANUFACTURING

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

32721 GLASS AND GLASS PRODUCT MANUFACTURING

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

327211 FLAT GLASS MANUFACTURING

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

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

327212 OTHER PRESSED AND BLOWN GLASS AND GLASSWARE MANUFACTURING

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

327213 GLASS CONTAINER MANUFACTURING

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

327215 GLASS PRODUCT MANUFACTURING MADE OF PURCHASED GLASS

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

3273 CEMENT AND CONCRETE PRODUCT MANUFACTURING

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

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

32731 CEMENT MANUFACTURING

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

327310 CEMENT MANUFACTURING

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

32732 READY-MIX CONCRETE MANUFACTURING

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

327320 READY-MIX CONCRETE MANUFACTURING

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

32733 CONCRETE PIPE, BRICK, AND BLOCK MANUFACTURING

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

327331 CONCRETE BLOCK AND BRICK MANUFACTURING

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

327332 CONCRETE PIPE MANUFACTURING

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

32739 OTHER CONCRETE PRODUCT MANUFACTURING

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

327390 OTHER CONCRETE PRODUCT MANUFACTURING

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

3274 LIME AND GYPSUM PRODUCT MANUFACTURING

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

32741 LIME MANUFACTURING

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

327410 LIME MANUFACTURING

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

32742 GYPSUM PRODUCT MANUFACTURING

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

327420 GYPSUM PRODUCT MANUFACTURING

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

3279 OTHER NONMETALLIC MINERAL PRODUCT MANUFACTURING

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

32791 ABRASIVE PRODUCT MANUFACTURING

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

327910 ABRASIVE PRODUCT MANUFACTURING

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

32799 ALL OTHER NONMETALLIC MINERAL PRODUCT MANUFACTURING

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

327991 CUT STONE AND STONE PRODUCT MANUFACTURING

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

327992 GROUND OR TREATED MINERAL AND EARTH MANUFACTURING

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

327993 MINERAL WOOL MANUFACTURING

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

327999 ALL OTHER MISCELLANEOUS NONMETALLIC MINERAL PRODUCT MANUFACTURING

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

331 PRIMARY METAL MANUFACTURING

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

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

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

3311 IRON AND STEEL MILLS AND FERROALLOY MANUFACTURING

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

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

33111 IRON AND STEEL MILLS AND FERROALLOY MANUFACTURING

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

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

331111 IRON AND STEEL MILLS

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

1. direct reduction of iron ore;

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

331112 ELECTROMETALLURGICAL FERROALLOY PRODUCT MANUFACTURING

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

3312 STEEL PRODUCT MANUFACTURING FROM PURCHASED STEEL

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

33121 IRON AND STEEL PIPE AND TUBE MANUFACTURING FROM PURCHASED STEEL

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

331210 IRON AND STEEL PIPE AND TUBE MANUFACTURING FROM PURCHASED STEEL

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

33122 ROLLING AND DRAWING OF PURCHASED STEEL

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

331221 ROLLED STEEL SHAPE MANUFACTURING

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

331222 STEEL WIRE DRAWING

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

3313 ALUMINA AND ALUMINUM PRODUCTION AND PROCESSING

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

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

33131 ALUMINA AND ALUMINUM PRODUCTION AND PROCESSING

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

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

331311 ALUMINA REFINING

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

331312 PRIMARY ALUMINUM PRODUCTION

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

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

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

331314 SECONDARY SMELTING AND ALLOYING OF ALUMINUM

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

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

331315 ALUMINUM SHEET, PLATE, AND FOIL MANUFACTURING

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

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

331316 ALUMINUM EXTRUDED PRODUCT MANUFACTURING

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

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

331319 OTHER ALUMINUM ROLLING AND DRAWING

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

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

3314 NONFERROUS METAL (EXCEPT ALUMINUM) PRODUCTION AND PROCESSING

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

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

33141 NONFERROUS METAL (EXCEPT ALUMINUM) SMELTING AND REFINING

This industry comprises establishments primarily engaged in:

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

331411 PRIMARY SMELTING AND REFINING OF COPPER

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

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

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

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

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

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

33142 COPPER ROLLING, DRAWING, EXTRUDING, AND ALLOYING

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

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

331421 COPPER ROLLING, DRAWING, AND EXTRUDING

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

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

331422 COPPER WIRE (EXCEPT MECHANICAL) DRAWING

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

331423 SECONDARY SMELTING, REFINING, AND ALLOYING OF COPPER

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

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

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

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

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

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

331491 NONFERROUS METAL (EXCEPT COPPER AND ALUMINUM) ROLLING, DRAWING, AND EXTRUDING

This U.S. industry comprises establishments primarily engaged in:

1. rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, and tube) from purchased nonferrous metals and/or
2. recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, and tube) in integrated mills.

331492 SECONDARY SMELTING, REFINING, AND ALLOYING OF NONFERROUS METAL (EXCEPT COPPER AND ALUMINUM)

This U.S. industry comprises establishments primarily engaged in:

1. alloying purchased nonferrous metals and/or
2. recovering nonferrous metals from scrap.

Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, and wire) using smelting or refining processes.

3315 FOUNDRIES

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping, threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 FERROUS METAL FOUNDRIES

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 IRON FOUNDRIES

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings (e.g., cast iron manhole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

331512 STEEL INVESTMENT FOUNDRIES

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

331513 STEEL FOUNDRIES (EXCEPT INVESTMENT)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

33152 NONFERROUS METAL FOUNDRIES

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 ALUMINUM DIE-CASTING FOUNDRIES

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

331522 NONFERROUS (EXCEPT ALUMINUM) DIE-CASTING FOUNDRIES

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331524 ALUMINUM FOUNDRIES (EXCEPT DIE-CASTING)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

331525 COPPER FOUNDRIES (EXCEPT DIE-CASTING)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

331528 OTHER NONFERROUS FOUNDRIES (EXCEPT DIE-CASTING)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous (except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

332 FABRICATED METAL PRODUCT MANUFACTURING

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 FORGING AND STAMPING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Manufacturing forgings from purchased metals;
2. Manufacturing metal custom roll forming products;
3. Manufacturing metal stamped and spun products (except automotive, cans, and coins); and
4. Manufacturing powder metallurgy products.

Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining and assembling) a specific manufactured product are classified in the industry of the finished product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

33211 FORGING AND STAMPING

This industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing forgings from purchased metals;
2. manufacturing metal custom roll forming products;
3. manufacturing metal stamped and spun products (except automotive, cans, and coins); and
4. manufacturing powder metallurgy products.

Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining and assembling) a specific manufactured product are classified in the industry of the finished product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 IRON AND STEEL FORGING

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

332112 NONFERROUS FORGING

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

332114 CUSTOM ROLL FORMING

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

332115 CROWN AND CLOSURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

332116 METAL STAMPING

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332117 POWDER METALLURGY PART MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

3322 CUTLERY AND HANDTOOL MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Manufacturing nonprecious and precious plated metal cutlery and flatware;
2. Manufacturing nonpowered hand and edge tools;
3. Manufacturing nonpowered handsaws;
4. Manufacturing saw blades, all types (including those for sawing machines); and

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5. Manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

33221 CUTLERY AND HANDTOOL MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing nonprecious and precious plated metal cutlery and flatware;
2. manufacturing nonpowered hand and edge tools;
3. manufacturing nonpowered handsaws;
4. manufacturing saw blades, all types (including those for sawing machines); and
5. manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 CUTLERY AND FLATWARE (EXCEPT PRECIOUS) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

332212 HAND AND EDGE TOOL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

332213 SAW BLADE AND HANDSAW MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing nonpowered handsaws and/or
2. manufacturing saw blades, all types (including those for power sawing machines).

332214 KITCHEN UTENSIL, POT, AND PAN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

3323 ARCHITECTURAL AND STRUCTURAL METALS MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing one or more of the following:

1. Plate work and fabricated structural product manufacturing and
2. Ornamental and architectural metal products manufacturing.

33231 PLATE WORK AND FABRICATED STRUCTURAL PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing one or more of the following:

1. prefabricated metal buildings, panels and sections;
2. structural metal products; and
3. metal plate work products.

332311 PREFABRICATED METAL BUILDING AND COMPONENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

332312 FABRICATED STRUCTURAL METAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

332313 PLATE WORK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

33232 ORNAMENTAL AND ARCHITECTURAL METAL PRODUCTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing one or more of the following:

1. metal framed windows (i.e., typically using purchased glass) and metal doors;
2. sheet metal work; and
3. ornamental and architectural metal products.

332321 METAL WINDOW AND DOOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (typically using purchased glass) and metal doors. Examples of products made by these establishments are: metal door frames; metal framed window and door screens; and metal molding and trim (except automotive).

332322 SHEET METAL WORK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

332323 ORNAMENTAL AND ARCHITECTURAL METAL WORK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

3324 BOILER, TANK, AND SHIPPING CONTAINER MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Power boiler and heat exchanger manufacturing;
2. Metal tank (heavy gauge) manufacturing; and
3. Metal can, box, and other metal container (light gauge) manufacturing.

33241 POWER BOILER AND HEAT EXCHANGER MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 POWER BOILER AND HEAT EXCHANGER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

33242 METAL TANK (HEAVY GAUGE) MANUFACTURING

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 METAL TANK (HEAVY GAUGE) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

33243 METAL CAN, BOX, AND OTHER METAL CONTAINER (LIGHT GAUGE) MANUFACTURING

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 METAL CAN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

332439 OTHER METAL CONTAINER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

3325 HARDWARE MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated and time locks).

33251 HARDWARE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated and time locks).

332510 HARDWARE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated and time locks).

3326 SPRING AND WIRE PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in:

1. Manufacturing steel springs by forming, such as cutting, bending, and heat winding, metal rod or strip stock, and/or
2. Manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

33261 SPRING AND WIRE PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in:

1. manufacturing steel springs by forming, such as cutting, bending, and heat winding, metal rod or strip stock, and/or
2. manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

332611 SPRING (HEAVY GAUGE) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding, rod or strip stock.

332612 SPRING (LIGHT GAUGE) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

332618 OTHER FABRICATED WIRE PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

3327 MACHINE SHOPS; TURNED PRODUCT; AND SCREW, NUT, AND BOLT MANUFACTURING

This industry group comprises establishments primarily engaged in:

1. Machine shops and/or
2. Turned product and screw, nut, and bolt manufacturing.

33271 MACHINE SHOPS

This industry comprises establishments primarily engaged in machining metal parts on a job or order basis (known as machine shops). Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 MACHINE SHOPS

This U.S. industry comprises establishments primarily engaged in machining metal parts on a job or order basis (known as machine shops). Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

33272 TURNED PRODUCT AND SCREW, NUT, AND BOLT MANUFACTURING

This industry comprises establishments primarily engaged in:

1. machining precision turned products or
2. manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners.

Included in this industry are establishments primarily engaged in manufacturing parts for machinery and equipment on a customized basis.

332721 PRECISION TURNED PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in machining precision products of all materials on a job or order basis (known as precision turned manufacturers). Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

332722 BOLT, NUT, SCREW, RIVET, AND WASHER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

3328 COATING, ENGRAVING, HEAT TREATING, AND ALLIED ACTIVITIES

This industry group comprises establishments primarily engaged in one or more of the following:

1. Heat treating metals and metal products;
2. Enameling, lacquering, and varnishing metals and metal products;
3. Hot dip galvanizing metals and metal products;
4. Engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates);
5. Powder coating metals and metal products;
6. Electroplating, plating, anodizing, coloring, and finishing metals and metal products; and
7. Providing other metal surfacing services for the trade.

Included in this industry are establishments that coat engravings and heat treat metals and metal formed products fabricated elsewhere.

33281 COATING, ENGRAVING, HEAT TREATING, AND ALLIED ACTIVITIES

This industry comprises establishments primarily engaged in one or more of the following:

1. heat treating metals and metal products;
2. enameling, lacquering, and varnishing metals and metal products;
3. hot dip galvanizing metals and metal products;
4. engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates);
5. powder coating metals and metal products;
6. electroplating, plating, anodizing, coloring, and finishing metals and metal products; and
7. providing other metal surfacing services for the trade.

Included in this industry are establishments that coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 METAL HEAT TREATING

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing metals and metal products for the trade.

332812 METAL COATING, ENGRAVING (EXCEPT JEWELRY AND SILVERWARE), AND ALLIED SERVICES TO MANUFACTURERS

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. enameling, lacquering, and varnishing metals and metal products;
2. hot dip galvanizing metals and metal products;
3. engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates);
4. powder coating metals and metal products; and
5. providing other metal surfacing services for the trade.

332813 ELECTROPLATING, PLATING, POLISHING, ANODIZING, AND COLORING

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

3329 OTHER FABRICATED METAL PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 METAL VALVE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves:

1. industrial valves;
2. fluid power valves and hose fittings;
3. plumbing fixture fittings and trim; and
4. other metal valves and pipe fittings.

332911 INDUSTRIAL VALVE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

332912 FLUID POWER VALVE AND HOSE FITTING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

332913 PLUMBING FIXTURE FITTING AND TRIM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

332919 OTHER METAL VALVE AND PIPE FITTING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

33299 ALL OTHER FABRICATED METAL PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 BALL AND ROLLER BEARING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

332992 SMALL ARMS AMMUNITION MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

332993 AMMUNITION (EXCEPT SMALL ARMS) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

332994 SMALL ARMS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

332995 OTHER ORDNANCE AND ACCESSORIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

332996 FABRICATED PIPE AND PIPE FITTING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in fabricating, such as cutting, threading, and bending metal pipes and pipe fittings made from purchased metal pipe.

332997 INDUSTRIAL PATTERN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

332998 ENAMELED IRON AND METAL SANITARY WARE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

332999 ALL OTHER MISCELLANEOUS FABRICATED METAL PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

333 MACHINERY MANUFACTURING

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special purpose machinery). Three industry groups consist of special purpose machinery--Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery

Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General Purpose Machinery Manufacturing.

3331 AGRICULTURE, CONSTRUCTION, AND MINING MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Agricultural implement manufacturing;
2. Construction machinery manufacturing; and
3. Mining and oil and gas field machinery manufacturing.

33311 AGRICULTURAL IMPLEMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 FARM MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

333112 LAWN AND GARDEN TRACTOR AND HOME LAWN AND GARDEN EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

33312 CONSTRUCTION MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 CONSTRUCTION MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

33313 MINING AND OIL AND GAS FIELD MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 MINING MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, and rock drills and
2. manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

333132 OIL AND GAS FIELD MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

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1. manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks; and
 2. manufacturing water well drilling machinery.

3332 INDUSTRIAL MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Sawmill and woodworking machinery manufacturing;
2. Plastics and rubber industry machinery manufacturing; and
3. Other industrial machinery manufacturing.

33321 SAWMILL AND WOODWORKING MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing sawmill and wood-working machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 SAWMILL AND WOODWORKING MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

33322 PLASTICS AND RUBBER INDUSTRY MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 PLASTICS AND RUBBER INDUSTRY MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

33329 OTHER INDUSTRIAL MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 PAPER INDUSTRY MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

333292 TEXTILE MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

333293 PRINTING MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, typesetting machinery, and bindery machinery.

333294 FOOD PRODUCT MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, and ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, and pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

333295 SEMICONDUCTOR MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

333298 ALL OTHER INDUSTRIAL MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

3333 COMMERCIAL AND SERVICE INDUSTRY MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and dry-cleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

33331 COMMERCIAL AND SERVICE INDUSTRY MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and dry-cleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 AUTOMATIC VENDING MACHINE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing coin, token, currency, or magnetic card operated vending machines; and/or
2. manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

333312 COMMERCIAL LAUNDRY, DRYCLEANING, AND PRESSING MACHINE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

333313 OFFICE MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mailhandling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

333314 OPTICAL INSTRUMENT AND LENS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing optical instruments and lens, such as binoculars, microscopes (except electron and proton), telescopes, prisms, and lenses (except ophthalmic);
2. coating or polishing lenses (except ophthalmic); and
3. mounting lenses (except ophthalmic).

333315 PHOTOGRAPHIC AND PHOTOCOPYING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, and digital), projectors, film developing equipment, photocopying equipment, and microfilm equipment.

333319 OTHER COMMERCIAL AND SERVICE INDUSTRY MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

3334 VENTILATION, HEATING, AIR-CONDITIONING, AND COMMERCIAL REFRIGERATION EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing ventilation, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

33341 VENTILATION, HEATING, AIR-CONDITIONING, AND COMMERCIAL REFRIGERATION EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing ventilation, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 AIR PURIFICATION EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

333412 INDUSTRIAL AND COMMERCIAL FAN AND BLOWER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

333414 HEATING EQUIPMENT (EXCEPT WARM AIR FURNACES) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

333415 AIR-CONDITIONING AND WARM AIR HEATING EQUIPMENT AND COMMERCIAL AND INDUSTRIAL REFRIGERATION EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or
2. manufacturing commercial and industrial refrigeration and freezer equipment.

3335 METALWORKING MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

33351 METALWORKING MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 INDUSTRIAL MOLD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

333512 MACHINE TOOL (METAL CUTTING TYPES) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

333513 MACHINE TOOL (METAL FORMING TYPES) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging, and die-casting machines.

333514 SPECIAL DIE AND TOOL, DIE SET, JIG, AND FIXTURE MANUFACTURING

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

333515 CUTTING TOOL AND MACHINE TOOL ACCESSORY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

333516 ROLLING MILL MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

333518 OTHER METALWORKING MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

3336 ENGINE, TURBINE, AND POWER TRANSMISSION EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive, gasoline, and aircraft).

33361 ENGINE, TURBINE, AND POWER TRANSMISSION EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive, gasoline, and aircraft).

333611 TURBINE AND TURBINE GENERATOR SET UNITS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft) and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

333612 SPEED CHANGER, INDUSTRIAL HIGH-SPEED DRIVE, AND GEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

333613 MECHANICAL POWER TRANSMISSION EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

333618 OTHER ENGINE EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

3339 OTHER GENERAL PURPOSE MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Pump and compressor manufacturing;
2. Material handling equipment manufacturing; and
3. All other general purpose machinery manufacturing.

33391 PUMP AND COMPRESSOR MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general purpose air and gas compressors, nonagricultural spraying and dusting equipment, general purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 PUMP AND PUMPING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing general purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps, and sump pumps.

333912 AIR AND GAS COMPRESSOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing general purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

333913 MEASURING AND DISPENSING PUMP MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

33392 MATERIAL HANDLING EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 ELEVATOR AND MOVING STAIRWAY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

333922 CONVEYOR AND CONVEYING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

333923 OVERHEAD TRAVELING CRANE, HOIST, AND MONORAIL SYSTEM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

333924 INDUSTRIAL TRUCK, TRACTOR, TRAILER, AND STACKER MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type), such as forklifts, pallet loaders and unloaders, and portable loading docks.

33399 ALL OTHER GENERAL PURPOSE MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing general purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 POWER-DRIVEN HANDTOOL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, and pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

333992 WELDING AND SOLDERING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

333993 PACKAGING MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

333994 INDUSTRIAL PROCESS FURNACE AND OVEN MANUFACTURING

This U.S. Industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, and wood).

333995 FLUID POWER CYLINDER AND ACTUATOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

333996 FLUID POWER PUMP AND MOTOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

333997 SCALE AND BALANCE (EXCEPT LABORATORY) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

333999 ALL OTHER MISCELLANEOUS GENERAL PURPOSE MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing general purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

334 COMPUTER AND ELECTRONIC PRODUCT MANUFACTURING

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically-related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment, are brought together. As new activities emerge, they are less likely therefore, to cross the subsector boundaries of the classification.

3341 COMPUTER AND PERIPHERAL EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following:

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1. Store the processing program or programs and the data immediately necessary for the execution of the program;
 2. Can be freely programmed in accordance with the requirements of the user;
 3. Perform arithmetical computations specified by the user; and
 4. Execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run.

Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

33411 COMPUTER AND PERIPHERAL EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following:

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4. execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run.

Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 ELECTRONIC COMPUTER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following:

1. store the processing program or programs and the data immediately necessary for the execution of the program;
2. can be freely programmed in accordance with the requirements of the user;
3. perform arithmetical computations specified by the user; and
4. execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run.

Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

334112 COMPUTER STORAGE DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

334113 COMPUTER TERMINAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

334119 OTHER COMPUTER PERIPHERAL EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

3342 COMMUNICATIONS EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Telephone apparatus manufacturing;
2. Radio and television broadcasting and wireless communications equipment manufacturing; and
3. Other communications equipment manufacturing.

33421 TELEPHONE APPARATUS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be standalone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, LAN modems, multi-user modems, and other data communications equipment, such as bridges, routers, and gateways.

334210 TELEPHONE APPARATUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

33422 RADIO AND TELEVISION BROADCASTING AND WIRELESS COMMUNICATIONS EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 RADIO AND TELEVISION BROADCASTING AND WIRELESS COMMUNICATIONS EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

33429 OTHER COMMUNICATIONS EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 OTHER COMMUNICATIONS EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

3343 AUDIO AND VIDEO EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

33431 AUDIO AND VIDEO EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 AUDIO AND VIDEO EQUIPMENT MANUFACTURING

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3344 SEMICONDUCTOR AND OTHER ELECTRONIC COMPONENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

33441 SEMICONDUCTOR AND OTHER ELECTRONIC COMPONENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 ELECTRON TUBE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

334412 BARE PRINTED CIRCUIT BOARD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

334413 SEMICONDUCTOR AND RELATED DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells and other optoelectronic devices.

334414 ELECTRONIC CAPACITOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

334415 ELECTRONIC RESISTOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

334416 ELECTRONIC COIL, TRANSFORMER, AND OTHER INDUCTOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

334417 ELECTRONIC CONNECTOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial; cylindrical; rack and panel; pin and sleeve; printed circuit; and fiber optic.

334418 PRINTED CIRCUIT ASSEMBLY (ELECTRONIC ASSEMBLY) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

334419 OTHER ELECTRONIC COMPONENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers, and other inductors; connectors; and loaded printed circuit boards).

3345 NAVIGATIONAL, MEASURING, ELECTROMEDICAL, AND CONTROL INSTRUMENTS MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

33451 NAVIGATIONAL, MEASURING, ELECTROMEDICAL, AND CONTROL INSTRUMENTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

334510 ELECTROMEDICAL AND ELECTROTHERAPEUTIC APPARATUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

334511 SEARCH, DETECTION, NAVIGATION, GUIDANCE, AERONAUTICAL, AND NAUTICAL SYSTEM AND INSTRUMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

334512 AUTOMATIC ENVIRONMENTAL CONTROL MANUFACTURING FOR RESIDENTIAL, COMMERCIAL, AND APPLIANCE USE

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration, and appliances.

334513 INSTRUMENTS AND RELATED PRODUCTS MANUFACTURING FOR MEASURING, DISPLAYING, AND CONTROLLING INDUSTRIAL PROCESS VARIABLES

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display, or control (i.e., monitor and analyze) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

334514 TOTALIZING FLUID METER AND COUNTING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

334515 INSTRUMENT MANUFACTURING FOR MEASURING AND TESTING ELECTRICITY AND ELECTRICAL SIGNALS

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

334516 ANALYTICAL LABORATORY INSTRUMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

334517 IRRADIATION APPARATUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, and research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

334518 WATCH, CLOCK, AND PART MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling: clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

334519 OTHER MEASURING AND CONTROLLING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

3346 MANUFACTURING AND REPRODUCING MAGNETIC AND OPTICAL MEDIA

This industry group comprises establishments primarily engaged in:

1. Manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or
2. Mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

33461 MANUFACTURING AND REPRODUCING MAGNETIC AND OPTICAL MEDIA

This industry comprises establishments primarily engaged in:

1. manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or;
2. mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 SOFTWARE REPRODUCING

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software, they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

334612 PRERECORDED COMPACT DISC (EXCEPT SOFTWARE), TAPE, AND RECORD REPRODUCING

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

334613 MAGNETIC AND OPTICAL RECORDING MEDIA MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

335 ELECTRICAL EQUIPMENT, APPLIANCE, AND COMPONENT MANUFACTURING

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric Lighting Equipment Manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household

Appliance Manufacturing establishments make both small and major electrical appliances and parts. Electrical Equipment Manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other Electrical Equipment and Component Manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 ELECTRIC LIGHTING EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Electric lamp bulb and part manufacturing and/or
2. Lighting fixture manufacturing.

33511 ELECTRIC LAMP BULB AND PART MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 ELECTRIC LAMP BULB AND PART MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

33512 LIGHTING FIXTURE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics), and lighting fixture components (except current-carrying wiring devices).

335121 RESIDENTIAL ELECTRIC LIGHTING FIXTURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

335122 COMMERCIAL, INDUSTRIAL, AND INSTITUTIONAL ELECTRIC LIGHTING FIXTURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

335129 OTHER LIGHTING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular) and nonelectric lighting equipment.

3352 HOUSEHOLD APPLIANCE MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Small electrical appliance manufacturing and/or
2. Major appliance manufacturing.

33521 SMALL ELECTRICAL APPLIANCE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 ELECTRIC HOUSEWARES AND HOUSEHOLD FAN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

335212 HOUSEHOLD VACUUM CLEANER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

33522 MAJOR APPLIANCE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 HOUSEHOLD COOKING APPLIANCE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

335222 HOUSEHOLD REFRIGERATOR AND HOME FREEZER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

335224 HOUSEHOLD LAUNDRY EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

335228 OTHER MAJOR HOUSEHOLD APPLIANCE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric and non-electric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

3353 ELECTRICAL EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

33531 ELECTRICAL EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 POWER, DISTRIBUTION, AND SPECIALTY TRANSFORMER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

335312 MOTOR AND GENERATOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

335313 SWITCHGEAR AND SWITCHBOARD APPARATUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

335314 RELAY AND INDUSTRIAL CONTROL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

3359 OTHER ELECTRICAL EQUIPMENT AND COMPONENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 BATTERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 STORAGE BATTERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

335912 PRIMARY BATTERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

33592 COMMUNICATION AND ENERGY WIRE AND CABLE MANUFACTURING

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 FIBER OPTIC CABLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

335929 OTHER COMMUNICATION AND ENERGY WIRE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

33593 WIRING DEVICE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 CURRENT-CARRYING WIRING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

335932 NONCURRENT-CARRYING WIRING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

33599 ALL OTHER ELECTRICAL EQUIPMENT AND COMPONENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 CARBON AND GRAPHITE PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

335999 ALL OTHER MISCELLANEOUS ELECTRICAL EQUIPMENT AND COMPONENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

336 TRANSPORTATION EQUIPMENT MANUFACTURING

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 MOTOR VEHICLE MANUFACTURING

This industry group comprises establishments primarily engaged in:

1. Automobile and light duty motor vehicle manufacturing and/or
2. Heavy duty truck manufacturing.

33611 AUTOMOBILE AND LIGHT DUTY MOTOR VEHICLE MANUFACTURING

This industry comprises establishments primarily engaged in:

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1. manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or
 2. manufacturing chassis only.

336111 AUTOMOBILE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing complete automobiles (i.e., body and chassis or unibody) or
2. manufacturing automobile chassis only.

336112 LIGHT TRUCK AND UTILITY VEHICLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or
2. manufacturing light truck and utility vehicle chassis only.

Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

33612 HEAVY DUTY TRUCK MANUFACTURING

This industry comprises establishments primarily engaged in:

1. manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special purpose heavy duty motor vehicles for highway use or
2. manufacturing heavy duty truck chassis only.

336120 HEAVY DUTY TRUCK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special purpose heavy duty motor vehicles for highway use or
2. manufacturing heavy duty truck chassis only.

3362 MOTOR VEHICLE BODY AND TRAILER MANUFACTURING

This industry group comprises establishments primarily engaged in:

1. Manufacturing motor vehicle bodies and cabs or
2. Manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies, and detachable trailer chassis.

The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

33621 MOTOR VEHICLE BODY AND TRAILER MANUFACTURING

This industry comprises establishments primarily engaged in:

1. manufacturing motor vehicle bodies and cabs or
2. manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies, and detachable trailer chassis.

The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 MOTOR VEHICLE BODY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

336212 TRUCK TRAILER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

336213 MOTOR HOME MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in:

1. manufacturing motor homes on purchased chassis and/or
2. manufacturing conversion vans on an assembly line basis.

Motor homes are units where the motor and the living quarters are integrated in the same unit.

336214 TRAVEL TRAILER AND CAMPER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing travel trailers and campers designed to attach to motor vehicles;
2. manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and
3. manufacturing automobile, utility, and light-truck trailers.

Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

3363 MOTOR VEHICLE PARTS MANUFACTURING

This industry group comprises establishments primarily engaged in:

1. Motor vehicle gasoline engine and engine parts manufacturing;
2. Motor vehicle electrical and electronic equipment manufacturing;
3. Motor vehicle steering and suspension components (except spring) manufacturing;
4. Motor vehicle brake system manufacturing;
5. Motor vehicle transmission and power train parts manufacturing;
6. Motor vehicle seating and interior trim manufacturing;
7. Motor vehicle metal stamping; and/or
8. Other motor vehicle parts manufacturing.

33631 MOTOR VEHICLE GASOLINE ENGINE AND ENGINE PARTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines, and engine parts, whether or not for vehicular use.

336311 CARBURETOR, PISTON, PISTON RING, AND VALVE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

336312 GASOLINE ENGINE AND ENGINE PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

33632 MOTOR VEHICLE ELECTRICAL AND ELECTRONIC EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in:

1. manufacturing vehicular lighting and/or
2. manufacturing and/or rebuilding motor vehicle electrical and electronic equipment.

The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, and ships).

336321 VEHICULAR LIGHTING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

336322 OTHER MOTOR VEHICLE ELECTRICAL AND ELECTRONIC EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

33633 MOTOR VEHICLE STEERING AND SUSPENSION COMPONENTS (EXCEPT SPRING) MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 MOTOR VEHICLE STEERING AND SUSPENSION COMPONENTS (EXCEPT SPRING) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

33634 MOTOR VEHICLE BRAKE SYSTEM MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 MOTOR VEHICLE BRAKE SYSTEM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

33635 MOTOR VEHICLE TRANSMISSION AND POWER TRAIN PARTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 MOTOR VEHICLE TRANSMISSION AND POWER TRAIN PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

33636 MOTOR VEHICLE SEATING AND INTERIOR TRIM MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 MOTOR VEHICLE SEATING AND INTERIOR TRIM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

33637 MOTOR VEHICLE METAL STAMPING

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 MOTOR VEHICLE METAL STAMPING

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

33639 OTHER MOTOR VEHICLE PARTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 MOTOR VEHICLE AIR-CONDITIONING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

336399 ALL OTHER MOTOR VEHICLE PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

3364 AEROSPACE PRODUCT AND PARTS MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Manufacturing complete aircraft, missiles, or space vehicles;
2. Manufacturing aerospace engines, propulsion units, auxiliary equipment or parts;
3. Developing and making prototypes of aerospace products;
4. Aircraft conversion (i.e., major modifications to systems); and
5. Complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

33641 AEROSPACE PRODUCT AND PARTS MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing complete aircraft, missiles, or space vehicles;
2. manufacturing aerospace engines, propulsion units, auxiliary equipment or parts;
3. developing and making prototypes of aerospace products;
4. aircraft conversion (i.e., major modifications to systems); and
5. complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 AIRCRAFT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing or assembling complete aircraft;
2. developing and making aircraft prototypes;
3. aircraft conversion (i.e., major modifications to systems); and
4. complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336412 AIRCRAFT ENGINE AND ENGINE PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing aircraft engines and engine parts;
2. developing and making prototypes of aircraft engines and engine parts;
3. aircraft propulsion system conversion (i.e., major modifications to systems); and
4. aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

336413 OTHER AIRCRAFT PARTS AND AUXILIARY EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or
2. developing and making prototypes of aircraft parts and auxiliary equipment.

Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

336414 GUIDED MISSILE AND SPACE VEHICLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing complete guided missiles and space vehicles and/or
2. developing and making prototypes of guided missile or space vehicles.

336415 GUIDED MISSILE AND SPACE VEHICLE PROPULSION UNIT AND PROPULSION UNIT PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or

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2. developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

336419 OTHER GUIDED MISSILE AND SPACE VEHICLE PARTS AND AUXILIARY EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or
2. developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

3365 RAILROAD ROLLING STOCK MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Manufacturing and/or rebuilding locomotives, locomotive frames, and parts;
2. Manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and
3. Manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

33651 RAILROAD ROLLING STOCK MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing and/or rebuilding locomotives, locomotive frames, and parts;
2. manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and
3. manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 RAILROAD ROLLING STOCK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing and/or rebuilding locomotives, locomotive frames, and parts;
2. manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and
3. manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

3366 SHIP AND BOAT BUILDING

This industry group comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

33661 SHIP AND BOAT BUILDING

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for

other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 SHIP BUILDING AND REPAIRING

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336612 BOAT BUILDING

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

3369 OTHER TRANSPORTATION EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 OTHER TRANSPORTATION EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 MOTORCYCLE, BICYCLE, AND PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment, and parts.

336992 MILITARY ARMORED VEHICLE, TANK, AND TANK COMPONENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

336999 ALL OTHER TRANSPORTATION EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, and armored vehicles and tanks).

337 FURNITURE AND RELATED PRODUCT MANUFACTURING

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for

furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knockdown). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 HOUSEHOLD AND INSTITUTIONAL FURNITURE AND KITCHEN CABINET MANUFACTURING

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen and bedroom furniture and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 WOOD KITCHEN CABINET AND COUNTERTOP MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 WOOD KITCHEN CABINET AND COUNTERTOP MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

33712 HOUSEHOLD AND INSTITUTIONAL FURNITURE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 UPHOLSTERED HOUSEHOLD FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

337122 NONUPHOLSTERED WOOD HOUSEHOLD FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337124 METAL HOUSEHOLD FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337125 HOUSEHOLD FURNITURE (EXCEPT WOOD AND METAL) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed, rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337127 INSTITUTIONAL FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337129 WOOD TELEVISION, RADIO, AND SEWING MACHINE CABINET MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

3372 OFFICE FURNITURE (INCLUDING FIXTURES) MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

33721 OFFICE FURNITURE (INCLUDING FIXTURES) MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 WOOD OFFICE FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337212 CUSTOM ARCHITECTURAL WOODWORK AND MILLWORK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

337214 OFFICE FURNITURE (EXCEPT WOOD) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337215 SHOWCASE, PARTITION, SHELVING, AND LOCKER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

337211 WOOD OFFICE FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337214 OFFICE FURNITURE (EXCEPT WOOD) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

3379 OTHER FURNITURE RELATED PRODUCT MANUFACTURING

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 MATTRESS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 MATTRESS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

33792 BLIND AND SHADE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 BLIND AND SHADE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following:

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1. venetian blinds, other window blinds, shades;
 2. curtain and drapery rods, poles; and/or
 3. curtain and drapery fixtures.

The blinds and shades may be made on a stock or custom basis and may be made of any material.

339 MISCELLANEOUS MANUFACTURING

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 MEDICAL EQUIPMENT AND SUPPLIES MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

33911 MEDICAL EQUIPMENT AND SUPPLIES MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 LABORATORY APPARATUS AND FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

For this industry, the 1997 Economic Census did not fully implement the conversion to NAICS. The data from 1997 to 2001 for NAICS industry 339111 did not include establishments primarily engaged in the manufacture of hospital beds and other hospital furniture. These establishments are included in the 2002 Economic Census data.

339112 SURGICAL AND MEDICAL INSTRUMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electro-medical and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

339113 SURGICAL APPLIANCE AND SUPPLIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

339114 DENTAL EQUIPMENT AND SUPPLIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material and dental cements.

339115 OPHTHALMIC GOODS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, reading glasses made to standard powers, and protective eyewear.

339116 DENTAL LABORATORIES

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

3399 OTHER MISCELLANEOUS MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

1. Jewelry and silverware manufacturing;
2. Sporting and athletic goods manufacturing;
3. Doll, toy, and game manufacturing;
4. Office supplies (except paper) manufacturing;
5. Sign manufacturing; and/or
6. All other miscellaneous manufacturing.

33991 JEWELRY AND SILVERWARE MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. manufacturing, engraving, chasing, or etching jewelry;
2. manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases);
3. manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware;
4. manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases);
5. stamping coins;
6. manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing;
7. cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems;
8. recutting, repolishing, and setting gem stones; and

9. drilling, sawing, and peeling cultured and costume pearls.

339911 JEWELRY (EXCEPT COSTUME) MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one of the following:

1. manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry;
2. manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and
3. stamping coins.

339912 SILVERWARE AND HOLLOWWARE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other hollowware.

339913 JEWELERS' MATERIAL AND LAPIDARY WORK MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one of the following:

1. manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing;
2. cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems;
3. recutting, repolishing, and setting gem stones; and
4. drilling, sawing, and peeling cultured pearls.

339914 COSTUME JEWELRY AND NOVELTY MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one of the following:

1. manufacturing, engraving, chasing, and etching costume jewelry; and/or
2. manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases).

This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

33992 SPORTING AND ATHLETIC GOODS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 SPORTING AND ATHLETIC GOODS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

33993 DOLL, TOY, AND GAME MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 DOLL AND STUFFED TOY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes; action figures; and stuffed toys.

339932 GAME, TOY, AND CHILDREN'S VEHICLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

33994 OFFICE SUPPLIES (EXCEPT PAPER) MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 PEN AND MECHANICAL PENCIL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

339942 LEAD PENCIL AND ART GOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

339943 MARKING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

339944 CARBON PAPER AND INKED RIBBON MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

33995 SIGN MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, and displays).

339950 SIGN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, and displays).

33999 ALL OTHER MISCELLANEOUS MANUFACTURING

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 GASKET, PACKING, AND SEALING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

339992 MUSICAL INSTRUMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

339993 FASTENER, BUTTON, NEEDLE, AND PIN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

339994 BROOM, BRUSH, AND MOP MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

339995 BURIAL CASKET MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

339999 ALL OTHER MISCELLANEOUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

Appendix C.

Methodology

SOURCES OF THE DATA

The manufacturing sector includes approximately 350,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing. The amount of information requested from manufacturing establishments was dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the Annual Survey of Manufactures (ASM).

Establishments in the 2002 Economic Census are divided into those sent report forms and those not sent report forms. The coverage of and the method of obtaining census information from each are described below:

1. Establishments sent a report form:

- a. ASM sample establishments. This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments, as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-10000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A. Explanation of Terms, for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 473 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries, as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in certain cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry, which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided

for the respondent to describe significant materials not listed on the form.

A wide variety of special inquiries were included to measure activities peculiar to a given industry, such as operations performed and equipment used.

- b. Large and medium establishments (non-ASM). Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census — manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.
- c. Small single-establishment companies (non-ASM). This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated “short form” was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics, because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the “not specified by kind” (nsk) categories.

2. Establishments not sent a report form:

- a. Small single-establishment companies not sent a report form. Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and the Census Bureau’s ability to assign the correct six-digit NAICS industry classification to the establishment. For each six-digit NAICS industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report that requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these establishments, but were included in the product and material “not specified by kind” (nsk) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit NAICS group classification codes available in the files. For manufacturing, these establishments were sent a

separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics, other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

- b. All nonemployers, i.e., all firms subject to federal income tax, with no paid employees, during 2002 are excluded as in previous censuses. Data for nonemployers are not included in this report, but are released in the annual *Nonemployer Statistics* series.

The report forms used to collect information for establishments in this sector are available at help.econ.census.gov/econhelp/resources/.

A more detailed examination of census methodology is presented in the *History of the Economic Census* at www.census.gov/econ/www/history.html.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

The classifications for all establishments covered in the 2002 Economic Census — Manufacturing are classified in 1 of 473 industries in accordance with the industry definitions in the *North American Industry Classification System (NAICS), United States, 2002* manual. There were no changes between the 2002 edition and the 1997 edition affecting this sector. When applicable, Appendix F of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 2002, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. There are 1,450 product classes (seven-digit codes), 5,674 census products, and an additional 3,746 ten-digit product codes. The ten-digit products are considered the primary products of the industry with the same first six digits.

For the 2002 Economic Census — Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 2002, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments that may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry's output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The 2002 Economic Census — Manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports, if the plant records permit such a separation and if the activities are substantial in size.

In 2002, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures, except for data on number of establishments for a few industries.

The 2002 Economic Census — Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The ASM sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1999 survey year based on the 1997 Economic Census — Manufacturing. This sample will be in place through the 2003 ASM.

In 1997, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the establishments in the 1997 manufacturing population were partitioned into two components for developing estimates within the ASM. The details of each are described below:

1. Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies

that operate at more than one physical location). Approximately 200,000 of the 370,000 establishments in the 1997 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1999 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1997 census. Supplemental samples representing both 1998 and 1999 births (newly active establishments that were not included in the 1997 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 2003.

The 1999-2003 ASM sample design is similar to the one used since 1984. Companies in the 1997 Economic Census — Manufacturing with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1999-2003 sample, there are approximately 500 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. Across these arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1997 Economic Census — Manufacturing.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1997 industry classification and its 1997 product class data. For each product class (1,755) and six-digit industry (473), a desired reliability constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints, while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by the Census Bureau's primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) that permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

2. Nonmail stratum. The initial nonmail component of the survey was comprised of approximately 170,000 small, single-establishment companies that were tabulated as administrative records in the 1997 Economic Census — Manufacturing. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

RELIABILITY OF DATA

All data compiled in the economic census are subject to nonsampling errors. Nonsampling errors can be attributed to many sources during the development or execution of the census. The following are two ways that further explain this method: ASM Estimating Procedure. Most of the ASM

estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1997 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the “difference” between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1998-2002 ASM estimates, the 1997 Economic Census — Manufacturing values serve as the base year. For the 2003 ASM, the base will be updated to be the 2002 Economic Census — Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contained approximately 170,000 individual establishments in 1999, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication. ASM Data Qualifications. The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists, but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

- From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.
- From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.
- From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 2002 Economic Census — Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

DISCLOSURE

In accordance with federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments in a specific industry or geographic area is not considered a disclosure; therefore, this information may be released even though other information is withheld. Techniques employed to limit disclosure are discussed at www.census.gov/epcd/ec02/disclosure.htm.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. Nonetheless, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures, which can be suppressed even though value of shipments data are published.

Appendix D.

Geographic Notes

OREGON

Albany is in Benton and Linn Counties.

Aumsville is now tabulated separately due to a population increase. This change deletes territory from the Balance of Marion County.

City of The Dalles name corrected from City of the Dalles.

Happy Valley is in Clackamas and Multnomah Counties; it is now tabulated separately due to a population increase. This change deletes territory from the Balances of Clackamas and Multnomah Counties.

Harrisburg is now tabulated separately due to a population increase. This change deletes territory from the Balance of Linn County.

Lafayette is now tabulated separately due to a population increase. This change deletes territory from the Balance of Yamhill County.

Lake Oswego is in Clackamas, Multnomah, and Washington Counties.

Lakeview is no longer tabulated separately due to a population decrease. This change adds territory to the Balance of Lake County.

Milwaukie is in Clackamas and Multnomah Counties.

Myrtle Point is no longer tabulated separately due to a population decrease. This change adds territory to the Balance of Coos County.

Portland is in Clackamas, Multnomah, and Washington Counties.

Salem is in Marion and Polk Counties.

Tualatin is in Clackamas and Washington Counties.

Wilsonville is in Clackamas and Washington Counties.

Balance of Clackamas County no longer includes Happy Valley (part), which is tabulated separately due to a population increase.

Balance of Coos County includes Myrtle Point, which is no longer tabulated separately due to a population decrease.

Balance of Lake County includes Lakeview, which is no longer tabulated separately due to a population decrease.

Balance of Linn County no longer includes Harrisburg, which is tabulated separately due to a population increase.

Balance of Marion County no longer includes Aumsville, which is tabulated separately due to a population increase.

Balance of Multnomah County no longer includes Happy Valley (part), which is tabulated separately due to a population increase.

Balance of Yamhill County no longer includes Lafayette, which is tabulated separately due to a population increase.

Appendix E.

Metropolitan and Micropolitan Statistical Areas

ALBANY-CORVALLIS-LEBANON, OR COMBINED STATISTICAL AREA

Albany-Lebanon, OR Micropolitan Statistical Area

Linn County, OR

Corvallis, OR Metropolitan Statistical Area

Benton County, OR

BEND-PRINEVILLE, OR COMBINED STATISTICAL AREA

Bend, OR Metropolitan Statistical Area

Deschutes County, OR

Prineville, OR Micropolitan Statistical Area

Crook County, OR

ASTORIA, OR MICROPOLITAN STATISTICAL AREA

Clatsop County, OR

BROOKINGS, OR MICROPOLITAN STATISTICAL AREA

Curry County, OR

CITY OF THE DALLES, OR MICROPOLITAN STATISTICAL AREA

Wasco County, OR

COOS BAY, OR MICROPOLITAN STATISTICAL AREA

Coos County, OR

EUGENE-SPRINGFIELD, OR METROPOLITAN STATISTICAL AREA

Lane County, OR

GRANTS PASS, OR MICROPOLITAN STATISTICAL AREA

Josephine County, OR

HOOD RIVER, OR MICROPOLITAN STATISTICAL AREA

Hood River County, OR

KLAMATH FALLS, OR MICROPOLITAN STATISTICAL AREA

Klamath County, OR

LA GRANDE, OR MICROPOLITAN STATISTICAL AREA

Union County, OR

MEDFORD, OR METROPOLITAN STATISTICAL AREA

Jackson County, OR

ONTARIO, OR-ID MICROPOLITAN STATISTICAL AREA

Payette County, ID

Malheur County, OR

PENDLETON-HERMISTON, OR MICROPOLITAN STATISTICAL AREA

Morrow County, OR

Umatilla County, OR

PORTLAND-VANCOUVER-BEAVERTON, OR-WA METROPOLITAN STATISTICAL AREA

Clackamas County, OR

Columbia County, OR

Multnomah County, OR

Washington County, OR

Yamhill County, OR

Clark County, WA

Skamania County, WA

ROSEBURG, OR MICROPOLITAN STATISTICAL AREA

Douglas County, OR

SALEM, OR METROPOLITAN STATISTICAL AREA

Marion County, OR

Polk County, OR

