

# Connecticut

# 1997

Issued May 2000

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## 1997 Economic Census

*Manufacturing*

Geographic Area Series



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



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**William M. Daley,**

Secretary

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Deputy Secretary

**Economics**

**and Statistics**

**Administration**

**Robert J. Shapiro,**

Under Secretary for

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# Introduction to the Economic Census

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## PURPOSES AND USES OF THE ECONOMIC CENSUS

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

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

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

## ALL-NEW INDUSTRY CLASSIFICATIONS

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

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

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

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

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

## RELATIONSHIP TO SIC

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

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

## GEOGRAPHIC AREA CODING

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

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

## **BASIS OF REPORTING**

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

## **DOLLAR VALUES**

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

All dollar values are shown in thousands of dollars.

## **AVAILABILITY OF ADDITIONAL DATA**

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

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

### **Special Tabulations**

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

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

Manufacturing and Construction Division 301-457-4673  
Service Sector Statistics Division 301-457-2668

## **HISTORICAL INFORMATION**

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

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

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

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

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

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## SOURCES FOR MORE INFORMATION

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

## ABBREVIATIONS AND SYMBOLS

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

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

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



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# Manufacturing

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## SCOPE

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

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

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

## GENERAL

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

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

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

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

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

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

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

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

## GEOGRAPHIC AREAS COVERED

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

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

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

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

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

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

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

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

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

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

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

## **DISCLOSURE**

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

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

## **AVAILABILITY OF MORE FREQUENT ECONOMIC DATA**

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

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

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

**Table 1. Industry Statistics for the State: 1997**

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E <sup>1</sup>	Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)					Wages (\$1,000)
<b>CONNECTICUT</b>													
<b>31-33</b>	<b>Manufacturing . . . .</b>	<b>1</b>	<b>5 844</b>	<b>1 926</b>	<b>252 330</b>	<b>10 452 076</b>	<b>153 045</b>	<b>317 515</b>	<b>4 895 335</b>	<b>27 295 212</b>	<b>19 867 018</b>	<b>46 938 210</b>	<b>1 864 217</b>
311	Food mfg . . . . .	1	315	74	8 068	238 375	5 660	10 903	138 168	924 334	944 677	1 858 000	56 843
3111	Animal food mfg . . . . .	4	7	3	287	10 191	156	355	4 598	26 399	85 670	110 914	978
31111	Animal food mfg . . . . .	4	7	3	287	10 191	156	355	4 598	26 399	85 670	110 914	978
311119	Other animal food mfg . . . . .	4	5	3	e	D	D	D	D	D	D	D	D
3113	Sugar & confectionery product mfg . . . . .	-	13	5	726	18 598	614	1 140	14 327	138 989	81 757	213 963	D
31133	Confectionery mfg from purchased chocolate . . . . .	-	8	3	f	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate . . . . .	-	8	3	f	D	D	D	D	D	D	D	D
31134	Nonchocolate confectionery mfg . . . . .	-	4	2	c	D	D	D	D	D	D	D	D
311340	Nonchocolate confectionery mfg . . . . .	-	4	2	c	D	D	D	D	D	D	D	D
3114	Fruit & vegetable preserving & specialty food mfg . . . . .	1	11	5	338	9 582	265	556	5 739	29 385	46 028	75 403	D
31141	Frozen food mfg . . . . .	1	6	2	113	3 101	96	210	1 904	7 049	8 842	15 891	D
311412	Frozen specialty food mfg . . . . .	1	6	2	113	3 101	96	210	1 904	7 049	8 842	15 891	D
31142	Fruit & vegetable canning, pickling, & drying . . . . .	1	5	3	225	6 481	169	346	3 835	22 336	37 186	59 512	D
311421	Fruit & vegetable canning . . . . .	1	4	3	c	D	D	D	D	D	D	D	660
3115	Dairy product mfg . . . . .	1	30	10	1 045	36 032	603	1 315	18 012	85 682	259 810	345 756	9 433
31151	Dairy product (except frozen) mfg . . . . .	1	14	7	703	24 998	327	788	9 994	43 057	185 819	229 685	6 055
311511	Fluid milk mfg . . . . .	-	7	4	510	19 348	182	428	5 834	39 931	128 309	168 084	4 603
311513	Cheese mfg . . . . .	9	4	2	c	D	D	D	D	D	D	D	D
31152	Ice cream & frozen dessert mfg . . . . .	-	16	3	342	11 034	276	527	8 018	42 625	73 991	116 071	3 378
311520	Ice cream & frozen dessert mfg . . . . .	-	16	3	342	11 034	276	527	8 018	42 625	73 991	116 071	3 378
3116	Meat product mfg . . . . .	1	30	11	866	24 774	609	1 331	14 163	67 575	123 767	183 936	3 330
31161	Animal slaughtering & processing . . . . .	1	30	11	866	24 774	609	1 331	14 163	67 575	123 767	183 936	3 330
311612	Meat processed from carcasses . . . . .	1	21	9	746	21 836	507	1 073	11 762	65 940	105 868	164 083	2 450
3117	Seafood product preparation & packaging . . . . .	1	4	1	c	D	D	D	D	D	D	D	D
31171	Seafood product preparation & packaging . . . . .	1	4	1	c	D	D	D	D	D	D	D	D
311712	Fresh & frozen seafood processing . . . . .	1	3	1	c	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg . . . . .	2	192	31	3 248	91 240	2 164	4 009	53 982	332 665	161 980	498 295	13 126
31181	Bread & bakery product mfg . . . . .	1	184	29	3 147	87 210	2 097	3 876	52 160	314 362	139 520	455 218	11 953
311811	Retail bakeries . . . . .	4	134	13	959	13 752	541	751	7 101	29 213	18 507	47 742	1 591
311812	Commercial bakeries . . . . .	1	45	14	2 064	70 569	1 458	2 959	43 414	277 347	116 057	394 562	10 075
311813	Frozen cakes, pies, & other pastries mfg . . . . .	2	5	2	124	2 889	98	166	1 645	7 802	4 956	12 914	287
31182	Cookie, cracker, & pasta mfg . . . . .	9	8	2	101	4 030	67	133	1 822	18 303	22 460	43 077	1 173
3119	Other food mfg . . . . .	-	27	8	1 422	45 365	1 154	2 072	25 991	237 410	176 009	413 846	7 809
31191	Snack food mfg . . . . .	-	4	2	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg . . . . .	-	4	2	f	D	D	D	D	D	D	D	D
31192	Coffee & tea mfg . . . . .	3	6	3	c	D	D	D	D	D	D	D	2 149
311920	Coffee & tea mfg . . . . .	3	6	3	c	D	D	D	D	D	D	D	2 149
31199	All other food mfg . . . . .	-	10	3	280	10 075	204	427	6 562	42 129	52 559	94 755	3 344
311999	All other miscellaneous food mfg . . . . .	-	6	2	c	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg . . . . .	1	24	5	363	11 992	215	403	5 942	86 504	98 426	182 953	3 833
3121	Beverage mfg . . . . .	1	23	4	e	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg . . . . .	1	14	4	e	D	D	D	D	D	D	D	3 439
312111	Soft drink mfg . . . . .	1	10	4	e	D	D	D	D	D	D	D	D

**Table 1. Industry Statistics for the State: 1997—Con.**

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>CONNECTICUT—Con.</b>													
<b>31-33 Manufacturing—Con.</b>													
313	Textile mills .....	2	56	26	3 807	123 996	2 995	6 499	76 757	305 443	351 445	659 303	24 159
3131	Fiber, yarn, & thread mills .	5	5	3	574	12 887	539	1 159	10 712	22 675	41 583	64 000	D
31311	Fiber, yarn, & thread mills .....	5	5	3	574	12 887	539	1 159	10 712	22 675	41 583	64 000	D
313113	Thread mills .....	5	3	3	f	D	D	D	D	D	D	D	D
3132	Fabric mills .....	—	27	9	1 322	49 351	983	2 223	31 442	115 888	138 474	257 299	15 798
31321	Broadwoven fabric mills .	1	13	3	481	14 655	433	888	11 600	28 304	25 814	58 124	D
313210	Broadwoven fabric mills .....	1	13	3	481	14 655	433	888	11 600	28 304	25 814	58 124	D
31322	Narrow fabric mills & schiffli machine embroidery .....	1	7	1	187	5 287	126	305	2 561	8 187	6 409	14 536	411
313221	Narrow fabric mills ....	1	5	1	c	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills ...	—	4	2	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills .	—	4	2	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills .....	3	24	14	1 911	61 758	1 473	3 117	34 603	166 880	171 388	338 004	D
31331	Textile & fabric finishing mills .....	5	15	8	1 382	39 171	1 105	2 295	25 239	119 821	107 309	228 077	6 122
313311	Broadwoven fabric finishing mills .....	—	9	5	559	18 557	406	881	10 567	71 288	52 934	125 050	D
313312	Textile & fabric finishing mills .....	9	6	3	823	20 614	699	1 414	14 672	48 533	54 375	103 027	D
31332	Fabric coating mills .....	—	9	6	529	22 587	368	822	9 364	47 059	64 079	109 927	D
313320	Fabric coating mills ...	—	9	6	529	22 587	368	822	9 364	47 059	64 079	109 927	D
314	Textile product mills.....	1	91	17	1 756	45 089	1 314	2 523	24 868	87 365	79 829	168 769	2 979
3141	Textile furnishings mills....	—	36	7	583	9 948	488	903	6 659	17 370	18 344	36 166	828
31412	Curtain & linen mills.....	—	33	7	571	9 797	477	889	6 535	17 085	17 897	35 433	810
314121	Curtain & drapery mills .....	—	29	5	374	6 400	295	534	4 024	11 767	13 292	25 446	523
314129	Other household textile product mills .....	—	4	2	197	3 397	182	355	2 511	5 318	4 605	9 987	287
3149	Other textile product mills...	2	55	10	1 173	35 141	826	1 620	18 209	69 995	61 485	132 603	2 151
31491	Textile bag & canvas mills .....	—	31	4	550	15 293	329	638	7 491	33 999	23 486	57 438	964
314912	Canvas & related product mills .....	—	28	3	f	D	D	D	D	D	D	D	D
31499	All other textile product mills .....	3	24	6	623	19 848	497	982	10 718	35 996	37 999	75 165	1 187
314999	All other miscellaneous textile product mills ..	2	21	4	f	D	D	D	D	D	D	D	D
315	Apparel mfg .....	1	73	22	2 040	45 090	1 642	3 190	28 299	187 857	175 158	356 397	D
3151	Apparel knitting mills .....	5	4	1	113	2 723	108	196	2 328	9 491	9 077	18 567	D
31519	Other apparel knitting mills .....	5	4	1	113	2 723	108	196	2 328	9 491	9 077	18 567	D
315191	Outerwear knitting mills .....	5	4	1	113	2 723	108	196	2 328	9 491	9 077	18 567	D
3152	Cut & sew apparel mfg ....	1	41	15	1 202	26 655	945	1 799	14 674	121 468	102 402	219 236	1 909
31521	Cut & sew apparel contractors .....	7	21	6	379	6 481	340	721	5 465	9 565	2 822	12 284	285
315212	Women's, girls', & infants' cut & sew apparel contractors ..	7	19	6	e	D	D	D	D	D	D	D	D
31522	Men's & boys' cut & sew apparel mfg.....	—	4	1	c	D	D	D	D	D	D	D	D
315223	Men's & boys' cut & sew shirt (exc work shirt) mfg.....	—	3	1	146	1 428	137	162	1 031	4 806	1 437	5 898	D
31523	Women's & girls' cut & sew apparel mfg .....	—	11	7	613	17 516	412	782	7 318	104 512	95 363	195 685	1 493
315231	Women's & girls' cut/ sew lingerie & nightwear mfg.....	—	3	3	c	D	D	D	D	D	D	D	D
315234	Women's & girls' cut & sew suit, coat, skirt mfg .....	7	2	2	c	D	D	D	D	D	D	D	D
315239	Women's & girls' cut & sew other outerwear mfg .....	—	4	1	e	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg .....	—	28	6	725	15 712	589	1 195	11 297	56 898	63 679	118 594	450
31599	Apparel accessories & other apparel mfg .....	—	28	6	725	15 712	589	1 195	11 297	56 898	63 679	118 594	450
315999	Other apparel accessories & other apparel mfg .....	—	21	4	662	14 484	535	1 100	10 473	54 312	62 122	114 391	378
316	Leather & allied product mfg .	—	9	3	274	17 364	128	472	2 896	43 211	31 603	76 318	D
3169	Other leather & allied product mfg.....	—	4	2	c	D	D	D	D	D	D	D	D
31699	Other leather & allied product mfg.....	—	4	2	c	D	D	D	D	D	D	D	D
316992	Women's handbag & purse mfg .....	—	3	2	c	D	D	D	D	D	D	D	D



**Table 1. Industry Statistics for the State: 1997—Con.**

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>CONNECTICUT—Con.</b>													
<b>31-33</b>	<b>Manufacturing—Con.</b>												
321	Wood product mfg . . . . .	2	115	21	1 500	46 141	1 141	2 412	29 502	94 418	96 586	191 055	4 894
3211	Sawmills & wood preservation . . . . .	1	17	3	215	5 958	162	346	4 409	19 274	9 805	28 857	1 082
32111	Sawmills & wood preservation . . . . .	1	17	3	215	5 958	162	346	4 409	19 274	9 805	28 857	1 082
321113	Sawmills . . . . .	1	16	2	c	D	D	D	D	D	D	D	D
3219	Other wood product mfg . . . . .	2	94	17	1 186	37 392	907	1 903	23 439	69 444	80 264	149 900	3 439
32191	Millwork . . . . .	2	50	9	631	22 215	451	960	12 204	41 522	42 327	84 276	1 936
321911	Wood window & door mfg . . . . .	3	17	3	240	8 176	145	312	3 877	19 325	20 744	40 221	834
321912	Cut stock, resawing lumber, & planing . . . . .	—	6	1	107	4 309	93	186	2 241	6 473	4 978	11 458	586
321918	Other millwork (including flooring) . . . . .	1	27	5	284	9 730	213	462	6 086	15 724	16 605	32 597	516
32192	Wood container & pallet mfg . . . . .	4	24	5	284	7 495	244	521	5 274	14 805	16 130	30 771	1 049
321920	Wood container & pallet mfg . . . . .	4	24	5	284	7 495	244	521	5 274	14 805	16 130	30 771	1 049
32199	All other wood product mfg . . . . .	1	20	3	271	7 682	212	422	5 961	13 117	21 807	34 853	454
321999	All other miscellaneous wood product mfg . . . . .	1	11	2	197	5 663	168	333	4 607	8 151	16 809	24 873	215
322	Paper mfg . . . . .	—	90	61	6 069	238 369	4 660	9 904	158 381	1 005 167	835 839	1 839 441	35 339
3221	Pulp, paper, & paperboard mills . . . . .	—	8	8	1 842	86 839	1 513	3 379	69 582	673 325	442 166	1 113 574	18 631
32212	Paper mills . . . . .	—	3	3	g	D	D	D	D	D	D	D	D
322121	Paper (except newsprint) mills . . . . .	—	3	3	g	D	D	D	D	D	D	D	D
32213	Paperboard mills . . . . .	2	5	5	f	D	D	D	D	D	D	D	D
322130	Paperboard mills . . . . .	2	5	5	f	D	D	D	D	D	D	D	D
3222	Converted paper product mfg . . . . .	—	82	53	4 227	151 530	3 147	6 525	88 799	331 842	393 673	725 867	16 708
32221	Paperboard container mfg . . . . .	—	45	34	2 820	101 349	2 116	4 341	61 234	200 859	266 727	468 401	11 856
322211	Corrugated & solid fiber box mfg . . . . .	—	26	20	1 706	64 228	1 257	2 703	36 114	136 980	184 037	321 303	8 293
322212	Folding paperboard box mfg . . . . .	1	14	11	762	26 546	591	1 079	18 189	50 328	44 771	97 088	2 930
322215	Nonfolding sanitary food container mfg . . . . .	—	2	1	c	D	D	D	D	D	D	D	D
32222	Paper bag & coated & treated paper mfg . . . . .	—	11	7	625	25 982	422	903	12 459	63 645	62 337	125 063	2 368
322222	Coated & laminated paper mfg . . . . .	—	8	5	e	D	D	D	D	D	D	D	D
322225	Laminated aluminum foil mfg for flexible packaging uses . . . . .	—	1	1	c	D	D	D	D	D	D	D	D
32223	Stationery product mfg . . . . .	—	7	2	234	8 271	181	450	5 856	24 748	24 675	49 680	979
322232	Envelope mfg . . . . .	—	1	1	c	D	D	D	D	D	D	D	D
32229	Other converted paper product mfg . . . . .	—	19	10	548	15 928	428	831	9 250	42 590	39 934	82 723	1 505
322299	All other converted paper product mfg . . . . .	—	17	10	f	D	D	D	D	D	D	D	D
323	Printing & related support activities . . . . .	2	678	155	13 364	487 480	9 616	19 409	298 890	1 035 455	687 472	1 719 840	67 327
3231	Printing & related support activities . . . . .	2	678	155	13 364	487 480	9 616	19 409	298 890	1 035 455	687 472	1 719 840	67 327
32311	Printing . . . . .	2	601	129	11 902	427 018	8 557	17 258	259 024	910 492	658 271	1 565 923	57 277
323110	Commercial lithographic printing . . . . .	2	315	84	7 847	292 126	5 549	11 255	178 574	572 914	459 480	1 031 093	34 354
323111	Commercial gravure printing . . . . .	9	8	4	150	5 594	125	236	4 339	14 444	15 526	29 915	2 362
323112	Commercial flexographic printing . . . . .	1	17	7	378	13 303	245	528	7 275	27 192	21 554	48 764	2 187
323113	Commercial screen printing . . . . .	1	45	6	620	19 075	480	948	11 850	47 866	19 681	67 436	3 709
323114	Quick printing . . . . .	1	132	6	1 195	38 232	899	1 788	24 727	74 457	42 728	117 222	5 272
323116	Manifold business form printing . . . . .	4	12	7	424	14 091	368	822	10 650	50 996	34 399	85 381	4 819
323118	Blankbook, looseleaf binder, & device mfg . . . . .	—	4	4	e	D	D	D	D	D	D	D	D
323119	Other commercial printing . . . . .	4	51	9	868	26 380	531	985	13 836	65 156	38 487	103 865	3 216
32312	Support activities for printing . . . . .	3	77	26	1 462	60 462	1 059	2 151	39 866	124 963	29 201	153 917	10 050
323121	Tradebinding & related work . . . . .	1	14	5	230	6 338	205	395	4 737	11 952	1 634	13 551	475
323122	Prepress services . . . . .	4	63	21	1 232	54 124	854	1 756	35 129	113 011	27 567	140 366	9 575

**Table 1. Industry Statistics for the State: 1997—Con.**

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>CONNECTICUT—Con.</b>													
<b>31-33</b>	<b>Manufacturing—Con.</b>												
324	Petroleum & coal products mfg .....	1	39	6	426	20 993	302	650	13 924	81 190	151 576	233 226	4 917
3241	Petroleum & coal products mfg .....	1	39	6	426	20 993	302	650	13 924	81 190	151 576	233 226	4 917
32412	Asphalt paving, roofing, & saturated materials mfg .....	1	32	5	354	17 178	274	602	13 084	71 675	140 909	213 084	4 404
324121	Asphalt paving mixture & block mfg .....	1	31	4	e	D	D	D	D	D	D	D	4 404
325	Chemical mfg .....	1	166	77	17 011	1 043 788	4 773	10 149	187 460	3 443 516	2 183 278	5 583 542	366 690
3251	Basic chemical mfg .....	1	23	11	1 036	51 641	471	1 072	26 693	150 900	191 949	349 524	12 920
32512	Industrial gas mfg .....	1	7	1	102	4 211	45	69	1 695	27 619	12 545	40 140	D
325120	Industrial gas mfg .....	1	7	1	102	4 211	45	69	1 695	27 619	12 545	40 140	D
32518	Other basic inorganic chemical mfg .....	—	2	1	e	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg .....	—	2	1	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg .....	1	12	7	497	28 380	294	711	16 172	85 087	160 382	251 694	7 536
325199	All other basic organic chemical mfg .....	1	10	6	e	D	D	D	D	D	D	D	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg .....	4	10	8	515	27 112	336	737	15 935	159 320	321 351	484 308	19 121
32521	Resin & synthetic rubber mfg .....	4	9	7	e	D	D	D	D	D	D	D	19 121
325211	Plastics material & resin mfg .....	5	7	6	e	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg .....	—	17	8	9 338	717 366	1 027	2 255	48 694	1 646 808	713 588	2 370 799	269 240
32541	Pharmaceutical & medicine mfg .....	—	17	8	9 338	717 366	1 027	2 255	48 694	1 646 808	713 588	2 370 799	269 240
325411	Medicinal & botanical mfg .....	—	3	1	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg .....	—	13	7	i	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg .....	2	28	12	1 377	47 321	749	1 499	17 359	135 581	197 616	335 176	9 114
32551	Paint & coating mfg .....	4	17	6	533	22 397	265	527	7 727	73 233	88 096	162 710	3 286
325510	Paint & coating mfg .....	4	17	6	533	22 397	265	527	7 727	73 233	88 096	162 710	3 286
32552	Adhesive mfg .....	—	11	6	844	24 924	484	972	9 632	62 348	109 520	172 466	5 828
325520	Adhesive mfg .....	—	11	6	844	24 924	484	972	9 632	62 348	109 520	172 466	5 828
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	38	21	2 633	113 510	1 174	2 577	45 827	1 090 050	460 515	1 484 937	43 227
32561	Soap & cleaning compound mfg .....	1	22	10	503	18 496	227	488	6 695	52 552	45 643	98 090	3 351
325611	Soap & other detergent mfg .....	2	9	5	241	8 801	130	292	3 509	23 497	20 097	43 387	D
325612	Polish & other sanitation good mfg ..	—	11	4	c	D	D	D	D	D	D	D	1 446
32562	Toilet preparation mfg ..	—	16	11	2 130	95 014	947	2 089	39 132	1 037 498	414 872	1 386 847	39 876
325620	Toilet preparation mfg ..	—	16	11	2 130	95 014	947	2 089	39 132	1 037 498	414 872	1 386 847	39 876
3259	Other chemical product mfg .....	2	45	15	2 023	84 055	957	1 873	31 476	254 616	280 057	534 274	12 867
32591	Printing ink mfg .....	5	6	4	e	D	D	D	D	D	D	D	D
325910	Printing ink mfg .....	5	6	4	e	D	D	D	D	D	D	D	D
32592	Explosives mfg .....	—	2	1	f	D	D	D	D	D	D	D	D
325920	Explosives mfg .....	—	2	1	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg .....	2	37	10	1 074	43 340	445	867	13 577	185 641	196 671	383 860	10 765
325991	Custom compounding of purchased resin ...	2	17	4	439	17 548	165	321	5 151	122 926	124 348	247 654	2 962
325992	Photographic film, paper, plate, & chemical mfg .....	1	4	2	c	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product & preparation mfg .....	3	16	4	e	D	D	D	D	D	D	D	D

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[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>CONNECTICUT—Con.</b>													
<b>31-33</b>	<b>Manufacturing—Con.</b>												
326	Plastics & rubber products mfg . . . . .	1	257	122	11 088	356 742	7 939	16 960	213 625	870 413	711 845	1 574 646	78 153
3261	Plastics product mfg . . . . .	1	218	102	9 405	298 551	6 683	14 325	178 183	730 399	610 791	1 333 594	68 217
32611	Unsupported plastics film, sheet, & bag mfg . . . . .	—	26	13	1 213	50 145	880	2 148	32 282	169 340	161 272	328 780	15 853
326111	Unsupported plastics bag mfg . . . . .	—	2	2	c	D	D	D	D	D	D	D	D
326113	Unsupported plastics film & sheet (except packaging) mfg . . . . .	—	21	10	956	41 810	682	1 687	25 969	149 100	138 094	285 183	14 483
32612	Plastics pipe, pipe fitting, & unsupported profile shape mfg . . . . .	2	14	5	267	11 503	205	411	5 204	30 187	34 145	63 523	1 630
326121	Unsupported plastics profile shape mfg . . . . .	2	13	5	e	D	D	D	D	D	D	D	D
32613	Laminated plastics plate, sheet, & shape mfg . . . . .	5	11	2	202	5 186	146	295	2 603	15 030	7 891	22 912	292
326130	Laminated plastics plate, sheet, & shape mfg . . . . .	5	11	2	202	5 186	146	295	2 603	15 030	7 891	22 912	292
32614	Polystyrene foam product mfg . . . . .	—	5	3	111	4 412	77	169	1 753	12 618	14 515	27 181	686
326140	Polystyrene foam product mfg . . . . .	—	5	3	111	4 412	77	169	1 753	12 618	14 515	27 181	686
32615	Urethane & other foam product (except polystyrene) mfg . . . . .	3	9	7	287	10 149	231	459	6 129	27 590	39 504	67 588	3 177
326150	Urethane & other foam product (except polystyrene) mfg . . . . .	3	9	7	287	10 149	231	459	6 129	27 590	39 504	67 588	3 177
32616	Plastics bottle mfg . . . . .	1	7	4	468	13 539	395	810	9 795	33 486	33 849	66 902	3 045
326160	Plastics bottle mfg . . . . .	1	7	4	468	13 539	395	810	9 795	33 486	33 849	66 902	3 045
32619	Other plastics product mfg . . . . .	2	146	68	6 857	203 617	4 749	10 033	120 417	442 148	319 615	756 708	43 534
326191	Plastics plumbing fixture mfg . . . . .	—	3	1	c	D	D	D	D	D	D	D	D
326199	All other plastics product mfg . . . . .	2	143	67	i	D	D	D	D	D	D	D	D
3262	Rubber product mfg . . . . .	2	39	20	1 683	58 191	1 256	2 635	35 442	140 014	101 054	241 052	9 936
32622	Rubber & plastics hoses & belting mfg . . . . .	9	2	1	c	D	D	D	D	D	D	D	D
326220	Rubber & plastics hoses & belting mfg . . . . .	9	2	1	c	D	D	D	D	D	D	D	D
32629	Other rubber product mfg . . . . .	—	32	18	1 449	50 619	1 082	2 254	30 342	118 972	81 805	200 992	8 272
326291	Rubber product mfg for mechanical use . . . . .	—	15	8	681	25 127	521	1 098	16 003	51 610	38 573	90 552	3 317
326299	All other rubber product mfg . . . . .	1	17	10	768	25 492	561	1 156	14 339	67 362	43 232	110 440	4 955
327	Nonmetallic mineral product mfg . . . . .	1	147	41	2 821	102 524	2 019	4 306	63 427	270 534	229 614	506 433	18 503
3271	Clay product & refractory mfg . . . . .	—	11	4	e	D	D	D	D	D	D	D	1 549
32712	Clay building material & refractories mfg . . . . .	—	4	3	230	11 412	175	367	7 202	27 702	15 952	44 132	1 512
327125	Nonclay refractory mfg . . . . .	—	2	2	c	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg . . . . .	2	26	6	410	12 579	273	507	8 274	29 787	20 998	59 048	1 826
32721	Glass & glass product mfg . . . . .	2	26	6	410	12 579	273	507	8 274	29 787	20 998	59 048	1 826
327213	Glass container mfg . . . . .	—	1	1	c	D	D	D	D	D	D	D	D
327215	Glass product mfg made of purchased glass . . . . .	3	21	5	e	D	D	D	D	D	D	D	1 740
3273	Cement & concrete product mfg . . . . .	1	75	20	1 372	52 297	972	2 239	33 077	128 547	127 717	255 439	10 291
32732	Ready-mix concrete mfg . . . . .	1	36	8	544	21 249	393	935	14 763	60 125	76 335	137 000	6 408
327320	Ready-mix concrete mfg . . . . .	1	36	8	544	21 249	393	935	14 763	60 125	76 335	137 000	6 408
32733	Concrete pipe, brick, & block mfg . . . . .	1	10	2	c	D	D	D	D	D	D	D	D
327332	Concrete pipe mfg . . . . .	—	4	2	113	4 123	84	207	2 893	9 039	6 926	15 870	D
32739	Other concrete product mfg . . . . .	1	27	10	640	23 721	447	989	13 469	50 975	36 466	86 078	2 786
327390	Other concrete product mfg . . . . .	1	27	10	640	23 721	447	989	13 469	50 975	36 466	86 078	2 786
3279	Other nonmetallic mineral product mfg . . . . .	1	31	10	638	20 937	474	939	11 125	70 923	51 989	120 894	4 812
32791	Abrasive product mfg . . . . .	—	11	5	432	14 701	326	677	7 049	46 939	32 375	76 943	3 686
327910	Abrasive product mfg . . . . .	—	11	5	432	14 701	326	677	7 049	46 939	32 375	76 943	3 686
32799	All other nonmetallic mineral product mfg . . . . .	3	20	5	206	6 236	148	262	4 076	23 984	19 614	43 951	1 126

**Table 1. Industry Statistics for the State: 1997—Con.**

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>CONNECTICUT—Con.</b>													
<b>31-33</b>	<b>Manufacturing—Con.</b>												
331	Primary metal mfg . . . . .	-	94	54	6 146	251 147	4 704	10 260	166 804	653 513	932 475	1 572 716	38 685
3311	Iron & steel mills & ferroalloy mfg . . . . .	-	3	1	c	D	D	D	D	D	D	D	D
33111	Iron & steel mills & ferroalloy mfg . . . . .	-	3	1	c	D	D	D	D	D	D	D	D
331111	Iron & steel mills . . . . .	-	3	1	c	D	D	D	D	D	D	D	D
3312	Steel product mfg from purchased steel . . . . .	-	25	13	1 588	68 160	1 261	2 729	49 653	206 503	283 505	483 467	7 233
33122	Rolling & drawing of purchased steel . . . . .	-	25	13	1 588	68 160	1 261	2 729	49 653	206 503	283 505	483 467	7 233
331221	Cold-rolled steel shape mfg . . . . .	-	12	6	1 014	47 959	780	1 620	33 672	153 360	189 323	337 342	2 980
331222	Steel wire drawing . . . . .	-	13	7	574	20 201	481	1 109	15 981	53 143	94 182	146 125	4 253
3313	Alumina & aluminum production & processing . . . . .	-	5	5	500	22 682	352	786	12 290	41 597	86 639	127 663	2 909
33131	Alumina & aluminum production & processing . . . . .	-	5	5	500	22 682	352	786	12 290	41 597	86 639	127 663	2 909
331315	Aluminum sheet, plate, & foil mfg . . . . .	-	4	4	e	D	D	D	D	D	D	D	D
331316	Aluminum extruded product mfg . . . . .	-	1	1	c	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing . . . . .	-	31	19	2 310	106 044	1 649	3 814	65 828	277 532	442 027	716 148	23 076
33142	Copper rolling, drawing, extruding, & alloying . . . . .	-	10	9	1 298	55 209	982	2 265	39 628	155 046	228 427	382 262	16 503
331421	Copper rolling, drawing, & extruding . . . . .	-	7	7	g	D	D	D	D	D	D	D	15 655
331422	Copper wire (except mechanical) drawing . . . . .	-	1	1	c	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying . . . . .	1	19	10	f	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding . . . . .	1	14	9	937	47 565	626	1 465	24 829	112 785	207 350	317 816	6 278
3315	Foundries . . . . .	-	30	16	g	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries . . . . .	-	5	3	855	25 263	727	1 417	18 437	51 790	26 656	77 752	D
331511	Iron foundries . . . . .	-	3	1	c	D	D	D	D	D	D	D	D
331512	Steel investment foundries . . . . .	-	1	1	f	D	D	D	D	D	D	D	D
33152	Nonferrous metal foundries . . . . .	-	25	13	f	D	D	D	D	D	D	D	2 114
331522	Nonferrous (except aluminum) die-casting foundries . . . . .	-	12	7	414	11 530	322	650	8 068	20 398	15 300	35 778	1 099
331524	Aluminum foundries (except die-casting) . . . . .	-	8	4	c	D	D	D	D	D	D	D	838
332	Fabricated metal product mfg . . . . .	-	1 521	476	44 290	1 675 304	32 228	68 495	1 014 565	3 662 158	2 166 018	5 836 823	228 130
3321	Forging & stamping . . . . .	-	137	72	6 989	264 943	5 205	11 401	174 384	493 177	419 174	908 529	30 896
33211	Forging & stamping . . . . .	-	137	72	6 989	264 943	5 205	11 401	174 384	493 177	419 174	908 529	30 896
332111	Iron & steel forging . . . . .	4	3	3	448	15 973	363	804	11 593	30 193	24 788	55 069	2 649
332112	Nonferrous forging . . . . .	-	2	2	c	D	D	D	D	D	D	D	D
332114	Custom roll forming . . . . .	1	6	2	c	D	D	D	D	D	D	D	D
332115	Crown & closure mfg . . . . .	1	8	4	527	18 226	447	985	13 265	44 577	54 383	99 062	2 523
332116	Metal stamping . . . . .	-	111	55	4 691	181 382	3 709	8 275	124 757	364 476	301 213	660 872	23 336
332117	Powder metallurgy part mfg . . . . .	-	7	6	1 024	38 131	473	869	18 169	28 680	22 216	52 361	1 475
3322	Cutlery & handtool mfg . . . . .	-	51	19	2 905	121 014	2 051	4 153	67 889	457 915	154 168	603 398	23 092
33221	Cutlery & handtool mfg . . . . .	-	51	19	2 905	121 014	2 051	4 153	67 889	457 915	154 168	603 398	23 092
332211	Cutlery & flatware (except precious) mfg . . . . .	-	8	4	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg . . . . .	-	35	13	1 672	68 249	1 144	2 305	37 869	219 414	96 982	312 463	5 525
332213	Saw blade & handsaw mfg . . . . .	-	4	1	c	D	D	D	D	D	D	D	D
332214	Kitchen utensil, pot, & pan mfg . . . . .	-	4	1	c	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg . . . . .	1	184	49	3 431	121 445	2 339	4 745	68 921	246 478	213 852	459 005	12 824
33231	Plate work & fabricated structural product mfg . . . . .	1	61	14	1 064	35 634	809	1 491	22 471	77 936	74 454	152 849	3 476
332311	Prefabricated metal building & component mfg . . . . .	-	9	2	257	5 225	229	369	4 375	11 192	15 440	26 468	170
332312	Fabricated structural metal mfg . . . . .	1	32	6	533	20 400	384	775	12 755	48 474	43 914	93 004	1 903
332313	Plate work mfg . . . . .	1	20	6	274	10 009	196	347	5 341	18 270	15 100	33 377	1 403

**Table 1. Industry Statistics for the State: 1997—Con.**

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>CONNECTICUT—Con.</b>													
<b>31-33</b>	<b>Manufacturing—Con.</b>												
332	Fabricated metal product mfg—Con.												
3323	Architectural & structural metals mfg—Con.												
33232	Ornamental & architectural metal products mfg.....	2	123	35	2 367	85 811	1 530	3 254	46 450	168 542	139 398	306 156	9 348
332321	Metal window & door mfg.....	—	11	4	632	18 842	333	777	8 842	42 870	38 083	81 403	949
332322	Sheet metal work mfg.	3	84	24	1 284	49 747	905	1 843	28 624	88 681	67 347	154 553	6 532
332323	Ornamental & architectural metal work mfg.....	—	28	7	451	17 222	292	634	8 984	36 991	33 968	70 200	1 867
3324	Boiler, tank, & shipping container mfg.....	—	22	10	1 112	48 593	603	1 167	14 129	114 256	65 020	177 710	4 620
33241	Power boiler & heat exchanger mfg.....	—	7	5	c	D	D	D	D	D	D	D	D
332410	Power boiler & heat exchanger mfg.....	—	7	5	c	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) mfg.....	—	5	1	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg.....	—	5	1	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg.....	1	10	4	399	11 482	301	588	7 142	32 138	23 278	55 042	3 011
332439	Other metal container mfg.....	—	9	4	e	D	D	D	D	D	D	D	D
3325	Hardware mfg.....	—	40	19	3 222	121 192	2 519	5 281	82 061	311 903	188 578	506 053	13 214
33251	Hardware mfg.....	—	40	19	3 222	121 192	2 519	5 281	82 061	311 903	188 578	506 053	13 214
332510	Hardware mfg.....	—	40	19	3 222	121 192	2 519	5 281	82 061	311 903	188 578	506 053	13 214
3326	Spring & wire product mfg.	—	68	34	2 198	83 068	1 702	3 682	54 814	166 729	101 573	267 446	12 816
33261	Spring & wire product mfg.....	—	68	34	2 198	83 068	1 702	3 682	54 814	166 729	101 573	267 446	12 816
332611	Spring (heavy gauge) mfg.....	—	7	5	342	14 806	259	523	10 747	35 243	19 024	54 561	D
332612	Spring (light gauge) mfg.....	1	29	17	1 123	42 641	887	1 933	27 391	63 268	46 175	109 135	6 289
332618	Other fabricated wire product mfg.....	—	32	12	733	25 621	556	1 226	16 676	68 218	36 374	103 750	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	705	146	11 645	453 788	8 648	18 098	279 212	827 270	453 270	1 284 225	64 379
33271	Machine shops.....	1	509	74	6 097	233 721	4 544	9 146	150 397	414 195	201 241	612 746	27 122
332710	Machine shops.....	1	509	74	6 097	233 721	4 544	9 146	150 397	414 195	201 241	612 746	27 122
33272	Turned product & screw, nut, & bolt mfg.....	—	196	72	5 548	220 067	4 104	8 952	128 815	413 075	252 029	671 479	37 257
332721	Precision turned product mfg.....	—	158	52	3 723	136 557	2 831	6 026	87 939	241 083	120 850	365 878	22 905
332722	Bolt, nut, screw, rivet, & washer mfg.....	—	38	20	1 825	83 510	1 273	2 926	40 876	171 992	131 179	305 601	14 352
3328	Coating, engraving, heat treating, & allied activities.	1	174	66	4 744	166 728	3 562	7 776	100 811	366 519	171 478	544 380	29 711
33281	Coating, engraving, heat treating, & allied activities.....	1	174	66	4 744	166 728	3 562	7 776	100 811	366 519	171 478	544 380	29 711
332811	Metal heat treating....	1	28	9	597	22 393	466	980	13 071	48 528	27 388	78 066	3 512
332812	Metal coating/engraving (exc jewelry/silverware)/allied services.....	1	53	16	1 199	41 235	906	1 949	25 472	101 726	31 229	132 997	12 043
332813	Electroplating, plating, polishing, anodizing, & coloring.....	1	93	41	2 948	103 100	2 190	4 847	62 268	216 265	112 861	333 317	14 156
3329	Other fabricated metal product mfg.....	—	140	61	8 044	294 533	5 599	12 192	172 344	677 911	398 905	1 086 077	36 578
33291	Metal valve mfg.....	—	30	22	2 662	94 051	1 723	3 778	48 045	230 650	157 790	393 280	10 961
332911	Industrial valve mfg....	—	10	7	842	26 829	543	1 099	13 079	76 055	61 654	136 667	2 890
332912	Fluid power valve & hose fitting mfg.....	—	11	8	963	39 987	579	1 306	20 590	95 576	42 814	143 084	5 129
332913	Plumbing fixture fitting & trim mfg.....	—	7	5	f	D	D	D	D	D	D	D	D
332919	Other metal valve & pipe fitting mfg.....	—	2	2	c	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	—	110	39	5 382	200 482	3 876	8 414	124 299	447 261	241 115	692 797	25 617
332991	Ball & roller bearing mfg.....	1	17	10	1 679	70 531	1 227	3 082	46 201	166 715	61 417	226 750	9 523
332994	Small arms mfg.....	—	11	6	1 908	70 180	1 441	2 863	46 383	146 022	81 443	234 518	8 497
332999	All other miscellaneous fabricated metal product mfg.....	1	59	22	1 662	55 940	1 102	2 276	28 963	127 220	93 579	219 373	7 293



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			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>CONNECTICUT—Con.</b>													
<b>31-33</b>	<b>Manufacturing—Con.</b>												
333	Machinery mfg .....	1	643	200	23 343	971 403	12 804	26 320	428 716	2 839 776	1 838 488	4 569 432	216 711
3331	Agriculture, construction, & mining machinery mfg....	2	8	2	165	6 120	99	217	2 388	14 449	12 393	26 617	320
33312	Construction machinery mfg .....	1	5	1	106	4 351	49	110	1 040	10 473	6 553	16 949	178
333120	Construction machinery mfg .....	1	5	1	106	4 351	49	110	1 040	10 473	6 553	16 949	178
3332	Industrial machinery mfg ..	1	87	42	6 070	290 184	3 106	6 569	96 816	897 943	463 145	1 293 105	89 142
33322	Plastics & rubber industry machinery mfg .....	2	13	7	776	37 277	463	969	19 444	131 716	95 238	224 860	3 241
333220	Plastics & rubber industry machinery mfg .....	2	13	7	776	37 277	463	969	19 444	131 716	95 238	224 860	3 241
33329	Other industrial machinery mfg .....	—	74	35	5 294	252 907	2 643	5 600	77 372	766 227	367 907	1 068 245	85 901
333291	Paper industry machinery mfg .....	—	5	4	210	8 446	63	127	2 567	14 624	16 435	32 447	D
333292	Textile machinery mfg .....	—	9	5	966	36 312	473	1 109	16 955	178 448	53 314	230 941	D
333293	Printing machinery & equipment mfg .....	2	10	6	513	27 414	197	513	8 962	54 306	54 711	106 230	D
333294	Food product machinery mfg .....	—	5	2	e	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg .....	—	3	3	g	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg .....	1	42	15	1 604	72 351	744	1 573	25 652	198 350	154 047	356 629	5 035
3333	Commercial & service industry machinery mfg ..	—	45	22	3 408	109 713	1 197	2 130	33 508	766 012	535 240	1 293 675	62 873
33331	Commercial & service industry machinery mfg .....	—	45	22	3 408	109 713	1 197	2 130	33 508	766 012	535 240	1 293 675	62 873
333311	Automatic vending machine mfg .....	9	1	1	c	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	—	14	9	2 091	53 774	518	932	11 986	614 856	450 593	1 061 890	D
333314	Optical instrument & lens mfg .....	—	12	5	595	28 302	262	372	9 109	86 267	44 288	126 443	7 612
333319	Other commercial & service industry machinery mfg .....	1	14	5	484	18 993	252	509	8 075	45 437	25 165	70 718	1 597
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg .....	3	24	11	1 108	37 656	693	1 362	18 700	77 086	84 992	157 754	4 112
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg ..	3	24	11	1 108	37 656	693	1 362	18 700	77 086	84 992	157 754	4 112
333412	Industrial & commercial fan & blower mfg .....	2	3	3	122	6 003	49	110	1 500	14 526	14 788	29 427	429
333414	Heating equipment (except warm air furnaces) mfg .....	4	7	3	224	8 179	114	218	3 239	21 197	10 467	31 516	572
333415	AC & warm air heating & commercial/ industrial refrig equip mfg .....	3	10	4	697	21 591	477	955	12 569	38 741	58 061	92 288	3 054
3335	Metalworking machinery mfg .....	1	331	71	6 695	286 062	4 216	8 437	154 166	510 095	381 969	866 838	34 058
33351	Metalworking machinery mfg .....	1	331	71	6 695	286 062	4 216	8 437	154 166	510 095	381 969	866 838	34 058
333511	Industrial mold mfg .....	—	46	11	642	31 902	489	1 001	21 092	51 851	16 165	64 984	3 700
333512	Machine tool (metal cutting types) mfg ...	—	20	11	1 681	70 222	817	1 646	31 324	126 429	201 704	319 551	12 231
333513	Machine tool (metal forming types) mfg...	—	2	1	c	D	D	D	D	D	D	D	D
333514	Special die & tool, die set, jig, & fixture mfg ..	2	149	18	1 715	77 110	1 219	2 410	44 278	139 445	43 296	180 921	8 796
333515	Cutting tool & machine tool accessory mfg ..	1	85	18	1 327	46 145	943	1 915	28 895	92 652	42 669	135 351	4 009
333516	Rolling mill machinery & equipment mfg .....	1	3	3	f	D	D	D	D	D	D	D	D
333518	Other metalworking machinery mfg .....	2	26	9	659	34 240	428	839	17 970	58 218	36 013	96 470	2 217
3336	Engine, turbine, & power transmission equipment mfg .....	—	25	13	2 751	116 951	1 747	4 097	68 034	290 807	156 749	444 452	14 344
33361	Engine, turbine, & power transmission equipment mfg .....	—	25	13	2 751	116 951	1 747	4 097	68 034	290 807	156 749	444 452	14 344
333611	Turbine & turbine generator set unit mfg .....	—	5	3	395	14 689	254	586	8 958	40 571	20 862	61 277	D
333613	Mechanical power transmission equipment mfg .....	3	11	7	738	25 849	540	1 200	15 344	66 147	35 807	100 212	2 539
333618	Other engine equipment mfg .....	—	4	3	1 575	74 974	923	2 256	42 808	180 623	98 102	277 470	D

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			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>CONNECTICUT—Con.</b>													
<b>31-33</b>	<b>Manufacturing—Con.</b>												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg .....	2	123	39	3 146	124 717	1 746	3 508	55 104	283 384	204 000	486 991	11 862
33391	Pump & compressor mfg .....	2	11	3	194	8 196	114	246	3 793	5 918	15 550	32 228	532
333912	Air & gas compressor mfg .....	1	4	2	129	6 176	69	167	2 794	888	11 428	23 075	315
33392	Material handling equipment mfg .....	1	17	7	392	15 313	273	549	9 130	31 466	36 873	68 674	790
333923	Overhead traveling crane, hoist, & monorail system mfg.	—	5	4	204	8 372	159	341	5 507	18 008	21 939	40 161	453
33399	All other general-purpose machinery mfg .....	2	95	29	2 560	101 208	1 359	2 713	42 181	246 000	151 577	386 089	10 540
333991	Power-driven handtool mfg .....	4	9	1	166	5 120	115	180	2 505	14 593	11 828	25 977	589
333992	Welding & soldering equipment mfg .....	7	7	4	220	9 105	85	160	2 509	23 695	20 510	43 541	823
333993	Packaging machinery mfg .....	2	12	4	364	14 111	151	335	5 467	20 022	20 955	40 928	978
333999	All other miscellaneous general-purpose machinery mfg .....	1	53	16	1 589	65 114	869	1 756	27 425	164 625	86 627	240 478	7 449
334	Computer & electronic product mfg .....	1	397	182	24 195	1 003 261	12 998	26 221	414 147	2 444 996	1 762 760	4 189 498	161 346
3341	Computer & peripheral equipment mfg .....	2	29	10	1 089	54 331	426	812	16 922	122 506	82 597	205 491	9 297
33411	Computer & peripheral equipment mfg .....	2	29	10	1 089	54 331	426	812	16 922	122 506	82 597	205 491	9 297
334111	Electronic computer mfg .....	4	10	4	185	7 606	88	135	2 120	18 274	18 263	36 364	861
334119	Other computer peripheral equipment mfg .....	2	15	6	876	45 421	316	656	14 071	102 812	63 289	166 418	8 261
3342	Communications equipment mfg .....	1	46	25	3 952	171 177	1 764	3 494	63 853	534 347	522 253	1 047 780	43 777
33421	Telephone apparatus mfg .....	—	18	9	1 913	87 080	935	1 900	31 758	259 169	281 464	542 697	D
334210	Telephone apparatus mfg .....	—	18	9	1 913	87 080	935	1 900	31 758	259 169	281 464	542 697	D
33422	Radio & TV broadcasting & wireless communications equipment mfg .....	2	17	12	1 369	58 757	550	1 024	26 112	182 412	158 929	329 653	16 334
334220	Radio & TV broadcasting & wireless communications equipment mfg .....	2	17	12	1 369	58 757	550	1 024	26 112	182 412	158 929	329 653	16 334
33429	Other communications equipment mfg .....	—	11	4	670	25 340	279	570	5 983	92 766	81 860	175 430	D
334290	Other communications equipment mfg .....	—	11	4	670	25 340	279	570	5 983	92 766	81 860	175 430	D
3343	Audio & video equipment mfg .....	2	8	5	406	12 940	225	469	4 378	31 171	30 030	58 906	1 588
33431	Audio & video equipment mfg .....	2	8	5	406	12 940	225	469	4 378	31 171	30 030	58 906	1 588
334310	Audio & video equipment mfg .....	2	8	5	406	12 940	225	469	4 378	31 171	30 030	58 906	1 588
3344	Semiconductor & other electronic component mfg .....	2	145	69	7 662	258 942	5 205	10 567	136 714	590 365	395 583	975 578	54 961
33441	Semiconductor & other electronic component mfg .....	2	145	69	7 662	258 942	5 205	10 567	136 714	590 365	395 583	975 578	54 961
334412	Bare printed circuit board mfg .....	—	31	11	1 552	53 896	1 206	2 443	30 663	138 602	89 700	224 900	16 929
334413	Semiconductor & related device mfg ...	3	19	6	753	36 727	457	761	16 880	114 772	39 368	151 230	13 600
334416	Electronic coil, transformer, & other inductor mfg .....	2	17	8	717	15 157	526	991	8 327	28 512	16 579	45 206	1 085
334417	Electronic connector mfg .....	2	15	10	1 260	45 242	866	1 777	26 132	106 992	78 112	188 793	8 919
334418	Printed circuit assembly (electronic assembly) mfg .....	—	12	9	714	20 697	468	881	9 406	45 614	46 012	94 070	2 701
334419	Other electronic component mfg .....	5	39	22	2 531	84 034	1 567	3 503	43 356	149 451	122 512	261 563	11 342

**Table 1. Industry Statistics for the State: 1997—Con.**

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>CONNECTICUT—Con.</b>													
<b>31-33</b>	<b>Manufacturing—Con.</b>												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg . . . . .	—	161	68	10 581	477 693	4 977	10 074	173 827	1 106 329	697 201	1 806 020	41 570
33451	Navigational, measuring, medical, & control instruments mfg . . . . .	—	161	68	10 581	477 693	4 977	10 074	173 827	1 106 329	697 201	1 806 020	41 570
334510	Electromedical & electrotherapeutic apparatus mfg . . . . .	1	17	6	906	41 318	346	763	11 234	72 035	49 088	120 664	4 407
334511	Search, detection, navigation, & guidance instrument mfg . . . . .	—	19	7	2 393	132 712	879	1 947	37 086	287 889	103 441	388 632	14 086
334512	Automatic environmental control mfg . . . . .	3	7	3	c	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg . . . . .	—	41	18	3 221	125 052	1 659	3 132	56 805	230 153	176 888	406 136	8 718
334514	Totalizing fluid meter & counting device mfg . . . . .	1	9	4	499	13 904	372	570	7 008	25 157	18 835	43 986	1 201
334515	Electricity measuring & testing instrument mfg . . . . .	5	13	9	563	24 641	294	643	10 382	65 398	27 753	92 987	2 967
334516	Analytical laboratory instrument mfg . . . . .	—	16	5	848	44 304	413	947	20 944	221 923	153 395	373 848	775
334517	Irradiation apparatus mfg . . . . .	—	6	3	e	D	D	D	D	D	D	D	D
334518	Watch, clock, & part mfg . . . . .	1	7	2	166	6 591	112	223	2 333	10 420	7 080	17 221	305
334519	Other measuring & controlling device mfg . . . . .	—	26	11	1 412	63 851	656	1 336	21 035	103 313	102 449	214 905	6 040
3346	Mfg & reproducing magnetic & optical media . . . . .	—	8	5	505	28 178	401	805	18 453	60 278	35 096	95 723	10 153
33461	Mfg & reproducing magnetic & optical media . . . . .	—	8	5	505	28 178	401	805	18 453	60 278	35 096	95 723	10 153
334611	Software reproducing . . . . .	—	2	1	e	D	D	D	D	D	D	D	D
334612	Prerecorded CD (except software), tape, & record reproducing . . . . .	2	4	3	c	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg . . . . .	1	215	114	14 675	538 183	8 977	17 880	252 397	1 395 185	978 650	2 374 935	97 110
3351	Electric lighting equipment mfg . . . . .	1	33	15	1 493	52 717	1 058	1 923	29 889	129 957	87 940	220 302	D
33511	Electric lamp bulb & part mfg . . . . .	—	2	2	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg . . . . .	—	2	2	f	D	D	D	D	D	D	D	D
33512	Lighting fixture mfg . . . . .	2	31	13	f	D	D	D	D	D	D	D	2 133
335121	Residential electric lighting fixture mfg . . . . .	1	10	3	c	D	D	D	D	D	D	D	393
335122	Commercial/industrial/institutional electric lighting fixture mfg . . . . .	—	8	4	266	9 124	163	327	3 674	21 984	13 285	35 328	351
335129	Other lighting equipment mfg . . . . .	2	13	6	484	15 866	327	718	7 635	63 475	41 498	106 433	1 389
3352	Household appliance mfg . . . . .	—	7	6	793	29 575	482	878	9 768	110 403	89 687	212 103	D
33521	Small electrical appliance mfg . . . . .	—	6	5	f	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg . . . . .	—	6	5	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg . . . . .	1	83	32	4 279	152 561	2 377	4 705	62 868	356 284	219 076	571 716	16 832
33531	Electrical equipment mfg . . . . .	1	83	32	4 279	152 561	2 377	4 705	62 868	356 284	219 076	571 716	16 832
335311	Power, distribution, & specialty transformer mfg . . . . .	—	6	3	294	10 805	182	389	4 805	23 734	16 182	40 230	D
335312	Motor & generator mfg . . . . .	—	17	12	2 046	60 016	1 207	2 463	28 926	141 031	91 048	231 626	8 735
335313	Switchgear & switchboard apparatus mfg . . . . .	—	11	3	808	40 009	396	738	13 556	88 788	39 079	123 928	D
335314	Relay & industrial control mfg . . . . .	1	49	14	1 131	41 731	592	1 115	15 581	102 731	72 767	175 932	3 126
3359	Other electrical equipment & component mfg . . . . .	1	92	61	8 110	303 330	5 060	10 374	149 872	798 541	581 947	1 370 814	70 481
33591	Battery mfg . . . . .	5	7	5	321	10 548	171	336	4 286	22 876	17 362	40 086	1 009
335911	Storage battery mfg . . . . .	5	7	5	321	10 548	171	336	4 286	22 876	17 362	40 086	1 009
33592	Communication & energy wire & cable mfg . . . . .	—	15	15	2 425	89 771	1 599	3 348	45 528	204 745	231 575	424 020	41 462
335929	Other communication & energy wire mfg . . . . .	—	13	13	g	D	D	D	D	D	D	D	D

**Table 1. Industry Statistics for the State: 1997—Con.**

[Includes data for industry groups and industries with 100 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>31-33</b>	<b>CONNECTICUT—Con. Manufacturing—Con.</b>												
335	Electrical equipment, appliance, & component mfg—Con.												
3359	Other electrical equipment & component mfg—Con.												
33593	Wiring device mfg . . . . .	1	27	20	3 231	116 837	2 155	4 481	64 938	381 668	167 582	553 712	21 108
335931	Current-carrying wiring device mfg . . . . .	—	18	14	1 198	32 412	805	1 707	21 252	131 895	54 615	181 386	4 938
335932	Noncurrent-carrying wiring device mfg . . . . .	2	9	6	2 033	84 425	1 350	2 774	43 686	249 773	112 967	372 326	16 170
33599	All other electrical equipment & component mfg . . . . .	1	43	21	2 133	86 174	1 135	2 209	35 120	189 252	165 428	352 996	6 902
335991	Carbon & graphite product mfg . . . . .	1	7	3	166	8 374	118	267	5 453	17 592	17 104	35 196	1 916
335999	All other miscellaneous electrical equipment & component mfg . . . . .	1	36	18	1 967	77 800	1 017	1 942	29 667	171 660	148 324	317 800	4 986
336	Transportation equipment mfg . . . . .	—	212	116	51 330	2 571 665	25 932	55 326	1 035 870	5 337 452	4 486 840	9 810 418	297 947
3363	Motor vehicle parts mfg . . . . .	—	64	31	i	D	D	D	D	D	D	D	51 575
33631	Motor vehicle gasoline engine & engine parts mfg . . . . .	—	12	4	1 262	43 349	948	1 975	26 823	107 623	178 229	285 031	17 231
336312	Gasoline engine & engine parts mfg . . . . .	—	12	4	1 262	43 349	948	1 975	26 823	107 623	178 229	285 031	17 231
33632	Motor vehicle electrical & electronic equipment mfg . . . . .	1	16	10	2 310	73 432	1 646	3 371	44 179	188 558	103 726	292 536	11 695
336321	Vehicular lighting equipment mfg . . . . .	—	4	2	f	D	D	D	D	D	D	D	1 193
336322	Other motor vehicle electrical & electronic equipment mfg . . . . .	1	12	8	g	D	D	D	D	D	D	D	10 502
33634	Motor vehicle brake system mfg . . . . .	—	5	3	1 014	34 610	765	1 310	18 160	72 813	132 194	202 842	8 423
336340	Motor vehicle brake system mfg . . . . .	—	5	3	1 014	34 610	765	1 310	18 160	72 813	132 194	202 842	8 423
33636	Motor vehicle seating & interior trim mfg . . . . .	—	4	1	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating & interior trim mfg . . . . .	—	4	1	e	D	D	D	D	D	D	D	D
33637	Motor vehicle metal stamping . . . . .	4	8	5	531	21 635	371	832	8 961	39 765	35 424	75 687	3 375
336370	Motor vehicle metal stamping . . . . .	4	8	5	531	21 635	371	832	8 961	39 765	35 424	75 687	3 375
33639	Other motor vehicle parts mfg . . . . .	1	14	7	795	28 119	623	1 231	20 298	71 406	70 596	142 293	4 715
336399	All other motor vehicle parts mfg . . . . .	2	13	6	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg . . . . .	—	117	79	35 351	1 916 844	18 401	39 325	805 571	3 891 743	3 619 018	7 487 368	235 257
33641	Aerospace product & parts mfg . . . . .	—	117	79	35 351	1 916 844	18 401	39 325	805 571	3 891 743	3 619 018	7 487 368	235 257
336411	Aircraft mfg . . . . .	—	8	8	j	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg . . . . .	—	55	39	15 721	908 587	8 622	18 553	357 934	1 833 883	2 361 519	4 133 065	120 546
336413	Other aircraft part & auxiliary equipment mfg . . . . .	—	52	31	i	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg . . . . .	—	2	1	f	D	D	D	D	D	D	D	D
3366	Ship & boat building . . . . .	—	14	4	i	D	D	D	D	D	D	D	D
33661	Ship & boat building . . . . .	—	14	4	i	D	D	D	D	D	D	D	D
336611	Ship building & repairing . . . . .	—	7	2	i	D	D	D	D	D	D	D	D
336612	Boat building . . . . .	6	7	2	c	D	D	D	D	D	D	D	197
337	Furniture & related product mfg . . . . .	3	246	42	3 124	92 197	2 414	4 651	58 981	185 861	139 958	327 553	9 976
3371	Household & institutional furniture & kitchen cabinet mfg . . . . .	3	161	14	1 435	39 645	1 186	2 232	28 525	77 078	52 524	129 086	4 540
33711	Wood kitchen cabinet & counter top mfg . . . . .	2	93	8	909	26 593	747	1 421	19 237	53 139	32 289	84 940	3 682
337110	Wood kitchen cabinet & counter top mfg . . . . .	2	93	8	909	26 593	747	1 421	19 237	53 139	32 289	84 940	3 682
33712	Household & institutional furniture mfg . . . . .	4	68	6	526	13 052	439	811	9 288	23 939	20 235	44 146	858
337121	Upholstered household furniture mfg . . . . .	5	16	1	122	2 769	106	165	1 977	5 298	4 023	9 104	201
337122	Nonupholstered wood household furniture mfg . . . . .	4	44	3	268	7 308	232	444	5 401	13 038	13 317	26 189	552
337127	Institutional furniture mfg . . . . .	—	4	2	128	2 819	94	192	1 794	5 289	2 493	8 132	D

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<b>CONNECTICUT—Con.</b>													
<b>31-33</b>	<b>Manufacturing—Con.</b>												
337	Furniture & related product mfg—Con.												
3372	Office furniture (including fixtures) mfg	2	71	24	1 288	41 837	936	1 789	24 023	83 273	57 467	142 503	3 153
33721	Office furniture (including fixtures) mfg	2	71	24	1 288	41 837	936	1 789	24 023	83 273	57 467	142 503	3 153
337211	Wood office furniture mfg	3	11	4	c	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork & millwork mfg	—	27	9	431	16 175	313	585	9 401	29 787	20 771	50 401	1 188
337214	Office furniture (except wood) mfg	—	3	2	c	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg	3	30	9	536	15 908	369	709	8 915	32 137	19 411	53 408	1 079
3379	Other furniture related product mfg	6	14	4	401	10 715	292	630	6 433	25 510	29 967	55 964	2 283
33791	Mattress mfg	6	7	2	214	6 408	152	381	4 051	19 141	19 777	39 022	1 993
337910	Mattress mfg	6	7	2	214	6 408	152	381	4 051	19 141	19 777	39 022	1 993
33792	Blind & shade mfg	6	7	2	187	4 307	140	249	2 382	6 369	10 190	16 942	290
337920	Blind & shade mfg	6	7	2	187	4 307	140	249	2 382	6 369	10 190	16 942	290
339	Miscellaneous mfg	—	456	112	16 640	570 973	10 584	20 582	281 716	2 340 864	984 481	3 306 912	146 913
3391	Medical equipment & supplies mfg	—	185	52	8 336	310 628	5 876	11 156	162 010	1 586 395	497 339	2 071 457	90 446
33911	Medical equipment & supplies mfg	—	185	52	8 336	310 628	5 876	11 156	162 010	1 586 395	497 339	2 071 457	90 446
339111	Laboratory apparatus & furniture mfg	—	13	2	390	14 150	276	634	8 464	30 347	54 739	84 265	D
339112	Surgical & medical instrument mfg	—	47	24	5 698	219 674	4 058	7 582	117 954	1 376 470	316 943	1 683 576	77 294
339113	Surgical appliance & supplies mfg	1	26	15	1 173	41 506	826	1 627	19 056	94 291	55 067	149 224	7 373
339114	Dental equipment & supplies mfg	—	12	5	560	20 877	349	657	7 862	54 312	58 311	111 154	1 526
339116	Dental laboratories	5	85	5	e	D	D	D	D	D	D	D	1 057
3399	Other miscellaneous mfg	1	271	60	8 304	260 345	4 708	9 426	119 706	754 469	487 142	1 235 455	56 467
33991	Jewelry & silverware mfg	1	31	9	1 002	25 823	598	1 319	9 636	68 127	64 306	129 728	D
339911	Jewelry (except costume) mfg	3	14	3	215	5 646	123	210	2 550	11 720	20 246	31 154	295
339914	Costume jewelry & novelty mfg	—	9	4	703	18 022	424	1 027	5 937	52 427	41 577	91 991	D
33992	Sporting & athletic goods mfg	4	30	8	868	21 279	657	1 197	12 449	51 656	32 822	84 757	2 851
339920	Sporting & athletic goods mfg	4	30	8	868	21 279	657	1 197	12 449	51 656	32 822	84 757	2 851
33993	Doll, toy, & game mfg	—	23	6	1 878	51 941	698	1 375	16 485	182 868	152 708	330 721	D
339932	Game, toy, & children's vehicle mfg	—	18	5	1 852	51 498	685	1 357	16 322	181 638	151 554	328 363	D
33994	Office supplies (except paper) mfg	5	19	3	263	8 232	165	338	4 215	30 677	23 254	56 041	1 213
339941	Pen & mechanical pencil mfg	5	3	2	120	3 933	69	145	1 894	21 017	15 735	38 847	869
33995	Sign mfg	5	81	6	1 071	35 814	538	1 190	19 010	78 563	47 853	124 014	7 774
339950	Sign mfg	5	81	6	1 071	35 814	538	1 190	19 010	78 563	47 853	124 014	7 774
33999	All other miscellaneous mfg	—	87	28	3 222	117 256	2 052	4 007	57 911	342 578	166 199	510 194	31 667
339991	Gasket, packing, & sealing device mfg	1	16	9	740	24 562	479	900	12 112	48 132	22 072	69 949	D
339992	Musical instrument mfg	—	9	2	156	4 765	119	269	3 249	7 998	4 119	12 547	172
339993	Fastener, button, needle, & pin mfg	—	18	8	650	16 840	447	1 016	11 283	33 826	21 165	54 612	2 943
339999	All other miscellaneous mfg	—	40	9	1 656	70 541	994	1 799	31 051	251 500	117 760	370 884	D

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

<sup>2</sup>Industries 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.



**Table 2. Industry Statistics for Metropolitan Areas: 1997**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>31-33</b>	<b>BOSTON-WORCESTER-LAWRENCE, MA-NH-ME-CT CMSA</b>												
	<b>Manufacturing ....</b>	<b>1</b>	<b>8 844</b>	<b>3 074</b>	<b>395 322</b>	<b>15 798 742</b>	<b>241 095</b>	<b>484 982</b>	<b>7 435 157</b>	<b>45 718 100</b>	<b>33 681 939</b>	<b>79 309 730</b>	<b>3 482 539</b>
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (CT Part) .....	-	19	7	547	20 357	385	844	10 270	43 926	28 713	71 244	2 650
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (ME Part) .....	1	41	8	1 388	43 851	734	1 653	20 074	S	S	124 721	4 828
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (MA Part) .....	1	7 448	2 622	332 006	13 505 530	198 540	401 940	6 174 666	37 417 970	27 017 210	64 365 196	2 975 800
	Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA (NH Part) .....	1	1 336	437	61 381	2 229 004	41 436	80 545	1 230 147	8 395 120	6 376 277	14 748 569	499 261
311	Food mfg .....	1	664	187	j	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg .....	1	48	16	h	D	D	D	D	D	D	D	D
313	Textile mills .....	1	128	69	i	D	D	D	D	D	D	D	D
314	Textile product mills .....	1	180	42	h	D	D	D	D	D	D	D	D
315	Apparel mfg .....	3	194	73	i	D	D	D	D	D	D	D	D
316	Leather & allied product mfg .	-	116	40	i	D	D	D	D	D	D	D	D
321	Wood product mfg .....	3	198	38	h	D	D	D	D	D	D	D	D
322	Paper mfg .....	-	166	118	j	D	D	D	D	D	D	D	D
323	Printing & related support activities .....	3	1 077	234	j	D	D	D	D	D	D	D	107 053
324	Petroleum & coal products mfg .....	1	45	10	f	D	D	D	D	D	D	D	D
325	Chemical mfg .....	1	351	152	j	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg .....	1	421	218	21 622	706 201	16 689	33 833	442 348	1 757 409	1 510 618	3 269 053	141 171
327	Nonmetallic mineral product mfg .....	1	245	76	i	D	D	D	D	D	D	D	D
331	Primary metal mfg .....	-	98	49	i	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg .....	1	1 634	476	40 901	1 517 003	29 397	59 553	880 171	3 702 019	1 916 028	5 599 963	357 939
333	Machinery mfg .....	2	769	294	33 456	1 463 248	18 414	37 238	634 513	3 253 851	2 673 862	5 937 448	227 624
334	Computer & electronic product mfg .....	-	1 039	537	m	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg .....	1	228	124	j	D	D	D	D	D	D	D	D
336	Transportation equipment mfg .....	-	167	61	j	D	D	D	D	D	D	D	D
337	Furniture & related product mfg .....	1	339	71	i	D	D	D	D	D	D	D	D
339	Miscellaneous mfg .....	1	737	189	24 304	919 994	13 974	27 807	372 702	2 449 330	1 422 551	3 902 291	D

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.</b>												
	<b>Worcester, MA—CT PMSA</b>												
<b>31-33</b>	<b>Manufacturing . . . .</b>	<b>1</b>	<b>857</b>	<b>337</b>	<b>39 051</b>	<b>1 535 603</b>	<b>25 057</b>	<b>50 712</b>	<b>739 514</b>	<b>3 727 749</b>	<b>2 859 933</b>	<b>6 584 341</b>	<b>300 448</b>
	Worcester, MA—CT PMSA (CT Part) . . . . .	—	19	7	547	20 357	385	844	10 270	43 926	28 713	71 244	2 650
	Worcester, MA—CT PMSA (MA Part) . . . . .	1	838	330	38 504	1 515 246	24 672	49 868	729 244	3 683 823	2 831 220	6 513 097	297 798
311	Food mfg . . . . .	1	42	15	1 144	30 663	760	1 453	18 638	139 064	110 143	249 075	6 542
3118	Bakeries & tortilla mfg . . . . .	—	29	10	582	13 870	369	681	8 349	97 184	43 826	141 135	D
31181	Bread & bakery product mfg . . . . .	—	28	10	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries . . . . .	—	11	7	e	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg . . . . .	—	4	1	f	D	D	D	D	D	D	D	D
3121	Beverage mfg . . . . .	—	4	1	f	D	D	D	D	D	D	D	D
31211	Soft drink & ice mfg . . . . .	—	3	1	f	D	D	D	D	D	D	D	D
312111	Soft drink mfg . . . . .	—	3	1	f	D	D	D	D	D	D	D	D
313	Textile mills . . . . .	3	17	10	1 360	38 756	989	2 131	27 235	126 992	105 243	237 123	6 007
3132	Fabric mills . . . . .	9	4	3	561	12 351	357	830	8 879	19 397	20 095	44 016	2 601
31321	Broadwoven fabric mills . . . . .	9	3	2	f	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills . . . . .	9	3	2	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills . . . . .	1	8	5	f	D	D	D	D	D	D	D	3 014
31331	Textile & fabric finishing mills . . . . .	1	4	2	f	D	D	D	D	D	D	D	D
313311	Broadwoven fabric finishing mills . . . . .	1	4	2	f	D	D	D	D	D	D	D	D
321	Wood product mfg . . . . .	2	24	8	448	13 350	307	542	6 897	25 552	22 859	48 388	1 530
3219	Other wood product mfg . . . . .	2	20	7	415	12 456	280	491	6 187	23 559	20 867	44 402	1 357
322	Paper mfg . . . . .	—	19	16	2 205	85 370	1 529	3 509	48 803	194 392	282 982	478 551	11 194
3222	Converted paper product mfg . . . . .	—	19	16	2 205	85 370	1 529	3 509	48 803	194 392	282 982	478 551	11 194
32221	Paperboard container mfg . . . . .	—	7	6	473	17 702	362	809	10 257	38 807	60 286	99 131	2 736
322211	Corrugated & solid fiber box mfg . . . . .	—	7	6	473	17 702	362	809	10 257	38 807	60 286	99 131	2 736
32222	Paper bag & coated & treated paper mfg . . . . .	—	3	2	g	D	D	D	D	D	D	D	D
322222	Coated & laminated paper mfg . . . . .	—	3	2	g	D	D	D	D	D	D	D	D
32223	Stationery product mfg . . . . .	2	5	5	576	20 576	413	909	14 332	47 689	49 538	97 161	1 975
322232	Envelope mfg . . . . .	2	5	5	576	20 576	413	909	14 332	47 689	49 538	97 161	1 975
323	Printing & related support activities . . . . .	1	83	16	1 362	40 940	977	1 731	26 019	68 931	39 226	108 100	4 678
3231	Printing & related support activities . . . . .	1	83	16	1 362	40 940	977	1 731	26 019	68 931	39 226	108 100	4 678
32311	Printing . . . . .	1	69	13	1 101	34 073	788	1 380	21 426	57 746	36 317	93 945	3 780
323110	Commercial lithographic printing . . . . .	—	37	9	788	23 394	589	1 014	15 733	38 363	25 915	64 419	2 829
32312	Support activities for printing . . . . .	—	14	3	261	6 867	189	351	4 593	11 185	2 909	14 155	898
325	Chemical mfg . . . . .	1	26	13	2 362	126 708	1 019	2 035	32 379	460 163	277 618	741 405	41 173
3254	Pharmaceutical & medicine mfg . . . . .	—	5	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg . . . . .	—	5	3	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg . . . . .	—	3	1	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg . . . . .	4	14	8	f	D	D	D	D	D	D	D	D
32599	All other chemical product & preparation mfg . . . . .	4	13	8	550	20 643	406	780	10 712	39 353	78 171	118 373	D
325991	Custom compounding of purchased resin . . . . .	4	10	8	f	D	D	D	D	D	D	D	3 506

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.</b>												
	<b>Worcester, MA—CT PMSA—Con.</b>												
<b>31-33</b>	<b>Manufacturing—Con.</b>												
326	Plastics & rubber products mfg .....	1	58	32	3 051	120 581	2 306	4 693	68 698	253 626	172 492	424 547	19 108
3261	Plastics product mfg .....	1	53	30	h	D	D	D	D	D	D	D	D
32611	Unsupported plastics film, sheet, & bag mfg ..	-	4	3	266	11 203	201	469	6 247	33 321	35 137	68 065	2 176
32619	Other plastics product mfg .....	2	35	22	2 097	84 621	1 589	3 118	47 101	152 272	84 074	236 453	12 709
326199	All other plastics product mfg .....	2	34	22	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg .....	-	5	2	e	D	D	D	D	D	D	D	D
32629	Other rubber product mfg .....	-	5	2	e	D	D	D	D	D	D	D	D
326299	All other rubber product mfg .....	-	3	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg .....	-	30	16	3 875	173 034	2 328	4 786	72 500	354 032	223 247	576 227	57 969
3271	Clay product & refractory mfg .....	-	2	2	e	D	D	D	D	D	D	D	D
32712	Clay building material & refractories mfg .....	-	1	1	e	D	D	D	D	D	D	D	D
327125	Nonclay refractory mfg .....	-	1	1	e	D	D	D	D	D	D	D	D
3272	Glass & glass product mfg .	-	7	4	552	19 363	322	683	9 000	44 016	30 883	72 911	D
32721	Glass & glass product mfg .....	-	7	4	552	19 363	322	683	9 000	44 016	30 883	72 911	D
327215	Glass product mfg made of purchased glass .....	-	5	4	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product mfg .....	-	12	8	h	D	D	D	D	D	D	D	D
32791	Abrasive product mfg ...	-	8	7	2 754	131 131	1 651	3 356	51 646	246 199	152 110	400 110	D
327910	Abrasive product mfg .	-	8	7	2 754	131 131	1 651	3 356	51 646	246 199	152 110	400 110	D
331	Primary metal mfg .....	1	15	7	550	19 512	410	881	13 106	40 004	48 569	87 663	4 259
3312	Steel product mfg from purchased steel .....	1	8	4	257	9 175	192	414	6 431	21 875	33 560	55 327	2 084
33122	Rolling & drawing of purchased steel .....	1	8	4	257	9 175	192	414	6 431	21 875	33 560	55 327	2 084
331222	Steel wire drawing ....	1	8	4	257	9 175	192	414	6 431	21 875	33 560	55 327	2 084
332	Fabricated metal product mfg .....	1	205	74	7 254	271 560	5 331	11 104	159 692	572 796	379 319	952 849	34 829
3321	Forging & stamping .....	6	10	6	1 559	71 136	1 338	2 889	42 645	119 585	87 459	201 293	9 798
33211	Forging & stamping .....	6	10	6	1 559	71 136	1 338	2 889	42 645	119 585	87 459	201 293	9 798
332111	Iron & steel forging ...	8	2	2	g	D	D	D	D	D	D	D	D
332117	Powder metallurgy part mfg .....	-	1	1	e	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg ....	-	9	6	740	23 110	492	1 053	11 874	67 028	28 854	95 523	D
33221	Cutlery & handtool mfg ..	-	9	6	740	23 110	492	1 053	11 874	67 028	28 854	95 523	D
332211	Cutlery & flatware (except precious) mfg .....	-	1	1	e	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	-	7	5	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg .....	2	23	7	402	13 626	300	607	9 134	23 806	20 898	44 651	1 334
3326	Spring & wire product mfg .	-	16	10	886	23 023	594	1 170	14 278	56 424	58 405	114 743	D
33261	Spring & wire product mfg .....	-	16	10	886	23 023	594	1 170	14 278	56 424	58 405	114 743	D
332612	Spring (light gauge) mfg .....	-	4	3	e	D	D	D	D	D	D	D	D
332618	Other fabricated wire product mfg .....	1	12	7	f	D	D	D	D	D	D	D	3 854
3327	Machine shops, turned product, & screw, nut, & bolt mfg .....	1	93	21	1 356	50 825	1 012	2 137	32 929	97 453	37 653	135 250	4 793
33271	Machine shops .....	1	81	14	1 034	39 667	766	1 632	25 526	77 067	25 456	102 556	3 616
332710	Machine shops .....	1	81	14	1 034	39 667	766	1 632	25 526	77 067	25 456	102 556	3 616
33272	Turned product & screw, nut, & bolt mfg .....	-	12	7	322	11 158	246	505	7 403	20 386	12 197	32 694	1 177
3328	Coating, engraving, heat treating, & allied activities .	-	26	9	477	15 065	387	795	9 825	32 107	9 555	41 882	2 652
33281	Coating, engraving, heat treating, & allied activities .....	-	26	9	477	15 065	387	795	9 825	32 107	9 555	41 882	2 652

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.</b>												
	<b>Worcester, MA—CT PMSA—Con.</b>												
<b>31-33</b>	<b>Manufacturing—Con.</b>												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg.....	—	21	10	1 553	65 649	998	2 118	34 598	158 603	126 225	290 771	7 770
33291	Metal valve mfg.....	—	9	5	1 102	48 455	681	1 404	24 490	117 722	99 327	222 867	5 291
332911	Industrial valve mfg....	—	6	4	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	—	12	5	451	17 194	317	714	10 108	40 881	26 898	67 904	2 479
332999	All other miscellaneous fabricated metal product mfg.....	—	7	3	294	10 924	198	410	6 223	28 853	18 902	47 901	1 659
333	Machinery mfg.....	3	117	49	4 628	194 380	2 794	5 716	95 090	417 324	287 531	698 313	23 756
3331	Agriculture, construction, & mining machinery mfg....	—	4	4	e	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	3	18	8	858	38 896	461	967	16 456	93 400	73 699	161 339	4 666
33322	Plastics & rubber industry machinery mfg.....	—	5	4	e	D	D	D	D	D	D	D	450
333220	Plastics & rubber industry machinery mfg.....	—	5	4	e	D	D	D	D	D	D	D	450
33329	Other industrial machinery mfg.....	4	12	4	601	29 222	319	695	12 531	74 299	61 350	129 798	4 216
3333	Commercial & service industry machinery mfg ..	1	9	5	677	20 953	492	957	11 827	54 655	23 653	77 276	3 344
33331	Commercial & service industry machinery mfg.....	1	9	5	677	20 953	492	957	11 827	54 655	23 653	77 276	3 344
333314	Optical instrument & lens mfg.....	1	6	4	f	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg.....	5	55	17	1 928	86 489	1 158	2 344	46 048	186 914	111 834	294 227	9 414
33351	Metalworking machinery mfg.....	5	55	17	1 928	86 489	1 158	2 344	46 048	186 914	111 834	294 227	9 414
333511	Industrial mold mfg....	4	15	4	285	16 042	224	526	10 422	28 233	9 332	36 434	2 174
333514	Special die & tool, die set, jig, & fixture mfg ..	2	23	7	363	15 722	268	551	9 788	28 375	10 543	38 535	2 519
333515	Cutting tool & machine tool accessory mfg ..	—	7	1	e	D	D	D	D	D	D	D	D
333516	Rolling mill machinery & equipment mfg.....	9	2	1	f	D	D	D	D	D	D	D	D
3336	Engine, turbine, & power transmission equipment mfg.....	1	6	3	293	13 247	172	372	6 609	12 814	20 359	33 106	1 082
33361	Engine, turbine, & power transmission equipment mfg.....	1	6	3	293	13 247	172	372	6 609	12 814	20 359	33 106	1 082
3339	Other general-purpose machinery mfg.....	1	21	10	534	22 423	290	622	8 838	51 694	38 190	87 792	4 475
33399	All other general-purpose machinery mfg.....	1	16	7	436	18 618	221	480	6 507	42 531	30 092	71 218	3 137
333999	All other miscellaneous general-purpose machinery mfg.....	1	10	7	386	16 722	187	408	5 345	38 026	27 749	64 404	2 798
334	Computer & electronic product mfg.....	—	44	20	4 210	196 517	2 090	3 991	61 408	545 761	436 981	976 182	52 067
3341	Computer & peripheral equipment mfg.....	—	6	1	g	D	D	D	D	D	D	D	D
33411	Computer & peripheral equipment mfg.....	—	6	1	g	D	D	D	D	D	D	D	D
334112	Computer storage device mfg.....	—	1	1	g	D	D	D	D	D	D	D	D
3342	Communications equipment mfg.....	—	5	3	e	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg.....	—	4	2	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg.....	—	4	2	e	D	D	D	D	D	D	D	D
3343	Audio & video equipment mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
33431	Audio & video equipment mfg.....	—	3	2	f	D	D	D	D	D	D	D	D
334310	Audio & video equipment mfg.....	—	3	2	f	D	D	D	D	D	D	D	D

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

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NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>BOSTON—WORCESTER—LAWRENCE, MA—NH—ME—CT CMSA—Con.</b>												
	<b>Worcester, MA—CT PMSA—Con.</b>												
<b>31-33</b>	<b>Manufacturing—Con.</b>												
334	Computer & electronic product mfg—Con.												
3344	Semiconductor & other electronic component mfg .....	-	15	9	1 360	59 107	867	1 795	28 125	145 850	141 757	274 566	18 679
33441	Semiconductor & other electronic component mfg .....	-	15	9	1 360	59 107	867	1 795	28 125	145 850	141 757	274 566	18 679
334413	Semiconductor & related device mfg...	-	4	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg .....	4	13	4	378	12 591	193	332	4 602	27 737	21 345	51 947	D
33451	Navigational, measuring, medical, & control instruments mfg .....	4	13	4	378	12 591	193	332	4 602	27 737	21 345	51 947	D
335	Electrical equipment, appliance, & component mfg .....	3	24	17	1 883	83 906	1 214	2 446	39 732	202 108	184 922	386 797	13 153
3359	Other electrical equipment & component mfg .....	3	16	13	1 589	72 061	1 044	2 113	34 990	168 685	166 069	334 876	D
33592	Communication & energy wire & cable mfg .....	3	10	10	1 336	61 142	904	1 797	30 626	141 144	147 072	286 982	10 659
335929	Other communication & energy wire mfg ...	3	9	9	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg .....	3	11	5	313	10 911	156	294	4 332	19 567	20 610	41 291	1 359
337	Furniture & related product mfg .....	-	30	9	1 129	36 757	874	1 549	21 357	69 486	76 317	145 385	5 148
3371	Household & institutional furniture & kitchen cabinet mfg .....	1	17	3	e	D	D	D	D	D	D	D	D
33712	Household & institutional furniture mfg .....	1	12	3	295	7 999	243	427	5 746	10 900	8 525	19 183	287
3372	Office furniture (including fixtures) mfg .....	-	11	6	803	27 887	604	1 062	14 981	56 670	65 820	122 290	4 678
33721	Office furniture (including fixtures) mfg .....	-	11	6	803	27 887	604	1 062	14 981	56 670	65 820	122 290	4 678
337214	Office furniture (except wood) mfg .....	-	1	1	e	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, & locker mfg .....	2	6	3	285	8 967	224	483	6 063	15 537	10 420	25 692	D
339	Miscellaneous mfg .....	1	66	18	2 031	59 600	1 322	2 620	27 933	138 954	74 212	217 713	7 465
3391	Medical equipment & supplies mfg .....	1	29	11	1 465	44 894	941	1 873	20 165	104 643	45 593	154 831	6 270
33911	Medical equipment & supplies mfg .....	1	29	11	1 465	44 894	941	1 873	20 165	104 643	45 593	154 831	6 270
339115	Ophthalmic goods mfg .....	-	6	5	1 204	38 235	746	1 514	16 224	78 161	35 703	118 664	5 234
3399	Other miscellaneous mfg ..	3	37	7	566	14 706	381	747	7 768	34 311	28 619	62 882	1 195
	<b>HARTFORD, CT MSA</b>												
<b>31-33</b>	<b>Manufacturing ....</b>	<b>1</b>	<b>2 075</b>	<b>708</b>	<b>89 573</b>	<b>3 757 220</b>	<b>55 839</b>	<b>115 718</b>	<b>1 854 335</b>	<b>8 340 382</b>	<b>6 767 791</b>	<b>14 925 166</b>	<b>561 946</b>
311	Food mfg .....	1	106	28	2 189	57 777	1 432	2 562	30 848	147 539	323 814	462 800	8 524
3115	Dairy product mfg .....	-	11	4	601	21 114	353	733	10 943	46 242	176 498	221 941	D
31151	Dairy product (except frozen) mfg .....	-	5	3	e	D	D	D	D	D	D	D	D
311511	Fluid milk mfg .....	-	2	2	e	D	D	D	D	D	D	D	D
3116	Meat product mfg .....	1	15	5	419	12 626	307	636	7 522	35 583	65 697	93 429	1 683
31161	Animal slaughtering & processing .....	1	15	5	419	12 626	307	636	7 522	35 583	65 697	93 429	1 683
311612	Meat processed from carcasses .....	1	11	5	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg .....	5	61	12	742	12 847	466	659	6 568	29 952	19 602	49 717	1 210
31181	Bread & bakery product mfg .....	5	60	12	f	D	D	D	D	D	D	D	D
311811	Retail bakeries .....	5	46	5	397	5 840	234	296	2 899	12 229	7 516	19 752	563

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>31-33</b>	<b>HARTFORD, CT MSA—Con.</b>												
	<b>Manufacturing—Con.</b>												
313	Textile mills .....	-	18	8	1 484	54 257	1 099	2 400	33 541	121 623	143 834	267 571	15 565
3132	Fabric mills .....	-	11	4		D	D	D	D	D	D	D	D
31321	Broadwoven fabric mills ..	1	6	2	e	D	D	D	D	D	D	D	D
313210	Broadwoven fabric mills .....	1	6	2	e	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills ...	-	2	1	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills ..	-	2	1	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills .....	2	5	3	e	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills .....	2	4	3	326	11 068	229	468	6 111	19 552	26 906	47 440	D
313311	Broadwoven fabric finishing mills .....	-	2	2	e	D	D	D	D	D	D	D	D
314	Textile product mills .....	4	16	8	498	10 404	394	693	6 401	21 171	22 675	43 755	855
3149	Other textile product mills ..	6	8	4	292	6 946	220	383	4 207	15 088	17 079	32 198	D
31499	All other textile product mills .....	6	6	4	e	D	D	D	D	D	D	D	D
315	Apparel mfg .....	6	21	6	298	4 393	266	525	3 548	8 015	6 017	14 045	242
3152	Cut & sew apparel mfg ....	7	13	5	253	3 671	233	479	3 102	6 252	3 819	10 063	193
321	Wood product mfg .....	2	39	8	626	20 388	496	1 030	13 708	45 841	37 810	83 369	1 971
3219	Other wood product mfg ...	2	32	6	505	17 003	402	822	11 164	27 978	33 015	60 941	1 262
322	Paper mfg .....	-	23	15	1 409	55 974	1 027	2 128	33 734	121 100	134 822	253 703	7 247
3222	Converted paper product mfg .....	-	20	12	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg .....	-	14	10	890	34 085	644	1 265	19 910	58 719	83 666	140 922	2 919
322211	Corrugated & solid fiber box mfg .....	-	8	5	372	16 147	261	562	7 750	30 220	37 779	67 924	D
323	Printing & related support activities .....	2	220	52	5 112	179 641	3 505	7 086	104 601	378 965	238 836	617 386	24 360
3231	Printing & related support activities .....	2	220	52	5 112	179 641	3 505	7 086	104 601	378 965	238 836	617 386	24 360
32311	Printing .....	2	200	45	4 794	168 681	3 257	6 626	97 466	359 574	235 414	594 570	22 992
323110	Commercial lithographic printing ..	2	107	31	2 910	107 552	1 891	3 839	59 199	207 729	161 858	369 279	13 438
323113	Commercial screen printing .....	-	15	4	392	12 794	304	656	8 425	35 142	11 432	46 482	2 966
323114	Quick printing .....	-	50	2	759	25 048	592	1 261	17 246	49 625	28 193	77 782	3 793
323119	Other commercial printing .....	3	19	5	552	17 412	311	562	8 601	48 251	26 880	75 258	2 103
32312	Support activities for printing .....	2	20	7	318	10 960	248	460	7 135	19 391	3 422	22 816	1 368
325	Chemical mfg .....	5	36	13	1 619	68 918	851	1 754	29 415	164 604	264 609	435 572	D
3252	Resin, syn rubber, & artificial & syn fibers & filaments mfg .....	9	4	3	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg .....	2	9	3	855	39 218	414	833	14 528	59 828	56 050	115 260	3 137
32592	Explosives mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
325920	Explosives mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg .....	2	88	42	3 211	98 830	2 223	4 426	55 727	231 558	196 380	426 416	18 975
3261	Plastics product mfg .....	1	74	35	2 607	77 219	1 768	3 517	41 247	176 904	157 129	332 689	15 117
32611	Unsupported plastics film, sheet, & bag mfg ..	-	14	7	374	14 980	263	567	8 864	44 407	46 048	89 661	6 380
32619	Other plastics product mfg .....	1	49	22	1 907	52 876	1 261	2 494	27 041	98 100	63 388	161 048	5 822
326199	All other plastics product mfg .....	1	48	22	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg .....	3	14	7	604	21 611	455	909	14 480	54 654	39 251	93 727	3 858
32629	Other rubber product mfg .....	1	10	5	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg .....	1	49	16	1 132	39 878	837	1 752	23 905	111 553	81 627	190 214	7 459
3273	Cement & concrete product mfg .....	1	28	10	579	20 724	418	939	13 820	53 744	45 219	97 827	D
32739	Other concrete product mfg .....	-	9	5	271	9 017	192	380	5 556	24 887	12 603	36 143	561
327390	Other concrete product mfg .....	-	9	5	271	9 017	192	380	5 556	24 887	12 603	36 143	561
3279	Other nonmetallic mineral product mfg .....	1	12	4	e	D	D	D	D	D	D	D	3 971
32791	Abrasive product mfg ...	-	7	3	350	12 377	265	525	5 320	40 172	28 358	66 238	D
327910	Abrasive product mfg ..	-	7	3	350	12 377	265	525	5 320	40 172	28 358	66 238	D

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>HARTFORD, CT MSA—Con.</b>												
<b>31-33</b>	<b>Manufacturing—Con.</b>												
331	Primary metal mfg . . . . .	-	22	15	1 093	40 888	853	1 834	28 026	91 026	102 091	185 690	3 273
3312	Steel product mfg from purchased steel . . . . .	-	8	5	440	19 348	327	757	14 246	52 509	62 264	108 872	1 327
33122	Rolling & drawing of purchased steel . . . . .	-	8	5	440	19 348	327	757	14 246	52 509	62 264	108 872	1 327
331221	Cold-rolled steel shape mfg . . . . .	-	5	3	371	16 713	282	666	12 790	47 128	54 820	96 386	D
3315	Foundries . . . . .	-	11	9	484	15 758	395	799	9 850	25 053	18 861	43 114	1 667
33152	Nonferrous metal foundries . . . . .	-	9	7	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg . . . . .	-	661	219	20 456	792 485	14 572	30 481	477 009	1 717 037	992 834	2 714 228	105 004
3321	Forging & stamping . . . . .	1	45	24	2 715	104 130	1 847	4 072	63 558	159 238	123 023	281 980	8 559
33211	Forging & stamping . . . . .	1	45	24	2 715	104 130	1 847	4 072	63 558	159 238	123 023	281 980	8 559
332111	Iron & steel forging . . . . .	4	3	3	448	15 973	363	804	11 593	30 193	24 788	55 069	2 649
332116	Metal stamping . . . . .	-	33	17	1 430	55 102	1 171	2 488	37 400	109 862	76 649	186 803	4 100
332117	Powder metallurgy part mfg . . . . .	-	4	3	682	27 680	193	526	10 835	5 930	14 244	19 865	D
3322	Cutlery & handtool mfg . . . . .	-	21	8	1 247	57 670	833	1 628	32 453	192 460	76 862	265 064	4 336
33221	Cutlery & handtool mfg . . . . .	-	21	8	1 247	57 670	833	1 628	32 453	192 460	76 862	265 064	4 336
332212	Hand & edge tool mfg . . . . .	-	16	6	1 110	50 882	727	1 443	28 741	181 052	74 112	251 044	D
3323	Architectural & structural metals mfg . . . . .	1	60	17	1 446	51 398	919	1 905	27 966	114 946	104 498	218 163	4 951
33231	Plate work & fabricated structural product mfg . . . . .	1	25	5	475	17 641	341	673	10 843	41 649	32 865	75 127	1 758
332312	Fabricated structural metal mfg . . . . .	1	15	4	393	14 652	287	571	9 238	37 274	28 931	66 855	1 458
33232	Ornamental & architectural metal products mfg . . . . .	1	35	12	971	33 757	578	1 232	17 123	73 297	71 633	143 036	3 193
332321	Metal window & door mfg . . . . .	-	3	2	e	D	D	D	D	D	D	D	D
332322	Sheet metal work mfg . . . . .	3	22	6	374	15 139	228	454	7 678	25 746	22 377	46 427	1 559
3324	Boiler, tank, & shipping container mfg . . . . .	-	11	6	980	43 945	514	996	11 569	106 453	57 294	162 244	4 327
33242	Metal tank (heavy gauge) mfg . . . . .	-	3	1	f	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) mfg . . . . .	-	3	1	f	D	D	D	D	D	D	D	D
33243	Metal can, box, & other metal container (light gauge) mfg . . . . .	-	5	3	e	D	D	D	D	D	D	D	D
332439	Other metal container mfg . . . . .	-	4	3	e	D	D	D	D	D	D	D	2 882
3325	Hardware mfg . . . . .	-	18	9	1 733	68 673	1 429	2 862	50 642	170 360	96 426	269 515	5 489
33251	Hardware mfg . . . . .	-	18	9	1 733	68 673	1 429	2 862	50 642	170 360	96 426	269 515	5 489
332510	Hardware mfg . . . . .	-	18	9	1 733	68 673	1 429	2 862	50 642	170 360	96 426	269 515	5 489
3326	Spring & wire product mfg . . . . .	-	44	27	1 775	70 194	1 378	3 029	46 548	141 031	84 625	224 717	12 002
33261	Spring & wire product mfg . . . . .	-	44	27	1 775	70 194	1 378	3 029	46 548	141 031	84 625	224 717	12 002
332611	Spring (heavy gauge) mfg . . . . .	-	7	5	342	14 806	259	523	10 747	35 243	19 024	54 561	D
332612	Spring (light gauge) mfg . . . . .	1	24	16	1 077	41 137	851	1 865	26 336	60 766	45 052	105 462	6 052
332618	Other fabricated wire product mfg . . . . .	-	13	6	356	14 251	268	641	9 465	45 022	20 549	64 694	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg . . . . .	-	326	70	5 501	216 264	4 089	8 874	141 808	390 421	247 496	642 133	36 357
33271	Machine shops . . . . .	1	237	38	3 118	124 243	2 266	4 813	80 545	221 324	132 970	352 161	16 524
332710	Machine shops . . . . .	1	237	38	3 118	124 243	2 266	4 813	80 545	221 324	132 970	352 161	16 524
33272	Turned product & screw, nut, & bolt mfg . . . . .	-	89	32	2 383	92 021	1 823	4 061	61 263	169 097	114 526	289 972	19 833
332721	Precision turned product mfg . . . . .	-	70	23	1 794	67 589	1 398	3 053	44 677	121 129	70 533	197 176	16 171
332722	Bolt, nut, screw, rivet, & washer mfg . . . . .	-	19	9	589	24 432	425	1 008	16 586	47 968	43 993	92 796	3 662
3328	Coating, engraving, heat treating, & allied activities . . . . .	-	87	33	2 049	73 452	1 485	3 119	41 035	183 591	64 965	252 141	15 457
33281	Coating, engraving, heat treating, & allied activities . . . . .	-	87	33	2 049	73 452	1 485	3 119	41 035	183 591	64 965	252 141	15 457
332811	Metal heat treating . . . . .	3	17	6	408	15 176	318	674	8 852	35 010	7 589	42 666	1 627
332812	Metal coating/engraving (exc jewelry/silverware)/allied services . . . . .	-	26	9	601	21 496	431	914	11 727	53 487	18 881	71 720	9 898
332813	Electroplating, plating, polishing, anodizing, & coloring . . . . .	-	44	18	1 040	36 780	736	1 531	20 456	95 094	38 495	137 755	3 932

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	<b>HARTFORD, CT MSA—Con.</b>												
<b>31-33</b>	<b>Manufacturing—Con.</b>												
332	Fabricated metal product mfg—Con.												
3329	Other fabricated metal product mfg . . . . .	—	49	25	3 010	106 759	2 078	3 996	61 430	258 537	137 645	398 271	13 526
33291	Metal valve mfg . . . . .	—	15	13	1 478	47 239	965	1 970	23 923	120 509	60 556	182 139	5 457
332911	Industrial valve mfg . . . . .	—	7	5	f	D	D	D	D	D	D	D	D
332912	Fluid power valve & hose fitting mfg . . . . .	—	5	5	406	13 135	274	566	8 152	44 900	16 683	61 598	D
332913	Plumbing fixture fitting & trim mfg . . . . .	—	2	2	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg . . . . .	1	34	12	1 532	59 520	1 113	2 026	37 507	138 028	77 089	216 132	8 069
332991	Ball & roller bearing mfg . . . . .	2	8	4	340	13 273	277	640	9 820	45 426	16 451	62 497	2 277
332994	Small arms mfg . . . . .	—	3	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg . . . . .	1	17	6	e	D	D	D	D	D	D	D	D
333	Machinery mfg . . . . .	—	260	77	9 717	407 966	5 764	12 245	209 187	1 087 460	677 926	1 753 942	45 276
3332	Industrial machinery mfg . . . . .	—	39	18	2 400	96 102	1 213	2 587	42 935	364 249	221 455	587 754	4 230
33329	Other industrial machinery mfg . . . . .	—	32	16	2 328	93 612	1 170	2 514	41 810	358 726	215 285	576 377	4 124
333292	Textile machinery mfg . . . . .	—	3	2	f	D	D	D	D	D	D	D	D
333294	Food product machinery mfg . . . . .	—	2	2	e	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg . . . . .	—	21	7	917	42 005	506	1 083	18 257	129 549	115 824	246 310	D
3333	Commercial & service industry machinery mfg . . . . .	1	11	6	853	35 739	412	665	13 365	101 771	54 486	152 776	7 876
33331	Commercial & service industry machinery mfg . . . . .	1	11	6	853	35 739	412	665	13 365	101 771	54 486	152 776	7 876
333314	Optical instrument & lens mfg . . . . .	—	2	2	e	D	D	D	D	D	D	D	D
333319	Other commercial & service industry machinery mfg . . . . .	1	5	2	340	12 731	174	359	5 392	31 561	16 902	48 474	D
3334	Ventilation, heating, AC, & commercial refrigeration equip mfg . . . . .	—	8	5	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, AC, & commercial refrigeration equip mfg . . . . .	—	8	5	e	D	D	D	D	D	D	D	D
333415	AC & warm air heating & commercial industrial refig equip mfg . . . . .	—	3	2	287	9 502	205	473	6 221	15 370	25 768	38 887	D
3335	Metalworking machinery mfg . . . . .	1	142	29	2 656	119 554	1 735	3 565	64 815	226 670	161 776	383 122	17 603
33351	Metalworking machinery mfg . . . . .	1	142	29	2 656	119 554	1 735	3 565	64 815	226 670	161 776	383 122	17 603
333511	Industrial mold mfg . . . . .	—	15	4	269	13 525	205	445	9 038	20 575	7 027	27 274	1 367
333512	Machine tool (metal cutting types) mfg . . . . .	—	8	5	562	28 361	318	608	13 322	69 790	94 343	159 596	D
333514	Special die & tool, die set, jig, & fixture mfg . . . . .	1	61	7	787	38 811	511	1 083	20 530	60 334	19 052	79 184	4 008
333515	Cutting tool & machine tool accessory mfg . . . . .	1	52	9	777	27 790	543	1 131	16 839	56 998	28 333	85 539	1 935
333518	Other metalworking machinery mfg . . . . .	5	6	4	261	11 067	158	298	5 086	18 973	13 021	31 529	D
3336	Engine, turbine, & power transmission equipment mfg . . . . .	—	14	7	2 154	95 701	1 327	3 235	54 622	243 188	123 574	363 416	9 120
33361	Engine, turbine, & power transmission equipment mfg . . . . .	—	14	7	2 154	95 701	1 327	3 235	54 622	243 188	123 574	363 416	9 120
333613	Mechanical power transmission equipment mfg . . . . .	2	5	4	580	20 022	430	985	11 819	56 171	28 685	83 065	D
333618	Other engine equipment mfg . . . . .	—	3	2	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg . . . . .	1	44	11	1 141	43 572	718	1 428	22 895	121 131	74 379	196 497	5 111
33399	All other general-purpose machinery mfg . . . . .	1	40	11	1 095	41 696	696	1 380	22 272	115 951	68 049	184 993	4 971
333999	All other miscellaneous general-purpose machinery mfg . . . . .	—	21	6	690	26 693	481	966	15 758	86 915	42 815	129 172	3 673



**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>31-33</b>	<b>HARTFORD, CT MSA—Con.</b>												
	<b>Manufacturing—Con.</b>												
334	Computer & electronic product mfg . . . . .	2	105	57	6 186	228 233	3 537	6 841	102 466	527 138	319 439	845 968	47 531
3341	Computer & peripheral equipment mfg . . . . .	2	8	5	694	37 824	225	479	11 127	83 214	44 866	127 768	7 056
33411	Computer & peripheral equipment mfg . . . . .	2	8	5	694	37 824	225	479	11 127	83 214	44 866	127 768	7 056
334119	Other computer peripheral equipment mfg . . . . .	2	5	4	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg . . . . .	1	13	7	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg . . . . .	—	5	3	345	9 173	180	210	3 571	39 033	13 407	51 668	D
334220	Radio & TV broadcasting & wireless communications equipment mfg . . . . .	—	5	3	345	9 173	180	210	3 571	39 033	13 407	51 668	D
3344	Semiconductor & other electronic component mfg . . . . .	3	37	22	2 448	73 079	1 628	3 249	37 324	159 026	130 015	283 867	17 540
33441	Semiconductor & other electronic component mfg . . . . .	3	37	22	2 448	73 079	1 628	3 249	37 324	159 026	130 015	283 867	17 540
334412	Bare printed circuit board mfg . . . . .	—	7	2	f	D	D	D	D	D	D	D	D
334416	Electronic coil, transformer, & other inductor mfg . . . . .	—	6	4	474	9 389	334	654	5 007	16 550	9 434	25 990	659
334418	Printed circuit assembly (electronic assembly) mfg . . . . .	—	4	3	277	8 430	135	302	2 915	21 537	25 479	47 144	D
334419	Other electronic component mfg . . . . .	8	9	8	812	28 150	453	977	12 963	49 130	58 619	97 788	4 393
3345	Navigational, measuring, medical, & control instruments mfg . . . . .	2	44	20	1 999	72 455	1 062	2 001	30 856	158 268	81 307	248 323	5 915
33451	Navigational, measuring, medical, & control instruments mfg . . . . .	2	44	20	1 999	72 455	1 062	2 001	30 856	158 268	81 307	248 323	5 915
334511	Search, detection, navigation, & guidance instrument mfg . . . . .	3	6	2	353	11 912	174	300	5 136	26 855	8 173	43 505	766
334513	Industrial process control instrument mfg . . . . .	1	11	5	811	29 250	377	705	11 071	64 760	38 197	103 145	2 096
3346	Mfg & reproducing magnetic & optical media . . . . .	—	2	2	e	D	D	D	D	D	D	D	D
33461	Mfg & reproducing magnetic & optical media . . . . .	—	2	2	e	D	D	D	D	D	D	D	D
334611	Software reproducing . . . . .	—	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg . . . . .	1	58	24	4 631	191 292	2 754	5 587	90 328	475 230	348 886	805 556	35 193
3352	Household appliance mfg . . . . .	—	3	3	e	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg . . . . .	—	3	3	e	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg . . . . .	—	3	3	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg . . . . .	—	26	8	g	D	D	D	D	D	D	D	7 542
33531	Electrical equipment mfg . . . . .	—	26	8	g	D	D	D	D	D	D	D	7 542
335312	Motor & generator mfg . . . . .	—	4	3	687	22 141	422	873	11 224	50 979	27 948	78 917	D
335313	Switchgear & switchboard apparatus mfg . . . . .	—	4	1	f	D	D	D	D	D	D	D	D
335314	Relay & industrial control mfg . . . . .	2	18	4	321	13 155	136	258	4 098	27 987	13 365	41 282	293
3359	Other electrical equipment & component mfg . . . . .	2	26	12	2 521	109 223	1 620	3 282	57 478	300 295	239 049	523 496	27 436
33592	Communication & energy wire & cable mfg . . . . .	1	4	4	816	33 251	554	1 180	19 127	61 270	104 679	156 757	14 201
335929	Other communication & energy wire mfg . . . . .	1	4	4	816	33 251	554	1 180	19 127	61 270	104 679	156 757	14 201
33593	Wiring device mfg . . . . .	3	7	2	g	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg . . . . .	3	4	2	g	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg . . . . .	—	14	5	621	31 683	305	544	12 892	46 629	58 846	98 735	D
335999	All other miscellaneous electrical equipment & component mfg . . . . .	—	10	4	f	D	D	D	D	D	D	D	D

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>HARTFORD, CT MSA—Con.</b>												
<b>31-33</b>	<b>Manufacturing—Con.</b>												
336	Transportation equipment mfg .....	-	106	62	24 022	1 315 029	12 515	26 927	514 208	2 552 065	2 441 356	4 850 843	177 405
3363	Motor vehicle parts mfg ...	-	17	7	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg .....	-	3	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg .....	-	3	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg .....	-	80	54	22 587	1 273 205	11 443	25 102	489 349	2 458 993	2 287 111	4 605 025	167 195
33641	Aerospace product & parts mfg .....	-	80	54	22 587	1 273 205	11 443	25 102	489 349	2 458 993	2 287 111	4 605 025	167 195
336411	Aircraft mfg .....	-	4	4	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg ....	-	40	27	j	D	D	D	D	D	D	D	104 553
336413	Other aircraft part & auxiliary equipment mfg .....	-	35	22	i	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg...	-	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg .....	3	78	21	1 249	39 828	934	1 916	25 055	88 342	68 609	158 558	4 349
3371	Household & institutional furniture & kitchen cabinet mfg .....	3	50	6	446	12 768	361	688	9 557	25 707	18 646	44 305	D
33711	Wood kitchen cabinet & counter top mfg .....	1	30	3	270	8 180	219	399	6 306	16 580	9 695	26 367	389
337110	Wood kitchen cabinet & counter top mfg ...	1	30	3	270	8 180	219	399	6 306	16 580	9 695	26 367	389
3372	Office furniture (including fixtures) mfg .....	1	23	13	591	20 729	422	852	11 536	43 953	30 616	76 113	1 823
33721	Office furniture (including fixtures) mfg .....	1	23	13	591	20 729	422	852	11 536	43 953	30 616	76 113	1 823
337215	Showcase, partition, shelving, & locker mfg .....	2	12	6	250	8 474	172	324	4 829	17 706	11 430	30 652	620
339	Miscellaneous mfg .....	1	148	33	4 270	134 250	2 492	4 939	60 873	352 273	231 566	582 896	38 634
3391	Medical equipment & supplies mfg .....	1	56	12	1 300	52 181	1 042	2 178	27 966	98 180	36 809	135 613	23 843
33911	Medical equipment & supplies mfg .....	1	56	12	1 300	52 181	1 042	2 178	27 966	98 180	36 809	135 613	23 843
339112	Surgical & medical instrument mfg .....	-	10	5	729	33 263	599	1 403	18 341	57 538	27 504	85 426	19 933
3399	Other miscellaneous mfg ...	1	92	21	2 970	82 069	1 450	2 761	32 907	254 093	194 757	447 283	14 791
33993	Doll, toy, & game mfg ...	-	8	4	g	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg .....	-	6	4	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg .....	2	30	10	638	16 220	482	866	9 729	27 974	16 913	45 882	1 277
339999	All other miscellaneous mfg .....	4	13	4	295	6 445	224	382	3 729	10 151	8 589	19 789	D
	<b>NEW LONDON—NORWICH, CT—RI MSA</b>												
<b>31-33</b>	<b>Manufacturing ....</b>	-	<b>336</b>	<b>95</b>	<b>24 297</b>	<b>1 175 932</b>	<b>10 906</b>	<b>22 911</b>	<b>343 471</b>	<b>2 225 497</b>	<b>1 421 230</b>	<b>3 666 659</b>	<b>239 832</b>
	New London—Norwich, CT—RI MSA (CT Part) .....	1	290	80	22 772	1 127 397	9 749	20 541	310 382	2 108 059	1 314 210	3 438 210	233 138
	New London—Norwich, CT—RI MSA (RI Part) .....	-	46	15	1 525	48 535	1 157	2 370	33 089	117 438	107 020	228 449	6 694
311	Food mfg .....	6	25	2	372	9 810	221	441	5 212	20 861	76 167	96 469	D
313	Textile mills .....	-	14	10	1 118	34 612	873	1 832	24 665	114 165	110 915	228 273	6 810
3132	Fabric mills .....	-	9	5	578	19 676	465	996	15 349	46 913	67 945	117 760	D
31324	Knit fabric mills .....	-	3	3	359	12 872	298	571	10 037	38 382	52 436	92 089	D
313249	Other knit fabric & lace mills .....	-	3	3	359	12 872	298	571	10 037	38 382	52 436	92 089	D
3133	Textile & fabric finishing & fabric coating mills .....	-	5	5	540	14 936	408	836	9 316	67 252	42 970	110 513	D
31331	Textile & fabric finishing mills .....	-	5	5	540	14 936	408	836	9 316	67 252	42 970	110 513	D
313311	Broadwoven fabric finishing mills .....	-	5	5	540	14 936	408	836	9 316	67 252	42 970	110 513	D
322	Paper mfg .....	2	10	7	952	37 867	725	1 590	25 143	129 144	148 216	278 708	9 646
3221	Pulp, paper, & paperboard mills .....	2	3	3	427	18 480	324	772	13 082	90 823	109 868	199 394	D
32213	Paperboard mills .....	2	3	3	427	18 480	324	772	13 082	90 823	109 868	199 394	D
322130	Paperboard mills .....	2	3	3	427	18 480	324	772	13 082	90 823	109 868	199 394	D
3222	Converted paper product mfg .....	-	7	4	525	19 387	401	818	12 061	38 321	38 348	79 314	D
32222	Paper bag & coated & treated paper mfg .....	-	2	2	e	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>31-33</b>	<b>NEW LONDON-NORWICH, CT-RI MSA—Con.</b>												
	<b>Manufacturing—Con.</b>												
323	Printing & related support activities.....	1	36	7	1 080	37 676	847	1 591	26 855	82 005	71 686	152 563	4 934
3231	Printing & related support activities.....	1	36	7	1 080	37 676	847	1 591	26 855	82 005	71 686	152 563	4 934
32311	Printing.....	1	33	6	g	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	1	17	3	835	29 910	670	1 248	22 047	65 095	59 063	123 078	3 669
325	Chemical mfg.....	—	10	5	4 321	388 168	604	1 515	35 072	267 936	260 280	549 515	D
3254	Pharmaceutical & medicine mfg.....	—	2	2	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	—	2	2	h	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg.....	—	1	1	h	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	—	17	9	638	21 605	469	1 060	13 186	59 975	50 324	110 243	4 079
3261	Plastics product mfg.....	1	12	6	348	11 464	264	630	7 541	30 143	24 006	53 754	1 795
3262	Rubber product mfg.....	—	5	3	290	10 141	205	430	5 645	29 832	26 318	56 489	2 284
32629	Other rubber product mfg.....	—	4	3	e	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	—	7	3	991	29 892	798	1 555	21 684	80 743	49 421	129 196	6 994
3314	Nonferrous metal (except aluminum) production & processing.....	—	2	2	e	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, & alloying ...	—	2	2	e	D	D	D	D	D	D	D	D
3315	Foundries.....	—	4	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	—	2	1	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries.....	—	2	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	—	47	5	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product mfg.....	—	8	3	e	D	D	D	D	D	D	D	D
33291	Metal valve mfg.....	—	5	3	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	1	28	11	1 202	57 207	569	1 286	23 242	150 750	93 128	238 379	3 438
3332	Industrial machinery mfg ..	1	7	4	f	D	D	D	D	D	D	D	D
33322	Plastics & rubber industry machinery mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg.....	—	2	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	6	5	3	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	—	12	3	506	13 718	377	625	7 577	54 002	52 285	105 317	D
3345	Navigational, measuring, medical, & control instruments mfg.....	—	5	2	e	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	—	5	2	e	D	D	D	D	D	D	D	D
334514	Totalizing fluid meter & counting device mfg ..	—	1	1	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	—	14	10	1 322	40 425	965	1 939	18 475	117 374	79 004	196 114	4 407
3359	Other electrical equipment & component mfg.....	—	5	4	933	27 718	682	1 420	11 686	49 660	40 659	90 584	3 565
33592	Communication & energy wire & cable mfg.....	—	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	9	4	i	D	D	D	D	D	D	D	11 704
3364	Aerospace product & parts mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	—	2	2	e	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg.....	—	1	1	e	D	D	D	D	D	D	D	D
3366	Ship & boat building.....	—	3	2	i	D	D	D	D	D	D	D	D
33661	Ship & boat building.....	—	3	2	i	D	D	D	D	D	D	D	D
336611	Ship building & repairing.....	—	3	2	i	D	D	D	D	D	D	D	D

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[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

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			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>31-33</b>	<b>NEW LONDON–NORWICH, CT–RI MSA—Con.</b>												
	<b>Manufacturing—Con.</b>												
339	Miscellaneous mfg.....	4	35	9	710	19 497	531	1 072	11 560	49 573	21 138	69 340	D
3399	Other miscellaneous mfg ..	3	24	5	479	13 196	376	779	8 701	33 987	16 956	49 797	D
<b>31-33</b>	<b>NEW YORK–NORTHERN NEW JERSEY–LONG ISLAND, NY–NJ–CT–PA CMSA</b>												
	<b>Manufacturing ....</b>	<b>1</b>	<b>29 610</b>	<b>8 242</b>	<b>837 259</b>	<b>29 316 270</b>	<b>556 831</b>	<b>1 099 707</b>	<b>14 974 104</b>	<b>88 559 145</b>	<b>75 447 144</b>	<b>164 000 119</b>	<b>5 662 912</b>
	New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA (CT Part).....	1	3 136	1 014	126 073	5 105 182	77 123	159 649	2 450 980	15 589 132	10 842 000	26 362 516	999 073
	New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA (NJ Part).....	1	9 881	3 185	336 041	12 775 550	224 381	456 137	6 591 608	41 940 178	37 053 679	78 851 460	2 605 396
	New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA (NY Part).....	2	16 565	4 039	374 810	11 425 439	255 150	483 656	5 928 336	31 004 045	27 448 245	58 649 812	2 055 055
	New York–Northern New Jersey–Long Island, NY–NJ–CT–PA CMSA (PA Part).....	—	28	4	335	10 099	177	265	3 180	25 790	103 220	136 331	3 388
311	Food mfg.....	2	2 571	447	l	D	D	D	D	D	D	D	D
312	Beverage & tobacco product mfg.....	2	100	32	i	D	D	D	D	D	D	D	D
313	Textile mills.....	3	922	248	j	D	D	D	D	D	D	D	D
314	Textile product mills.....	2	809	173	j	D	D	D	D	D	D	D	D
315	Apparel mfg.....	3	4 418	1 362	m	D	D	D	D	D	D	D	D
316	Leather & allied product mfg ..	1	230	55	i	D	D	D	D	D	D	D	D
321	Wood product mfg.....	4	326	66	h	D	D	D	D	D	D	D	D
322	Paper mfg.....	1	490	276	k	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	4	3 936	722	l	D	D	D	D	D	D	D	D
324	Petroleum & coal products mfg.....	1	118	27	h	D	D	D	D	D	D	D	D
325	Chemical mfg.....	1	1 205	587	l	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	2	1 052	540	l	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	2	617	176	j	D	D	D	D	D	D	D	D
331	Primary metal mfg.....	—	286	135	j	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	1	3 722	960	80 405	2 878 544	58 220	121 941	1 709 920	6 078 011	4 482 749	10 584 180	356 089
333	Machinery mfg.....	1	1 672	489	k	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	1	1 402	576	l	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	1	637	297	k	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	—	450	166	k	D	D	D	D	D	D	D	D
337	Furniture & related product mfg.....	3	1 452	259	j	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	1	3 195	649	l	D	D	D	D	D	D	D	D

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.</b>												
	<b>Bridgeport, CT PMSA</b>												
<b>31-33</b>	<b>Manufacturing . . . .</b>	<b>1</b>	<b>843</b>	<b>272</b>	<b>37 092</b>	<b>1 581 671</b>	<b>22 815</b>	<b>46 622</b>	<b>798 365</b>	<b>3 502 157</b>	<b>2 614 401</b>	<b>6 278 436</b>	<b>225 120</b>
311	Food mfg . . . . .	6	39	10	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg . . . .	7	25	8	424	7 919	253	533	4 016	13 460	22 906	37 184	D
31181	Bread & bakery product mfg . . . . .	7	25	8	424	7 919	253	533	4 016	13 460	22 906	37 184	D
311811	Retail bakeries . . . . .	2	20	6	253	3 350	125	183	1 627	5 971	4 691	10 659	499
313	Textile mills . . . . .	5	5	3	837	25 544	689	1 454	17 229	44 650	50 508	95 569	D
3133	Textile & fabric finishing & fabric coating mills . . . . .	5	5	3	837	25 544	689	1 454	17 229	44 650	50 508	95 569	D
31331	Textile & fabric finishing mills . . . . .	9	3	1	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills . . . . .	9	2	1	f	D	D	D	D	D	D	D	D
322	Paper mfg . . . . .	—	13	8	451	16 666	332	762	8 899	38 992	48 984	88 535	1 720
3222	Converted paper product mfg . . . . .	—	13	8	451	16 666	332	762	8 899	38 992	48 984	88 535	1 720
323	Printing & related support activities . . . . .	2	98	23	1 402	48 976	1 048	2 109	31 231	97 625	51 641	152 954	4 426
3231	Printing & related support activities . . . . .	2	98	23	1 402	48 976	1 048	2 109	31 231	97 625	51 641	152 954	4 426
32311	Printing . . . . .	2	85	19	1 238	42 733	936	1 886	27 328	83 664	48 010	135 574	3 986
323110	Commercial lithographic printing . . . . .	2	42	15	870	31 395	672	1 404	20 599	60 420	30 834	95 159	2 494
325	Chemical mfg . . . . .	2	26	9	496	21 898	240	416	7 599	70 490	74 369	140 609	D
326	Plastics & rubber products mfg . . . . .	1	46	22	2 433	81 482	1 698	3 662	49 374	212 395	155 008	365 354	21 585
3261	Plastics product mfg . . . . .	1	37	15	1 821	62 291	1 245	2 696	38 421	171 183	129 689	299 270	D
32619	Other plastics product mfg . . . . .	2	29	13	g	D	D	D	D	D	D	D	D
326199	All other plastics product mfg . . . . .	2	29	13	g	D	D	D	D	D	D	D	D
3262	Rubber product mfg . . . . .	—	9	7	612	19 191	453	966	10 953	41 212	25 319	66 084	D
32629	Other rubber product mfg . . . . .	—	9	7	612	19 191	453	966	10 953	41 212	25 319	66 084	D
326299	All other rubber product mfg . . . . .	—	4	3	418	13 436	304	666	7 301	29 160	16 467	45 200	D
331	Primary metal mfg . . . . .	—	14	8	981	39 759	745	1 658	26 324	81 282	133 035	213 528	4 564
3314	Nonferrous metal (except aluminum) production & processing . . . . .	—	5	4	811	35 201	617	1 411	23 401	71 150	124 826	195 479	3 895
33142	Copper rolling, drawing, extruding, & alloying . . . . .	—	2	2	e	D	D	D	D	D	D	D	D
331421	Copper rolling, drawing, & extruding . . . . .	—	2	2	e	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying . . . . .	—	3	2	e	D	D	D	D	D	D	D	D
331491	Other nonferrous metal rolling, drawing, & extruding . . . . .	—	3	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg . . . . .	1	231	66	5 938	239 798	4 220	8 907	132 078	569 021	241 955	801 078	37 071
3321	Forging & stamping . . . . .	—	14	9	939	29 404	652	1 427	19 076	62 605	32 028	91 640	2 942
33211	Forging & stamping . . . . .	—	14	9	939	29 404	652	1 427	19 076	62 605	32 028	91 640	2 942
332116	Metal stamping . . . . .	—	13	8	f	D	D	D	D	D	D	D	D
3322	Cutlery & handtool mfg . . . . .	—	8	6	1 202	46 989	857	1 739	25 303	215 696	41 774	248 944	D
33221	Cutlery & handtool mfg . . . . .	—	8	6	1 202	46 989	857	1 739	25 303	215 696	41 774	248 944	D
332211	Cutlery & flatware (except precious) mfg . . . . .	—	5	3	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg . . . . .	—	3	3	e	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg . . . . .	3	33	8	463	17 445	351	710	10 547	31 339	22 943	53 990	D
33232	Ornamental & architectural metal products mfg . . . . .	4	25	6	384	14 865	291	596	8 850	26 327	18 029	44 221	2 776
332322	Sheet metal work mfg . . . . .	4	18	5	308	12 681	231	477	7 327	21 929	14 297	36 231	2 643

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>31-33</b>	<b>NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.</b>												
	<b>Bridgeport, CT PMSA—Con.</b>												
	<b>Manufacturing—Con.</b>												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg .....	—	111	20	1 731	88 091	1 232	2 580	42 801	151 299	70 576	221 970	8 039
33271	Machine shops .....	1	91	14	961	46 018	748	1 513	28 344	77 116	26 163	102 283	3 315
332710	Machine shops .....	1	91	14	961	46 018	748	1 513	28 344	77 116	26 163	102 283	3 315
33272	Turned product & screw, nut, & bolt mfg .....	—	20	6	770	42 073	484	1 067	14 457	74 183	44 413	119 687	4 724
332721	Precision turned product mfg .....	—	15	4	369	15 975	214	447	7 161	32 193	9 932	41 672	1 423
332722	Bolt, nut, screw, rivet, & washer mfg .....	—	5	2	401	26 098	270	620	7 296	41 990	34 481	78 015	3 301
3328	Coating, engraving, heat treating, & allied activities ..	—	30	11	620	23 831	501	1 118	14 952	34 524	27 227	63 893	D
33281	Coating, engraving, heat treating, & allied activities .....	—	30	11	620	23 831	501	1 118	14 952	34 524	27 227	63 893	D
332813	Electroplating, plating, polishing, anodizing, & coloring .....	1	17	8	406	16 089	333	754	10 109	23 382	7 849	31 270	1 298
3329	Other fabricated metal product mfg .....	2	27	10	856	30 076	536	1 163	17 282	64 346	39 676	103 639	4 306
33299	All other fabricated metal product mfg .....	2	27	10	856	30 076	536	1 163	17 282	64 346	39 676	103 639	4 306
332999	All other miscellaneous fabricated metal product mfg .....	1	16	8	569	20 634	348	725	10 785	40 895	28 137	67 589	2 570
333	Machinery mfg .....	2	111	37	3 547	147 888	2 059	4 060	75 979	262 379	254 965	530 888	17 929
3332	Industrial machinery mfg ..	4	13	10	672	34 012	353	780	14 816	65 591	59 501	128 281	D
33329	Other industrial machinery mfg .....	2	11	8	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg .....	4	7	4	291	13 125	113	228	3 841	23 086	13 882	38 249	1 231
3333	Commercial & service industry machinery mfg ..	2	10	7	498	15 876	219	342	4 912	39 096	28 328	67 199	D
33331	Commercial & service industry machinery mfg .....	2	10	7	498	15 876	219	342	4 912	39 096	28 328	67 199	D
333313	Office machinery mfg ..	4	4	3	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg .....	—	67	13	1 956	81 135	1 178	2 310	46 308	131 204	130 740	262 540	7 951
33351	Metalworking machinery mfg .....	—	67	13	1 956	81 135	1 178	2 310	46 308	131 204	130 740	262 540	7 951
333512	Machine tool (metal cutting types) mfg ...	—	4	2	f	D	D	D	D	D	D	D	2 588
333514	Special die & tool, die set, jig, & fixture mfg ..	1	33	4	394	17 804	291	551	9 826	42 420	10 675	51 321	1 916
3339	Other general-purpose machinery mfg .....	2	17	6	e	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg .....	2	61	22	3 792	152 927	2 143	4 262	77 502	302 423	253 372	556 893	24 835
3342	Communications equipment mfg .....	3	6	3	1 126	54 750	516	988	24 543	102 713	153 997	256 468	D
33421	Telephone apparatus mfg .....	1	5	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg .....	1	5	2	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg .....	9	1	1	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg .....	9	1	1	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg .....	4	28	9	1 177	36 970	724	1 486	18 888	78 202	37 610	116 927	12 038
33441	Semiconductor & other electronic component mfg .....	4	28	9	1 177	36 970	724	1 486	18 888	78 202	37 610	116 927	12 038
334418	Printed circuit assembly (electronic assembly) mfg .....	—	3	3	260	6 710	182	298	3 607	14 711	12 922	29 345	D
334419	Other electronic component mfg .....	1	13	5	742	20 844	430	997	11 305	23 986	21 457	45 685	2 755

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.</b>												
	<b>Bridgeport, CT PMSA—Con.</b>												
<b>31-33</b>	<b>Manufacturing—Con.</b>												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg .....	-	22	9	1 411	58 192	857	1 719	32 286	115 171	57 713	173 279	5 267
33451	Navigational, measuring, medical, & control instruments mfg .....	-	22	9	1 411	58 192	857	1 719	32 286	115 171	57 713	173 279	5 267
334513	Industrial process control instrument mfg .....	-	11	5	1 065	42 314	698	1 442	26 472	82 109	38 091	120 109	2 480
335	Electrical equipment, appliance, & component mfg .....	-	37	22	3 079	126 254	1 988	3 915	61 122	296 383	215 546	532 739	17 269
3351	Electric lighting equipment mfg .....	-	3	2	e	D	D	D	D	D	D	D	D
3352	Household appliance mfg..	-	2	2	e	D	D	D	D	D	D	D	D
33521	Small electrical appliance mfg .....	-	1	1	e	D	D	D	D	D	D	D	D
335211	Electric housewares & household fan mfg...	-	1	1	e	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	1	14	3	434	13 188	285	538	6 408	43 616	21 485	65 362	D
33531	Electrical equipment mfg .....	1	14	3	434	13 188	285	538	6 408	43 616	21 485	65 362	D
335314	Relay & industrial control mfg .....	1	7	2	266	8 921	153	285	3 582	23 164	11 833	35 201	686
3359	Other electrical equipment & component mfg .....	-	18	15	1 882	75 179	1 192	2 447	36 631	135 230	105 027	248 121	8 531
33593	Wiring device mfg .....	-	7	7	g	D	D	D	D	D	D	D	6 752
335931	Current-carrying wiring device mfg .....	-	5	5	312	10 436	236	455	7 236	21 490	11 721	33 196	D
335932	Noncurrent-carrying wiring device mfg ....	-	2	2	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg .....	-	7	5	428	13 646	286	509	6 366	39 162	26 643	66 094	D
335999	All other miscellaneous electrical equipment & component mfg .....	-	7	5	428	13 646	286	509	6 366	39 162	26 643	66 094	D
336	Transportation equipment mfg .....	-	22	13	10 208	532 421	5 177	10 443	240 252	1 109 131	882 344	2 129 220	D
3363	Motor vehicle parts mfg ...	-	6	4	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg .....	-	4	3	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg .....	-	3	2	e	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg .....	-	12	8	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg .....	-	12	8	i	D	D	D	D	D	D	D	D
336411	Aircraft mfg .....	-	3	3	i	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg ....	-	4	2	f	D	D	D	D	D	D	D	183
339	Miscellaneous mfg .....	-	62	11	2 266	101 916	1 335	2 645	44 883	329 296	145 793	474 251	29 356
3391	Medical equipment & supplies mfg .....	2	34	5	745	31 064	487	914	14 350	69 645	26 264	94 287	D
33911	Medical equipment & supplies mfg .....	2	34	5	745	31 064	487	914	14 350	69 645	26 264	94 287	D
339112	Surgical & medical instrument mfg .....	2	8	3	486	20 243	346	699	11 351	47 039	18 030	63 358	2 907
3399	Other miscellaneous mfg ..	-	28	6	1 521	70 852	848	1 731	30 533	259 651	119 529	379 964	D
33999	All other miscellaneous mfg .....	-	10	3	g	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg .....	-	5	1	g	D	D	D	D	D	D	D	D

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.</b>												
	<b>Danbury, CT PMSA</b>												
<b>31-33</b>	<b>Manufacturing ....</b>	-	<b>354</b>	<b>112</b>	<b>14 774</b>	<b>662 650</b>	<b>8 441</b>	<b>17 349</b>	<b>284 039</b>	<b>2 210 344</b>	<b>1 558 024</b>	<b>3 772 667</b>	<b>115 679</b>
311	Food mfg.....	-	19	3	362	14 530	209	468	7 739	49 994	88 352	138 397	3 215
322	Paper mfg.....	-	8	6	1 594	73 161	1 326	2 743	58 773	569 401	361 867	932 103	7 639
3221	Pulp, paper, & 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
3222	Converted paper product mfg.....	1	7	5	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg.....	1	5	4	e	D	D	D	D	D	D	D	D
322211	Corrugated & solid fiber box mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	37	6	700	28 270	473	1 027	17 513	52 707	52 507	106 396	3 064
3231	Printing & related support activities.....	1	37	6	700	28 270	473	1 027	17 513	52 707	52 507	106 396	3 064
32311	Printing.....	1	33	5	636	25 891	419	913	15 745	47 955	51 417	100 553	D
323110	Commercial lithographic printing..	-	17	4	533	22 561	342	769	13 608	41 427	46 567	89 169	2 508
325	Chemical mfg.....	-	21	12	2 603	154 763	449	907	14 584	656 224	365 568	1 018 752	51 241
3254	Pharmaceutical & medicine mfg.....	-	5	2	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	5	2	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	-	4	2	g	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	1	4	3	407	13 668	156	301	4 732	111 553	117 676	228 966	D
32599	All other chemical product & preparation mfg.....	-	3	2	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg.....	-	11	6	f	D	D	D	D	D	D	D	D
3261	Plastics product mfg.....	1	10	5	e	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	1	9	5	492	16 771	401	729	12 435	33 890	27 219	61 592	5 197
326199	All other plastics product mfg.....	1	9	5	492	16 771	401	729	12 435	33 890	27 219	61 592	5 197
331	Primary metal mfg.....	-	7	5	298	12 764	215	511	7 828	14 689	56 528	68 712	2 030
332	Fabricated metal product mfg.....	-	70	15	1 862	70 616	1 355	2 816	38 916	162 211	73 393	231 997	10 569
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	-	33	6	508	19 721	348	756	10 511	45 091	14 870	60 094	1 894
33272	Turned product & screw, nut, & bolt mfg.....	-	5	3	304	11 954	184	452	4 902	32 233	10 572	42 845	D
3329	Other fabricated metal product mfg.....	-	10	4	979	38 047	701	1 455	20 361	92 243	41 564	129 962	6 477
33299	All other fabricated metal product mfg.....	-	9	4	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg.....	-	4	2	e	D	D	D	D	D	D	D	D
333	Machinery mfg.....	2	29	7	615	25 480	310	558	8 475	52 725	34 113	84 778	1 280
334	Computer & electronic product mfg.....	-	44	24	3 088	150 876	1 679	3 383	63 500	335 068	229 142	573 443	20 161
3344	Semiconductor & other electronic component mfg.....	-	19	11	1 122	49 689	739	1 430	24 813	115 803	74 503	188 266	9 118
33441	Semiconductor & other electronic component mfg.....	-	19	11	1 122	49 689	739	1 430	24 813	115 803	74 503	188 266	9 118
334413	Semiconductor & related device mfg....	-	5	3	490	24 038	303	528	11 958	67 142	32 898	97 948	3 241
334417	Electronic connector mfg.....	-	2	1	e	D	D	D	D	D	D	D	D



**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.</b>												
<b>31-33</b>	<b>Manufacturing—Con.</b>												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg .....	-	17	10	1 840	96 354	864	1 830	37 008	206 564	146 733	364 288	9 987
33451	Navigational, measuring, medical, & control instruments mfg .....	-	17	10	1 840	96 354	864	1 830	37 008	206 564	146 733	364 288	9 987
334511	Search, detection, navigation, & guidance instrument mfg .....	-	2	1	f	D	D	D	D	D	D	D	D
334517	Irradiation apparatus mfg .....	-	3	2	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg .....	-	3	2	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg .....	1	18	9	1 078	39 264	555	1 161	15 159	110 652	75 384	190 590	1 769
3353	Electrical equipment mfg ..	1	7	4	e	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg .....	1	7	4	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg .....	1	10	5	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg .....	1	8	4	f	D	D	D	D	D	D	D	1 213
335999	All other miscellaneous electrical equipment & component mfg .....	1	7	4	686	24 781	301	649	8 246	70 357	53 211	127 614	1 213
336	Transportation equipment mfg .....	4	10	6	415	13 641	295	550	7 900	31 132	23 729	53 783	D
339	Miscellaneous mfg .....	-	33	6	805	30 398	514	1 100	14 825	48 476	92 204	139 668	D
3391	Medical equipment & supplies mfg .....	-	11	4	608	24 811	394	880	11 823	38 590	76 105	114 105	3 941
33911	Medical equipment & supplies mfg .....	-	11	4	608	24 811	394	880	11 823	38 590	76 105	114 105	3 941
339111	Laboratory apparatus & furniture mfg .....	-	2	1	e	D	D	D	D	D	D	D	D
	<b>New Haven—Meriden, CT PMSA</b>												
<b>31-33</b>	<b>Manufacturing .....</b>	-	<b>934</b>	<b>323</b>	<b>39 876</b>	<b>1 553 232</b>	<b>24 309</b>	<b>50 700</b>	<b>707 615</b>	<b>5 246 760</b>	<b>3 568 340</b>	<b>8 736 926</b>	<b>309 338</b>
311	Food mfg .....	2	64	18	1 468	39 953	1 030	2 154	21 905	142 477	134 187	278 981	7 748
3113	Sugar & confectionery product mfg .....	-	4	3	e	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg .....	2	34	6	568	16 961	318	640	6 356	83 074	43 162	128 356	3 911
31181	Bread & bakery product mfg .....	-	31	5	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	7	3	e	D	D	D	D	D	D	D	D
313	Textile mills .....	-	4	4	e	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills .....	-	3	3	283	10 060	219	470	3 783	18 748	29 867	47 882	D
31332	Fabric coating mills .....	-	3	3	283	10 060	219	470	3 783	18 748	29 867	47 882	D
313320	Fabric coating mills ..	-	3	3	283	10 060	219	470	3 783	18 748	29 867	47 882	D
315	Apparel mfg .....	-	13	3	533	15 416	357	678	6 427	83 156	72 528	151 785	1 517
3152	Cut & sew apparel mfg ....	-	10	3	f	D	D	D	D	D	D	D	D
31523	Women's & girls' cut & sew apparel mfg .....	-	4	3	e	D	D	D	D	D	D	D	1 439
315239	Women's & girls' cut & sew other outerwear mfg .....	-	2	1	e	D	D	D	D	D	D	D	D
322	Paper mfg .....	-	24	15	1 045	37 087	757	1 677	20 206	102 053	81 580	184 482	5 544
3222	Converted paper product mfg .....	-	23	14	f	D	D	D	D	D	D	D	D
32221	Paperboard container mfg .....	-	10	8	467	18 852	318	685	10 371	38 524	38 278	78 582	D
322211	Corrugated & solid fiber box mfg .....	-	5	4	338	14 560	232	510	7 397	29 419	30 652	60 169	1 525
32222	Paper bag & coated & treated paper mfg .....	-	6	3	e	D	D	D	D	D	D	D	D

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.</b>												
<b>31-33</b>	<b>Manufacturing—Con.</b>												
323	Printing & related support activities.....	3	123	30	2 706	104 189	2 010	4 162	67 685	222 967	162 097	379 734	12 230
3231	Printing & related support activities.....	3	123	30	2 706	104 189	2 010	4 162	67 685	222 967	162 097	379 734	12 230
32311	Printing.....	3	102	22	2 133	78 504	1 603	3 269	50 946	165 825	149 308	309 828	8 774
323110	Commercial lithographic printing ..	2	47	14	1 599	62 008	1 229	2 545	40 677	131 983	119 529	246 305	5 445
32312	Support activities for printing.....	4	21	8	573	25 685	407	893	16 739	57 142	12 789	69 906	3 456
323122	Prepress services ....	4	18	8	559	25 383	395	871	16 528	56 569	12 648	69 191	D
325	Chemical mfg.....	-	27	15	4 836	269 694	1 242	2 668	40 923	1 202 524	629 697	1 825 629	70 489
3254	Pharmaceutical & medicine mfg.....	-	5	2	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg.....	-	5	2	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg.....	-	5	2	h	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
32552	Adhesive mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
325520	Adhesive mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	5	4	430	18 093	278	752	10 910	134 314	68 774	202 945	D
32562	Toilet preparation mfg ...	-	2	1	e	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg.	-	2	1	e	D	D	D	D	D	D	D	D
3259	Other chemical product mfg.....	-	8	4	e	D	D	D	D	D	D	D	6 175
32599	All other chemical product & preparation mfg.....	-	6	2	395	17 015	147	300	4 857	25 996	46 910	73 187	D
326	Plastics & rubber products mfg.....	4	39	15	1 093	39 206	808	1 685	20 152	84 282	54 207	139 255	6 177
3261	Plastics product mfg.....	4	35	15	1 075	38 616	792	1 649	19 674	82 808	52 564	136 131	6 076
32619	Other plastics product mfg.....	4	24	11	826	31 977	598	1 276	16 102	67 863	43 827	112 252	5 625
326199	All other plastics product mfg.....	5	22	10	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg.....	2	22	9	482	18 792	340	773	10 769	36 599	39 091	75 580	2 615
331	Primary metal mfg.....	-	24	13	1 891	91 845	1 433	3 108	58 636	273 930	394 987	667 098	12 110
3312	Steel product mfg from purchased steel.....	-	6	5	831	38 774	677	1 435	28 111	121 427	167 703	289 463	4 145
33122	Rolling & drawing of purchased steel.....	-	6	5	831	38 774	677	1 435	28 111	121 427	167 703	289 463	4 145
331221	Cold-rolled steel shape mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
331222	Steel wire drawing....	-	3	3	e	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing.....	-	8	4	e	D	D	D	D	D	D	D	4 777
33149	Other nonferrous metal rolling, drawing, extruding, & alloying ...	-	6	3	293	17 505	176	312	7 653	57 671	67 052	124 045	D
331491	Other nonferrous metal rolling, drawing, & extruding.....	-	4	3	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	184	55	5 654	196 192	4 218	9 101	120 396	444 999	276 446	733 647	22 199
3321	Forging & stamping.....	2	14	7	366	14 856	269	578	8 395	28 492	18 673	46 790	958
33211	Forging & stamping.....	2	14	7	366	14 856	269	578	8 395	28 492	18 673	46 790	958
3322	Cutlery & handtool mfg....	-	9	4	256	10 095	201	453	6 340	36 615	25 100	65 709	D
33221	Cutlery & handtool mfg..	-	9	4	256	10 095	201	453	6 340	36 615	25 100	65 709	D
3323	Architectural & structural metals mfg.....	1	36	10	802	25 947	569	1 130	14 445	47 443	42 019	89 524	1 760
33231	Plate work & fabricated structural product mfg..	-	11	3	263	6 401	239	392	4 883	13 100	18 769	31 921	341
33232	Ornamental & architectural metal products mfg.....	1	25	7	539	19 546	330	738	9 562	34 343	23 250	57 603	1 419
3325	Hardware mfg.....	-	7	3	g	D	D	D	D	D	D	D	D
33251	Hardware mfg.....	-	7	3	g	D	D	D	D	D	D	D	D
332510	Hardware mfg.....	-	7	3	g	D	D	D	D	D	D	D	D

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.</b>												
<b>31-33</b>	<b>New Haven—Meriden, CT PMSA—Con.</b>												
	<b>Manufacturing—Con.</b>												
332	Fabricated metal product mfg—Con.												
3327	Machine shops, turned product, & screw, nut, & bolt mfg .....	1	71	12	1 081	35 185	817	1 521	22 158	61 019	26 644	87 567	5 103
33271	Machine shops .....	1	54	9	769	22 977	571	1 035	14 023	40 704	13 999	55 022	2 557
332710	Machine shops .....	1	54	9	769	22 977	571	1 035	14 023	40 704	13 999	55 022	2 557
33272	Turned product & screw, nut, & bolt mfg .....	—	17	3	312	12 208	246	486	8 135	20 315	12 645	32 545	2 546
3328	Coating, engraving, heat treating, & allied activities.	1	12	6	520	16 611	418	937	11 492	42 217	11 444	54 347	1 603
33281	Coating, engraving, heat treating, & allied activities .....	1	12	6	520	16 611	418	937	11 492	42 217	11 444	54 347	1 603
332812	Metal coating/engraving (exc jewelry/silverware)/allied services .....	1	6	4	382	13 073	296	688	9 032	36 244	7 760	44 690	1 320
3329	Other fabricated metal product mfg .....	—	22	9	1 428	48 330	1 080	2 526	31 180	111 383	76 745	193 364	5 109
33291	Metal valve mfg .....	—	6	3	269	8 169	201	493	4 852	18 405	25 011	41 927	601
33299	All other fabricated metal product mfg .....	—	16	6	1 159	40 161	879	2 033	26 328	92 978	51 734	151 437	4 508
332994	Small arms mfg .....	—	4	4	1 059	37 174	817	1 904	24 698	87 144	45 839	139 665	D
333	Machinery mfg .....	3	88	35	2 827	114 342	1 412	2 888	44 332	215 639	148 408	351 797	11 487
3332	Industrial machinery mfg ..	5	12	5	388	17 340	144	267	3 926	44 894	24 144	70 475	D
33329	Other industrial machinery mfg .....	6	10	3	e	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	4	6	3	301	10 315	161	323	4 508	17 873	12 835	35 237	D
33331	Commercial & service industry machinery mfg .....	4	6	3	301	10 315	161	323	4 508	17 873	12 835	35 237	D
333313	Office machinery mfg ..	5	3	2	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg .....	1	41	16	1 152	44 567	686	1 405	22 547	79 283	58 594	121 746	4 697
33351	Metalworking machinery mfg .....	1	41	16	1 152	44 567	686	1 405	22 547	79 283	58 594	121 746	4 697
333514	Special die & tool, die set, jig, & fixture mfg ..	3	22	5	293	11 806	223	446	8 197	21 194	8 313	29 530	1 515
333516	Rolling mill machinery & equipment mfg ....	—	2	2	e	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg .....	3	23	9	865	38 131	338	729	10 984	67 444	46 497	111 801	2 944
33399	All other general-purpose machinery mfg .....	4	19	7	788	34 726	286	625	9 043	62 055	42 460	102 288	D
333999	All other miscellaneous general-purpose machinery mfg .....	2	15	5	648	28 538	240	519	7 353	42 904	26 040	68 248	2 172
334	Computer & electronic product mfg .....	—	84	38	4 878	197 259	2 442	5 196	67 621	526 007	412 296	904 245	36 110
3342	Communications equipment mfg .....	—	10	5	1 067	48 169	365	814	12 341	174 807	173 959	339 426	15 594
33422	Radio & TV broadcasting & wireless communications equipment mfg .....	—	5	3	e	D	D	D	D	D	D	D	D
334220	Radio & TV broadcasting & wireless communications equipment mfg .....	—	5	3	e	D	D	D	D	D	D	D	D
33429	Other communications equipment mfg .....	—	2	1	e	D	D	D	D	D	D	D	D
334290	Other communications equipment mfg .....	—	2	1	e	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg .....	—	27	12	1 351	46 370	1 004	1 979	25 456	115 604	84 302	196 266	6 537
33441	Semiconductor & other electronic component mfg .....	—	27	12	1 351	46 370	1 004	1 979	25 456	115 604	84 302	196 266	6 537
334412	Bare printed circuit board mfg .....	—	12	5	742	28 215	561	1 229	16 190	72 810	56 242	125 586	4 499
334419	Other electronic component mfg .....	—	6	4	357	10 470	264	474	5 524	29 111	18 883	47 784	699

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.</b>												
	<b>New Haven—Meriden, CT PMSA—Con.</b>												
<b>31-33</b>	<b>Manufacturing—Con.</b>												
334	Computer & electronic product mfg—Con.												
3345	Navigational, measuring, medical, & control instruments mfg .....	1	39	16	2 119	90 304	870	1 978	25 737	206 481	118 458	303 223	12 081
33451	Navigational, measuring, medical, & control instruments mfg .....	1	39	16	2 119	90 304	870	1 978	25 737	206 481	118 458	303 223	12 081
334510	Electromedical & electrotherapeutic apparatus mfg .....	1	9	5	849	39 651	313	706	10 619	67 716	47 054	114 253	4 153
334511	Search, detection, navigation, & guidance instrument mfg .....	—	3	2	e	D	D	D	D	D	D	D	D
334519	Other measuring & controlling device mfg .....	—	4	1	426	20 931	109	217	3 689	37 867	11 650	49 101	D
335	Electrical equipment, appliance, & component mfg .....	—	43	19	2 179	71 350	1 188	2 437	29 761	201 820	128 474	329 541	30 365
3353	Electrical equipment mfg ..	1	17	6	995	27 905	489	1 016	10 452	61 615	44 404	105 489	4 797
33531	Electrical equipment mfg .....	1	17	6	995	27 905	489	1 016	10 452	61 615	44 404	105 489	4 797
335312	Motor & generator mfg .....	—	3	2	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg .....	—	17	10	934	33 954	548	1 106	16 500	124 596	76 155	200 477	24 865
33592	Communication & energy wire & cable mfg .....	—	7	7	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	—	7	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg .....	—	33	18	4 197	161 553	2 781	6 310	97 029	447 225	624 545	1 053 442	34 730
3363	Motor vehicle parts mfg ...	—	15	8	g	D	D	D	D	D	D	D	20 274
33631	Motor vehicle gasoline engine & engine parts mfg .....	—	5	2	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg ....	—	5	2	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg .....	1	5	3	1 101	31 384	676	1 381	15 145	82 805	53 309	136 045	D
336322	Other motor vehicle electrical & electronic equipment mfg .....	1	4	3	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg .....	—	12	8	2 170	98 480	1 498	3 613	65 632	291 528	440 700	713 911	14 228
33641	Aerospace product & parts mfg .....	—	12	8	2 170	98 480	1 498	3 613	65 632	291 528	440 700	713 911	14 228
336411	Aircraft mfg .....	9	1	1	e	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg ....	—	6	5	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg .....	3	40	5	364	9 987	280	489	6 294	18 941	14 502	33 415	643
339	Miscellaneous mfg .....	—	79	24	4 929	161 007	3 404	6 076	82 233	1 179 008	302 470	1 471 014	52 469
3391	Medical equipment & supplies mfg .....	—	39	14	3 721	128 091	2 607	4 443	68 243	1 101 858	233 941	1 326 081	49 517
33911	Medical equipment & supplies mfg .....	—	39	14	3 721	128 091	2 607	4 443	68 243	1 101 858	233 941	1 326 081	49 517
339112	Surgical & medical instrument mfg .....	—	14	7	h	D	D	D	D	D	D	D	D
339113	Surgical appliance & supplies mfg .....	—	3	3	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	3	40	10	1 208	32 916	797	1 633	13 990	77 150	68 529	144 933	2 952
33991	Jewelry & silverware mfg .....	1	9	5	630	15 071	413	935	5 973	38 450	40 945	78 849	D
339914	Costume jewelry & novelty mfg .....	—	2	2	e	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg .....	1	16	4	291	9 897	162	266	3 394	18 350	9 455	27 559	1 072

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.</b>												
	<b>Stamford—Norwalk, CT PMSA</b>												
<b>31-33</b>	<b>Manufacturing . . . .</b>	<b>1</b>	<b>489</b>	<b>120</b>	<b>16 703</b>	<b>703 207</b>	<b>8 971</b>	<b>18 589</b>	<b>285 463</b>	<b>3 091 396</b>	<b>1 690 705</b>	<b>4 638 079</b>	<b>222 646</b>
311	Food mfg . . . . .	—	33	4	1 306	49 989	1 011	2 003	35 273	197 470	71 141	269 151	6 421
3118	Bakeries & tortilla mfg . . . . .	—	31	4	g	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg . . . . .	—	30	3	g	D	D	D	D	D	D	D	6 237
311812	Commercial bakeries . . . . .	—	14	3	1 235	48 662	957	1 933	34 481	192 007	66 824	259 358	6 143
315	Apparel mfg . . . . .	1	20	5	753	16 538	618	1 240	12 195	62 128	68 807	128 933	D
3159	Apparel accessories & other apparel mfg . . . . .	—	14	3	f	D	D	D	D	D	D	D	280
31599	Apparel accessories & other apparel mfg . . . . .	—	14	3	f	D	D	D	D	D	D	D	280
315999	Other apparel accessories & other apparel mfg . . . . .	—	10	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities . . . . .	3	115	22	1 558	64 438	1 130	2 330	36 341	142 243	75 633	216 453	12 725
3231	Printing & related support activities . . . . .	3	115	22	1 558	64 438	1 130	2 330	36 341	142 243	75 633	216 453	12 725
32311	Printing . . . . .	2	101	18	1 330	53 055	981	2 018	28 739	120 323	69 179	188 142	8 816
323110	Commercial lithographic printing . . . . .	4	59	11	723	27 170	485	1 004	16 216	47 068	29 405	76 661	5 874
325	Chemical mfg . . . . .	—	21	10	2 111	95 761	809	1 674	37 793	957 929	383 693	1 277 601	42 099
3251	Basic chemical mfg . . . . .	—	2	1	e	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical mfg . . . . .	—	1	1	e	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical mfg . . . . .	—	1	1	e	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg . . . . .	—	11	6	1 614	74 035	638	1 328	28 340	906 137	348 675	1 189 664	D
32562	Toilet preparation mfg . . . . .	—	6	4	1 546	71 531	594	1 234	27 188	899 696	342 910	1 177 422	D
325620	Toilet preparation mfg . . . . .	—	6	4	1 546	71 531	594	1 234	27 188	899 696	342 910	1 177 422	D
326	Plastics & rubber products mfg . . . . .	3	10	6	443	15 721	348	837	10 873	45 474	33 977	79 648	2 638
3261	Plastics product mfg . . . . .	3	9	5	e	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg . . . . .	2	48	12	729	26 933	508	1 051	16 230	54 751	33 552	88 740	2 407
333	Machinery mfg . . . . .	—	27	9	3 301	139 285	1 275	2 588	26 219	881 188	506 240	1 309 865	D
3332	Industrial machinery mfg . . . . .	—	3	1	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg . . . . .	—	3	1	g	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg . . . . .	—	1	1	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg . . . . .	—	7	1	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg . . . . .	—	7	1	g	D	D	D	D	D	D	D	D
333313	Office machinery mfg . . . . .	—	2	1	g	D	D	D	D	D	D	D	D
3339	Other general-purpose machinery mfg . . . . .	2	10	6	e	D	D	D	D	D	D	D	602
334	Computer & electronic product mfg . . . . .	1	50	20	3 283	170 074	1 467	3 177	59 122	458 105	295 276	756 205	11 619
3344	Semiconductor & other electronic component mfg . . . . .	8	8	4	f	D	D	D	D	D	D	D	3 632
33441	Semiconductor & other electronic component mfg . . . . .	8	8	4	f	D	D	D	D	D	D	D	3 632
334419	Other electronic component mfg . . . . .	8	3	2	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg . . . . .	—	22	7	2 227	125 188	761	1 605	33 884	371 291	242 519	617 697	4 989
33451	Navigational, measuring, medical, & control instruments mfg . . . . .	—	22	7	2 227	125 188	761	1 605	33 884	371 291	242 519	617 697	4 989
334511	Search, detection, navigation, & guidance instrument mfg . . . . .	—	4	1	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg . . . . .	—	5	3	f	D	D	D	D	D	D	D	1 246
334516	Analytical laboratory instrument mfg . . . . .	—	5	2	f	D	D	D	D	D	D	D	166

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.</b>												
	<b>Stamford—Norwalk, CT PMSA—Con.</b>												
<b>31-33</b>	<b>Manufacturing—Con.</b>												
335	Electrical equipment, appliance, & component mfg .....	5	17	12	522	18 370	346	647	8 291	33 214	32 056	66 599	1 784
336	Transportation equipment mfg .....	7	8	3	e	D	D	D	D	D	D	D	830
337	Furniture & related product mfg .....	5	40	2	326	10 109	259	516	6 631	20 665	15 969	36 349	830
339	Miscellaneous mfg .....	3	54	10	1 555	59 335	752	1 414	23 511	146 310	92 298	234 416	8 768
3391	Medical equipment & supplies mfg .....	1	20	5	635	31 175	329	493	9 927	75 082	50 158	125 249	3 785
33911	Medical equipment & supplies mfg .....	1	20	5	635	31 175	329	493	9 927	75 082	50 158	125 249	3 785
339112	Surgical & medical instrument mfg .....	—	4	1	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	6	34	5	920	28 160	423	921	13 584	71 228	42 140	109 167	4 983
33995	Sign mfg .....	9	14	3	604	19 130	244	589	10 759	42 004	27 369	67 187	D
339950	Sign mfg .....	9	14	3	604	19 130	244	589	10 759	42 004	27 369	67 187	D
	<b>Waterbury, CT PMSA</b>												
<b>31-33</b>	<b>Manufacturing ....</b>	<b>1</b>	<b>516</b>	<b>187</b>	<b>17 628</b>	<b>604 422</b>	<b>12 587</b>	<b>26 389</b>	<b>375 498</b>	<b>1 538 475</b>	<b>1 410 530</b>	<b>2 936 408</b>	<b>126 290</b>
311	Food mfg .....	—	20	4	580	17 309	435	848	11 696	139 638	89 395	223 266	23 446
3113	Sugar & confectionery product mfg .....	—	2	1	e	D	D	D	D	D	D	D	D
31133	Confectionery mfg from purchased chocolate...	—	2	1	e	D	D	D	D	D	D	D	D
311330	Confectionery mfg from purchased chocolate .....	—	2	1	e	D	D	D	D	D	D	D	D
313	Textile mills .....	6	4	2	e	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	6	2	2	e	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills .....	6	2	2	e	D	D	D	D	D	D	D	D
313113	Thread mills .....	6	2	2	e	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	2	28	7	392	11 721	291	505	6 385	25 355	12 337	37 684	D
3231	Printing & related support activities.....	2	28	7	392	11 721	291	505	6 385	25 355	12 337	37 684	D
32311	Printing .....	2	27	7	e	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	3	19	4	276	9 454	193	365	4 919	16 216	10 149	26 400	D
325	Chemical mfg .....	3	14	10	833	36 584	481	1 071	19 629	103 148	189 067	299 536	D
3251	Basic chemical mfg .....	—	1	1	e	D	D	D	D	D	D	D	D
32519	Other basic organic chemical mfg .....	—	1	1	e	D	D	D	D	D	D	D	D
325199	All other basic organic chemical mfg .....	—	1	1	e	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg .....	—	19	9	995	24 909	572	1 330	13 215	69 548	66 764	135 569	9 230
3261	Plastics product mfg .....	—	17	9	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg .....	—	8	4	602	11 368	287	695	6 007	39 264	24 508	63 552	7 082
326199	All other plastics product mfg .....	—	8	4	602	11 368	287	695	6 007	39 264	24 508	63 552	7 082
331	Primary metal mfg .....	1	14	8	647	28 521	469	1 186	19 423	91 049	172 514	264 490	8 132
3314	Nonferrous metal (except aluminum) production & processing.....	1	10	6	554	25 413	399	1 045	16 920	79 114	147 860	227 818	7 831
33142	Copper rolling, drawing, extruding, & alloying ...	—	5	4	342	16 038	246	606	10 955	56 639	119 409	176 548	D
331421	Copper rolling, drawing, & extruding .	—	3	3	e	D	D	D	D	D	D	D	D

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.</b>												
	<b>Waterbury, CT PMSA—Con.</b>												
<b>31-33</b>	<b>Manufacturing—Con.</b>												
332	Fabricated metal product mfg .....	1	219	79	6 736	243 232	5 299	11 434	167 481	499 074	404 667	903 531	38 593
3321	Forging & stamping .....	—	53	27	2 678	105 503	2 220	4 884	76 970	224 595	232 849	457 290	17 692
33211	Forging & stamping .....	—	53	27	2 678	105 503	2 220	4 884	76 970	224 595	232 849	457 290	17 692
332115	Crown & closure mfg .....	—	6	4	f	D	D	D	D	D	D	D	D
332116	Metal stamping .....	—	46	22	1 962	81 879	1 616	3 783	59 923	168 175	178 525	344 649	15 185
3327	Machine shops, turned product, & screw, nut, & bolt mfg .....	1	97	29	2 075	69 621	1 636	3 356	47 745	129 213	73 466	202 785	8 511
33271	Machine shops .....	1	45	7	720	22 380	558	1 088	15 197	42 240	17 893	60 216	2 578
332710	Machine shops .....	1	45	7	720	22 380	558	1 088	15 197	42 240	17 893	60 216	2 578
33272	Turned product & screw, nut, & bolt mfg .....	1	52	22	1 355	47 241	1 078	2 268	32 548	86 973	55 573	142 569	5 933
332721	Precision turned product mfg .....	1	47	18	1 086	35 725	871	1 786	24 977	57 740	29 657	86 793	D
332722	Bolt, nut, screw, rivet, & washer mfg .....	—	5	4	269	11 516	207	482	7 571	29 233	25 916	55 776	D
3328	Coating, engraving, heat treating, & allied activities .....	1	30	14	1 418	48 519	1 051	2 396	30 786	98 310	64 304	162 562	9 839
33281	Coating, engraving, heat treating, & allied activities .....	1	30	14	1 418	48 519	1 051	2 396	30 786	98 310	64 304	162 562	9 839
332813	Electroplating, plating, polishing, anodizing, & coloring .....	1	20	12	1 291	44 427	946	2 210	28 024	88 676	61 394	150 038	8 403
333	Machinery mfg .....	2	69	14	775	31 103	493	922	16 126	77 820	33 101	101 307	2 810
3335	Metalworking machinery mfg .....	1	44	7	411	15 587	290	528	8 868	26 803	9 984	37 342	1 170
33351	Metalworking machinery mfg .....	1	44	7	411	15 587	290	528	8 868	26 803	9 984	37 342	1 170
334	Computer & electronic product mfg .....	1	28	11	1 875	67 047	925	1 861	27 049	157 945	133 192	294 182	14 073
3342	Communications equipment mfg .....	—	3	2	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg .....	—	3	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg .....	—	3	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg .....	3	15	5	598	18 509	428	823	11 299	49 697	30 879	80 069	4 046
33441	Semiconductor & other electronic component mfg .....	3	15	5	598	18 509	428	823	11 299	49 697	30 879	80 069	4 046
334417	Electronic connector mfg .....	2	3	3	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, medical, & control instruments mfg .....	—	9	4	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg .....	—	9	4	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg .....	—	4	2	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg .....	—	14	13	1 334	34 262	864	1 546	20 611	121 136	60 877	176 406	4 127
3351	Electric lighting equipment mfg .....	—	3	2	e	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg .....	—	1	1	e	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg .....	—	1	1	e	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg .....	—	9	9	810	18 055	508	1 006	12 002	86 118	41 798	122 575	D
33593	Wiring device mfg .....	—	7	7	f	D	D	D	D	D	D	D	3 419
335931	Current-carrying wiring device mfg .....	—	6	6	f	D	D	D	D	D	D	D	D

**Table 2. Industry Statistics for Metropolitan Areas: 1997—Con.**

[Includes data for industry groups and industries with 250 employees or more. For definitions of CMSAs, MSAs, and PMSAs, information on geographic areas followed by \*, and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>31-33</b>	<b>NEW YORK—NORTHERN NEW JERSEY—LONG ISLAND, NY—NJ—CT—PA CMSA—Con.</b> <b>Waterbury, CT PMSA—Con.</b> <b>Manufacturing—Con.</b>												
336	Transportation equipment mfg .....	1	12	6	1 335	51 591	1 095	2 215	34 615	122 407	127 616	249 014	6 883
3363	Motor vehicle parts mfg ...	1	9	6	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg .....	—	2	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg ....	—	2	1	f	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts mfg .....	—	2	2	e	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts mfg .....	—	2	2	e	D	D	D	D	D	D	D	D
337	Furniture & related product mfg .....	—	15	4	416	10 393	339	578	6 995	19 602	13 544	33 300	2 570
3371	Household & institutional furniture & kitchen cabinet mfg .....	—	7	1	263	6 995	228	401	5 000	14 991	8 802	23 709	D
33711	Wood kitchen cabinet & counter top mfg .....	—	6	1	e	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet & counter top mfg ...	—	6	1	e	D	D	D	D	D	D	D	D
339	Miscellaneous mfg .....	1	25	9	543	16 316	335	747	9 357	30 034	19 074	48 466	4 653
3399	Other miscellaneous mfg ..	1	18	6	e	D	D	D	D	D	D	D	4 288
33999	All other miscellaneous mfg .....	—	8	5	364	10 480	216	527	6 832	19 441	14 070	32 942	2 394
339993	Fastener, button, needle, & pin mfg ....	—	8	5	364	10 480	216	527	6 832	19 441	14 070	32 942	2 394

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

<sup>2</sup>Industries 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: 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.

**Table 3. Industry Statistics for Counties: 1997**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>31-33</b>	<b>FAIRFIELD COUNTY, CT</b> <b>Manufacturing ....</b>	<b>1</b>	<b>1 316</b>	<b>406</b>	<b>57 560</b>	<b>2 495 948</b>	<b>32 808</b>	<b>67 527</b>	<b>1 106 723</b>	<b>7 220 179</b>	<b>4 863 011</b>	<b>12 115 468</b>	<b>483 701</b>
311	Food mfg .....	1	82	15	2 134	72 977	1 464	2 873	44 367	231 812	145 928	379 359	10 195
3118	Bakeries & tortilla mfg .....	1	63	12	1 728	57 606	1 258	2 524	39 103	209 993	92 698	304 043	D
31181	Bread & bakery product mfg .....	1	62	11	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries .	1	20	5	1 407	53 251	1 086	2 284	36 880	199 551	85 073	285 972	6 780
313	Textile mills .....	6	11	5	993	30 810	793	1 688	19 067	69 845	73 550	143 661	D
3133	Textile & fabric finishing & fabric coating mills .....	6	8	4	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills .....	9	6	2	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills .....	9	4	2	f	D	D	D	D	D	D	D	D



**Table 3. Industry Statistics for Counties: 1997—Con.**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>31-33</b>	<b>FAIRFIELD COUNTY, CT—Con.</b>												
	<b>Manufacturing—Con.</b>												
315	Apparel mfg .....	1	24	6	783	17 183	644	1 285	12 637	65 396	70 510	133 994	D
3159	Apparel accessories & other apparel mfg .....	—	15	3	605	13 163	496	1 007	9 646	50 691	57 847	106 498	D
31599	Apparel accessories & other apparel mfg .....	—	15	3	605	13 163	496	1 007	9 646	50 691	57 847	106 498	D
315999	Other apparel accessories & other apparel mfg .....	—	10	3	f	D	D	D	D	D	D	D	D
322	Paper mfg .....	—	15	8	718	24 856	568	1 125	15 060	49 292	71 554	121 722	2 296
3222	Converted paper product mfg .....	—	15	8	718	24 856	568	1 125	15 060	49 292	71 554	121 722	2 296
32221	Paperboard container mfg .....	—	8	6	f	D	D	D	D	D	D	D	1 801
323	Printing & related support activities .....	2	221	47	3 260	128 432	2 414	5 017	78 287	268 028	169 830	441 374	18 964
3231	Printing & related support activities .....	2	221	47	3 260	128 432	2 414	5 017	78 287	268 028	169 830	441 374	18 964
32311	Printing .....	2	191	38	h	D	D	D	D	D	D	D	14 513
323110	Commercial lithographic printing ..	2	106	27	1 845	71 314	1 344	2 877	45 659	129 942	101 465	236 712	10 247
325	Chemical mfg .....	—	59	28	5 072	267 133	1 425	2 886	58 220	1 672 820	814 410	2 415 843	95 724
3251	Basic chemical mfg .....	1	12	7	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg .....	—	8	3	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg .....	—	8	3	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg .....	—	5	3	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	—	16	8	g	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg .....	—	8	6	g	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .....	—	8	6	g	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg .....	1	48	25	2 509	92 415	1 915	4 112	59 579	245 747	187 336	432 088	25 566
3261	Plastics product mfg .....	1	41	19	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg .....	2	33	16	1 737	58 940	1 331	2 712	37 761	128 291	112 962	241 209	17 501
326199	All other plastics product mfg .....	2	33	16	1 737	58 940	1 331	2 712	37 761	128 291	112 962	241 209	17 501
331	Primary metal mfg .....	—	15	9	752	31 810	532	1 201	18 143	55 050	134 197	187 063	D
332	Fabricated metal product mfg .....	1	226	72	5 871	228 472	4 148	8 824	122 601	457 444	257 260	714 083	28 425
3321	Forging & stamping .....	—	14	8	625	22 451	462	1 013	14 280	39 992	27 379	67 078	D
33211	Forging & stamping .....	—	14	8	625	22 451	462	1 013	14 280	39 992	27 379	67 078	D
332116	Metal stamping .....	—	12	6	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg .....	1	40	10	589	21 417	411	884	12 505	41 866	32 445	73 969	3 975
3327	Machine shops, turned product, & screw, nut, & bolt mfg .....	—	92	21	1 560	73 456	1 060	2 216	31 798	138 775	66 242	206 155	6 927
33271	Machine shops .....	1	74	14	745	30 806	545	1 012	16 809	56 673	19 163	75 532	2 626
332710	Machine shops .....	1	74	14	745	30 806	545	1 012	16 809	56 673	19 163	75 532	2 626
33272	Turned product & screw, nut, & bolt mfg .....	—	18	7	815	42 650	515	1 204	14 989	82 102	47 079	130 623	4 301
332722	Bolt, nut, screw, rivet, & washer mfg .....	—	4	3	f	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, & allied activities ..	1	38	11	677	24 799	543	1 167	15 783	38 242	28 447	68 830	2 657
33281	Coating, engraving, heat treating, & allied activities .....	1	38	11	677	24 799	543	1 167	15 783	38 242	28 447	68 830	2 657
3329	Other fabricated metal product mfg .....	1	23	13	1 728	65 658	1 155	2 484	35 785	149 015	77 526	222 328	10 518
33299	All other fabricated metal product mfg .....	1	23	13	1 728	65 658	1 155	2 484	35 785	149 015	77 526	222 328	10 518
332991	Ball & roller bearing mfg .....	1	4	4	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product mfg .....	1	16	9	949	31 029	633	1 300	16 169	65 108	53 208	116 922	D

**Table 3. Industry Statistics for Counties: 1997—Con.**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>FAIRFIELD COUNTY, CT—Con.</b>												
<b>31-33</b>	<b>Manufacturing—Con.</b>												
333	Machinery mfg .....	-	114	37	6 623	277 526	3 102	6 211	90 521	1 126 743	723 660	1 782 686	142 265
3332	Industrial machinery mfg ..	-	12	8	2 161	121 363	1 178	2 477	25 895	335 135	98 887	366 611	D
33329	Other industrial machinery mfg .....	-	12	8	2 161	121 363	1 178	2 477	25 895	335 135	98 887	366 611	D
333295	Semiconductor machinery mfg .....	-	3	3	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	17	7	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg .....	-	17	7	g	D	D	D	D	D	D	D	D
333313	Office machinery mfg ..	-	5	3	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery mfg .....	-	51	11	1 879	80 535	1 057	2 118	41 148	131 117	132 441	262 158	7 167
33351	Metalworking machinery mfg .....	-	51	11	1 879	80 535	1 057	2 118	41 148	131 117	132 441	262 158	7 167
333512	Machine tool (metal cutting types) mfg ...	-	6	3	991	36 594	421	903	15 826	48 232	98 978	143 566	2 473
3339	Other general-purpose machinery mfg .....	3	27	8	587	20 806	337	631	9 497	32 881	38 032	81 124	1 380
334	Computer & electronic product mfg .....	1	125	56	8 918	425 483	4 612	9 600	181 885	999 497	646 152	1 659 328	51 886
3342	Communications equipment mfg .....	7	14	8	f	D	D	D	D	D	D	D	D
33422	Radio & TV broadcasting & wireless communications equipment mfg .....	7	7	6	f	D	D	D	D	D	D	D	5 282
334220	Radio & TV broadcasting & wireless communications equipment mfg .....	7	7	6	f	D	D	D	D	D	D	D	5 282
3344	Semiconductor & other electronic component mfg .....	3	38	19	2 340	96 014	1 537	3 349	50 824	212 755	110 099	319 044	22 874
33441	Semiconductor & other electronic component mfg .....	3	38	19	2 340	96 014	1 537	3 349	50 824	212 755	110 099	319 044	22 874
334413	Semiconductor & related device mfg ...	3	8	4	616	32 692	378	671	15 472	105 297	35 308	137 645	11 621
334419	Other electronic component mfg .....	5	9	5	987	33 609	645	1 604	20 038	49 354	27 556	75 995	4 783
3345	Navigational, measuring, medical, & control instruments mfg .....	-	53	23	5 340	274 797	2 397	4 995	101 141	682 479	440 634	1 138 394	20 067
33451	Navigational, measuring, medical, & control instruments mfg .....	-	53	23	5 340	274 797	2 397	4 995	101 141	682 479	440 634	1 138 394	20 067
334511	Search, detection, navigation, & guidance instrument mfg .....	-	7	3	1 562	107 819	442	966	26 423	199 956	64 303	274 065	10 015
334513	Industrial process control instrument mfg .....	-	17	9	1 826	72 141	1 022	2 034	37 998	139 437	99 792	237 968	4 094
334516	Analytical laboratory instrument mfg .....	-	7	3	f	D	D	D	D	D	D	D	278
334519	Other measuring & controlling device mfg .....	-	8	4	579	27 088	315	616	11 021	27 651	70 851	108 588	1 610
335	Electrical equipment, appliance, & component mfg .....	1	57	35	3 876	148 943	2 332	4 632	62 713	377 514	263 283	667 097	18 184
3353	Electrical equipment mfg ..	2	23	12	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg .....	2	23	12	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg .....	1	26	19	2 395	93 110	1 407	2 930	41 387	189 616	134 998	337 767	9 702
33593	Wiring device mfg .....	-	7	7	g	D	D	D	D	D	D	D	6 738
335932	Noncurrent-carrying wiring device mfg .....	-	2	2	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg .....	1	16	10	1 171	41 701	636	1 285	16 226	116 605	85 424	206 653	D
335999	All other miscellaneous electrical equipment & component mfg .....	1	15	10	g	D	D	D	D	D	D	D	D

**Table 3. Industry Statistics for Counties: 1997—Con.**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>FAIRFIELD COUNTY, CT—Con.</b>													
<b>31-33</b>	<b>Manufacturing—Con.</b>												
336	Transportation equipment mfg . . . . .	—	32	18	10 758	549 315	5 561	11 141	250 620	1 146 771	910 200	2 193 189	57 831
3363	Motor vehicle parts mfg . . .	2	11	6	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg . . . . .	1	6	4	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg . . . . .	1	6	4	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg . . . . .	—	14	11	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg . . . . .	—	14	11	i	D	D	D	D	D	D	D	D
336411	Aircraft mfg . . . . .	—	3	3	i	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg . . . . .	—	5	5	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg . . . . .	5	69	9	713	21 172	570	1 143	13 743	40 211	29 575	69 810	1 587
339	Miscellaneous mfg . . . . .	2	125	21	3 177	122 693	1 807	3 599	54 906	273 732	219 693	486 335	17 146
3391	Medical equipment & supplies mfg . . . . .	1	57	12	1 877	82 413	1 144	2 212	35 084	173 848	149 892	321 500	10 981
33911	Medical equipment & supplies mfg . . . . .	1	57	12	1 877	82 413	1 144	2 212	35 084	173 848	149 892	321 500	10 981
339112	Surgical & medical instrument mfg . . . . .	—	13	5	1 004	52 937	548	1 074	19 596	106 166	71 261	176 404	6 625
3399	Other miscellaneous mfg . . .	4	68	9	1 300	40 280	663	1 387	19 822	99 884	69 801	164 835	6 165
33995	Sign mfg . . . . .	6	29	4	777	25 483	355	825	14 071	59 471	38 046	95 100	5 364
339950	Sign mfg . . . . .	6	29	4	777	25 483	355	825	14 071	59 471	38 046	95 100	5 364
<b>HARTFORD COUNTY, CT</b>													
<b>31-33</b>	<b>Manufacturing . . . . .</b>	<b>1</b>	<b>1 592</b>	<b>560</b>	<b>71 982</b>	<b>3 113 085</b>	<b>43 849</b>	<b>91 773</b>	<b>1 477 184</b>	<b>6 478 603</b>	<b>4 986 505</b>	<b>11 319 796</b>	<b>446 620</b>
311	Food mfg . . . . .	1	85	25	1 850	50 252	1 194	2 165	26 547	123 193	285 845	400 477	7 752
3115	Dairy product mfg . . . . .	—	9	4	597	21 066	350	729	10 908	46 052	176 117	221 369	4 663
3118	Bakeries & tortilla mfg . . . . .	5	49	11	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg . . . . .	5	48	11	f	D	D	D	D	D	D	D	D
313	Textile mills . . . . .	—	7	2	f	D	D	D	D	D	D	D	D
3132	Fabric mills . . . . .	—	5	2	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills . . . . .	—	1	1	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills . . . . .	—	1	1	f	D	D	D	D	D	D	D	D
322	Paper mfg . . . . .	—	15	9	929	34 992	682	1 489	21 807	79 512	93 328	170 699	4 887
3222	Converted paper product mfg . . . . .	—	12	6	f	D	D	D	D	D	D	D	D
323	Printing & related support activities . . . . .	2	182	42	3 911	149 094	2 837	5 869	87 173	293 834	198 859	492 320	21 328
3231	Printing & related support activities . . . . .	2	182	42	3 911	149 094	2 837	5 869	87 173	293 834	198 859	492 320	21 328
32311	Printing . . . . .	2	165	36	3 641	139 975	2 630	5 499	81 499	276 803	195 552	471 979	19 969
323110	Commercial lithographic printing . . . . .	3	93	27	2 302	95 901	1 566	3 269	51 526	172 055	147 724	319 632	12 381
323114	Quick printing . . . . .	—	42	2	729	24 484	573	1 234	16 885	48 317	27 593	75 873	D
325	Chemical mfg . . . . .	5	26	10	1 418	59 965	734	1 527	26 093	148 310	247 680	402 447	D
3259	Other chemical product mfg . . . . .	2	5	3	827	36 372	401	810	14 076	53 774	52 346	105 517	D
32592	Explosives mfg . . . . .	—	1	1	f	D	D	D	D	D	D	D	D
325920	Explosives mfg . . . . .	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg . . . . .	2	61	29	2 293	68 800	1 539	3 018	37 653	171 264	154 204	323 960	13 542
3261	Plastics product mfg . . . . .	1	52	25	1 986	60 042	1 303	2 562	31 471	143 156	133 214	275 213	11 940
32619	Other plastics product mfg . . . . .	1	29	14	1 375	37 264	871	1 691	18 431	69 620	46 021	115 378	D
326199	All other plastics product mfg . . . . .	1	28	14	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg . . . . .	1	31	11	599	20 225	441	908	13 380	57 463	43 266	99 271	2 801
331	Primary metal mfg . . . . .	—	21	14	1 068	40 042	833	1 793	27 345	90 955	89 943	173 542	3 273

**Table 3. Industry Statistics for Counties: 1997—Con.**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>31-33</b>	<b>HARTFORD COUNTY, CT—Con.</b>												
	<b>Manufacturing—Con.</b>												
332	Fabricated metal product mfg . . . . .	—	533	182	17 717	691 419	12 631	26 593	417 881	1 491 453	825 423	2 319 352	86 982
3321	Forging & stamping . . . . .	1	30	17	2 195	89 443	1 441	3 260	53 825	126 009	102 668	228 206	7 098
332116	Forging & stamping . . . . .	1	30	17	2 195	89 443	1 441	3 260	53 825	126 009	102 668	228 206	7 098
332117	Metal stamping . . . . .	—	22	12	1 115	46 480	927	2 026	31 774	88 186	65 931	154 171	3 825
3322	Powder metallurgy part mfg . . . . .	—	2	2	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg . . . . .	—	18	7	1 119	51 159	733	1 461	28 971	181 799	74 162	251 766	3 434
332212	Cutlery & handtool mfg . . . . .	—	18	7	1 119	51 159	733	1 461	28 971	181 799	74 162	251 766	3 434
332212	Hand & edge tool mfg . . . . .	—	14	6	g	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg . . . . .	1	48	14	g	D	D	D	D	D	D	D	D
33232	Ornamental & architectural metal products mfg . . . . .	1	26	9	823	27 974	473	1 032	14 286	63 134	66 239	127 955	2 849
3324	Boiler, tank, & shipping container mfg . . . . .	—	6	3	f	D	D	D	D	D	D	D	D
3325	Hardware mfg . . . . .	—	14	9	1 694	67 588	1 403	2 815	50 090	167 623	94 295	264 680	5 164
33251	Hardware mfg . . . . .	—	14	9	1 694	67 588	1 403	2 815	50 090	167 623	94 295	264 680	5 164
332510	Hardware mfg . . . . .	—	14	9	1 694	67 588	1 403	2 815	50 090	167 623	94 295	264 680	5 164
3326	Spring & wire product mfg . . . . .	—	39	24	1 651	66 769	1 276	2 818	43 810	133 153	81 765	213 979	11 867
33261	Spring & wire product mfg . . . . .	—	39	24	1 651	66 769	1 276	2 818	43 810	133 153	81 765	213 979	11 867
332612	Spring (light gauge) mfg . . . . .	1	23	16	1 071	40 803	847	1 854	26 083	60 196	44 987	104 828	6 049
3327	Machine shops, turned product, & screw, nut, & bolt mfg . . . . .	—	262	59	4 562	174 845	3 430	7 485	115 635	310 886	168 838	483 839	28 567
33271	Machine shops . . . . .	1	190	32	2 466	94 019	1 837	3 916	62 384	161 959	63 103	223 354	10 951
332710	Machine shops . . . . .	1	190	32	2 466	94 019	1 837	3 916	62 384	161 959	63 103	223 354	10 951
33272	Turned product & screw, nut, & bolt mfg . . . . .	—	72	27	2 096	80 826	1 593	3 569	53 251	148 927	105 735	260 485	17 616
332721	Precision turned product mfg . . . . .	—	59	21	1 620	61 576	1 250	2 740	40 167	109 944	67 144	182 319	14 905
3328	Coating, engraving, heat treating, & allied activities . . . . .	—	78	30	1 929	68 938	1 403	2 952	39 136	172 019	48 123	222 516	13 598
33281	Coating, engraving, heat treating, & allied activities . . . . .	—	78	30	1 929	68 938	1 403	2 952	39 136	172 019	48 123	222 516	13 598
332812	Metal coating/engraving (exc jewelry/silverware)/allied services . . . . .	—	78	30	1 929	68 938	1 403	2 952	39 136	172 019	48 123	222 516	13 598
332813	Electroplating, plating, polishing, anodizing, & coloring . . . . .	—	23	9	581	21 145	415	891	11 473	52 648	18 491	70 490	9 825
3329	Other fabricated metal product mfg . . . . .	—	38	19	2 671	94 195	1 904	3 673	56 451	219 974	120 680	341 391	11 434
33291	Metal valve mfg . . . . .	—	11	10	1 315	41 922	894	1 854	21 987	96 960	53 487	151 359	4 619
33299	All other fabricated metal product mfg . . . . .	1	27	9	1 356	52 273	1 010	1 819	34 464	123 014	67 193	190 032	6 815
332994	Small arms mfg . . . . .	—	3	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg . . . . .	—	194	59	7 170	312 721	4 322	9 408	160 706	749 949	517 414	1 257 424	35 623
3332	Industrial machinery mfg . . . . .	—	23	10	1 005	46 574	523	1 110	19 316	135 048	126 908	262 551	D
33329	Other industrial machinery mfg . . . . .	—	20	8	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery mfg . . . . .	—	15	5	768	36 919	437	921	15 791	118 602	106 520	225 958	D
3333	Commercial & service industry machinery mfg . . . . .	1	9	5	556	22 146	254	507	7 372	58 462	37 294	94 687	D
33331	Commercial & service industry machinery mfg . . . . .	1	9	5	556	22 146	254	507	7 372	58 462	37 294	94 687	D
3335	Metalworking machinery mfg . . . . .	1	111	26	2 403	109 506	1 541	3 181	57 819	209 344	155 631	359 747	16 294
33351	Metalworking machinery mfg . . . . .	1	111	26	2 403	109 506	1 541	3 181	57 819	209 344	155 631	359 747	16 294
333512	Machine tool (metal cutting types) mfg . . . . .	—	8	5	562	28 361	318	608	13 322	69 790	94 343	159 596	D
333514	Special die & tool, die set, jig, & fixture mfg . . . . .	1	46	6	691	35 625	440	964	18 553	55 177	17 197	72 144	3 376
333515	Cutting tool & machine tool accessory mfg . . . . .	1	45	9	737	26 344	514	1 070	15 694	53 787	27 436	81 431	1 777
3336	Engine, turbine, & power transmission equipment mfg . . . . .	—	12	5	2 041	90 903	1 257	3 097	52 237	235 357	109 304	341 860	8 351
33361	Engine, turbine, & power transmission equipment mfg . . . . .	—	12	5	2 041	90 903	1 257	3 097	52 237	235 357	109 304	341 860	8 351
333618	Other engine equipment mfg . . . . .	—	3	2	g	D	D	D	D	D	D	D	D

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	<b>HARTFORD COUNTY, CT—Con.</b>												
<b>31-33</b>	<b>Manufacturing—Con.</b>												
333	Machinery mfg—Con.												
3339	Other general-purpose machinery mfg .....	1	30	8	700	27 764	429	837	14 543	84 327	50 595	135 655	4 282
33399	All other general-purpose machinery mfg .....	1	27	8	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg .....	2	74	43	4 567	175 209	2 587	5 080	81 560	402 034	240 559	638 881	33 985
3341	Computer & peripheral equipment mfg .....	2	7	5	687	37 551	223	475	11 013	82 622	44 312	126 621	7 004
33411	Computer & peripheral equipment mfg .....	2	7	5	687	37 551	223	475	11 013	82 622	44 312	126 621	7 004
334119	Other computer peripheral equipment mfg .....	2	5	4	f	D	D	D	D	D	D	D	D
3344	Semiconductor & other electronic component mfg .....	4	27	17	1 689	51 136	1 114	2 281	27 108	104 268	90 830	189 716	7 089
33441	Semiconductor & other electronic component mfg .....	4	27	17	1 689	51 136	1 114	2 281	27 108	104 268	90 830	189 716	7 089
334419	Other electronic component mfg .....	8	8	7	779	26 911	426	925	12 419	46 710	55 467	91 965	4 157
3345	Navigational, measuring, medical, & control instruments mfg .....	3	29	15	1 433	51 665	758	1 458	23 113	113 928	60 658	177 892	4 376
33451	Navigational, measuring, medical, & control instruments mfg .....	3	29	15	1 433	51 665	758	1 458	23 113	113 928	60 658	177 892	4 376
334513	Industrial process control instrument mfg .....	1	7	4	654	24 867	329	611	9 961	53 931	31 860	86 304	1 849
335	Electrical equipment, appliance, & component mfg .....	—	41	19	3 498	150 579	1 938	3 888	63 702	320 741	252 234	561 001	21 177
3353	Electrical equipment mfg ..	—	22	7	1 556	66 434	840	1 689	26 223	142 760	72 247	211 102	7 489
33531	Electrical equipment mfg .....	—	22	7	1 556	66 434	840	1 689	26 223	142 760	72 247	211 102	7 489
335312	Motor & generator mfg .....	—	4	3	687	22 141	422	873	11 224	50 979	27 948	78 917	D
335313	Switchgear & switchboard apparatus mfg .....	—	4	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg .....	—	15	9	1 569	74 286	869	1 693	32 210	154 988	148 208	293 935	D
33593	Wiring device mfg .....	—	2	1	f	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg .....	—	2	1	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg .....	—	9	4	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg .....	—	9	4	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg .....	—	86	54	20 304	1 141 113	9 674	20 878	391 933	1 949 192	1 504 849	3 347 232	148 133
3363	Motor vehicle parts mfg ...	—	13	7	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg .....	—	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg .....	—	1	1	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg .....	—	69	47	18 933	1 101 394	8 648	19 128	368 276	1 859 897	1 353 362	3 107 959	138 100
33641	Aerospace product & parts mfg .....	—	69	47	18 933	1 101 394	8 648	19 128	368 276	1 859 897	1 353 362	3 107 959	138 100
336411	Aircraft mfg .....	—	4	4	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg ....	—	35	23	i	D	D	D	D	D	D	D	77 116
336413	Other aircraft part & auxiliary equipment mfg .....	—	29	19	i	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg...	—	1	1	f	D	D	D	D	D	D	D	D
337	Furniture & related product mfg .....	2	64	19	1 122	36 311	822	1 680	22 409	82 137	63 039	146 819	3 975
3372	Office furniture (including fixtures) mfg .....	1	22	13	584	20 498	416	840	11 393	43 454	30 330	75 364	1 745
33721	Office furniture (including fixtures) mfg .....	1	22	13	584	20 498	416	840	11 393	43 454	30 330	75 364	1 745

**Table 3. Industry Statistics for Counties: 1997—Con.**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>HARTFORD COUNTY, CT—Con.</b>													
<b>31-33</b>	<b>Manufacturing—Con.</b>												
339	Miscellaneous mfg.....	1	107	24	3 631	113 982	2 140	4 355	54 658	317 984	208 908	525 708	36 209
3391	Medical equipment & supplies mfg.....	1	45	9	1 071	43 715	928	2 012	25 932	89 039	30 317	119 891	22 468
33911	Medical equipment & supplies mfg.....	1	45	9	1 071	43 715	928	2 012	25 932	89 039	30 317	119 891	22 468
339112	Surgical & medical instrument mfg.....	—	7	4	600	26 689	554	1 314	17 237	52 824	23 717	76 980	D
3399	Other miscellaneous mfg ..	1	62	15	2 560	70 267	1 212	2 343	28 726	228 945	178 591	405 817	13 741
33993	Doll, toy, & game mfg ...	—	4	3	g	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg.....	—	3	3	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg.....	2	22	8	512	13 111	390	709	8 117	21 898	12 458	35 478	D
<b>LITCHFIELD COUNTY, CT</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	<b>1</b>	<b>448</b>	<b>156</b>	<b>17 288</b>	<b>589 845</b>	<b>12 311</b>	<b>26 311</b>	<b>379 700</b>	<b>1 922 910</b>	<b>1 331 198</b>	<b>3 246 777</b>	<b>97 004</b>
313	Textile mills.....	5	6	4	f	D	D	D	D	D	D	D	D
3131	Fiber, yarn, & thread mills .	5	3	3	f	D	D	D	D	D	D	D	D
31311	Fiber, yarn, & thread mills.....	5	3	3	f	D	D	D	D	D	D	D	D
313113	Thread mills.....	5	3	3	f	D	D	D	D	D	D	D	D
322	Paper mfg.....	—	4	3	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & 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
323	Printing & related support activities.....	1	28	7	729	20 470	420	820	9 393	57 296	31 288	89 027	5 112
3231	Printing & related support activities.....	1	28	7	729	20 470	420	820	9 393	57 296	31 288	89 027	5 112
32311	Printing.....	1	28	7	729	20 470	420	820	9 393	57 296	31 288	89 027	5 112
326	Plastics & rubber products mfg.....	—	23	12	1 593	42 158	1 077	2 664	27 843	101 209	79 659	175 698	D
3261	Plastics product mfg.....	—	22	12	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	—	17	8	g	D	D	D	D	D	D	D	8 521
326199	All other plastics product mfg.....	—	17	8	g	D	D	D	D	D	D	D	8 521
332	Fabricated metal product mfg.....	—	142	54	4 767	176 174	3 615	7 975	119 717	382 696	289 995	674 379	30 721
3321	Forging & stamping.....	—	30	14	1 395	55 384	1 141	2 338	40 528	135 657	113 736	248 906	11 661
33211	Forging & stamping.....	—	30	14	1 395	55 384	1 141	2 338	40 528	135 657	113 736	248 906	11 661
332116	Metal stamping.....	—	26	11	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg.....	1	65	18	1 272	47 468	944	2 003	31 915	91 715	91 516	183 792	8 505
33271	Machine shops.....	1	39	6	627	23 848	435	920	14 368	51 447	67 044	118 596	4 435
332710	Machine shops.....	1	39	6	627	23 848	435	920	14 368	51 447	67 044	118 596	4 435
33272	Turned product & screw, nut, & bolt mfg.....	1	26	12	645	23 620	509	1 083	17 547	40 268	24 472	65 196	4 070
3328	Coating, engraving, heat treating, & allied activities.	1	10	6	771	24 062	575	1 330	15 426	50 670	31 625	82 423	5 000
33281	Coating, engraving, heat treating, & allied activities.....	1	10	6	771	24 062	575	1 330	15 426	50 670	31 625	82 423	5 000
332813	Electroplating, plating, polishing, anodizing, & coloring.....	—	6	5	732	23 164	544	1 278	14 793	48 377	30 637	79 140	D
3329	Other fabricated metal product mfg.....	—	18	7	871	33 889	617	1 600	22 195	72 032	34 856	108 477	D
33299	All other fabricated metal product mfg.....	—	16	6	f	D	D	D	D	D	D	D	D
332991	Ball & roller bearing mfg.....	—	5	3	654	26 273	500	1 410	19 243	45 518	26 111	73 585	2 123
333	Machinery mfg.....	3	64	18	1 547	53 111	942	1 842	26 767	120 491	97 862	207 866	6 095
3332	Industrial machinery mfg ..	—	13	7	520	17 960	270	634	8 237	35 189	24 811	61 439	D
33329	Other industrial machinery mfg.....	—	13	7	520	17 960	270	634	8 237	35 189	24 811	61 439	D

**Table 3. Industry Statistics for Counties: 1997—Con.**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>LITCHFIELD COUNTY, CT—Con.</b>													
<b>31-33</b>	<b>Manufacturing—Con.</b>												
334	Computer & electronic product mfg .....	2	25	12	1 316	46 099	802	1 528	21 153	89 263	76 388	165 440	7 706
3344	Semiconductor & other electronic component mfg .....	3	14	8	791	25 391	552	1 122	13 791	65 356	43 210	108 525	5 420
33441	Semiconductor & other electronic component mfg .....	3	14	8	791	25 391	552	1 122	13 791	65 356	43 210	108 525	5 420
334417	Electronic connector mfg .....	2	3	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg .....	4	18	9	1 196	30 376	779	1 622	20 181	175 952	48 697	219 869	D
3359	Other electrical equipment & component mfg .....	5	12	6	976	23 193	685	1 448	17 947	164 225	40 300	199 904	D
33593	Wiring device mfg .....	5	9	4	f	D	D	D	D	D	D	D	D
335931	Current-carrying wiring device mfg .....	—	6	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg .....	—	9	5	1 101	41 716	832	1 802	25 037	71 367	115 123	197 366	9 413
3363	Motor vehicle parts mfg ...	—	3	3	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg .....	—	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg .....	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg .....	—	33	10	1 361	43 947	990	2 104	31 299	203 798	61 434	265 036	5 763
3391	Medical equipment & supplies mfg .....	—	6	2	f	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg .....	—	6	2	f	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg .....	—	2	1	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	1	27	8	f	D	D	D	D	D	D	D	D
<b>MIDDLESEX COUNTY, CT</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	—	<b>309</b>	<b>105</b>	<b>13 132</b>	<b>513 508</b>	<b>9 515</b>	<b>19 264</b>	<b>323 268</b>	<b>1 479 643</b>	<b>1 550 978</b>	<b>2 999 340</b>	<b>76 751</b>
323	Printing & related support activities .....	2	27	6	936	32 798	743	1 300	24 581	73 202	66 868	138 963	3 828
3231	Printing & related support activities .....	2	27	6	936	32 798	743	1 300	24 581	73 202	66 868	138 963	3 828
32311	Printing .....	2	24	5	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	—	14	3	713	24 548	591	999	18 875	53 375	52 313	104 668	D
326	Plastics & rubber products mfg .....	1	20	9	825	25 365	648	1 423	17 248	53 926	37 227	90 745	D
3261	Plastics product mfg .....	1	16	8	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg .....	1	69	28	2 162	82 165	1 587	3 273	49 746	136 334	80 190	216 693	9 821
333	Machinery mfg .....	1	41	14	1 516	60 544	927	1 635	31 026	142 954	87 205	230 059	8 378
3333	Commercial & service industry machinery mfg ..	2	5	3	f	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg .....	2	5	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg .....	—	23	9	1 021	40 700	580	1 060	14 451	126 388	85 445	215 528	7 643
3345	Navigational, measuring, medical, & control instruments mfg .....	—	12	5	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg .....	—	12	5	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg .....	—	14	5	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg .....	—	5	4	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg .....	—	5	4	h	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg .....	—	3	3	h	D	D	D	D	D	D	D	D
339	Miscellaneous mfg .....	3	26	9	557	14 357	356	583	6 256	34 260	19 188	53 652	1 076

**Table 3. Industry Statistics for Counties: 1997—Con.**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>NEW HAVEN COUNTY, CT</b>												
<b>31-33</b>	<b>Manufacturing . . . .</b>	<b>1</b>	<b>1 592</b>	<b>531</b>	<b>59 380</b>	<b>2 285 018</b>	<b>37 796</b>	<b>78 103</b>	<b>1 124 638</b>	<b>7 084 489</b>	<b>5 073 414</b>	<b>12 073 861</b>	<b>456 858</b>
311	Food mfg. . . . .	1	88	23	2 103	58 472	1 500	3 056	34 164	284 949	227 318	508 838	31 310
3113	Sugar & confectionery product mfg. . . . .	—	6	4	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg. . . . .	3	46	6	643	17 950	359	695	6 828	85 518	44 660	132 304	4 012
31181	Bread & bakery product mfg. . . . .	—	43	5	f	D	D	D	D	D	D	D	D
315	Apparel mfg. . . . .	—	22	6	705	19 796	499	992	9 191	108 145	95 554	199 314	1 652
3152	Cut & sew apparel mfg. . . . .	—	18	5	f	D	D	D	D	D	D	D	D
322	Paper mfg. . . . .	—	32	23	1 420	49 831	1 037	2 353	28 079	131 837	126 455	259 693	6 737
3222	Converted paper product mfg. . . . .	—	31	22	g	D	D	D	D	D	D	D	D
32221	Paperboard container mfg. . . . .	1	14	12	645	25 768	445	998	14 421	51 785	61 444	115 080	D
323	Printing & related support activities. . . . .	3	165	38	3 279	122 991	2 442	4 928	78 638	261 283	178 531	434 427	13 735
3231	Printing & related support activities. . . . .	3	165	38	3 279	122 991	2 442	4 928	78 638	261 283	178 531	434 427	13 735
32311	Printing . . . . .	3	143	30	2 699	97 149	2 030	4 026	61 787	203 832	165 608	364 078	D
323110	Commercial lithographic printing . . . . .	2	69	18	1 972	75 904	1 509	3 060	48 555	157 336	129 775	281 924	6 152
32312	Support activities for printing. . . . .	4	22	8	580	25 842	412	902	16 851	57 451	12 923	70 349	D
323122	Prepress services . . . . .	4	19	8	564	25 462	398	874	16 579	56 725	12 688	69 387	3 404
325	Chemical mfg. . . . .	—	45	24	5 400	293 585	1 508	3 070	51 188	1 192 655	759 672	1 953 265	73 622
3254	Pharmaceutical & medicine mfg. . . . .	—	5	2	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg. . . . .	—	5	2	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg. . . . .	—	5	2	h	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg. . . . .	2	10	4	897	30 657	532	1 060	11 777	92 281	140 904	233 912	D
32552	Adhesive mfg. . . . .	—	3	2	f	D	D	D	D	D	D	D	D
325520	Adhesive mfg. . . . .	—	3	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg. . . . .	2	13	6	597	24 466	288	584	9 710	57 528	81 704	139 695	7 168
32599	All other chemical product & preparation mfg. . . . .	3	10	4	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg. . . . .	2	68	28	2 327	74 871	1 623	3 433	41 101	160 548	124 416	285 245	13 733
3261	Plastics product mfg. . . . .	3	58	25	g	D	D	D	D	D	D	D	D
32619	Other plastics product mfg. . . . .	4	39	18	1 397	44 652	918	1 945	24 561	94 620	64 232	159 520	9 258
326199	All other plastics product mfg. . . . .	4	37	17	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg. . . . .	2	32	12	700	26 812	480	1 046	15 769	58 249	54 562	112 884	4 068
331	Primary metal mfg. . . . .	—	43	23	2 895	133 435	2 165	4 807	86 545	387 230	574 411	959 803	21 648
3312	Steel product mfg from purchased steel . . . . .	—	10	5	780	35 467	609	1 193	24 123	117 654	152 379	270 356	2 402
33122	Rolling & drawing of purchased steel . . . . .	—	10	5	780	35 467	609	1 193	24 123	117 654	152 379	270 356	2 402
331221	Cold-rolled steel shape mfg. . . . .	—	7	3	643	31 246	498	954	20 882	106 232	134 503	240 956	D
3314	Nonferrous metal (except aluminum) production & processing. . . . .	—	19	11	1 457	69 992	1 077	2 498	45 684	194 260	290 635	483 755	15 903
33142	Copper rolling, drawing, extruding, & alloying . . . . .	—	7	6	948	43 022	745	1 744	32 012	113 789	194 730	307 714	D
331421	Copper rolling, drawing, & extruding . . . . .	—	5	5	f	D	D	D	D	D	D	D	D
33149	Other nonferrous metal rolling, drawing, extruding, & alloying . . . . .	2	11	5	f	D	D	D	D	D	D	D	D



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			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>31-33</b>	<b>NEW HAVEN COUNTY, CT—Con.</b>												
	<b>Manufacturing—Con.</b>												
332	Fabricated metal product mfg . . . . .	—	441	124	12 203	444 057	9 229	19 775	278 778	1 051 923	604 176	1 655 801	62 847
3321	Forging & stamping . . . . .	—	51	25	2 274	82 604	1 787	4 064	56 176	165 897	157 301	320 424	8 670
33211	Forging & stamping . . . . .	—	51	25	2 274	82 604	1 787	4 064	56 176	165 897	157 301	320 424	8 670
332116	Metal stamping . . . . .	—	43	20	g	D	D	D	D	D	D	D	7 501
3322	Cutlery & handtool mfg . . . . .	—	16	7	1 172	48 888	866	1 792	27 151	230 939	62 124	288 062	17 561
33221	Cutlery & handtool mfg . . . . .	—	16	7	1 172	48 888	866	1 792	27 151	230 939	62 124	288 062	17 561
332211	Cutlery & flatware (except precious) mfg . . . . .	—	5	2	f	D	D	D	D	D	D	D	D
3323	Architectural & structural metals mfg . . . . .	2	63	15	1 079	37 389	769	1 472	21 330	69 714	59 439	129 648	2 847
33232	Ornamental & architectural metal products mfg . . . . .	3	44	11	f	D	D	D	D	D	D	D	2 387
3325	Hardware mfg . . . . .	—	11	4	1 171	43 599	839	1 921	25 661	118 710	77 556	198 575	D
33251	Hardware mfg . . . . .	—	11	4	1 171	43 599	839	1 921	25 661	118 710	77 556	198 575	D
332510	Hardware mfg . . . . .	—	11	4	1 171	43 599	839	1 921	25 661	118 710	77 556	198 575	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg . . . . .	1	201	41	3 391	124 502	2 601	5 192	79 530	225 972	102 132	327 053	14 015
33271	Machine shops . . . . .	1	134	18	1 726	63 180	1 349	2 580	42 214	108 863	39 231	147 722	5 850
332710	Machine shops . . . . .	1	134	18	1 726	63 180	1 349	2 580	42 214	108 863	39 231	147 722	5 850
33272	Turned product & screw, nut, & bolt mfg . . . . .	—	67	23	1 665	61 322	1 252	2 612	37 316	117 109	62 901	179 331	8 165
332721	Precision turned product mfg . . . . .	—	57	19	1 314	47 292	976	2 022	27 394	84 708	33 111	116 836	5 069
3328	Coating, engraving, heat treating, & allied activities . . . . .	2	38	15	1 227	43 629	946	2 134	28 291	93 070	46 004	139 595	6 555
33281	Coating, engraving, heat treating, & allied activities . . . . .	2	38	15	1 227	43 629	946	2 134	28 291	93 070	46 004	139 595	6 555
332813	Electroplating, plating, polishing, anodizing, & coloring . . . . .	2	23	10	738	26 724	560	1 270	16 654	48 767	35 433	84 060	3 906
3329	Other fabricated metal product mfg . . . . .	—	44	13	1 715	57 492	1 292	2 951	36 923	135 818	88 780	229 795	6 753
33299	All other fabricated metal product mfg . . . . .	—	36	9	1 378	47 212	1 044	2 378	30 937	111 864	58 903	177 569	D
332994	Small arms mfg . . . . .	—	7	4	g	D	D	D	D	D	D	D	D
333	Machinery mfg . . . . .	3	175	57	3 988	162 979	2 190	4 319	72 183	313 447	228 536	530 990	16 999
3332	Industrial machinery mfg . . . . .	5	24	11	688	29 988	319	561	10 151	75 236	67 175	145 340	D
3335	Metalworking machinery mfg . . . . .	1	98	23	1 688	65 815	1 078	2 115	36 440	115 622	73 500	172 693	6 493
33351	Metalworking machinery mfg . . . . .	1	98	23	1 688	65 815	1 078	2 115	36 440	115 622	73 500	172 693	6 493
3339	Other general-purpose machinery mfg . . . . .	3	32	14	990	44 770	441	957	15 340	77 446	57 137	132 649	D
33399	All other general-purpose machinery mfg . . . . .	4	24	9	829	36 727	329	721	10 423	64 919	43 277	106 160	3 497
333999	All other miscellaneous general-purpose machinery mfg . . . . .	2	18	7	687	30 195	271	589	8 358	45 910	27 643	72 847	2 688
334	Computer & electronic product mfg . . . . .	—	129	53	7 108	279 064	3 548	7 401	97 785	718 968	622 034	1 310 032	48 971
3342	Communications equipment mfg . . . . .	—	15	8	2 271	100 660	854	1 836	29 040	306 357	342 615	640 587	25 615
33421	Telephone apparatus mfg . . . . .	—	8	4	1 338	59 247	532	1 106	17 834	145 430	177 598	325 093	D
334210	Telephone apparatus mfg . . . . .	—	8	4	1 338	59 247	532	1 106	17 834	145 430	177 598	325 093	D
3344	Semiconductor & other electronic component mfg . . . . .	1	51	19	2 030	62 990	1 445	2 775	34 006	149 967	109 969	258 593	8 649
33441	Semiconductor & other electronic component mfg . . . . .	1	51	19	2 030	62 990	1 445	2 775	34 006	149 967	109 969	258 593	8 649
334412	Bare printed circuit board mfg . . . . .	—	13	5	755	28 389	571	1 240	16 299	73 144	56 512	126 196	4 534
334419	Other electronic component mfg . . . . .	1	17	7	605	17 285	377	693	7 974	40 845	26 814	67 734	1 183
3345	Navigational, measuring, medical, & control instruments mfg . . . . .	1	52	20	2 419	101 497	1 024	2 321	29 771	228 798	131 315	338 429	12 687
33451	Navigational, measuring, medical, & control instruments mfg . . . . .	1	52	20	2 419	101 497	1 024	2 321	29 771	228 798	131 315	338 429	12 687
334510	Electromedical & electrotherapeutic apparatus mfg . . . . .	1	10	5	856	39 906	320	726	10 724	68 682	47 300	115 453	4 202
334519	Other measuring & controlling device mfg . . . . .	—	7	3	585	27 423	193	439	6 239	52 223	18 601	69 859	3 495

**Table 3. Industry Statistics for Counties: 1997—Con.**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>31-33</b>	<b>NEW HAVEN COUNTY, CT—Con.</b>												
	<b>Manufacturing—Con.</b>												
335	Electrical equipment, appliance, & component mfg .....	-	63	35	3 705	127 423	2 263	4 323	63 859	314 428	216 480	530 025	33 844
3351	Electric lighting equipment mfg .....	-	13	7	f	D	D	D	D	D	D	D	D
33511	Electric lamp bulb & part mfg .....	-	2	2	f	D	D	D	D	D	D	D	D
335110	Electric lamp bulb & part mfg .....	-	2	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	1	21	8	1 143	32 761	584	1 225	13 436	74 066	48 454	121 894	D
33531	Electrical equipment mfg .....	1	21	8	1 143	32 761	584	1 225	13 436	74 066	48 454	121 894	D
335312	Motor & generator mfg .....	-	5	3	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg .....	-	28	20	1 622	58 505	1 002	1 964	29 585	182 376	128 005	309 129	26 148
33592	Communication & energy wire & cable mfg .....	-	8	8	843	33 759	468	915	16 051	107 061	84 144	189 039	23 933
335929	Other communication & energy wire mfg ...	-	8	8	843	33 759	468	915	16 051	107 061	84 144	189 039	23 933
336	Transportation equipment mfg .....	-	49	27	5 133	202 028	3 519	7 816	121 625	535 457	697 980	1 214 925	39 960
3363	Motor vehicle parts mfg ...	1	24	14	h	D	D	D	D	D	D	D	25 168
33631	Motor vehicle gasoline engine & engine parts mfg .....	-	6	2	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg ....	-	6	2	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg .....	1	6	4	g	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg .....	1	4	3	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg .....	-	19	11	2 263	102 958	1 564	3 739	67 880	300 671	444 842	727 353	14 564
33641	Aerospace product & parts mfg .....	-	19	11	2 263	102 958	1 564	3 739	67 880	300 671	444 842	727 353	14 564
336412	Aircraft engine & engine parts mfg ....	-	8	5	g	D	D	D	D	D	D	D	D
337	Furniture & related product mfg .....	2	55	8	735	19 153	585	994	12 515	38 795	25 395	64 224	3 107
339	Miscellaneous mfg .....	-	112	35	6 587	237 057	4 349	7 959	114 086	1 440 155	420 892	1 851 559	80 760
3391	Medical equipment & supplies mfg .....	-	50	19	3 919	135 675	2 729	4 619	70 202	1 115 903	237 959	1 344 070	50 147
33911	Medical equipment & supplies mfg .....	-	50	19	3 919	135 675	2 729	4 619	70 202	1 115 903	237 959	1 344 070	50 147
339112	Surgical & medical instrument mfg .....	-	18	9	h	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ...	1	62	16	2 668	101 382	1 620	3 340	43 884	324 252	182 933	507 489	30 613
33991	Jewelry & silverware mfg .....	1	9	5	f	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg .....	-	26	9	1 672	76 650	922	1 867	32 209	262 649	122 813	386 265	26 827
339999	All other miscellaneous mfg .....	-	13	3	g	D	D	D	D	D	D	D	D
<b>31-33</b>	<b>NEW LONDON COUNTY, CT</b>												
	<b>Manufacturing ....</b>	<b>1</b>	<b>237</b>	<b>59</b>	<b>19 888</b>	<b>1 035 074</b>	<b>7 433</b>	<b>16 290</b>	<b>255 693</b>	<b>1 834 604</b>	<b>1 112 160</b>	<b>2 962 841</b>	<b>219 676</b>
322	Paper mfg .....	2	8	6	f	D	D	D	D	D	D	D	D
325	Chemical mfg .....	-	8	5	4 310	387 835	597	1 503	34 885	266 597	258 946	546 835	D
3254	Pharmaceutical & medicine mfg .....	-	2	2	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg .....	-	2	2	h	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg .....	-	1	1	h	D	D	D	D	D	D	D	D
331	Primary metal mfg .....	-	6	3	f	D	D	D	D	D	D	D	D
3315	Foundries .....	-	3	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries .	-	1	1	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 mfg .....	-	35	4	567	21 127	360	717	10 895	71 547	53 109	128 399	2 912

**Table 3. Industry Statistics for Counties: 1997—Con.**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>31-33</b>	<b>NEW LONDON COUNTY, CT—Con.</b>												
	<b>Manufacturing—Con.</b>												
333	Machinery mfg . . . . .	1	19	5	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	1	5	2	f	D	D	D	D	D	D	D	D
33322	Plastics & rubber industry machinery mfg . . . . .	—	3	1	f	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg . . . . .	—	3	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg . . . . .	—	6	2	i	D	D	D	D	D	D	D	D
3366	Ship & boat building . . . . .	—	4	2	i	D	D	D	D	D	D	D	D
33661	Ship & boat building . . . . .	—	4	2	i	D	D	D	D	D	D	D	D
336611	Ship building & repairing . . . . .	—	3	2	i	D	D	D	D	D	D	D	D
	<b>TOLLAND COUNTY, CT</b>												
<b>31-33</b>	<b>Manufacturing . . . . .</b>	—	<b>152</b>	<b>35</b>	<b>4 487</b>	<b>145 752</b>	<b>2 746</b>	<b>5 243</b>	<b>71 812</b>	<b>456 409</b>	<b>280 871</b>	<b>739 212</b>	<b>31 699</b>
313	Textile mills . . . . .	—	4	3	507	16 792	399	783	10 512	33 526	34 044	70 730	D
323	Printing & related support activities . . . . .	1	16	4	578	11 010	303	536	7 387	35 674	15 152	50 669	1 551
3231	Printing & related support activities . . . . .	1	16	4	578	11 010	303	536	7 387	35 674	15 152	50 669	1 551
32311	Printing . . . . .	1	14	4	f	D	D	D	D	D	D	D	D
333	Machinery mfg . . . . .	—	18	4	1 121	40 465	599	1 320	20 174	218 150	79 191	295 710	D
3332	Industrial machinery mfg ..	—	6	2	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg . . . . .	—	4	2	f	D	D	D	D	D	D	D	D
333292	Textile machinery mfg . . . . .	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg . . . . .	—	10	5	733	22 398	458	841	9 293	54 369	40 577	95 143	D
3344	Semiconductor & other electronic component mfg . . . . .	—	5	4	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg . . . . .	—	5	4	f	D	D	D	D	D	D	D	D
	<b>WINDHAM COUNTY, CT</b>												
<b>31-33</b>	<b>Manufacturing . . . . .</b>	—	<b>198</b>	<b>74</b>	<b>8 613</b>	<b>273 846</b>	<b>6 587</b>	<b>13 004</b>	<b>156 317</b>	<b>818 375</b>	<b>668 881</b>	<b>1 480 915</b>	<b>51 908</b>
311	Food mfg . . . . .	—	6	3	g	D	D	D	D	D	D	D	2 876
3119	Other food mfg . . . . .	—	1	1	f	D	D	D	D	D	D	D	D
31191	Snack food mfg . . . . .	—	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg . . . . .	—	1	1	f	D	D	D	D	D	D	D	D
326	Plastics & rubber products mfg . . . . .	2	20	11	1 084	38 571	811	1 635	22 247	100 276	99 053	199 263	D
3261	Plastics product mfg . . . . .	4	14	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product mfg . . . . .	—	11	6	595	19 707	432	953	11 195	59 401	40 862	107 047	3 786
332	Fabricated metal product mfg . . . . .	1	40	8	661	20 320	481	1 019	10 771	43 998	30 207	74 126	3 540
335	Electrical equipment, appliance, & component mfg . . . . .	—	9	6	1 494	47 715	1 048	2 219	24 124	119 264	123 582	234 143	D
3359	Other electrical equipment & component mfg . . . . .	—	4	4	g	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg . . . . .	—	3	3	g	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg . . . . .	—	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment mfg . . . . .	—	7	3	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg . . . . .	—	3	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg . . . . .	—	3	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg . . . . .	—	11	5	f	D	D	D	D	D	D	D	D

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

<sup>2</sup>Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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.

**Table 4. Industry Statistics for Places: 1997**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>ANSONIA, CT</b>													
31-33	Manufacturing ....	-	19	6	1 020	37 896	769	1 619	23 904	74 334	73 094	145 377	3 886
<b>AVON TOWN, CT</b>													
31-33	Manufacturing ....	2	22	10	685	25 543	519	1 113	14 863	63 489	45 991	109 832	3 106
<b>BERLIN TOWN, CT</b>													
31-33	Manufacturing ....	1	90	34	3 550	125 911	2 652	5 259	76 831	261 012	345 607	609 858	30 876
332	Fabricated metal product mfg .....	-	38	15	1 063	39 993	883	1 932	28 316	90 680	43 739	139 730	7 806
333	Machinery mfg .....	-	17	9	563	25 899	323	750	13 302	46 467	34 103	78 852	3 410
336	Transportation equipment mfg .....	-	7	3	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	3	2	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
<b>BETHEL TOWN, CT</b>													
31-33	Manufacturing ....	-	49	17	1 586	64 766	960	1 899	29 762	114 641	165 291	283 767	D
334	Computer & electronic product mfg .....	-	2	2	f	D	D	D	D	D	D	D	D
<b>BLOOMFIELD TOWN, CT</b>													
31-33	Manufacturing ....	1	74	37	4 186	163 558	2 627	5 739	86 024	444 463	273 658	691 951	27 111
332	Fabricated metal product mfg .....	2	20	9	511	20 949	346	804	12 200	36 132	23 896	59 920	2 170
333	Machinery mfg .....	-	8	4	1 102	45 596	703	1 711	24 879	167 731	55 604	221 778	D
3336	Engine, turbine, & power transmission equipment mfg .....	-	3	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg .....	-	3	2	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg .....	5	6	5	661	20 462	360	577	9 260	60 514	53 755	103 153	8 541
336	Transportation equipment mfg .....	-	6	5	849	39 360	414	956	16 069	90 336	49 762	134 947	4 276
3364	Aerospace product & parts mfg .....	-	5	4	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg .....	-	5	4	f	D	D	D	D	D	D	D	D
336411	Aircraft mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
<b>BRANFORD TOWN, CT</b>													
31-33	Manufacturing ....	1	92	33	2 852	102 430	1 852	4 015	52 791	269 377	179 984	454 629	14 030
332	Fabricated metal product mfg .....	-	16	9	659	24 648	493	1 129	16 152	70 340	42 057	116 514	D
336	Transportation equipment mfg .....	-	4	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical & electronic equipment mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical & electronic equipment mfg .....	-	1	1	f	D	D	D	D	D	D	D	D

**Table 4. Industry Statistics for Places: 1997—Con.**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>BRIDGEPORT, CT</b>													
<b>31-33</b>	<b>Manufacturing . . . .</b>	<b>1</b>	<b>249</b>	<b>75</b>	<b>10 340</b>	<b>374 984</b>	<b>6 677</b>	<b>13 580</b>	<b>195 691</b>	<b>757 957</b>	<b>642 368</b>	<b>1 424 424</b>	<b>50 903</b>
313	Textile mills . . . . .	9	1	1	f	D	D	D	D	D	D	D	D
3133	Textile & fabric finishing & fabric coating mills . . . . .	9	1	1	f	D	D	D	D	D	D	D	D
31331	Textile & fabric finishing mills . . . . .	9	1	1	f	D	D	D	D	D	D	D	D
313312	Textile & fabric finishing mills . . . . .	9	1	1	f	D	D	D	D	D	D	D	D
323	Printing & related support activities . . . . .	4	31	10	522	17 668	364	762	10 577	32 109	18 202	53 703	1 520
3231	Printing & related support activities . . . . .	4	31	10	522	17 668	364	762	10 577	32 109	18 202	53 703	1 520
326	Plastics & rubber products mfg . . . . .	-	19	8	967	32 931	751	1 631	20 389	70 764	62 306	132 252	10 101
3261	Plastics product mfg . . . . .	-	17	6	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg . . . . .	-	15	6	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg . . . . .	-	15	6	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg . . . . .	1	62	19	1 230	42 303	924	1 846	24 905	71 619	60 974	134 857	3 958
333	Machinery mfg . . . . .	-	28	6	1 330	54 783	736	1 479	30 094	79 932	117 929	199 337	4 493
3335	Metalworking machinery mfg . . . . .	-	21	5	1 239	52 044	662	1 364	28 485	72 014	111 922	185 416	D
33351	Metalworking machinery mfg . . . . .	-	21	5	1 239	52 044	662	1 364	28 485	72 014	111 922	185 416	D
333512	Machine tool (metal cutting types) mfg . . . . .	-	3	2	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg . . . . .	-	13	7	1 586	67 097	963	1 782	25 975	169 624	127 727	315 864	11 437
3359	Other electrical equipment & component mfg . . . . .	-	5	5	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg . . . . .	-	2	2	f	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg . . . . .	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg . . . . .	-	6	3	g	D	D	D	D	D	D	D	10 029
3364	Aerospace product & parts mfg . . . . .	-	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg . . . . .	-	1	1	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg . . . . .	-	1	1	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg . . . . .	-	18	2	582	22 840	412	876	13 090	56 872	24 139	78 974	D
<b>BRISTOL, CT</b>													
<b>31-33</b>	<b>Manufacturing . . . .</b>	<b>1</b>	<b>158</b>	<b>60</b>	<b>4 542</b>	<b>158 991</b>	<b>3 328</b>	<b>6 845</b>	<b>99 967</b>	<b>361 069</b>	<b>225 807</b>	<b>580 526</b>	<b>20 838</b>
332	Fabricated metal product mfg . . . . .	-	78	32	2 195	80 949	1 701	3 582	55 025	161 396	93 985	254 070	11 619
3326	Spring & wire product mfg . . . . .	-	17	13	928	34 406	737	1 494	24 740	68 206	46 654	114 819	5 806
33261	Spring & wire product mfg . . . . .	-	17	13	928	34 406	737	1 494	24 740	68 206	46 654	114 819	5 806
332612	Spring (light gauge) mfg . . . . .	1	11	8	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg . . . . .	-	37	12	765	27 173	573	1 289	18 400	51 611	18 631	69 655	3 836
335	Electrical equipment, appliance, & component mfg . . . . .	-	6	4	640	22 780	380	789	11 042	57 443	28 018	85 484	D
3353	Electrical equipment mfg . . . . .	-	4	3	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg . . . . .	-	4	3	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg . . . . .	-	1	1	f	D	D	D	D	D	D	D	D
<b>BROOKFIELD TOWN, CT</b>													
<b>31-33</b>	<b>Manufacturing . . . .</b>	<b>4</b>	<b>45</b>	<b>15</b>	<b>1 311</b>	<b>49 537</b>	<b>849</b>	<b>1 806</b>	<b>26 390</b>	<b>125 695</b>	<b>102 080</b>	<b>226 016</b>	<b>6 168</b>
334	Computer & electronic product mfg . . . . .	3	13	7	507	19 587	327	711	10 711	57 191	21 407	76 831	1 696

**Table 4. Industry Statistics for Places: 1997—Con.**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>CHESHIRE TOWN, CT</b>													
31-33	Manufacturing ....	-	65	24	2 550	76 886	1 510	3 308	36 225	187 434	125 714	289 378	11 470
334	Computer & electronic product mfg.....	-	7	3	559	15 992	305	769	6 596	64 801	23 873	67 549	3 733
335	Electrical equipment, appliance, & component mfg.....	-	5	2	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
335312	Motor & generator mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
<b>CLINTON TOWN, CT</b>													
31-33	Manufacturing ....	-	24	7	663	27 421	528	1 299	19 700	150 609	116 331	266 412	6 115
<b>CROMWELL TOWN, CT</b>													
31-33	Manufacturing ....	1	29	7	503	21 073	374	740	13 450	40 692	16 760	57 179	D
<b>DANBURY, CT</b>													
31-33	Manufacturing ....	1	130	52	6 556	280 979	3 814	7 733	123 296	731 675	562 385	1 301 958	35 515
332	Fabricated metal product mfg.....	-	21	7	1 305	49 371	905	1 917	25 337	119 799	53 963	170 446	7 961
3329	Other fabricated metal product mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	18	11	1 816	99 229	911	1 806	39 296	234 496	136 676	372 412	15 094
3344	Semiconductor & other electronic component mfg.....	-	10	6	f	D	D	D	D	D	D	D	7 661
33441	Semiconductor & other electronic component mfg.....	-	10	6	f	D	D	D	D	D	D	D	7 661
3345	Navigational, measuring, medical, & control instruments mfg.....	-	6	5	1 063	63 810	436	964	23 735	157 406	75 700	234 581	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	6	5	1 063	63 810	436	964	23 735	157 406	75 700	234 581	D
334511	Search, detection, navigation, & guidance instrument mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg.....	1	8	4	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg .....	1	6	4	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment & component mfg .....	1	6	4	f	D	D	D	D	D	D	D	D
335999	All other miscellaneous electrical equipment & component mfg .....	1	5	4	f	D	D	D	D	D	D	D	D
<b>EAST HARTFORD TOWN, CT</b>													
31-33	Manufacturing ....	-	83	19	10 091	641 333	4 505	9 537	185 650	867 842	1 029 254	1 823 057	72 408
323	Printing & related support activities.....	-	14	3	626	21 791	498	1 134	15 152	41 519	24 178	65 704	D
3231	Printing & related support activities.....	-	14	3	626	21 791	498	1 134	15 152	41 519	24 178	65 704	D
32311	Printing .....	-	11	2	598	20 966	471	1 075	14 482	40 086	23 866	63 957	D
323114	Quick printing .....	-	5	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	6	4	i	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	-	5	4	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	5	4	i	D	D	D	D	D	D	D	D
336411	Aircraft mfg.....	-	1	1	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg .....	-	3	2	i	D	D	D	D	D	D	D	D
<b>EAST HAVEN TOWN, CT</b>													
31-33	Manufacturing ....	5	34	8	588	19 202	395	794	8 941	46 498	42 792	88 513	D

**Table 4. Industry Statistics for Places: 1997—Con.**

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NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>31-33</b>	<b>EAST WINDSOR TOWN, CT</b>												
	Manufacturing ....	3	29	13	743	25 033	519	1 058	13 031	51 659	37 271	92 710	9 660
<b>31-33</b>	<b>ELLINGTON TOWN, CT</b>												
	Manufacturing ....	1	27	9	622	25 513	380	630	11 212	57 647	58 875	116 264	4 874
<b>31-33</b>	<b>ENFIELD TOWN, CT</b>												
	Manufacturing ....	-	55	16	2 860	87 878	1 390	2 870	39 387	269 800	222 174	487 071	14 451
339	Miscellaneous mfg .....	-	5	1	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	4	1	g	D	D	D	D	D	D	D	D
33993	Doll, toy, & game mfg ...	-	1	1	g	D	D	D	D	D	D	D	D
339932	Game, toy, & children's vehicle mfg .....	-	1	1	g	D	D	D	D	D	D	D	D
<b>31-33</b>	<b>FAIRFIELD TOWN, CT</b>												
	Manufacturing ....	1	50	16	1 469	59 319	868	1 848	29 394	103 514	116 350	220 969	6 302
<b>31-33</b>	<b>FARMINGTON TOWN, CT</b>												
	Manufacturing ....	1	57	30	3 350	139 069	2 227	4 804	77 759	347 404	248 942	594 506	23 326
332	Fabricated metal product mfg .....	-	13	11	1 500	57 769	1 118	2 474	38 365	137 688	82 372	222 332	7 581
333	Machinery mfg .....	-	7	6	982	47 891	569	1 178	23 022	128 335	118 919	243 469	11 332
3335	Metalworking machinery mfg .....	-	4	4	686	35 946	367	765	16 752	81 311	92 990	170 801	10 004
33351	Metalworking machinery mfg .....	-	4	4	686	35 946	367	765	16 752	81 311	92 990	170 801	10 004
<b>31-33</b>	<b>GLASTONBURY TOWN, CT</b>												
	Manufacturing ....	2	60	19	1 324	48 774	914	1 758	27 553	93 391	69 770	163 775	4 688
<b>31-33</b>	<b>GREENWICH TOWN, CT</b>												
	Manufacturing ....	2	65	13	1 622	57 715	1 090	2 124	34 119	169 150	75 151	242 004	D
311	Food mfg .....	-	7	3	f	D	D	D	D	D	D	D	D
3118	Bakeries & tortilla mfg ....	-	7	3	f	D	D	D	D	D	D	D	D
31181	Bread & bakery product mfg .....	-	6	2	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries ..	-	4	2	f	D	D	D	D	D	D	D	D
<b>31-33</b>	<b>GROTON, CT *</b>												
	Manufacturing ....	-	5	2	j	D	D	D	D	D	D	D	D
325	Chemical mfg .....	-	1	1	h	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg .....	-	1	1	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg .....	-	1	1	h	D	D	D	D	D	D	D	D
325411	Medicinal & botanical mfg .....	-	1	1	h	D	D	D	D	D	D	D	D
336	Transportation equipment mfg .....	-	1	1	i	D	D	D	D	D	D	D	D
3366	Ship & boat building .....	-	1	1	i	D	D	D	D	D	D	D	D
33661	Ship & boat building .....	-	1	1	i	D	D	D	D	D	D	D	D
336611	Ship building & repairing .....	-	1	1	i	D	D	D	D	D	D	D	D
<b>31-33</b>	<b>GROTON TOWN BALANCE, CT *</b>												
	Manufacturing ....	3	14	3	849	24 708	695	1 335	17 856	59 542	32 534	91 637	D
331	Primary metal mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
3315	Foundries .....	-	1	1	f	D	D	D	D	D	D	D	D
33151	Ferrous metal foundries ..	-	1	1	f	D	D	D	D	D	D	D	D
331512	Steel investment foundries .....	-	1	1	f	D	D	D	D	D	D	D	D
<b>31-33</b>	<b>GUILFORD TOWN, CT</b>												
	Manufacturing ....	1	37	13	1 022	37 549	691	1 325	20 574	96 855	103 052	199 588	8 912

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		E <sup>1</sup>	Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>HAMDEN TOWN, CT</b>													
31-33	Manufacturing ....	2	91	35	1 854	55 232	1 240	2 491	29 406	114 958	103 752	218 704	5 434
<b>HARTFORD, CT</b>													
31-33	Manufacturing ....	2	112	34	2 183	60 583	1 555	3 007	33 576	130 684	123 323	254 530	7 188
<b>KILLINGLY TOWN BALANCE, CT *</b>													
31-33	Manufacturing ....	-	27	15	2 361	73 903	1 859	3 717	42 228	286 497	224 628	517 781	10 659
311	Food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
3119	Other food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
31191	Snack food mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
311919	Other snack food mfg.	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
<b>MANCHESTER TOWN, CT</b>													
31-33	Manufacturing ....	3	99	39	3 881	169 788	2 637	5 761	85 911	456 245	322 926	772 518	29 351
332	Fabricated metal product mfg.....	1	30	10	823	34 561	618	1 353	18 969	75 532	42 546	116 410	3 748
333	Machinery mfg.....	-	7	4	561	27 034	357	828	13 759	89 519	57 441	145 298	D
336	Transportation equipment mfg.....	1	7	6	609	29 063	415	872	14 066	72 514	43 837	110 923	6 494
3364	Aerospace product & parts mfg.....	1	6	6	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	1	6	6	f	D	D	D	D	D	D	D	D
<b>MERIDEN, CT</b>													
31-33	Manufacturing ....	-	103	34	4 353	162 878	2 637	5 719	72 966	378 759	386 724	751 187	33 319
332	Fabricated metal product mfg.....	1	26	5	565	20 629	439	864	11 693	36 131	14 447	51 129	1 992
333	Machinery mfg.....	-	11	5	611	29 643	228	571	8 405	43 191	22 727	65 001	2 544
334	Computer & electronic product mfg.....	-	5	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg...	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	11	3	f	D	D	D	D	D	D	D	1 178
3399	Other miscellaneous mfg..	-	10	3	f	D	D	D	D	D	D	D	D
<b>MIDDLETOWN, CT</b>													
31-33	Manufacturing ....	-	58	29	5 256	222 039	3 774	7 766	145 239	705 669	987 939	1 662 244	33 286
334	Computer & electronic product mfg.....	-	6	5	601	21 925	300	551	7 859	50 888	28 107	82 125	2 153
336	Transportation equipment mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	3	2	h	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg....	-	1	1	h	D	D	D	D	D	D	D	D



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			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>MILFORD, CT (CC) *</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	-	<b>206</b>	<b>53</b>	<b>6 100</b>	<b>258 831</b>	<b>3 871</b>	<b>7 590</b>	<b>135 328</b>	<b>720 445</b>	<b>397 069</b>	<b>1 104 456</b>	<b>53 856</b>
332	Fabricated metal product mfg .....	-	72	15	1 906	83 042	1 415	2 948	51 245	272 113	72 015	331 813	19 058
3321	Forging & stamping .....	-	6	4	508	14 817	343	737	9 546	35 615	13 708	46 653	1 223
33211	Forging & stamping .....	-	6	4	508	14 817	343	737	9 546	35 615	13 708	46 653	1 223
332116	Metal stamping .....	-	6	4	508	14 817	343	737	9 546	35 615	13 708	46 653	1 223
3322	Cutlery & handtool mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332211	Cutlery & flatware (except precious) mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg .....	1	36	10	523	21 270	347	623	12 678	34 817	23 508	57 779	1 631
334	Computer & electronic product mfg .....	-	21	7	952	40 525	476	896	14 489	79 240	116 976	193 917	3 305
3342	Communications equipment mfg .....	-	2	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg .....	-	2	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg .....	-	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg .....	-	11	4	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	5	2	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg .....	-	3	2	g	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg .....	-	2	1	g	D	D	D	D	D	D	D	D
<b>MILFORD CITY, CT *</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	-	<b>206</b>	<b>53</b>	<b>6 100</b>	<b>258 831</b>	<b>3 871</b>	<b>7 590</b>	<b>135 328</b>	<b>720 445</b>	<b>397 069</b>	<b>1 104 456</b>	<b>53 856</b>
332	Fabricated metal product mfg .....	-	72	15	1 906	83 042	1 415	2 948	51 245	272 113	72 015	331 813	19 058
3321	Forging & stamping .....	-	6	4	508	14 817	343	737	9 546	35 615	13 708	46 653	1 223
33211	Forging & stamping .....	-	6	4	508	14 817	343	737	9 546	35 615	13 708	46 653	1 223
332116	Metal stamping .....	-	6	4	508	14 817	343	737	9 546	35 615	13 708	46 653	1 223
3322	Cutlery & handtool mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332211	Cutlery & flatware (except precious) mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg .....	1	36	10	523	21 270	347	623	12 678	34 817	23 508	57 779	1 631
334	Computer & electronic product mfg .....	-	21	7	952	40 525	476	896	14 489	79 240	116 976	193 917	3 305
3342	Communications equipment mfg .....	-	2	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg .....	-	2	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg .....	-	2	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg .....	-	11	4	g	D	D	D	D	D	D	D	D
3399	Other miscellaneous mfg ..	-	5	2	g	D	D	D	D	D	D	D	D
33999	All other miscellaneous mfg .....	-	3	2	g	D	D	D	D	D	D	D	D
339999	All other miscellaneous mfg .....	-	2	1	g	D	D	D	D	D	D	D	D
<b>MONROE TOWN, CT</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	-	<b>30</b>	<b>9</b>	<b>1 012</b>	<b>34 688</b>	<b>660</b>	<b>1 396</b>	<b>19 633</b>	<b>73 339</b>	<b>59 807</b>	<b>126 948</b>	<b>4 783</b>
<b>MONTVILLE TOWN, CT</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	4	<b>13</b>	<b>3</b>	<b>f</b>	<b>D</b>	<b>D</b>	<b>D</b>	<b>D</b>	<b>D</b>	<b>D</b>	<b>D</b>	<b>D</b>
<b>NAUGATUCK, CT</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	1	<b>63</b>	<b>28</b>	<b>2 957</b>	<b>109 801</b>	<b>1 860</b>	<b>4 139</b>	<b>59 898</b>	<b>378 644</b>	<b>355 625</b>	<b>737 462</b>	<b>39 767</b>
334	Computer & electronic product mfg .....	-	5	4	841	28 540	346	861	10 713	93 635	73 317	170 400	D
3342	Communications equipment mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
33421	Telephone apparatus mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus mfg .....	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>NEW BRITAIN, CT</b>													
31-33	<b>Manufacturing ....</b>	-	141	48	5 329	193 197	3 903	7 785	124 053	497 710	347 599	845 048	18 828
332	Fabricated metal product mfg .....	-	59	22	3 527	133 780	2 638	5 233	89 607	373 146	200 626	571 588	12 707
3322	Cutlery & handtool mfg ....	-	1	1	f	D	D	D	D	D	D	D	D
33221	Cutlery & handtool mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
332212	Hand & edge tool mfg .	-	1	1	f	D	D	D	D	D	D	D	D
3325	Hardware mfg .....	-	4	2	f	D	D	D	D	D	D	D	D
33251	Hardware mfg .....	-	4	2	f	D	D	D	D	D	D	D	D
332510	Hardware mfg .....	-	4	2	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg .....	-	30	7	645	24 349	560	1 276	18 479	49 257	19 182	67 918	5 976
3329	Other fabricated metal product mfg .....	-	8	6	816	20 848	591	1 118	11 597	66 800	36 578	102 872	2 434
33291	Metal valve mfg .....	-	4	4	679	16 411	490	909	8 869	54 964	24 028	78 864	D
<b>NEW HAVEN, CT</b>													
31-33	<b>Manufacturing ....</b>	1	106	42	4 177	147 228	2 804	6 341	80 520	413 807	325 127	750 641	20 218
332	Fabricated metal product mfg .....	-	12	4	1 426	53 689	1 009	2 452	32 519	136 623	92 671	237 193	6 258
3325	Hardware mfg .....	-	2	2	g	D	D	D	D	D	D	D	D
33251	Hardware mfg .....	-	2	2	g	D	D	D	D	D	D	D	D
332510	Hardware mfg .....	-	2	2	g	D	D	D	D	D	D	D	D
<b>NEWINGTON TOWN, CT</b>													
31-33	<b>Manufacturing ....</b>	-	87	27	3 094	119 842	2 039	4 217	67 473	216 162	169 439	383 246	15 487
332	Fabricated metal product mfg .....	1	34	7	652	25 193	503	1 058	17 075	43 122	20 793	65 340	2 228
336	Transportation equipment mfg .....	-	3	3	814	36 139	631	1 368	24 429	78 712	37 473	111 696	8 383
3364	Aerospace product & parts mfg .....	-	3	3	814	36 139	631	1 368	24 429	78 712	37 473	111 696	8 383
33641	Aerospace product & parts mfg .....	-	3	3	814	36 139	631	1 368	24 429	78 712	37 473	111 696	8 383
336412	Aircraft engine & engine parts mfg ....	-	2	2	f	D	D	D	D	D	D	D	D
<b>NEW MILFORD TOWN, CT</b>													
31-33	<b>Manufacturing ....</b>	-	52	9	1 742	80 451	1 326	2 823	62 247	612 707	374 322	987 313	10 982
322	Paper mfg .....	-	1	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, & 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
<b>NEWTOWN TOWN, CT</b>													
31-33	<b>Manufacturing ....</b>	-	35	10	1 207	41 575	957	1 975	28 033	86 459	114 105	199 205	8 161
<b>NORTH BRANFORD TOWN, CT</b>													
31-33	<b>Manufacturing ....</b>	-	39	4	822	29 286	392	760	9 135	96 660	91 598	190 062	11 750
334	Computer & electronic product mfg .....	-	6	2	f	D	D	D	D	D	D	D	D

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<b>NORTH HAVEN TOWN, CT</b>													
<b>31-33</b>	<b>Manufacturing . . . .</b>	-	<b>78</b>	<b>36</b>	<b>8 759</b>	<b>340 789</b>	<b>6 422</b>	<b>13 020</b>	<b>206 587</b>	<b>1 674 213</b>	<b>917 608</b>	<b>2 559 778</b>	<b>95 755</b>
323	Printing & related support activities.....	2	15	7	1 160	46 400	919	1 972	31 250	105 258	94 602	194 676	3 936
3231	Printing & related support activities.....	2	15	7	1 160	46 400	919	1 972	31 250	105 258	94 602	194 676	3 936
32311	Printing .....	-	13	5	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing ..	-	9	5	913	34 833	748	1 569	23 783	82 019	88 108	165 009	2 454
332	Fabricated metal product mfg.....	-	14	5	889	31 191	719	1 506	20 798	80 380	36 503	118 408	4 927
3329	Other fabricated metal product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	2	2	f	D	D	D	D	D	D	D	D
332994	Small arms mfg .....	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	5	2	564	20 403	464	978	12 640	43 744	33 270	77 228	D
3344	Semiconductor & other electronic component mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor & other electronic component mfg.....	-	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	3	3	g	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg .....	-	2	2	g	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	-	6	2	h	D	D	D	D	D	D	D	D
3391	Medical equipment & supplies mfg.....	-	4	1	h	D	D	D	D	D	D	D	D
33911	Medical equipment & supplies mfg.....	-	4	1	h	D	D	D	D	D	D	D	D
339112	Surgical & medical instrument mfg.....	-	3	1	h	D	D	D	D	D	D	D	D
<b>NORWALK, CT</b>													
<b>31-33</b>	<b>Manufacturing . . . .</b>	<b>1</b>	<b>170</b>	<b>52</b>	<b>6 713</b>	<b>297 713</b>	<b>3 604</b>	<b>7 936</b>	<b>121 145</b>	<b>889 946</b>	<b>531 631</b>	<b>1 420 524</b>	<b>36 126</b>
315	Apparel mfg.....	-	9	3	f	D	D	D	D	D	D	D	D
3159	Apparel accessories & other apparel mfg.....	-	7	3	f	D	D	D	D	D	D	D	D
31599	Apparel accessories & other apparel mfg.....	-	7	3	f	D	D	D	D	D	D	D	D
315999	Other apparel accessories & other apparel mfg.....	-	6	3	f	D	D	D	D	D	D	D	D
323	Printing & related support activities.....	1	35	8	674	28 604	520	1 096	14 502	76 674	41 089	116 090	5 045
3231	Printing & related support activities.....	1	35	8	674	28 604	520	1 096	14 502	76 674	41 089	116 090	5 045
32311	Printing .....	1	30	7	589	25 507	464	975	12 423	70 974	39 612	108 954	3 349
325	Chemical mfg.....	-	3	3	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	2	2	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg.....	-	19	11	2 115	122 368	855	2 059	37 308	370 870	203 416	578 055	6 997
3345	Navigational, measuring, medical, & control instruments mfg.....	-	8	4	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	8	4	g	D	D	D	D	D	D	D	D
334511	Search, detection, navigation, & guidance instrument mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg.....	8	21	4	570	16 881	234	423	9 081	42 777	25 467	65 753	D
<b>NORWICH, CT</b>													
<b>31-33</b>	<b>Manufacturing . . . .</b>	<b>2</b>	<b>48</b>	<b>15</b>	<b>1 403</b>	<b>44 761</b>	<b>882</b>	<b>1 880</b>	<b>23 305</b>	<b>138 999</b>	<b>116 703</b>	<b>254 522</b>	<b>10 678</b>
<b>ORANGE TOWN, CT</b>													
<b>31-33</b>	<b>Manufacturing . . . .</b>	<b>4</b>	<b>22</b>	<b>9</b>	<b>884</b>	<b>25 400</b>	<b>572</b>	<b>1 090</b>	<b>12 984</b>	<b>60 288</b>	<b>59 653</b>	<b>120 018</b>	<b>3 385</b>

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			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>PLAINFIELD TOWN, CT</b>													
31-33	<b>Manufacturing</b> ....	-	30	12	1 777	54 692	1 434	2 656	27 978	185 704	119 350	306 622	D
335	Electrical equipment, appliance, & component mfg .....	-	3	3	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg .....	-	2	2	f	D	D	D	D	D	D	D	D
33592	Communication & energy wire & cable mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
335929	Other communication & energy wire mfg ...	-	1	1	f	D	D	D	D	D	D	D	D
<b>PLAINVILLE TOWN, CT</b>													
31-33	<b>Manufacturing</b> ....	1	67	17	2 498	99 412	1 482	2 967	44 129	195 514	88 431	280 071	11 041
332	Fabricated metal product mfg .....	1	34	8	681	24 763	524	1 063	14 390	41 992	15 330	57 236	2 644
334	Computer & electronic product mfg .....	3	6	3	798	27 649	387	794	11 478	59 126	29 963	89 470	2 801
335	Electrical equipment, appliance, & component mfg .....	-	2	1	f	D	D	D	D	D	D	D	D
3353	Electrical equipment mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33531	Electrical equipment mfg .....	-	2	1	f	D	D	D	D	D	D	D	D
335313	Switchgear & switchboard apparatus mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
<b>PLYMOUTH TOWN, CT</b>													
31-33	<b>Manufacturing</b> ....	5	41	15	1 209	38 785	826	1 680	24 334	159 772	45 163	205 642	5 769
<b>RIDGEFIELD TOWN, CT</b>													
31-33	<b>Manufacturing</b> ....	-	19	4	g	D	D	D	D	D	D	D	D
325	Chemical mfg .....	-	3	2	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg .....	-	2	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg .....	-	2	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg .....	-	2	1	g	D	D	D	D	D	D	D	D
<b>SEYMOUR TOWN, CT</b>													
31-33	<b>Manufacturing</b> ....	-	35	18	1 370	48 230	916	1 874	24 750	109 312	80 365	191 404	6 895
<b>SHELTON, CT</b>													
31-33	<b>Manufacturing</b> ....	2	77	35	4 923	211 781	2 607	5 507	88 530	441 241	284 617	728 552	31 111
332	Fabricated metal product mfg .....	-	18	12	1 079	50 297	691	1 606	19 327	97 901	55 536	154 760	6 852
333	Machinery mfg .....	4	9	5	515	22 806	288	641	10 358	45 196	24 082	69 350	1 794
334	Computer & electronic product mfg .....	7	9	6	f	D	D	D	D	D	D	D	D
3342	Communications equipment mfg .....	9	3	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg .....	-	2	2	g	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg .....	-	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg .....	-	1	1	g	D	D	D	D	D	D	D	D
336411	Aircraft mfg .....	-	1	1	g	D	D	D	D	D	D	D	D
<b>SIMSBURY TOWN, CT</b>													
31-33	<b>Manufacturing</b> ....	-	11	3	f	D	D	D	D	D	D	D	1 195
325	Chemical mfg .....	-	2	2	f	D	D	D	D	D	D	D	D
3259	Other chemical product mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
32592	Explosives mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
325920	Explosives mfg .....	-	1	1	f	D	D	D	D	D	D	D	D

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<b>SOUTHINGTON TOWN, CT</b>													
31-33	Manufacturing ....	2	104	35	2 632	97 934	2 062	4 550	60 167	181 417	117 980	299 213	27 658
332	Fabricated metal product mfg .....	2	48	21	1 423	53 303	1 090	2 415	32 668	90 341	65 427	155 046	6 575
339	Miscellaneous mfg .....	-	8	3	529	21 603	508	1 163	14 200	41 858	18 634	60 782	D
<b>SOUTH WINDSOR TOWN, CT</b>													
31-33	Manufacturing ....	1	89	28	2 763	116 094	1 554	3 175	49 870	270 377	178 200	443 637	16 055
335	Electrical equipment, appliance, & component mfg .....	-	5	3	595	26 801	279	496	10 177	34 812	55 461	83 173	D
<b>STAFFORD TOWN, CT</b>													
31-33	Manufacturing ....	-	24	7	1 165	35 750	919	1 714	20 892	100 451	67 255	169 526	17 310
<b>STAMFORD, CT</b>													
31-33	Manufacturing ....	-	183	47	6 126	229 600	2 996	6 008	106 618	1 644 778	937 781	2 515 274	100 992
323	Printing & related support activities .....	5	45	9	593	25 259	404	790	15 437	40 621	23 095	63 979	6 150
3231	Printing & related support activities .....	5	45	9	593	25 259	404	790	15 437	40 621	23 095	63 979	6 150
32311	Printing .....	4	42	7	f	D	D	D	D	D	D	D	D
325	Chemical mfg .....	-	11	5	g	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, & toilet preparation mfg ..	-	5	2	f	D	D	D	D	D	D	D	D
32562	Toilet preparation mfg ...	-	2	1	f	D	D	D	D	D	D	D	D
325620	Toilet preparation mfg .	-	2	1	f	D	D	D	D	D	D	D	D
333	Machinery mfg .....	-	12	4	g	D	D	D	D	D	D	D	D
3333	Commercial & service industry machinery mfg ..	-	2	1	g	D	D	D	D	D	D	D	D
33331	Commercial & service industry machinery mfg .....	-	2	1	g	D	D	D	D	D	D	D	D
333313	Office machinery mfg .	-	1	1	g	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg .....	1	22	9	g	D	D	D	D	D	D	D	4 431
3345	Navigational, measuring, medical, & control instruments mfg .....	-	9	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg .....	-	9	3	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg .....	-	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous mfg .....	1	15	4	701	34 307	355	648	11 552	79 012	54 505	133 620	D
<b>STONINGTON TOWN, CT</b>													
31-33	Manufacturing ....	-	35	8	1 179	49 978	745	1 652	27 447	160 431	98 692	256 805	D
333	Machinery mfg .....	-	4	2	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	1	1	f	D	D	D	D	D	D	D	D
33322	Plastics & rubber industry machinery mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
333220	Plastics & rubber industry machinery mfg .....	-	1	1	f	D	D	D	D	D	D	D	D

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			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>STRATFORD TOWN, CT</b>													
31-33	Manufacturing ....	-	101	35	9 395	506 527	5 438	11 119	253 098	1 119 345	849 961	2 107 317	58 536
334	Computer & electronic product mfg.....	-	7	2	930	37 701	615	1 293	23 955	74 428	34 721	109 029	D
3345	Navigational, measuring, medical, & control instruments mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, medical, & control instruments mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
334513	Industrial process control instrument mfg.....	-	4	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg.....	-	6	4	i	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg.....	-	4	3	i	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg.....	-	4	3	i	D	D	D	D	D	D	D	D
336411	Aircraft mfg.....	-	1	1	i	D	D	D	D	D	D	D	D
336412	Aircraft engine & engine parts mfg....	-	2	2	f	D	D	D	D	D	D	D	D
<b>TOLLAND TOWN, CT</b>													
31-33	Manufacturing ....	-	14	2	g	D	D	D	D	D	D	D	D
333	Machinery mfg.....	-	5	1	f	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	2	1	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg.....	-	1	1	f	D	D	D	D	D	D	D	D
333292	Textile machinery mfg.	-	1	1	f	D	D	D	D	D	D	D	D
<b>TORRINGTON, CT</b>													
31-33	Manufacturing ....	1	83	34	3 770	118 689	2 795	6 285	75 856	240 502	208 445	443 752	17 912
326	Plastics & rubber products mfg.....	-	8	5	789	23 547	650	1 651	18 436	45 696	45 055	86 230	4 363
3261	Plastics product mfg.....	-	7	5	f	D	D	D	D	D	D	D	D
32619	Other plastics product mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
326199	All other plastics product mfg.....	-	6	4	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg.....	-	16	8	827	31 114	681	1 810	23 401	56 491	32 588	90 171	D
3329	Other fabricated metal product mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg.....	-	4	3	f	D	D	D	D	D	D	D	D
333	Machinery mfg.....	4	12	4	529	16 323	354	642	8 512	36 643	42 242	76 649	2 500
<b>TRUMBULL TOWN, CT</b>													
31-33	Manufacturing ....	1	26	14	750	25 258	518	1 059	14 223	41 104	38 725	92 403	4 929
<b>VERNON TOWN, CT</b>													
31-33	Manufacturing ....	1	37	7	854	25 298	428	794	10 517	44 272	47 412	93 894	4 845

**Table 4. Industry Statistics for Places: 1997—Con.**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>WALLINGFORD TOWN, CT</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	—	<b>135</b>	<b>48</b>	<b>5 501</b>	<b>228 499</b>	<b>3 333</b>	<b>6 772</b>	<b>106 303</b>	<b>596 755</b>	<b>563 196</b>	<b>1 140 491</b>	<b>30 105</b>
325	Chemical mfg .....	—	2	2	f	D	D	D	D	D	D	D	D
3255	Paint, coating, & adhesive mfg .....	—	2	2	f	D	D	D	D	D	D	D	D
32552	Adhesive mfg .....	—	1	1	f	D	D	D	D	D	D	D	D
325520	Adhesive mfg .....	—	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal mfg .....	—	5	4	892	43 265	714	1 412	29 842	154 970	190 302	343 631	5 106
3312	Steel product mfg from purchased steel .....	—	2	2	f	D	D	D	D	D	D	D	D
33122	Rolling & drawing of purchased steel .....	—	2	2	f	D	D	D	D	D	D	D	D
331221	Cold-rolled steel shape mfg .....	—	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg .....	—	14	6	589	24 111	280	588	10 045	41 067	41 042	66 802	2 106
3335	Metalworking machinery mfg .....	—	9	5	548	22 215	254	529	9 065	37 518	37 869	60 064	D
33351	Metalworking machinery mfg .....	—	9	5	548	22 215	254	529	9 065	37 518	37 869	60 064	D
334	Computer & electronic product mfg .....	—	16	8	1 340	64 089	538	1 195	18 212	146 027	104 682	247 506	7 023
3345	Navigational, measuring, medical, & control instruments mfg .....	—	6	3	764	38 482	275	648	9 862	71 606	46 457	117 235	D
33451	Navigational, measuring, medical, & control instruments mfg .....	—	6	3	764	38 482	275	648	9 862	71 606	46 457	117 235	D
334510	Electromedical & electrotherapeutic apparatus mfg .....	—	3	2	f	D	D	D	D	D	D	D	D
<b>WATERBURY, CT</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	<b>1</b>	<b>219</b>	<b>78</b>	<b>6 433</b>	<b>220 935</b>	<b>4 940</b>	<b>10 208</b>	<b>148 497</b>	<b>531 402</b>	<b>551 515</b>	<b>1 085 328</b>	<b>38 584</b>
331	Primary metal mfg .....	1	11	7	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production & processing .....	1	7	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product mfg .....	1	89	32	2 779	100 548	2 220	4 910	70 145	209 081	196 338	406 244	16 318
3321	Forging & stamping .....	—	16	8	970	37 533	832	2 001	28 312	76 648	101 807	179 257	5 073
33211	Forging & stamping .....	—	16	8	970	37 533	832	2 001	28 312	76 648	101 807	179 257	5 073
332116	Metal stamping .....	—	14	6	f	D	D	D	D	D	D	D	D
3327	Machine shops, turned product, & screw, nut, & bolt mfg .....	—	39	13	951	32 519	742	1 522	22 087	66 979	41 639	109 063	4 758
33272	Turned product & screw, nut, & bolt mfg .....	—	22	9	547	20 257	422	935	13 806	42 687	29 643	72 719	3 340
3328	Coating, engraving, heat treating, & allied activities .....	3	18	7	573	21 544	439	981	14 108	42 336	30 236	72 395	4 538
33281	Coating, engraving, heat treating, & allied activities .....	3	18	7	573	21 544	439	981	14 108	42 336	30 236	72 395	4 538
335	Electrical equipment, appliance, & component mfg .....	1	7	7	f	D	D	D	D	D	D	D	D
<b>WATERTOWN TOWN, CT</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	<b>1</b>	<b>77</b>	<b>35</b>	<b>4 493</b>	<b>144 914</b>	<b>3 203</b>	<b>6 664</b>	<b>94 169</b>	<b>347 625</b>	<b>306 022</b>	<b>646 187</b>	<b>27 735</b>
332	Fabricated metal product mfg .....	—	35	15	1 506	56 361	1 188	2 518	40 655	124 027	98 764	222 452	11 858
3321	Forging & stamping .....	—	12	8	873	37 050	717	1 447	27 700	90 476	80 417	170 617	9 171
33211	Forging & stamping .....	—	12	8	873	37 050	717	1 447	27 700	90 476	80 417	170 617	9 171
332116	Metal stamping .....	—	10	6	f	D	D	D	D	D	D	D	D
334	Computer & electronic product mfg .....	1	3	3	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg .....	—	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts mfg ...	—	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine & engine parts mfg .....	—	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine & engine parts mfg .....	—	1	1	f	D	D	D	D	D	D	D	D

**Table 4. Industry Statistics for Places: 1997—Con.**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
<b>WEST HARTFORD TOWN, CT</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	-	<b>80</b>	<b>22</b>	<b>3 217</b>	<b>137 834</b>	<b>2 172</b>	<b>3 997</b>	<b>78 138</b>	<b>319 242</b>	<b>197 656</b>	<b>513 952</b>	<b>19 033</b>
332	Fabricated metal product mfg .....	-	24	7	1 398	59 385	1 010	1 917	37 886	122 453	69 727	192 323	6 553
3329	Other fabricated metal product mfg .....	-	2	1	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal product mfg .....	-	2	1	f	D	D	D	D	D	D	D	D
332994	Small arms mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, & component mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment & component mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
33593	Wiring device mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
335932	Noncurrent-carrying wiring device mfg ....	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg .....	-	4	3	610	28 575	397	651	16 010	64 728	43 850	106 211	D
3364	Aerospace product & parts mfg .....	-	3	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg .....	-	3	2	f	D	D	D	D	D	D	D	D
336413	Other aircraft part & auxiliary equipment mfg .....	-	2	2	f	D	D	D	D	D	D	D	D
<b>WEST HAVEN, CT</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	-	<b>62</b>	<b>22</b>	<b>5 258</b>	<b>276 511</b>	<b>1 544</b>	<b>3 010</b>	<b>41 707</b>	<b>1 116 307</b>	<b>512 421</b>	<b>1 623 105</b>	<b>61 776</b>
325	Chemical mfg .....	-	5	3	h	D	D	D	D	D	D	D	D
3254	Pharmaceutical & medicine mfg .....	-	2	2	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical & medicine mfg .....	-	2	2	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation mfg .....	-	2	2	h	D	D	D	D	D	D	D	D
<b>WILTON TOWN, CT</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	-	<b>18</b>	<b>3</b>	<b>g</b>	<b>D</b>	<b>D</b>	<b>D</b>	<b>D</b>	<b>D</b>	<b>D</b>	<b>D</b>	<b>D</b>
333	Machinery mfg .....	-	2	1	g	D	D	D	D	D	D	D	D
3332	Industrial machinery mfg ..	-	1	1	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery mfg .....	-	1	1	g	D	D	D	D	D	D	D	D
333295	Semiconductor machinery mfg .....	-	1	1	g	D	D	D	D	D	D	D	D
<b>WINCHESTER TOWN, CT</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	<b>2</b>	<b>39</b>	<b>14</b>	<b>1 130</b>	<b>39 824</b>	<b>796</b>	<b>1 590</b>	<b>22 612</b>	<b>98 624</b>	<b>114 832</b>	<b>213 991</b>	<b>6 566</b>
332	Fabricated metal product mfg .....	-	14	6	512	21 010	342	679	11 079	57 214	69 930	128 186	3 913
<b>WINDHAM TOWN, CT</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	-	<b>28</b>	<b>8</b>	<b>1 375</b>	<b>48 687</b>	<b>1 043</b>	<b>2 121</b>	<b>29 505</b>	<b>113 603</b>	<b>123 327</b>	<b>227 607</b>	<b>16 159</b>
<b>WINDSOR TOWN, CT</b>													
<b>31-33</b>	<b>Manufacturing ....</b>	-	<b>46</b>	<b>31</b>	<b>4 653</b>	<b>205 606</b>	<b>2 478</b>	<b>5 463</b>	<b>96 570</b>	<b>364 719</b>	<b>313 551</b>	<b>674 957</b>	<b>16 042</b>
332	Fabricated metal product mfg .....	-	7	6	1 412	68 007	426	1 012	18 283	90 025	51 113	138 518	2 138
3321	Forging & stamping .....	-	1	1	f	D	D	D	D	D	D	D	D
33211	Forging & stamping .....	-	1	1	f	D	D	D	D	D	D	D	D
332117	Powder metallurgy part mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
3324	Boiler, tank, & shipping container mfg .....	-	2	2	f	D	D	D	D	D	D	D	D
333	Machinery mfg .....	-	8	5	1 567	71 113	919	2 104	40 147	127 443	123 588	251 538	D
3336	Engine, turbine, & power transmission equipment mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, & power transmission equipment mfg .....	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment mfg .....	-	1	1	f	D	D	D	D	D	D	D	D



**Table 4. Industry Statistics for Places: 1997—Con.**

[Includes data for industry groups and industries with 500 employees or more. For information on geographic areas followed by \* and explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (\$1,000)	Cost of materials (\$1,000)	Value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>2</sup>	Payroll (\$1,000)	Number	Hours (1,000)	Wages (\$1,000)				
	<b>WINDSOR LOCKS TOWN, CT</b>												
<b>31-33</b>	<b>Manufacturing ....</b>	-	<b>21</b>	<b>8</b>	<b>1 642</b>	<b>78 720</b>	<b>746</b>	<b>1 720</b>	<b>30 789</b>	<b>169 237</b>	<b>139 984</b>	<b>308 192</b>	<b>12 345</b>
313	Textile mills .....	-	1	1	f	D	D	D	D	D	D	D	D
3132	Fabric mills .....	-	1	1	f	D	D	D	D	D	D	D	D
31323	Nonwoven fabric mills...	-	1	1	f	D	D	D	D	D	D	D	D
313230	Nonwoven fabric mills..	-	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment mfg .....	-	3	2	f	D	D	D	D	D	D	D	D
3364	Aerospace product & parts mfg .....	-	3	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product & parts mfg .....	-	3	2	f	D	D	D	D	D	D	D	D
336419	Other guided missile & space vehicle parts & auxiliary equip mfg...	-	1	1	f	D	D	D	D	D	D	D	D
	<b>WOLCOTT TOWN, CT</b>												
<b>31-33</b>	<b>Manufacturing ....</b>	<b>2</b>	<b>37</b>	<b>11</b>	<b>807</b>	<b>29 669</b>	<b>637</b>	<b>1 208</b>	<b>15 905</b>	<b>53 773</b>	<b>38 183</b>	<b>90 334</b>	<b>2 464</b>

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

<sup>2</sup>Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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.

**Table 5. Detailed Statistics for the State: 1997**

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

Item	Value	Item	Value
<b>CONNECTICUT</b>		<b>CONNECTICUT—Con.</b>	
Companies <sup>1</sup> .....	number.. 5 574	Quantity of electricity purchased for heat and power .....	1,000 kWh.. 5 598 555
		Quantity of electricity generated less sold for heat and power .....	1,000 kWh.. S
All establishments .....	number.. 5 844	Total value of shipments .....	\$1,000.. 46 938 210
Establishments with 1 to 19 employees .....	number.. 3 918	Value of resales .....	\$1,000.. 2 666 790
Establishments with 20 to 99 employees .....	number.. 1 428	Value added .....	\$1,000.. 27 295 212
Establishments with 100 employees or more .....	number.. 498	Total inventories, beginning of year .....	\$1,000.. 6 674 073
All employees .....	number.. 252 330	Finished goods inventories, beginning of year .....	\$1,000.. 2 328 018
Total compensation <sup>2</sup> .....	\$1,000.. 13 043 507	Work-in-process inventories, beginning of year .....	\$1,000.. 2 433 533
Annual payroll .....	\$1,000.. 10 452 076	Materials and supplies inventories, beginning of year .....	\$1,000.. 1 912 522
Total fringe benefits .....	\$1,000.. 2 591 431	Total inventories, end of year .....	\$1,000.. 7 034 191
Production workers, average for year .....	number.. 153 045	Finished goods inventories, end of year .....	\$1,000.. 2 740 415
Production workers on March 12 .....	number.. 154 150	Work-in-process inventories, end of year .....	\$1,000.. 2 248 987
Production workers on May 12 .....	number.. 152 831	Materials and supplies inventories, end of year .....	\$1,000.. 2 044 789
Production workers on August 12 .....	number.. 152 616	Gross book value of total assets at beginning of year .....	\$1,000.. 18 867 218
Production workers on November 12 .....	number.. 152 583	Total capital expenditures (new and used) .....	\$1,000.. 1 864 217
Production-worker hours .....	1,000.. 317 515	Capital expenditures for buildings and other structures (new and used) .....	\$1,000.. 382 220
Production-worker wages .....	\$1,000.. 4 895 335	Capital expenditures for machinery and equipment (new and used) .....	\$1,000.. 1 481 997
Total cost of materials .....	\$1,000.. 19 867 018	Total retirements <sup>2</sup> .....	\$1,000.. 628 128
Cost of materials, parts, containers, etc., consumed .....	\$1,000.. 16 404 096	Gross book value of total assets at end of year .....	\$1,000.. 20 103 307
Cost of resales .....	\$1,000.. 1 916 628	Total depreciation during year <sup>2</sup> .....	\$1,000.. 1 280 154
Cost of fuels .....	\$1,000.. 193 654	Total rental payments <sup>2</sup> .....	\$1,000.. 485 713
Cost of purchased electricity .....	\$1,000.. 432 654	Buildings and other structures rental payments <sup>2</sup> .....	\$1,000.. 253 122
Cost of contract work .....	\$1,000.. 919 986	Machinery and equipment rental payments <sup>2</sup> .....	\$1,000.. 232 591

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

<sup>2</sup>These items are collected in the ASM and estimated for the remaining establishments.

# Appendix A.

## Explanation of Terms

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

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

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

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

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

### **COST OF MATERIALS**

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

Included in this item are:

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

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

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

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

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

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual

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manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

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

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

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

### **EMPLOYEES**

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

#### **Production Workers**

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

#### **All Other Employees**

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria,

medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

### **FRINGE BENEFITS**

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

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

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

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

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

### **NUMBER OF ESTABLISHMENTS AND COMPANIES**

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location

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where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

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

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

### **PAYROLL**

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

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

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

### **PRODUCTION-WORKER HOURS**

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

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

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the

Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

### **RENTAL PAYMENTS**

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

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

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

### **RETIREMENTS OF DEPRECIABLE ASSETS**

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

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

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

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and

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plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

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

### **VALUE ADDED**

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

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

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

### **VALUE OF SHIPMENTS**

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

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

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

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

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

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

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

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

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



# Appendix B.

## NAICS Codes, Titles, and Descriptions

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### 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 NAICS industry group includes establishments classified in NAICS Industry 31111, Animal Food Manufacturing.

##### **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.

The data published with NAICS code 311111 include the following SIC industry:

2047 Dog and cat food

#### **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.

The data published with NAICS code 311119 include the following SIC industry:

2048 Prepared feeds and feed ingredients for animals and fowls, except dogs and cats (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311119 do not include establishments primarily engaged in the custom grinding of grain. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **3112 Grain and Oilseed Milling**

This NAICS industry group includes establishments classified in the following NAICS Industries: 31121, Flour Milling and Malt Manufacturing; 31122, Starch and Vegetable Fats and Oils Manufacturing; and 31123, Breakfast Cereal Manufacturing.

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

The data published with NAICS code 311211 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soup mixes (pt)

2041 Flour and other grain mill products

##### **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.

The data published with NAICS code 311212 include the following SIC industry:

2044 Rice milling



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This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311212 do not include rice mills primarily engaged in packaging uncooked rice with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **311213 Malt Manufacturing**

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

The data published with NAICS code 311213 include the following SIC industry:

2083 Malt

### **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).

The data published with NAICS code 311221 include the following SIC industry:

2046 Wet corn milling

#### **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.

The data published with NAICS code 311222 include the following SIC industry:

2075 Soybean oil mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311222 do not include establishments primarily engaged in the processing of

soybean oil from soybeans crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **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.

The data published with NAICS code 311223 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311223 do not include establishments primarily engaged in the processing of vegetable oils, except soybean oil, from oilseeds crushed in the same establishment. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **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.

The data published with NAICS code 311225 include the following SIC industries:

2074 Cottonseed oil mills (pt)

2075 Soybean oil mills (pt)

2076 Vegetable oil mills, n.e.c. (pt)

2077 Animal and marine fats and oil (pt)

2079 Shortening and cooking oils

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311225 do not include establishments primarily engaged in refining and/or blending corn oil from purchased oil. The data include establishments primarily engaged in the manufacture of vegetable oil foots. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **31123 Breakfast Cereal Manufacturing**

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

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### **311230 Breakfast Cereal Manufacturing**

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

The data published with NAICS code 311230 include the following SIC industry:

2043 Cereal breakfast foods (pt)

### **3113 Sugar and Confectionery Product Manufacturing**

This industry group comprises (1) establishments that 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.

The data published with NAICS code 311312 include the following SIC industry:

2061 Raw cane sugar

##### **311312 Cane Sugar Refining**

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

The data published with NAICS code 311312 include the following SIC industry:

2062 Cane sugar refining

##### **311313 Beet Sugar Manufacturing**

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

The data published with NAICS code 311313 include the following SIC industry:

2063 Beet sugar

### **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.

The data published with NAICS code 311320 include the following SIC industries:

2066 Chocolate and cocoa products

#### **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.

The data published with NAICS code 311330 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

5441 Candy, nut, and confectionery stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311330 do not include establishments primarily engaged in the manufacture of chocolate products made from purchased chocolate. The NAICS definitions will be fully implemented with the 2002 Economic Census.

##### **3113301 Chocolate and Chocolate-type Confectionery Retail – Manufacturer**

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products not for immediate consumption made on the premises from chocolate produced elsewhere.

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### **3113302 Chocolate and Chocolate-type Confectionery – Manufacturer**

Establishments primarily engaged in the manufacture of consumer-type chocolate and chocolate-type confectionery products from chocolate produced 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.

The data published with NAICS code 311340 include the following SIC industries:

2064 Candy and other confectionery products and chewing gum (pt)

2099 Food preparations, n.e.c. (pt)

5441 Candy, nut, and confectionery stores (pt)

### **3113401 Nonchocolate-Type Confectionery Products Retail – Manufacturer**

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup, not for immediate consumption made on the premises.

### **3113402 Nonchocolate-Type Confectionery Products – Manufacturer**

Establishments primarily engaged in the manufacture of consumer-type nonchocolate confectionery products, excluding cough drops, medicated candy, roasted peanuts, unsweetened popcorn and fountain syrup.

### **3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing**

This industry group includes (1) establishments 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.

The data published with NAICS code 311411 include the following SIC industry:

2037 Frozen fruits and vegetables

### **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.

The data published with NAICS code 311412 include the following SIC industry:

2038 Frozen specialties, n.e.c.

### **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.

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The data published with NAICS code 311421 include the following SIC industries:

2033 Canned fruits and vegetables

2035 Pickles, sauces, and salad dressings (pt)

### **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.

The data published with NAICS code 311422 include the following SIC industry:

2032 Canned specialties (pt)

### **311423 Dried and Dehydrated Food Manufacturing**

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

The data published with NAICS code 311423 include the following SIC industries:

2034 Dehydrated fruits, vegetables, and soups (pt)

2099 Food preparations, n.e.c. (pt)

### **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.

The data published with NAICS code 311511 include the following SIC industry:

2026 Fluid milk

#### **311512 Creamery Butter Manufacturing**

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

The data published with NAICS code 311512 include the following SIC industry:

2021 Creamery butter

#### **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.

The data published with NAICS code 311513 include the following SIC industry:

2022 Cheese, natural and processed

#### **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.

The data published with NAICS code 311514 include the following SIC industry:

2023 Dry, condensed and evaporated milk

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311514 do not include establishments primarily engaged in the manufacture of fluid milk processed with ultra-high temperature. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **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).

The data published with NAICS code 311520 include the following SIC industry:

2024 Ice cream and frozen desserts

## **3116 Meat Product Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 31161, Animal Slaughtering and Processing.

### **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 primary engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

The data published with NAICS code 311611 include the following SIC industries:

2011 Meat packing plants

2048 Prepared feeds, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311611 do not include establishments primarily engaged in custom slaughtering. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **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.

The data published with NAICS code 311612 include the following SIC industries:

2013 Sausages and other prepared meats

5147 Meat and meat products (pt)

#### **311613 Rendering and Meat Byproduct Processing**

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

The data published with NAICS code 311613 include the following SIC industry:

2077 Animal and marine fats and oil (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311613 do not include establishments primarily engaged in manufacturing lard from purchased materials. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 311615 include the following SIC industry:

2015 Poultry and egg processing (pt)

### **3117 Seafood Product Preparation and Packaging**

This NAICS industry group includes establishments classified in NAICS Industry 31171, Seafood Product Preparation and Packaging.

#### **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 seafoods; (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 included in this industry.

##### **311711 Seafood Canning**

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as “floating factory ships” that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

The data published with NAICS code 311711 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2091 Canned and cured seafood

##### **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



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entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

The data published with NAICS code 311712 include the following SIC industries:

2077 Animal and marine fats and oil (pt)

2092 Prepared fresh or frozen fish and seafood

### **3118 Bakeries and Tortilla Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 31181, Bread and Bakery Product Manufacturing; 31182, Cookie, Cracker, and Pasta Manufacturing; and 31183, 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.

The data published with NAICS code 311811 include the following SIC industry:

5461 Retail bakeries (pt)

##### **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.

The data published with NAICS code 311812 include the following SIC industries:

2051 Bread, cake, and related products

2052 Cookies and crackers (pt)

##### **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.

The data published with NAICS code 311813 include the following SIC industry:

2053 Frozen bakery products, except bread

##### **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.

The data published with NAICS code 311821 include the following SIC industry:

2052 Cookies and crackers (pt)

##### **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.

The data published with NAICS code 311822 include the following SIC industries:

2045 Blended and prepared flour

##### **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.

The data published with NAICS code 311823 include the following SIC industry:

2098 Macaroni and spaghetti

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311823 do not include dry pasta plants primarily engaged in packaging dry pasta with other ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

##### **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.

The data published with NAICS code 311830 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

### **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.

The data published with NAICS code 311911 include the following SIC industries:

2068 Salted and roasted nuts and seeds

2099 Food preparations, n.e.c. (pt)

##### **311919 Other Snack Food Manufacturing**

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

The data published with NAICS code 311919 include the following SIC industries:

2052 Cookies and crackers (pt)

2096 Potato chips and similar snacks

#### **31192 Coffee and Tea Manufacturing**

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

#### **311920 Coffee and Tea Manufacturing**

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

The data published with NAICS code 311920 include the following SIC industries:

2043 Cereal breakfast foods (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311920 do not include establishments primarily engaged in the manufacture of coffee flavorings and syrups. The NAICS definitions will be fully implemented with the 2002 Economic Census.

##### **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.

The data published with NAICS code 311930 include the following SIC industry:

2087 Flavoring extracts and syrups, n.e.c. (pt)

##### **31194 Seasoning and Dressing Manufacturing**

This 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).

The data published with NAICS code 311941 include the following SIC industries:

2035 Pickles, sauces, and salad dressings (pt)

2099 Food preparations, n.e.c.(pt)

### **311942 Spice and Extract Manufacturing**

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

The data published with NAICS code 311942 include the following SIC industries:

2087 Flavoring extracts and syrups, n.e.c. (pt)

2095 Roasted coffee (pt)

2099 Food preparations, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311942 include establishments primarily engaged in the manufacture of coffee extracts but do not include establishments primarily engaged in the manufacture of malt extract. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 311991 include the following SIC industry:

2099 Food preparations, n.e.c. (pt)

### **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; bakeries and tortillas; 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.

The data published with NAICS code 311999 include the following SIC industries:

2015 Poultry slaughtering and processing (pt)

2032 Canned specialties (pt)

2087 Flavoring extracts and syrups, n.e.c. (pt)

2099 Food preparations, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 311999 do not include establishments primarily engaged in the manufacture of soup mixes from purchased dehydrated ingredients. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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



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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 NAICS industry group includes establishments classified in the following NAICS Industries: 31211, Soft Drink and Ice Manufacturing; 31212, Breweries; 31213, Wineries; and 31214, Distilleries.

#### **31211 Soft Drink and Ice Manufacturing**

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

##### **312111 Soft Drink Manufacturing**

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

The data published with NAICS code 312111 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

##### **312112 Bottled Water Manufacturing**

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

The data published with NAICS code 312112 include the following SIC industry:

2086 Bottled and canned soft drinks (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312112 do not include establishments primarily engaged in the bottling of mineral or spring water. The NAICS definitions will be fully implemented with the 2002 Economic Census.

##### **312113 Ice Manufacturing**

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

The data published with NAICS code 312113 include the following SIC industry:

2097 Manufactured 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.

The data published with NAICS code 312120 include the following SIC industry:

2082 Malt beverages

#### **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.

The data published with NAICS code 312130 include the following SIC industry:

2084 Wines, brandy, and brandy spirits

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 312130 do not include establishments primarily engaged in the manufacture of applejack. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **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.

The data published with NAICS code 312140 include the following SIC industry:

2085 Distilled liquor, except brandy

## **3122 Tobacco Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 31221, Tobacco Stemming and Redrying; and 31222, Tobacco Product Manufacturing.

### **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.

The data published with NAICS code 312210 include the following SIC industry:

2141 Tobacco stemming and redrying (pt)

### **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.

The data published with NAICS code 312221 include the following SIC industries:

2111 Cigarettes

#### **312229 Other Tobacco Product Manufacturing**

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

The data published with NAICS code 312229 include the following SIC industries:

2121 Cigars

2131 Chewing and smoking tobacco

2141 Tobacco stemming and redrying (pt)

## **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 and 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 fibers.

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 includes 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; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments; and (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.

The data published with NAICS code 313111 include the following SIC industries:

2281 Yarn spinning mills

2299 Textile goods, n.e.c. (pt)

#### **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.

The data published with NAICS code 313112 include the following SIC industry:

2282 Yarn throwing and winding mills (pt)

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### **3131121 Yarn Texturing, Throwing, and Twisting Mills – Manufacturer**

Establishments primarily engaged in texturing, throwing, twisting, spooling, or winding purchased yarns or manmade filaments.

### **3131122 Yarn Texturing, Throwing, and Twisting Mills – Commission Finisher**

Establishments primarily engaged in throwing, twisting, spooling, or winding yarns or manmade filaments on a commission basis.

### **313113 Thread Mills**

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

The data published with NAICS code 313113 include the following SIC industries:

- 2284 Thread mills (pt)
- 2299 Textile goods, n.e.c. (pt)

### **3132 Fabric Mills**

This NAICS industry group includes establishments classified in the following NAICS Industries: 31321, Broadwoven Fabric Mills; 31322, Narrow Fabric Mills and Schiffli Machine Embroidery; 31323, Nonwoven Fabric Mills; and 31324, 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.

The data published with NAICS code 313210 include the following SIC industries:

- 2211 Weaving mills, cotton
- 2221 Weaving mills, synthetics
- 2231 Weaving and finishing mills, wool (pt)
- 2299 Textile goods, n.e.c. (pt)

### **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; and (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

The data published with NAICS code 313221 include the following SIC industries:

- 2241 Narrow fabric mills
- 2299 Textile goods, n.e.c. (pt)

### **313222 Schiffli Machine Embroidery**

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

The data published with NAICS code 313222 include the following SIC industry:

- 2397 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.

The data published with NAICS code 313230 include the following SIC industries:

- 2297 Nonwoven fabrics
- 2299 Textile goods, n.e.c. (pt)

### **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; or (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).

The data published with NAICS code 313241 include the following SIC industry:

2257 Circular knit fabric mills (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313241 do not include establishments primarily engaged in the manufacture of articles of weft knit fabric. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **3132411 Weft Knit Fabric Mills – Manufacturer**

Establishments primarily engaged in knitting weft (i.e., circular) fabric; knitting and finishing weft fabric; or knitting, finishing, and further fabricating weft fabric products (except apparel).

### **3132412 Weft Knit Fabric Mills – Jobber**

Establishments engaged as weft knit fabric jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric or fabricated products (except apparel).

### **3132413 Weft Knit Fabric Mills – Contractor**

Establishments primarily engaged in knitting or finishing weft knit fabric or further fabricating weft knit fabric into products (except apparel) on a commission basis.

### **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).

The data published with NAICS code 313249 include the following SIC industries:

2258 Lace and warp knit fabric mills (pt)

2259 Knitting mills, n.e.c. (pt)

### **3132491 Other Knit Fabric and Lace Mills – Manufacturer**

Establishments primarily engaged in knitting warp (i.e., flat) fabric; knitting and finishing warp fabric; knitting, finishing, and further fabricating warp fabric products (except apparel); manufacturing lace; or manufacturing, dyeing, or finishing lace and lace goods.

### **3132492 Other Knit Fabric and Lace Mills – Jobber**

Establishments engaged as other knit fabric and lace jobbers, who perform entrepreneurial functions of a manufacturer, including buying raw materials, designing and preparing samples, arranging for fabric to be made from their materials, and marketing finished fabric.

### **3132493 Other Knit Fabric and Lace Mills – Contractor**

Establishments primarily engaged in knitting or finishing lace and other knit fabric or further fabricating lace and other knit fabric into products (except apparel) on a commission basis.

### **3133 Textile and Fabric Finishing and Fabric Coating Mills**

This NAICS industry group includes establishments classified in the following NAICS Industries: 31331, Textile and Fabric Finishing Mills; and 31332, Fabric Coating Mills.

### **31331 Textile and Fabric Finishing Mills**

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods 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.

### **313311 Broadwoven Fabric Finishing Mills**

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

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The data published with NAICS code 313311 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2261 Finishing plants, cotton
- 2262 Finishing plants, synthetics
- 5131 Piece goods, notions and other dry goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 313311 do not include establishments primarily engaged in the sponging of fabric for tailors and dressmakers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **3133111 Broadwoven Fabric Finishing Mills – Manufacturer**

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased broadwoven fabrics.

### **3133112 Broadwoven Fabric Finishing Mills – Converter**

Establishments engaged as converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

### **3133113 Broadwoven Fabric Finishing Mills – Commission Finisher**

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of broadwoven fabrics on a commission basis.

### **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) and (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.

The data published with NAICS code 313312 include the following SIC industries:

- 2231 Weaving and finishing mills, wool (pt)
- 2257 Circular knit fabric mills (pt)
- 2258 Lace and warp knit fabric mills (pt)

2269 Finishing plants, n.e.c.

2282 Yarn throwing and winding mills (pt)

2284 Thread mills (pt)

2299 Textile goods, n.e.c. (pt)

5131 Piece goods, notions and other dry goods (pt)

### **3133121 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Manufacturer**

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of purchased textiles, apparel, and fabrics (except broadwoven).

### **3133122 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Converter**

Establishments engaged as converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale.

### **3133123 Textile and Fabric Finishing (Except Broadwoven Fabric) Mills – Commission Finisher**

Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) on a commission basis.

### **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.

The data published with NAICS code 313320 include the following SIC industries:

- 2295 Coated fabrics, not rubberized
- 3069 Fabricated rubber products, n.e.c. (pt)

### **314 Textile Product Mills**

Industries in the Textile Product Mills subsector group establishments that made 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 NAICS industry group includes establishments classified in the following NAICS Industries: 31411, Carpet and Rug Mills; and 31412, Curtain and Linen Mills.



### **31411 Carpet and Rug Mills**

This 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.

#### **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.

The data published with NAICS code 314110 include the following SIC industry:

2273 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.

The data published with NAICS code 314121 include the following SIC industries:

2391 Curtains and draperies

5714 Drapery and upholstery stores (pt)

#### **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.

The data published with NAICS code 314129 include the following SIC industry:

2392 Housefurnishings, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314129 do not include

establishments primarily engaged in the making of custom slip covers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 314911 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

2393 Textile bags

##### **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.

The data published with NAICS code 314912 include the following SIC industry:

2394 Canvas and related products

### **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).

The data published with NAICS code 314991 include the following SIC industry:

2298 Cordage and twine

### **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.

The data published with NAICS code 314992 include the following SIC industry:

2296 Tire cord and fabric

### **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 cord and tire fabrics) from purchased materials.

The data published with NAICS code 314999 include the following SIC industries:

2299 Textile goods, n.e.c. (pt)

2395 Pleating and stitching (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 314999 include establishments primarily engaged in the manufacture of other miscellaneous textile products from SIC 3999, but do not include establishments primarily engaged in the manufacture of dust rags or textile fire hoses, or engaged in the embroidery of advertising. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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).

The data published with NAICS code 315111 include the following SIC industries:

2251 Women's hosiery, except socks

2252 Hosiery, n.e.c. (pt)

### **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).

The data published with NAICS code 315119 include the following SIC industry:

2252 Hosiery, n.e.c. (pt)

### **31519 Other Apparel Knitting Mills**

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

### **315191 Outerwear Knitting Mills**

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

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The data published with NAICS code 315191 include the following SIC industries:

2253 Knit outerwear mills

2259 Knitting mills, n.e.c. (pt)

### **3151911 Outerwear Knitting Mills – Manufacturer**

Establishments primarily engaged in knitting outerwear clothing.

### **3151912 Outerwear Knitting Mills – Jobber**

Establishments engaged as knit 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.

### **3151913 Outerwear Knitting Mills – Contractor**

Establishments primarily engaged in manufacturing knit outerwear on materials owned by others (commission basis).

### **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.

The data published with NAICS code 315192 include the following SIC industries:

2254 Knit underwear mills

2259 Knitting mills, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315192 do not include knitting mills primarily engaged in the manufacture of bath and lounge robes. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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 (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.

The data published with NAICS code 315211 include the following SIC industries:

2311 Men’s and boys’ suits and coats (pt)

2321 Shirts, men’s and boys’ (pt)

2322 Men’s and boys’ underwear and nightwear (pt)

2325 Men’s and boys’ trousers and slacks (pt)

2326 Men’s and boys’ work clothing (pt)

2329 Men’s and boys’ clothing, n.e.c. (pt)

2341 Women’s and children’s underwear (pt)

2384 Robes and dressing gowns (pt)

2385 Waterproof outer garments (pt)

2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315211 do not include establishments primarily engaged in cut and sew contract work for men’s and boy’s neckwear, hats, shirts, other outerwear, fur goods, dress and work gloves, leather gloves and mittens, leather and sheep-lined clothing, apparel belts, or apparel and accessories, nec. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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 (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.



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The data published with NAICS code 315212 include the following SIC industries:

- 2331 Women's blouses and waists (pt)
- 2335 Women's dresses (pt)
- 2337 Women's suits and coats (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2341 Women's and children's underwear (pt)
- 2342 Brassieres and allied garments (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)
- 2385 Waterproof outer garments (pt)
- 2389 Apparel and accessories, n.e.c. (pt)
- 2395 Pleating and stitching (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315212 do not include establishments primarily engaged in cut and sew contract work for women's, girls', and infants' hats; fur goods; dress and work gloves; leather gloves and mittens; leather and sheep-lined clothing; or apparel belts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 315221 include the following SIC industries:

- 2322 Men's and boys' underwear and nightwear (pt)
- 2341 Women's and children's underwear (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2384 Robes and dressing gowns (pt)

### **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.

The data published with NAICS code 315222 include the following SIC industries:

- 2311 Men's and boys' suits and coats (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315222 do not include establishments primarily engaged in custom tailoring.

### **3152221 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing – Manufacturer**

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.

### **3152222 - Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing - Jobber**

Establishments engaged as 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.

### **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

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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.

The data published with NAICS code 315223 include the following SIC industries:

2321 Shirts, men's and boys' (pt)

2361 Girls' and children's dresses and blouses (pt)

### **3152231 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Manufacturer**

Establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric.

### **3152232 Men's and Boys' Cut and Sew Shirt (Except Work Shirt) Manufacturing – Jobber**

Establishments engaged as 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.

### **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.

The data published with NAICS code 315224 include the following SIC industries:

2325 Men's and boys' trousers and slacks (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

### **3152241 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Manufacturer**

Establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric.

### **3152242 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing – Jobbers**

Establishments engaged as 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.

### **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.

The data published with NAICS code 315225 include the following SIC industry:

2326 Men's and boys' work clothing (pt)

### **3152251 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Manufacturer**

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.

### **3152252 Men's and Boys' Cut and Sew Work Clothing Manufacturing – Jobbers**

Establishments engaged as 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.

### **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 sweat-pants 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.

The data published with NAICS code 315228 include the following SIC industries:

2329 Men's and boys' clothing, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

### **3152281 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Manufacturer**

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 working clothing).

### **3152282 Men's and Boys' Cut and Sew Other Outerwear Manufacturing – Jobbers**

Establishments engaged as 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.

### **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.

The data published with NAICS code 315231 include the following SIC industries:

2341 Women's and children's underwear (pt)

2342 Brassieres and allied garments (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2384 Robes and dressing gowns (pt)

2389 Apparel and accessories, n.e.c. (pt)

### **3152311 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Manufacturer**

Establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric.

### **3152312 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing – Jobbers**

Establishments engaged as 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.

### **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.

The data published with NAICS code 315232 include the following SIC industries:

2331 Women's blouses and waists (pt)

2361 Girls' and children's dresses and blouses (pt)

### **3152321 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Manufacturer**

Establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric.

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### **3152322 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing – Jobbers**

Establishments engaged as 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.

### **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.

The data published with NAICS code 315233 include the following SIC industries:

2335 Women's dresses (pt)

2361 Girls' and children's dresses and blouses (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315233 do not include establishments primarily engaged in custom tailoring.

### **3152331 Women's and Girls' Cut and Sew Dress Manufacturing – Manufacturer**

Establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric.

### **3152332 Women's and Girls' Cut and Sew Dress Manufacturing – Jobbers**

Establishments engaged as 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.

### **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.

The data published with NAICS code 315234 include the following SIC industries:

2337 Women's suits and coats (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

### **3152341 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Manufacturer**

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.

### **3152342 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing – Jobbers**

Establishments engaged as 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.

### **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.

The data published with NAICS code 315239 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2369 Girls' and children's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)



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### **3152391 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Manufacturer**

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).

### **3152392 Women's and Girls' Cut and Sew Other Outerwear Manufacturing – Jobbers**

Establishments engaged as 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.

### **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.

The data published with NAICS code 315291 include the following SIC industries:

- 2341 Women's and children's underwear (pt)
- 2361 Girls' and children's dresses and blouses (pt)
- 2369 Girls' and children's outerwear, n.e.c. (pt)
- 2385 Waterproof outer garments (pt)

### **3152911 Infants' Cut and Sew Apparel Manufacturing – Manufacturer**

Establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

### **3152912 Infants' Cut and Sew Apparel Manufacturing – Jobbers**

Establishments engaged as 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. 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.

The data published with NAICS code 315292 include the following SIC industries:

- 2371 Fur goods
- 2386 Leather and sheep-lined clothing

### **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.

The data published with NAICS code 315299 include the following SIC industries:

- 2329 Men's and boys' clothing, n.e.c. (pt)
- 2339 Women's outerwear, n.e.c. (pt)
- 2389 Apparel and accessories, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 315299 do not include establishments primarily engaged in the manufacture of

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waterproof rubber and plastic outerwear or rubber pants and raincoats. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **3152991 All Other Cut and Sew Apparel Manufacturing – Manufacturer**

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). Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

### **3152992 All Other Cut and Sew Apparel Manufacturing – Jobbers**

Establishments engaged as clothing jobbers (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), 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. Examples of these products 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.

The data published with NAICS code 315991 include the following SIC industry:

2353 Hats, caps, and millinery

### **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.

The data published with NAICS code 315992 include the following SIC industries:

2381 Fabric gloves and mittens

3151 Leather gloves and mittens

### **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.

The data published with NAICS code 315993 include the following SIC industry:

2323 Men's and boys' neckwear

### **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, suspenders, and waterproof outerwear.

The data published with NAICS code 315999 include the following SIC industries:

2339 Women's outerwear, n.e.c. (pt)

2385 Waterproof outer garments (pt)

2387 Apparel belts

2389 Apparel and accessories, n.e.c. (pt)

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

5699 Miscellaneous apparel and accessory stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 315999 include establishments primarily engaged in custom tailoring but do not include establishments primarily engaged in the manufacture of rubber bibs, aprons, and bathing caps.

### **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 NAICS industry group includes establishments classified in NAICS Industry 31611, Leather and Hide Tanning and Finishing.

#### **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.

The data published with NAICS code 316110 include the following SIC industries:

3111 Leather tanning and finishing

3999 Manufacturing industries, n.e.c. (pt)

### **3162 Footwear Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 31621, Footwear Manufacturing.

#### **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.

The data published with NAICS code 316211 include the following SIC industry:

Rubber and plastics footwear

##### **316212 House Slipper Manufacturing**

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

The data published with NAICS code 316212 include the following SIC industry:

3142 House slippers

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### **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.

The data published with NAICS code 316213 include the following SIC industry:

3143 Men's footwear, except athletic

### **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.

The data published with NAICS code 316214 include the following SIC industry:

3144 Women's footwear, except athletic

### **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)).

The data published with NAICS code 316219 include the following SIC industry:

3149 Footwear, except rubber, n.e.c.

### **3169 Other Leather and Allied Product Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 31699, Other Leather and Allied Product Manufacturing.

### **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.

The data published with NAICS code 316991 include the following SIC industry:

3161 Luggage

### **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).

The data published with NAICS code 316992 include the following SIC industry:

3171 Women's handbags and purses

### **316993 Personal Leather Goods (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).

The data published with NAICS code 316993 include the following SIC industry:

3172 Personal leather goods, n.e.c.

### **316999 All Other Leather Goods Manufacturing**

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

The data published with NAICS code 316999 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3199 Leather goods, n.e.c.

### **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.

The data published with NAICS code 321113 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2439 Structural wood members, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321113 include establishments primarily engaged in the manufacture of lumber members made from logs and bolts, but do not include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **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.

The data published with NAICS code 321114 include the following SIC industry:

2491 Wood preserving

## **3212 Veneer, Plywood, and Engineered Wood Product Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing.

### **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.

The data published with NAICS code 321211 include the following SIC industry:

2435 Hardwood veneer and plywood

#### **321212 Softwood Veneer and Plywood Manufacturing**

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

The data published with NAICS code 321212 include the following SIC industry:

2436 Softwood veneer and 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.

The data published with NAICS code 321213 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

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### **321214 Truss Manufacturing**

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

The data published with NAICS code 321214 include the following SIC industry:

2439 Structural wood members, n.e.c. (pt)

### **321219 Reconstituted Wood Product Manufacturing**

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

The data published with NAICS code 321219 include the following SIC industry:

2493 Reconstituted wood products

### **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.

The data published with NAICS code 321911 include the following SIC industry:

2431 Millwork (pt)

#### **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.

The data published with NAICS code 321912 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2439 Structural wood members, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 321912 include establishments primarily engaged in the manufacture of hardwood dimension made from logs and bolts, lumber members made from purchased lumber, and semi-machined and fully-machined softwood dimension lumber, but do not include establishments primarily engaged in the manufacture of staves from purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **321918 Other Millwork (Including Flooring)**

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

The data published with NAICS code 321918 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2426 Hardwood dimension and flooring mills (pt)

2431 Millwork (pt)

#### **32192 Wood Container and Pallet Manufacturing**

This 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.

The data published with NAICS code 321920 include the following SIC industries:

2429 Special product sawmills, n.e.c. (pt)

2441 Nailed wood boxes & shoo

2448 Wood pallets and skids

2449 Wood containers, n.e.c.

2499 Wood products, n.e.c. (pt)

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This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321920 include establishments primarily engaged in the manufacture of cooperage headings and staves made of purchased lumber. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 321991 include the following SIC industry:

2451 Mobile homes

#### **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.

The data published with NAICS code 321992 include the following SIC industry:

2452 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).

The data published with NAICS code 321999 include the following SIC industries:

2421 Sawmills and planing mills, general (pt)

2429 Special product sawmills, n.e.c. (pt)

2499 Wood products, n.e.c. (pt)

3131 Footwear cut stock and findings (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 321999 include establishments primarily engaged in the manufacture of wood cooling towers, but do not include establishments primarily engaged in the manufacture of finished metal moldings for mirrors and pictures, semi-machined and fully-machined softwood dimension, or cooperage headings. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 322110 include the following SIC industry:

2611 Pulp mills

##### **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.

The data published with NAICS code 322121 include the following SIC industries:

2621 Paper mills (pt)

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322121 include paper mills which convert sanitary paper stock into sanitary paper products, but do not include paper mills which are primarily engaged in the manufacture of other converted paper products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

##### **3221211 Paper (Except Newsprint) Mills – Integrated Producer**

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp in combination with pulp manufacture.

##### **3221212 Paper (Except Newsprint) Mills – Nonintegrated Producer**

Establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp not in combination with pulp manufacture.

##### **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.

The data published with NAICS code 322122 include the following SIC industry:

2621 Paper mills (pt)

##### **3221221 Newsprint Mills – Integrated Producer**

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp in combination with pulp manufacture.

##### **3221222 Newsprint Mills – Nonintegrated Producer**

Establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp not in combination with pulp manufacture.

##### **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.

The data published with NAICS code 322130 include the following SIC industry:

2631 Paperboard mills

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 322130 do not include paperboard mills primarily engaged in converting paperboard into paperboard products. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **3221301 Paperboard Mills – Integrated Producer**

Establishments primarily engaged in manufacturing paperboard from pulp in combination with pulp manufacture.

#### **3221302 Paperboard Mills – Nonintegrated Producer**

Establishments primarily engaged in manufacturing paperboard from pulp not in combination with pulp manufacture or paperboard converting.

### **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.

The data published with NAICS code 322211 include the following SIC industry:

2653 Corrugated and solid fiber boxes

### **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.

The data published with NAICS code 322212 include the following SIC industry:

2657 Folding paperboard boxes

#### **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.

The data published with NAICS code 322213 include the following SIC industry:

2652 Setup paperboard boxes

#### **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.

The data published with NAICS code 322214 include the following SIC industry:

2655 Fiber cans, drums, and similar products

#### **322215 Nonfolding Sanitary Food Container Manufacturing**

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

The data published with NAICS code 322215 include the following SIC industry:

2656 Sanitary food containers

#### **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.

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### **322221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing**

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322221 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

### **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) manufacturing converted aluminum and other metal foils for non-packaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

The data published with NAICS code 322222 include the following SIC industries:

2672 Paper - coated and laminated, n.e.c.

2679 Converted paper products, n.e.c. (pt)

### **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.

The data published with NAICS code 322223 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

### **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.

The data published with NAICS code 322224 include the following SIC industry:

2674 Bags - uncoated paper and multiwall

### **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.

The data published with NAICS code 322225 include the following SIC industry:

3497 Metal foil and leaf (pt)

### **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.

The data published with NAICS code 322226 include the following SIC industry:

2675 Die-cut paper and board (pt)

### **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.

The data published with NAICS code 322231 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

### **322232 Envelope Manufacturing**

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

The data published with NAICS code 322232 include the following SIC industry:

2677 Envelopes

### **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., loose-leaf fillers, notebooks, pads, stationery, tablets).

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The data published with NAICS code 322233 include the following SIC industry:

2678 Stationery products

### **32229 Other Converted Paper Product Manufacturing**

This industry comprises establishments primarily engaged in (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.

The data published with NAICS code 322291 include the following SIC industries:

2676 Sanitary paper products (pt)

3842 Surgical appliances and supplies (pt)

#### **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.

The data published with NAICS code 322299 include the following SIC industries:

2675 Die-cut paper and board (pt)

2679 Converted paper products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

### **323 Printing and Related Support Activities**

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as book-binding, platemaking services, and data imaging. 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, 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. 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 NAICS industry group includes establishments classified in the following NAICS Industries: 32311, Printing; and 32312, Support Activities for Printing.

##### **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 bending, 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.

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The data published with NAICS code 3231 10 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

### **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.

The data published with NAICS code 3231 11 include the following SIC industries:

- 2754 Commercial printing, gravure
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

### **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.

The data published with NAICS code 3231 12 include the following SIC industries:

- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

### **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.

The data published with NAICS code 3231 13 include the following SIC industries:

- 2396 Automotive and apparel trimmings (pt)
- 2759 Commercial printing, n.e.c. (pt)
- 2771 Greeting cards (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

### **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.

The data published with NAICS code 3231 14 include the following SIC industries:

- 2752 Commercial printing, lithographic (pt)
- 2759 Commercial printing, n.e.c. (pt)

### **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.

The data published with NAICS code 3231 15 include the following SIC industry:

- 2759 Commercial printing, n.e.c. (pt)

### **323116 Manifold Business Form 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.

The data published with NAICS code 3231 16 include the following SIC industries:

- 2761 Manifold business forms
- 2782 Blankbooks and looseleaf binders (pt)

### **323117 Book Printing**

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

The data published with NAICS code 3231 17 include the following SIC industry:

- 2732 Book printing

### **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.



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The data published with NAICS code 323118 include the following SIC industry:

2782 Blankbooks and looseleaf binders (pt)

### **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.

The data published with NAICS code 323119 include the following SIC industries:

2759 Commercial printing, n.e.c. (pt)

2771 Greeting cards (pt)

3999 Manufacturing industries, n.e.c. (pt)

### **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).

The data published with NAICS code 323121 include the following SIC industry:

2789 Bookbinding and related work

### **323122 Prepress Services**

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

The data published with NAICS code 323122 include the following SIC industries:

2791 Typesetting

2796 Platemaking services

## **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 NAICS industry group includes establishments classified in the following NAICS Industries: 32411, Petroleum Refineries; 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing; and 32419, 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.

The data published with NAICS code 324110 include the following SIC industry:

2911 Petroleum refining

#### **32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing**

This industry comprises establishments primarily engaged in (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.

##### **32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing**

This industry comprises establishments primarily engaged in (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.

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### **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.

The data published with NAICS code 324121 include the following SIC industry:

2951 Asphalt paving mixtures and blocks

### **324122 Asphalt Shingle and Coating Materials Manufacturing**

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

The data published with NAICS code 324122 include the following SIC industry:

2952 Asphalt felts and coatings

### **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.

The data published with NAICS code 324191 include the following SIC industry:

2992 Lubricating oils and greases

#### **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.

The data published with NAICS code 324199 include the following SIC industries:

2999 Petroleum and coal products, n.e.c.

3312 Blast furnaces and steel mills (pt)

### **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 (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 (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.

The data published with NAICS code 325110 include the following SIC industries:

2865 Cyclic crudes and intermediates (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

### **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 U.S. industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

The data published with NAICS code 325120 include the following SIC industries:

2813 Industrial gases

2869 Industrial organic chemicals, n.e.c. (pt)

### **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.

The data published with NAICS code 325131 include the following SIC industries:

2816 Inorganic pigments (pt)

2819 Industrial inorganic chemicals, n.e.c. (pt)

### **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).

The data published with NAICS code 325132 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

### **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.

The data published with NAICS code 325181 include the following SIC industry:

2812 Alkalies and chlorine

### **325182 Carbon Black Manufacturing**

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

The data published with NAICS code 325182 include the following SIC industries:

2816 Inorganic pigments (pt)

2895 Carbon 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).

The data published with NAICS code 325188 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2869 Industrial organic chemicals, n.e.c. (pt)

### **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).

The data published with NAICS code 325191 include the following SIC industry:

2861 Gum and wood chemicals

### **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.

The data published with NAICS code 325192 include the following SIC industry:

2865 Cyclic crudes and intermediates (pt)

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### **325193 Ethyl Alcohol Manufacturing**

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

The data published with NAICS code 325193 include the following SIC industry:

2869 Industrial organic chemicals, n.e.c. (pt)

### **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).

The data published with NAICS code 325199 include the following SIC industries:

2869 Industrial organic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

### **3252 Resin, Synthetic Rubber, and 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.

The data published with NAICS code 325211 include the following SIC industry:

2821 Plastics materials and resins

#### **325212 Synthetic Rubber Manufacturing**

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

The data published with NAICS code 325212 include the following SIC industry:

2822 Synthetic rubber

### **32522 Artificial and Synthetic Fibers and Filaments Manufacturing**

This industry comprises establishments primarily engaged in (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 (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 texturing cellulosic fibers and filaments.

The data published with NAICS code 325221 include the following SIC industry:

2823 Cellulosic manmade fibers

#### **325222 Noncellulosic Organic Fiber Manufacturing**

This U.S. industry consists of establishments primarily engaged in (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 texturing noncellulosic fibers and filaments.

The data published with NAICS code 325222 include the following SIC industry:

2824 Organic fibers, noncellulosic

### **3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 32531, Fertilizer Manufacturing; and 32532, 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

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into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

The data published with NAICS code 325311 include the following SIC industry:

2873 Nitrogenous 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.

The data published with NAICS code 325312 include the following SIC industry:

2874 Phosphatic fertilizers

### **325314 Fertilizer (Mixing Only) Manufacturing**

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

The data published with NAICS code 325314 include the following SIC industry:

2875 Fertilizers, mixing only

### **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).

The data published with NAICS code 325320 include the following SIC industry:

2879 Agricultural chemicals, n.e.c.

### **3254 Pharmaceutical and Medicine Manufacturing**

This NAICS industry group includes establishments classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

### **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 (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.

The data published with NAICS code 325411 include the following SIC industry:

2833 Medicinals and 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.

The data published with NAICS code 325412 include the following SIC industries:

2834 Pharmaceutical preparations

2835 Diagnostic substances (pt)

### **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.

The data published with NAICS code 325413 include the following SIC industry:

2835 Diagnostic substances (pt)

### **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).

The data published with NAICS code 325414 include the following SIC industry:

2836 Biological products, except diagnostic

### **3255 Paint, Coating, and Adhesive Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 32551, Paint and Coating Manufacturing; and 32552, Adhesive Manufacturing.



### **32551 Paint and Coating Manufacturing**

This 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.

#### **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.

The data published with NAICS code 325510 include the following SIC industries:

2851 Paints and allied products

2899 Chemical preparations, n.e.c. (pt)

### **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.

The data published with NAICS code 325520 include the following SIC industry:

2891 Adhesives and sealants

### **3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 32561, Soap and Cleaning Compound Manufacturing; and 32562, 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.

The data published with NAICS code 325611 include the following SIC industries:

2841 Soap and other detergents

2844 Toilet preparations (pt)

#### **325612 Polish and Other Sanitation Good Manufacturing**

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

The data published with NAICS code 325612 include the following SIC industry:

2842 Polishes and sanitation goods

#### **325613 Surface Active Agent Manufacturing**

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

The data published with NAICS code 325613 include the following SIC industry:

2843 Surface active agents

#### **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.

The data published with NAICS code 325620 include the following SIC industry:

2844 Toilet preparations (pt)

#### **3259 Other Chemical Product Manufacturing**

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and

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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 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.

The data published with NAICS code 325910 include the following SIC industry:

2893 Printing ink

### **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.

The data published with NAICS code 325920 include the following SIC industry:

2892 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 comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

The data published with NAICS code 325991 include the following SIC industries:

3087 Custom compound purchased resins

### **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.

The data published with NAICS code 325992 include the following SIC industry:

3861 Photographic equipment and supplies (pt)

### **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).

The data published with NAICS code 325998 include the following SIC industries:

2819 Industrial inorganic chemicals, n.e.c. (pt)

2899 Chemical preparations, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 325998 do not include establishments primarily engaged in aerosol packaging. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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

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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 Hose 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 Unsupported Plastics Film, Sheet, and Bag Manufacturing**

This industry comprises establishments primarily engaged in (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 Unsupported Plastics Bag Manufacturing**

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

The data published with NAICS code 326111 include the following SIC industry:

2673 Bags - plastics, laminated, and coated (pt)

##### **326112 Unsupported Plastics Packaging Film and Sheet Manufacturing**

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

The data published with NAICS code 326112 include the following SIC industry:

2671 Paper - coated and laminated, packaging (pt)

##### **326113 Unsupported Plastics Film and Sheet (Except Packaging) Manufacturing**

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

The data published with NAICS code 326113 include the following SIC industry:

3081 Unsupported plastics film and sheet

##### **32612 Plastics Pipe, Pipe Fitting, and Unsupported 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 Unsupported Plastics Profile Shapes 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.

The data published with NAICS code 326121 include the following SIC industry:

3082 Unsupported plastics profile shapes

##### **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.

The data published with NAICS code 326122 include the following SIC industries:

3084 Plastics pipe

3089 Plastics products, n.e.c. (pt)

##### **32613 Laminated Plastics Plate, Sheet, 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.



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### **326130 Laminated Plastics Plate, Sheet, 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.

The data published with NAICS code 326130 include the following SIC industry:

3083 Laminated plastics plate and sheet

### **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.

The data published with NAICS code 326140 include the following SIC industry:

3086 Plastics foam products (pt)

### **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).

The data published with NAICS code 326150 include the following SIC industry:

3086 Plastics foam products (pt)

### **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.

The data published with NAICS code 326160 include the following SIC industry:

3085 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.

The data published with NAICS code 326191 include the following SIC industry:

3088 Plastics plumbing fixtures

### **326192 Resilient Floor Covering Manufacturing**

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

The data published with NAICS code 326192 include the following SIC industries:

3069 Fabricated rubber products, n.e.c. (pt)

3996 Hard surface floor coverings

### **326199 All Other Plastics Product Manufacturing**

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

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

3089 Plastics products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

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

### **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.

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### **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.

The data published with NAICS code 326211 include the following SIC industry:

3011 Tires and inner tubes

#### **326212 Tire Retreading**

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

The data published with NAICS code 326212 include the following SIC industry:

7534 Tire retreading and repair shops (pt)

#### **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.

The data published with NAICS code 326220 include the following SIC industry:

3052 Rubber and plastics hose and belting

#### **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.

The data published with NAICS code 326291 include the following SIC industry:

3061 Mechanical rubber goods

#### **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.

The data published with NAICS code 326299 include the following SIC industry:

3069 Fabricated rubber products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 326299 include establishments primarily engaged in the manufacture of rubber products including gloves, toys, pants, raincoats, bibs, aprons, bathing caps, life jackets, and wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **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 benefit 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 NAICS industry group includes establishments classified in the following NAICS Industries: 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing; and 32712, Clay Building Material and Refractories Manufacturing.

#### **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.

The data published with NAICS code 327111 include the following SIC industry:

3261 Vitreous plumbing fixtures

#### **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.

The data published with NAICS code 327112 include the following SIC industries:

3262 Vitreous china table and kitchen articles

3263 Fine earthenware table and kitchen articles

3269 Pottery products, n.e.c.

3299 Nonmetallic mineral products, n.e.c. (pt)

### **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.

The data published with NAICS code 327113 include the following SIC industry:

3264 Porcelain electrical supplies

### **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.

The data published with NAICS code 327121 include the following SIC industry:

3251 Brick and structural clay tile

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327121 include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **327122 Ceramic Wall and Floor Tile Manufacturing**

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

The data published with NAICS code 327122 include the following SIC industry:

3253 Ceramic wall and floor tile

#### **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.

The data published with NAICS code 327123 include the following SIC industry:

3259 Structural clay products, n.e.c.

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### **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.

The data published with NAICS code 327124 include the following SIC industry:

3255 Clay refractories

### **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.

The data published with NAICS code 327125 include the following SIC industry:

3297 Nonclay refractories

### **3272 Glass and Glass Product Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 32721, Glass and Glass Product Manufacturing.

#### **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.

The data published with NAICS code 327211 include the following SIC industry:

3211 Flat glass

#### **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).

The data published with NAICS code 327212 include the following SIC industry:

3229 Pressed and blown glass, n.e.c.

### **327213 Glass Container Manufacturing**

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

The data published with NAICS code 327213 include the following SIC industry:

3221 Glass containers

### **327215 Glass Product Manufacturing Made of Purchased Glass**

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

The data published with NAICS code 327215 include the following SIC industry:

3231 Products of purchased glass

### **3273 Cement and Concrete Product Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 32731, Cement Manufacturing; 32732, Ready-Mix Concrete Manufacturing; 32733, Concrete Pipe, Brick, and Block Manufacturing; and 32739, 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.

The data published with NAICS code 327310 include the following SIC industry:

3241 Cement, hydraulic

#### **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, 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.

The data published with NAICS code 327320 include the following SIC industry:

3273 Ready-mixed concrete

### **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.

The data published with NAICS code 327331 include the following SIC industry:

3271 Concrete brick and block

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 327331 do not include establishments primarily engaged in the manufacture of slumped brick. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **327332 Concrete Pipe Manufacturing**

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

The data published with NAICS code 327332 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

#### **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).

The data published with NAICS code 327390 include the following SIC industry:

3272 Concrete products, n.e.c. (pt)

### **3274 Lime and Gypsum Product Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 32741, Lime Manufacturing; and 32742, Gypsum Product Manufacturing.

#### **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.

The data published with NAICS code 327410 include the following SIC industry:

3274 Lime

#### **32742 Gypsum Product Manufacturing**

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

The data published with NAICS code 327420 include the following SIC industries:

3275 Gypsum products

3299 Nonmetallic mineral products, n.e.c. (pt)

#### **3279 Other Nonmetallic Mineral Product Manufacturing**

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments 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.

The data published with NAICS code 327910 include the following SIC industry:

3291 Abrasive products (pt)

### **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.

The data published with NAICS code 327991 include the following SIC industry:

3281 Cut stone and stone products

#### **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.

The data published with NAICS code 327992 include the following SIC industry:

3295 Minerals, ground or treated

#### **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.

The data published with NAICS code 327993 include the following SIC industry:

3296 Mineral wool

### **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).

The data published with NAICS code 327999 include the following SIC industries:

3272 Concrete products, n.e.c. (pt)

3292 Asbestos products (pt)

3299 Nonmetallic mineral products, n.e.c. (pt)

### **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.

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### **3311 Iron and Steel Mills and Ferroalloy Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing.

#### **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, 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; (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.

The data published with NAICS code 331111 include the following SIC industries:

3312 Blast furnaces and steel mills (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331111 include establishments primarily engaged in the manufacture of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **3311111 Iron and Steel Mills – Fully Integrated**

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

#### **3311112 Iron and Steel Mills – Partially Integrated With a Blast Furnace**

Establishments primarily engaged in smelting iron ore in a blast furnace to produce pig iron in molten or solid form; then converting pig iron into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing ingots and/or semifinished shapes, such as blooms, billets, and rods.

#### **3311113 Iron and Steel Mills – Partially Integrated Without a Blast Furnace**

Establishments primarily engaged in converting pig iron, direct reduced iron, and/or scrap into steel by removal of the carbon in the iron through combustion in a basic oxygen or electric furnace; then producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire.

#### **3311114 Iron and Steel Mills – Nonintegrated**

Establishments primarily engaged in producing iron and steel basic shapes, such as plates, sheets, strips, and bars, and other related products, such as pipes, tubes, and wire from purchased ingots and/or semifinished shapes, such as blooms, billets, and rods.

#### **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.

The data published with NAICS code 331112 include the following SIC industry:

3313 Electrometallurgical products (pt)

#### **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 Pipes and Tubes 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 Pipes and Tubes 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.

The data published with NAICS code 331210 include the following SIC industry:

3317 Steel pipe and tubes

### **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.

The data published with NAICS code 331221 include the following SIC industry:

3316 Cold finishing of steel shapes

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331221 do not include establishments primarily engaged in making coke oven and blast furnace products; in making steel and rolling or drawing steel shapes; or in the making of ferrous metal powder, paste, and flake. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **331222 Steel Wire Drawing**

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

The data published with NAICS code 331222 include the following SIC industry:

3315 Steel wire and related products (pt)

### **3313 Alumina and Aluminum Production and Processing**

This NAICS industry group includes establishments classified in NAICS Industry 33131, Alumina and Aluminum Production and Processing.

#### **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, wire).

##### **331311 Alumina Refining**

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

The data published with NAICS code 331311 include the following SIC industry:

2819 Industrial inorganic chemicals, n.e.c. (pt)

### **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, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

The data published with NAICS code 331312 include the following SIC industry:

3334 Primary aluminum

#### **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.

The data published with NAICS code 331314 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

#### **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.

The data published with NAICS code 331315 include the following SIC industry:

3353 Aluminum sheet, plate, and foil (pt)

#### **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.

The data published with NAICS code 331316 include the following SIC industry:

3354 Aluminum extruded products



### **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.

The data published with NAICS code 331319 include the following SIC industries:

3355 Aluminum rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

### **3314 Nonferrous Metal (Except Aluminum) Production and Processing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 33141, Nonferrous Metal (Except Aluminum) Smelting and Refining; 33142, Copper Rolling, Drawing, Extruding, and Alloying; and 33149, 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 (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.

The data published with NAICS code 331411 include the following SIC industry:

3331 Primary copper

#### **331419 Primary Smelting and Refining of Nonferrous Metal (Except Copper and Aluminum)**

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

The data published with NAICS code 331419 include the following SIC industry:

3339 Primary nonferrous metals, n.e.c.

### **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, and 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, and 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, 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, tube (except bare or insulated copper communication or energy wire in integrated mills)).

The data published with NAICS code 331421 include the following SIC industry:

3351 Copper rolling and drawing

#### **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.

The data published with NAICS code 331422 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

#### **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.

The data published with NAICS code 331423 include the following SIC industries:

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

### **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

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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, or extruding shapes (e.g., bar, plate, sheet, strip, 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, tube) in integrated mills.

The data published with NAICS code 331491 include the following SIC industries:

3356 Nonferrous rolling and drawing, n.e.c.

3357 Nonferrous wire drawing and insulating (pt)

### **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, wire) using smelting or refining processes.

The data published with NAICS code 331492 include the following SIC industries:

3313 Electrometallurgical products (pt)

3341 Secondary nonferrous metals (pt)

3399 Primary metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 331492 include establishments primarily engaged in the manufacture of other nonferrous additive alloys. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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 man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

The data published with NAICS code 331511 include the following SIC industries:

3321 Gray iron foundries

3322 Malleable iron foundries

#### **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.

The data published with NAICS code 331512 include the following SIC industry:

3324 Steel investment foundries

#### **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.

The data published with NAICS code 331513 include the following SIC industry:

3325 Steel foundries, n.e.c.

### **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.

The data published with NAICS code 331521 include the following SIC industry:

3363 Aluminum die-castings

#### **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.

The data published with NAICS code 331522 include the following SIC industry:

3364 Nonferrous die-casting, except aluminum

#### **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.

The data published with NAICS code 331524 include the following SIC industry:

3365 Aluminum foundries

#### **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.

The data published with NAICS code 331525 include the following SIC industry:

3366 Copper foundries

#### **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.

The data published with NAICS code 331528 include the following SIC industry:

3369 Nonferrous foundries, n.e.c.

### **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 NAICS industry group includes establishments classified in NAICS Industry 33211, Forging and Stamping.

##### **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, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished

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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.

The data published with NAICS code 332111 include the following SIC industry:

3462 Iron and steel forgings

### **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.

The data published with NAICS code 332112 include the following SIC industry:

3463 Nonferrous forgings

### **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.

The data published with NAICS code 332114 include the following SIC industry:

3449 Miscellaneous metal work (pt)

### **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.

The data published with NAICS code 332115 include the following SIC industry:

3466 Crowns and closures

### **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.

The data published with NAICS code 332116 include the following SIC industry:

3469 Metal stampings, n.e.c. (pt)

### **332117 Powder Metallurgy Parts 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.

The data published with NAICS code 332117 include the following SIC industry:

3499 Fabricated metal products, n.e.c. (pt)

### **3322 Cutlery and Handtool Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33221, Cutlery and Handtool Manufacturing.

#### **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 skillet) 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.

The data published with NAICS code 332211 include the following SIC industries:

3421 Cutlery

3914 Silverware and plated ware (pt)



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This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332211 do not include establishments primarily engaged in the manufacture of hand-operated clippers for human hair. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **332212 Hand and Edge Tool Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

The data published with NAICS code 332212 include the following SIC industries:

- 3423 Hand and edge tools, n.e.c.
- 3523 Farm machinery and equipment (pt)
- 3524 Lawn and garden equipment (pt)
- 3545 Machine tool accessories (pt)
- 3699 Electrical equipment and supplies, n.e.c. (pt)
- 3799 Transportation equipment, n.e.c. (pt)
- 3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census—Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332212 include establishments primarily engaged in the manufacture of wheelbarrows or quality control laser equipment but do not include establishments primarily engaged in the manufacture of tool-type shears or fish wire, an electrical wiring tool. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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).

The data published with NAICS code 332213 include the following SIC industry:

- 3425 Saw blades and handsaws

### **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 skillet) or stamped without further fabrication).

The data published with NAICS code 332214 include the following SIC industry:

- 3469 Metal stampings, n.e.c. (pt)

### **3323 Architectural and Structural Metals Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 33231, Plate Work and Fabricated Structural Product Manufacturing; and 33232, 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.

The data published with NAICS code 332311 include the following SIC industry:

- 3448 Prefabricated metal buildings

##### **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.

The data published with NAICS code 332312 include the following SIC industries:

- 3441 Fabricated structural metal
- 3449 Miscellaneous metal work (pt)

##### **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.

The data published with NAICS code 332313 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

##### **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 (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

The data published with NAICS code 332321 include the following SIC industries:

- 2499 Wood products, n.e.c. (pt)
- 3442 Metal doors, sash, and trim
- 3449 Miscellaneous metal work (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332321 include establishments primarily engaged in the manufacture of metal finished moldings for mirrors and pictures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **332322 Sheet Metal Work Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

The data published with NAICS code 332322 include the following SIC industry:

- 3444 Sheet metal work (pt)

### **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.

The data published with NAICS code 332323 include the following SIC industries:

- 3446 Architectural metal work
- 3449 Miscellaneous metal work (pt)
- 3523 Farm machinery and equipment (pt)

### **3324 Boiler, Tank, and Shipping Container Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 33241, Power Boiler and Heat Exchanger Manufacturing; 33242, Metal Tank (Heavy Gauge) Manufacturing; and 33243, 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.

The data published with NAICS code 332410 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332410 do not include establishments primarily engaged in the manufacture of nuclear control drive mechanisms. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 332420 include the following SIC industry:

- 3443 Fabricated plate work, boiler shops (pt)

### **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.

The data published with NAICS code 332431 include the following SIC industry:

- 3411 Metal cans

### **332439 Other Metal Container Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

The data published with NAICS code 332439 include the following SIC industries:

- 3412 Metal barrels, drums, and pails
- 3429 Hardware, n.e.c. (pt)
- 3444 Sheet metal work (pt)
- 3499 Fabricated metal products, n.e.c. (pt)
- 3537 Industrial trucks and tractors (pt)

### **3325 Hardware Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33251, Hardware Manufacturing.

#### **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, 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, time locks).

The data published with NAICS code 332510 include the following SIC industries:

- 3429 Hardware, n.e.c. (pt)
- 3499 Fabricated metal products, n.e.c. (pt)

### **3326 Spring and Wire Product Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33261, Spring and Wire Product Manufacturing.

#### **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.

The data published with NAICS code 332611 include the following SIC industry:

- 3493 Steel springs, except wire

### **332612 Spring (Light Gauge) Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

The data published with NAICS code 332612 include the following SIC industry:

- 3495 Wire springs (pt)

### **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.

The data published with NAICS code 332618 include the following SIC industries:

- 3315 Steel wire and related products (pt)
- 3399 Primary metal products, n.e.c. (pt)
- 3496 Miscellaneous fabricated wire products

### **3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 33271, Machine Shops; and 33272, Turned Product and Screw, Nut, and Bolt Manufacturing.

#### **33271 Machine Shops**

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

#### **332710 Machine Shops**

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

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

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

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### **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 manufacturing parts for machinery and equipment on a customized basis.

### **332721 Precision Turned Product Manufacturing**

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. 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.

The data published with NAICS code 332721 include the following SIC industry:

3451 Screw machine products

### **332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

The data published with NAICS code 332722 include the following SIC industry:

3452 Bolts, nuts, rivets, and washers

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332722 do not include establishments primarily engaged in the manufacture of turnbuckles and hose clamps. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **3328 Coating, Engraving, Heat Treating, and Allied Activities**

This NAICS industry group includes establishments classified in NAICS Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities.

### **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, 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. Establishments in this industry 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.

The data published with NAICS code 332811 include the following SIC industry:

3398 Metal heat treating

### **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.

The data published with NAICS code 332812 include the following SIC industry:

3479 Metal coating and allied services (pt)

### **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.

The data published with NAICS code 332813 include the following SIC industry:

3471 Plating and polishing

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332813 do not include establishments primarily engaged in laminating steel. The NAICS definitions will be fully implemented with the 2002 Economic Census.



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### **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.

The data published with NAICS code 332911 include the following SIC industries:

3491 Industrial valves

#### **332912 Fluid Power Valve and Hose Fitting Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

The data published with NAICS code 332912 include the following SIC industries:

3492 Fluid power valves and hose fittings

3728 Aircraft parts and equipment, n.e.c. (pt)

#### **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.

The data published with NAICS code 332913 include the following SIC industry:

3432 Plumbing fittings and brass goods (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332913 include establishments primarily engaged in the manufacture of lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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).

The data published with NAICS code 332919 include the following SIC industries:

3429 Hardware, n.e.c. (pt)

3494 Valves and pipe fittings, n.e.c. (pt)

3499 Fabricated metal products, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332919 do not include establishments primarily engaged in manufacturing lawn hose nozzels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 332991 include the following SIC industry:

3562 Ball and roller bearings

#### **332992 Small Arms Ammunition Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

The data published with NAICS code 332992 include the following SIC industry:

3482 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.

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The data published with NAICS code 332993 include the following SIC industry:

3483 Ammunition, except small arms, n.e.c.

### **332994 Small Arms Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

The data published with NAICS code 332994 include the following SIC industry:

3484 Small arms

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **332995 Other Ordnance and Accessories Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

The data published with NAICS code 332995 include the following SIC industry:

3489 Ordnance and accessories, n.e.c.

### **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.

The data published with NAICS code 332996 include the following SIC industries:

3353 Aluminum sheet, plate, and foil (pt)

3498 Fabricated pipe and fittings

### **332997 Industrial Pattern Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

The data published with NAICS code 332997 include the following SIC industry:

3543 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.

The data published with NAICS code 332998 include the following SIC industry:

3431 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).

The data published with NAICS code 332999 include the following SIC industries:

3291 Abrasive products (pt)

3432 Plumbing fixture fittings and trim

3494 Valves and pipe fittings, n.e.c. (pt)

3497 Metal foil and leaf (pt)

3499 Fabricated metal products, n.e.c. (pt)

3537 Industrial trucks and tractors (pt)

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

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332999 do not include establishments primarily engaged in manufacturing fire-place fixtures, traps, handcuffs and leg irons, ladder jacks, or other like metal products, or primarily engaged in manufacturing precious metal hollowware. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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

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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 NAICS industry group includes establishments classified in the following NAICS Industries: 33311, Agricultural Implement Manufacturing; 33312, Construction Machinery Manufacturing; and 33313, 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).

The data published with NAICS code 333111 include the following SIC industry:

3523 Farm machinery and equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

NAICS. Data for NAICS industry 333111 do not include establishments primarily engaged in manufacturing cotton ginning machinery. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **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.

The data published with NAICS code 333112 include the following SIC industry:

3524 Lawn and garden equipment (pt)

#### **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.

The data published with NAICS code 333120 include the following SIC industry:

3531 Construction machinery (pt)

#### **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, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

The data published with NAICS code 333131 include the following SIC industry:

3532 Mining machinery

#### **333132 Oil and Gas Field Machinery and Equipment Manufacturing**

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

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The data published with NAICS code 333132 include the following SIC industry:

3533 Oil field machinery

### **3332 Industrial Machinery Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 33321, Sawmill and Woodworking Machinery Manufacturing; 33322, Plastics and Rubber Industry Machinery Manufacturing; and 33329, Other Industrial Machinery Manufacturing.

#### **33321 Sawmill and Woodworking Machinery Manufacturing**

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

#### **333210 Sawmill and Woodworking Machinery Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

The data published with NAICS code 333210 include the following SIC industry:

3553 Woodworking 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.

The data published with NAICS code 333220 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)

#### **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.

The data published with NAICS code 333291 include the following SIC industry:

3554 Paper industries machinery

### **333292 Textile Machinery Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

The data published with NAICS code 333292 include the following SIC industries:

3552 Textile machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

### **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, type-setting machinery, and bindery machinery.

The data published with NAICS code 333293 include the following SIC industries:

3555 Printing trades machinery

3699 Electrical equipment and supplies, n.e.c. (pt)

### **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, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

The data published with NAICS code 333294 include the following SIC industry:

3556 Food products machinery

### **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.

The data published with NAICS code 333295 include the following SIC industry:

3559 Special industry machinery, n.e.c. (pt)



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### **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).

The data published with NAICS code 333298 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3639 Household appliances, n.e.c. (pt)

### **3333 Commercial and Service Industry Machinery Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33331, Commercial and Service Industry Machinery Manufacturing.

### **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 drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

### **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.

The data published with NAICS code 333311 include the following SIC industry:

3581 Automatic merchandising machines

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333311 do not include establishments primarily engaged in the manufacture of change making machines. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 333312 include the following SIC industry:

3582 Commercial laundry equipment

### **333313 Office Machinery Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mail-handling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

The data published with NAICS code 333313 include the following SIC industries:

3578 Calculating and accounting equipment (pt)

3579 Office machines, n.e.c. (pt)

### **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, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

The data published with NAICS code 333314 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3827 Optical instruments and lenses

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333314 include establishments primarily engaged in the manufacture of sighting and tracking laser products.

### **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, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

The data published with NAICS code 333315 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3861 Photographic equipment and supplies (pt)

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This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333315 include establishments primarily engaged in the manufacture of photographic laser products.

### **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).

The data published with NAICS code 333319 include the following SIC industries:

3559 Special industry machinery, n.e.c. (pt)

3589 Service industry machinery, n.e.c.

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

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333319 do not include establishments primarily engaged in the manufacture of beauty and barbershop equipment, except chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

#### **33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing**

This industry comprises establishments primarily engaged in manufacturing ventilating, 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.

The data published with NAICS code 333411 include the following SIC industry:

3564 Blowers and fans (pt)

#### **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.

The data published with NAICS code 333412 include the following SIC industry:

3564 Blowers and fans (pt)

#### **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.

The data published with NAICS code 333414 include the following SIC industries:

3433 Heating equipment, except electric

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 333414 do not include establishments primarily engaged in the manufacture of cooling towers of wood, metal, or sheet metal, or the manufacture of electric swimming pool heaters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **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.

The data published with NAICS code 333415 include the following SIC industries:

3443 Fabricated plate work, boiler shops (pt)

3585 Refrigeration and heating equipment (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to

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NAICS. Data for NAICS industry 333415 include establishments primarily engaged in the manufacture of metal cooling towers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **3335 Metalworking Machinery Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33351, Metalworking Machinery Manufacturing.

#### **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.

The data published with NAICS code 333511 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

##### **333512 Machine Tool (Metal Cutting Types) Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

The data published with NAICS code 333512 include the following SIC industries:

3541 Machine tools, metal cutting types

3699 Electrical equipment and supplies, n.e.c. (pt)

##### **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.

The data published with NAICS code 333513 include the following SIC industries:

3542 Machine tools, metal forming types

### **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.

The data published with NAICS code 333514 include the following SIC industry:

3544 Special dies, tools, jigs, and fixtures (pt)

#### **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.

The data published with NAICS code 333515 include the following SIC industry:

3545 Machine tool accessories (pt)

#### **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.

The data published with NAICS code 333516 include the following SIC industry:

3547 Rolling mill machinery

#### **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).

The data published with NAICS code 333518 include the following SIC industry:

3549 Metalworking machinery, n.e.c.

### **3336 Engine, Turbine, and Power Transmission Equipment Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

#### **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).



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### **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.

The data published with NAICS code 333611 include the following SIC industry:

3511 Turbines and turbine generator sets

### **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).

The data published with NAICS code 333612 include the following SIC industry:

3566 Speed changers, drives, and gears

### **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, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

The data published with NAICS code 333613 include the following SIC industry:

3568 Power transmission equipment, n.e.c.

### **333618 Other Engine Equipment Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

The data published with NAICS code 333618 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

### **3339 Other General-Purpose Machinery Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 33391, Pump and Compressor Manufacturing; 33392, Material Handling Equipment Manufacturing; and 33399, 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.

The data published with NAICS code 333911 include the following SIC industries:

3561 Pumps and pumping equipment

3743 Railroad equipment (pt)

#### **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.

The data published with NAICS code 333912 include the following SIC industry:

3563 Air and gas compressors

#### **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.

The data published with NAICS code 333913 include the following SIC industry:

3586 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.

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### **333921 Elevator and Moving Stairway Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

The data published with NAICS code 333912 include the following SIC industry:

3534 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.

The data published with NAICS code 333922 include the following SIC industries:

3523 Farm machinery and equipment (pt)

3535 Conveyors and conveying equipment

### **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.

The data published with NAICS code 333923 include the following SIC industries:

3531 Construction machinery (pt)

3536 Hoists, cranes, and monorails

### **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.

The data published with NAICS code 333924 include the following SIC industry:

3537 Industrial trucks and tractors (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 332994 do not include establishments primarily engaged in the manufacture of tranquilizer guns. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

The data published with NAICS code 333991 include the following SIC industry:

3546 Power-driven handtools

#### **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).

The data published with NAICS code 333992 include the following SIC industries:

3548 Welding apparatus (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

#### **333993 Packaging Machinery Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

The data published with NAICS code 333993 include the following SIC industry:

3565 Packaging 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, wood).

The data published with NAICS code 333994 include the following SIC industry:

3567 Industrial furnaces and ovens

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### **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.

The data published with NAICS code 333995 include the following SIC industries:

3593 Fluid power cylinders and actuators

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333995 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 333996 include the following SIC industries:

3594 Fluid power pumps and motors

3728 Aircraft parts and equipment, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 333996 include establishments primarily engaged in the manufacture of aerospace-type fluid power actuators. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **333997 Scale and Balance (Except Laboratory) Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

The data published with NAICS code 333997 include the following SIC industry:

3596 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).

The data published with NAICS code 333999 include the following SIC industries:

3569 General industrial machinery, n.e.c.

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

### **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 NAICS industry group includes establishments classified in NAICS Industry 33411, Computer and Peripheral Equipment Manufacturing.

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### **33411 Computer and Peripheral Equipment Manufacturing**

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

#### **334111 Electronic Computer Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

The data published with NAICS code 334111 include the following SIC industry:

3571 Electronic computers

#### **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.

The data published with NAICS code 334112 include the following SIC industry:

3572 Computer storage devices

#### **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.

The data published with NAICS code 334113 include the following SIC industry:

3575 Computer terminals

#### **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).

The data published with NAICS code 334119 include the following SIC industries:

3577 Computer peripheral equipment, n.e.c.

3578 Calculating and accounting equipment (pt)

3699 Electrical equipment and supplies, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334119 include establishments primarily engaged in the manufacture of laser products.

#### **3342 Communications Equipment Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 33421, Telephone Apparatus Manufacturing; 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and 33429, 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 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.



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### **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.

The data published with NAICS code 334210 include the following SIC industry:

3661 Telephone and telegraph apparatus (pt)

### **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.

The data published with NAICS code 334220 include the following SIC industries:

3663 Radio and TV communications equipment

3679 Electronic components, n.e.c. (pt)

### **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).

The data published with NAICS code 334290 include the following SIC industry:

3669 Communications equipment, n.e.c.

### **3343 Audio and Video Equipment Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33431, Audio and Video Equipment Manufacturing.

### **33431 Audio and Video Equipment Manufacturing**

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

### **334310 Audio and Video Equipment Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

The data published with NAICS code 334310 include the following SIC industry:

3651 Household audio and video equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334310 do not include establishments primarily engaged in the manufacture of radio headphones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **3344 Semiconductor and Other Electronic Component Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

### **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

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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.

The data published with NAICS code 334411 include the following SIC industries:

3671 Electron 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.

The data published with NAICS code 334412 include the following SIC industry:

3672 Printed circuit boards

### **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.

The data published with NAICS code 334413 include the following SIC industry:

3674 Semiconductors and related devices

### **334414 Electronic Capacitor Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

The data published with NAICS code 334414 include the following SIC industry:

3675 Electronic capacitors

### **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.

The data published with NAICS code 334415 include the following SIC industry:

3676 Electronic resistors

### **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.

The data published with NAICS code 334416 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3677 Electronic coils and transformers

3825 Instruments to measure electricity (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334416 include establishments primarily engaged in the manufacture of telephone transformers or portable instrument transformers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 334417 include the following SIC industry:

3678 Electronic connectors

### **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.

The data published with NAICS code 334418 include the following SIC industries:

3661 Telephone and telegraph apparatus (pt)

3679 Electronic components, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334418 do not include

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establishments primarily engaged in the manufacture of plotter controllers. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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).

The data published with NAICS code 334419 include the following SIC industry:

3679 Electronic components, n.e.c. (pt)

### **3345 Navigational, Measuring, Medical, and Control Instruments Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33451, Navigational, Measuring, Medical, and Control Instruments Manufacturing.

#### **33451 Navigational, Measuring, Medical, 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.

The data published with NAICS code 334510 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

3845 Electromedical equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334510 include establishments primarily engaged in the manufacture of electro-medical laser products.

#### **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.

The data published with NAICS code 334511 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3812 Search and navigation equipment

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334511 include establishments primarily engaged in the manufacture of search and detection laser products.

#### **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.

The data published with NAICS code 334512 include the following SIC industry:

3822 Environmental controls

#### **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 (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

The data published with NAICS code 334513 include the following SIC industry:

3823 Process control instruments

#### **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



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by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

The data published with NAICS code 334514 include the following SIC industry:

3824 Fluid meters and counting devices

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334514 do not include establishments primarily engaged in the manufacture of automotive ammeters and voltmeters or motor vehicle gauges. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 334515 include the following SIC industry:

3825 Instruments to measure electricity (pt)

### **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.

The data published with NAICS code 334516 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3826 Analytical instruments

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334516 include establishments primarily engaged in the manufacture of analytical and scientific laser products.

### **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, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

The data published with NAICS code 334517 include the following SIC industry:

3844 X-ray apparatus and tubes

### **334518 Watch, Clock, and Parts 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.

The data published with NAICS code 334518 include the following SIC industries:

3495 Wire springs (pt)

3579 Office machines, n.e.c. (pt)

3873 Watches, clocks, and watchcases

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334518 do not include establishments primarily engaged in the manufacture of electronic chronometers or watch jewels. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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).

The data published with NAICS code 334519 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3829 Measuring and controlling devices, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing implemented the conversion to NAICS differently. Data for NAICS industry 334519 include establishments primarily engaged in the manufacture of commercial geophysical, meteorological, survey, and drafting laser products.

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### **3346 Manufacturing and Reproducing Magnetic and Optical Media**

This NAICS industry group includes establishments classified in NAICS Industry 33461, Manufacturing and Reproducing Magnetic and Optical 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.

The data published with NAICS code 334611 include the following SIC industries:

7379 Computer Related Services, n.e.c. (pt)

##### **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.

The data published with NAICS code 334612 include the following SIC industries:

3652 Prerecorded records and tapes

7819 Services allied to motion pictures (pt)

##### **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.

The data published with NAICS code 334613 include the following SIC industry:

3695 Magnetic and optical recording media

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 334613 do not include establishments primarily engaged in the manufacture of magnetic tape cleaners. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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 NAICS industry group includes establishments classified in the following NAICS Industries: 33511, Electric Lamp Bulb and Parts Manufacturing; and 33512, Lighting Fixture Manufacturing.

##### **33511 Electric Lamp Bulb and Parts 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).

The data published with NAICS code 335110 include the following SIC industry:

3641 Electric lamps

##### **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).

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### **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.

The data published with NAICS code 335121 include the following SIC industries:

3089 Plastics products, n.e.c. (pt)

3645 Residential lighting fixtures

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335121 include establishments primarily engaged in the manufacture of plastic lampshades. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 335122 include the following SIC industry:

3646 Commercial 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 electric lighting fixtures) and nonelectric lighting equipment.

The data published with NAICS code 335129 include the following SIC industries:

3648 Lighting equipment, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

### **3352 Household Appliance Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 33521, Small Electrical Appliance Manufacturing; and 33522, 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).

The data published with NAICS code 335211 include the following SIC industry:

3634 Electric housewares and fans (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 335211 do not include establishments primarily engaged in the manufacture of electric hair clippers for humans. The NAICS definitions will be fully implemented with the 2002 Economic Census.

#### **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.

The data published with NAICS code 335212 include the following SIC industries:

3635 Household vacuum cleaners

3639 Household appliances, n.e.c. (pt)

#### **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).

The data published with NAICS code 335221 include the following SIC industry:

3631 Household cooking equipment

#### **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.

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The data published with NAICS code 335222 include the following SIC industry:

3632 Household refrigerators and freezers

### **335224 Household Laundry Equipment Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

The data published with NAICS code 335224 include the following SIC industry:

3633 Household laundry equipment

### **335228 Other Major Household Appliance Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

The data published with NAICS code 335228 include the following SIC industry:

3639 Household appliances, n.e.c. (pt)

### **3353 Electrical Equipment Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33531, Electrical Equipment Manufacturing.

#### **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.

The data published with NAICS code 335311 include the following SIC industries:

3548 Welding apparatus (pt)

3612 Transformers

#### **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.

The data published with NAICS code 335312 include the following SIC industries:

3621 Motors and generators

7694 Armature rewinding shops (pt)

#### **335313 Switchgear and Switchboard Apparatus Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

The data published with NAICS code 335313 include the following SIC industry:

3613 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.

The data published with NAICS code 335314 include the following SIC industry:

3625 Relays and industrial controls

#### **3359 Other Electrical Equipment and Component Manufacturing**

This industry group comprises establishments 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.

The data published with NAICS code 335911 include the following SIC industry:

3691 Storage batteries

### **335912 Primary Battery Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

The data published with NAICS code 335912 include the following SIC industry:

3692 Primary batteries, dry and wet

### **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.

The data published with NAICS code 335921 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

### **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.

The data published with NAICS code 335929 include the following SIC industry:

3357 Nonferrous wire drawing and insulating (pt)

### **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.

The data published with NAICS code 335931 include the following SIC industry:

3643 Current-carrying wiring devices

### **335932 Noncurrent-Carrying Wiring Device Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

The data published with NAICS code 335932 include the following SIC industry:

3644 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.

The data published with NAICS code 335991 include the following SIC industry:

3624 Carbon and 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.

The data published with NAICS code 335999 include the following SIC industries:

3629 Electrical industrial apparatus, n.e.c.

3699 Electrical equipment and supplies, n.e.c. (pt)

### **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.



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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 NAICS industry group includes establishments classified in the following NAICS Industries: 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and 33612, Heavy Duty Truck Manufacturing.

#### **33611 Automobile and Light Duty Motor Vehicle Manufacturing**

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

##### **336111 Automobile Manufacturing**

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

The data published with NAICS code 336111 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

##### **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.

The data published with NAICS code 336112 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

### **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.

The data published with NAICS code 336120 include the following SIC industry:

3711 Motor vehicles and car bodies (pt)

### **3362 Motor Vehicle Body and Trailer Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

#### **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.

The data published with NAICS code 336211 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3713 Truck and bus bodies

3714 Motor vehicle parts and accessories (pt)

##### **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.

The data published with NAICS code 336212 include the following SIC industry:

3715 Truck trailers

### **336213 Motor Home Manufacturing**

This U.S. industry 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.

The data published with NAICS code 336213 include the following SIC industry:

3716 Motor homes

### **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.

The data published with NAICS code 336214 include the following SIC industries:

3792 Travel trailer and campers

3799 Transportation equipment, n.e.c. (pt)

### **3363 Motor Vehicle Parts Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; 33633, Motor Vehicle Steering and Suspension Component (Except Spring) Manufacturing; 33634, Motor Vehicle Brake System Manufacturing; 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing; 33636, Motor Vehicle Seating and Interior Trim Manufacturing; 33637, Motor Vehicle Metal Stamping; and 33639, 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.

The data published with NAICS code 336311 include the following SIC industries:

3592 Carburetors, pistons, rings, and 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.

The data published with NAICS code 336312 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

#### **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, ships).

#### **336321 Vehicular Lighting Equipment Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

The data published with NAICS code 336321 include the following SIC industry:

3647 Vehicular lighting equipment

#### **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.

The data published with NAICS code 336322 include the following SIC industries:

3679 Electronic components, n.e.c. (pt)

3694 Engine electrical equipment

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336322 include establishments primarily engaged in the manufacture of electronic control modular chips for motor vehicles. The NAICS definitions will be fully implemented with the 2002 Economic Census.



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### **33633 Motor Vehicle Steering and Suspension Component (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 Component (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).

The data published with NAICS code 336330 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

### **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.

The data published with NAICS code 336340 include the following SIC industries:

3292 Asbestos products (pt)

3714 Motor vehicle parts and accessories (pt)

### **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.

The data published with NAICS code 336350 include the following SIC industry:

3714 Motor vehicle parts and accessories (pt)

### **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.

The data published with NAICS code 336360 include the following SIC industries:

2396 Automotive and apparel trimmings (pt)

2399 Fabricated textile products, n.e.c. (pt)

2531 Public building and related furniture (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336360 do not include establishments primarily engaged in the manufacture of metal motor vehicle seat frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 336370 include the following SIC industry:

3465 Automotive stampings

### **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.

The data published with NAICS code 336391 include the following SIC industry:

3585 Refrigeration and heating equipment (pt)

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### **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).

The data published with NAICS code 336399 include the following SIC industries:

3519 Internal combustion engines, n.e.c. (pt)

3714 Motor vehicle parts and accessories (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336399 do not include establishments primarily engaged in the manufacture of luggage and utility racks or trailer hitches. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **3364 Aerospace Product and Parts Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33641, Aerospace Product and Parts Manufacturing.

#### **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).

The data published with NAICS code 336411 include the following SIC industry:

3721 Aircraft

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 336411 do not include establishments primarily engaged in the manufacture of target drones. The NAICS definitions will be fully implemented with the 2002 Economic Census.

##### **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).

The data published with NAICS code 336412 include the following SIC industry:

3724 Aircraft engines and engine parts

##### **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.

The data published with NAICS code 336413 include the following SIC industry:

3728 Aircraft parts and equipment, n.e.c. (pt)

##### **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.

The data published with NAICS code 336414 include the following SIC industry:

3761 Guided missiles and space vehicles

##### **336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing**

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

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The data published with NAICS code 336415 include the following SIC industry:

3764 Space propulsion units and 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.

The data published with NAICS code 336419 include the following SIC industry:

3769 Space vehicle equipment, n.e.c.

### **3365 Railroad Rolling Stock Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33651, Railroad Rolling Stock Manufacturing.

#### **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.

The data published with NAICS code 336510 include the following SIC industries:

3531 Construction machinery (pt)

3743 Railroad equipment (pt)

### **3366 Ship and Boat Building**

This NAICS industry group includes establishments classified in NAICS Industry 33661, Ship and Boat Building.

### **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.

The data published with NAICS code 336611 include the following SIC industry:

3731 Ship building and repairing

#### **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.

The data published with NAICS code 336612 include the following SIC industry:

3732 Boat building and repairing (pt)

### **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.

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### **336991 Motorcycle, Bicycle, and Parts Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment and parts.

The data published with NAICS code 336991 include the following SIC industries:

3751 Motorcycles, bicycles, and parts

3944 Games, toys, and children's vehicles (pt)

### **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.

The data published with NAICS code 336992 include the following SIC industries:

3711 Motor vehicles and car bodies (pt)

3795 Tanks and tank components

### **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, armored vehicles, and tanks).

The data published with NAICS code 336999 include the following SIC industry:

3799 Transportation equipment, n.e.c. (pt)

### **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., knock-down). 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.



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### **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.

The data published with NAICS code 3371110 include the following SIC industries:

2434 Wood kitchen cabinets

2541 Wood partitions and fixtures (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337110 include establishments primarily engaged in manufacturing wood countertops as part of wood office and store fixtures. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 337121 include the following SIC industries:

2512 Upholstered household furniture

2515 Mattresses and bedsprings (pt)

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337121 do not include establishments primarily engaged in manufacturing upholstered metal household furniture. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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).

The data published with NAICS code 337122 include the following SIC industries:

2511 Wood household furniture

5712 Furniture stores (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337122 include establishments primarily engaged in manufacturing wood box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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).

The data published with NAICS code 337124 include the following SIC industry:

2514 Metal household furniture

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337124 include establishments primarily engaged in manufacturing upholstered metal household furniture or metal box spring frames. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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,

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rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

The data published with NAICS code 337125 include the following SIC industry:

2519 Household furniture, n.e.c.

### **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).

The data published with NAICS code 337127 include the following SIC industries:

2531 Public building and related furniture (pt)

2599 Furniture and fixtures, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337127 do not include establishments primarily engaged in manufacturing wood or nonwood lunchroom tables and chairs. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 337129 include the following SIC industry:

2517 Wood TV and radio cabinets

### **3372 Office Furniture (Including Fixtures) Manufacturing**

This NAICS industry group includes establishments classified in NAICS Industry 33721, Office Furniture (Including Fixtures) Manufacturing.

### **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).

The data published with NAICS code 337211 include the following SIC industry:

2521 Wood office furniture

### **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.

The data published with NAICS code 337212 include the following SIC industry:

2541 Wood partitions and fixtures (pt)

### **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).

The data published with NAICS code 337214 include the following SIC industry:

2522 Office furniture, except wood

### **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.

The data published with NAICS code 337215 include the following SIC industries:

2426 Hardwood dimension and flooring mills (pt)

2541 Wood partitions and fixtures (pt)

2542 Partitions and fixtures, except wood

3499 Fabricated metal products, n.e.c. (pt)

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This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 337215 include establishments primarily engaged in manufacturing wood or non-wood lunchroom tables and chairs, but do not include establishments primarily engaged in manufacturing wood or metal box spring frames, finished plastic furniture parts, convertible bed sleeper mechanisms or chair glides. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 337910 include the following SIC industry:

2515 Mattresses and bedsprings (pt)

#### **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: 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.

The data published with NAICS code 337920 include the following SIC industry:

2591 Drapery hardware, blinds, and shades

### **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 NAICS industry group includes establishments classified in NAICS Industry 33911, Medical Equipment and Supplies Manufacturing.

#### **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.

The data published with NAICS code 339111 include the following SIC industry:

3821 Laboratory apparatus and furniture



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This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339111 do not include establishments primarily engaged in the manufacture of hospital beds or operating tables. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **339112 Surgical and Medical Instrument Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical, and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

The data published with NAICS code 339112 include the following SIC industries:

3829 Measuring and controlling devices, n.e.c. (pt)

3841 Surgical and medical instruments

### **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).

The data published with NAICS code 339113 include the following SIC industries:

2599 Furniture and fixtures, n.e.c. (pt)

3842 Surgical appliances and supplies (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339113 do not include establishments primarily engaged in the manufacture of rubber gloves and life jackets. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 339114 include the following SIC industries:

3699 Electrical equipment and supplies, n.e.c. (pt)

3843 Dental equipment and supplies

### **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, and reading glasses made to standard powers.

The data published with NAICS code 339115 include the following SIC industry:

3851 Ophthalmic goods

### **339116 Dental Laboratories**

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

The data published with NAICS code 339116 include the following SIC industry:

8072 Dental laboratories

### **3399 Other Miscellaneous Manufacturing**

This NAICS industry group includes establishments classified in the following NAICS Industries: 33991, Jewelry and Silverware Manufacturing; 33992, Sporting and Athletic Goods Manufacturing; 33993, Doll, Toy, and Game Manufacturing; 33994, Office Supplies (Except Paper) Manufacturing; 33995, Sign Manufacturing; and 33999, 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 comprises establishments primarily engaged in one or more 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.

The data published with NAICS code 339911 include the following SIC industries:

3479 Metal coating and allied services (pt)

3911 Jewelry, precious metal

### **339912 Silverware and Holloware 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 plated ware.

The data published with NAICS code 339912 include the following SIC industries:

3479 Metal coating and allied services (pt)

3914 Silverware and plated ware (pt)

### **339913 Jewelers' Material and Lapidary Work Manufacturing**

This U.S. industry comprises establishments primarily engaged in one or more 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.

The data published with NAICS code 339913 include the following SIC industry:

3915 Jewelers' materials and lapidary work

### **339914 Costume Jewelry and Novelty Manufacturing**

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

The data published with NAICS code 339914 include the following SIC industries:

3479 Metal coating and allied services (pt)

3499 Fabricated metal products, n.e.c. (pt)

3961 Costume jewelry

### **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).

The data published with NAICS code 339920 include the following SIC industry:

3949 Sporting and athletic goods, n.e.c.

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339920 do not include establishments primarily engaged in the manufacture of wet suits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 339931 include the following SIC industry:

3942 Dolls

#### **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).

The data published with NAICS code 339932 include the following SIC industry:

3944 Games, toys, and children's vehicles (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339932 do not include

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establishments primarily engaged in the manufacture of rubber toys, except dolls or embroidery kits. The NAICS definitions will be fully implemented with the 2002 Economic Census.

### **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.

The data published with NAICS code 339941 include the following SIC industry:

3951 Pens and mechanical pencils

#### **339942 Lead Pencil and Art Goods 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.

The data published with NAICS code 339942 include the following SIC industries:

2531 Public building and related furniture (pt)

3579 Office machines, n.e.c. (pt)

3952 Lead pencils and art goods (pt)

#### **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.

The data published with NAICS code 339943 include the following SIC industry:

3953 Marking devices

#### **339944 Carbon Paper and Inked Ribbon Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

The data published with NAICS code 339944 include the following SIC industry:

3955 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, 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, displays).

The data published with NAICS code 339950 include the following SIC industries:

3993 Signs and advertising specialties

### **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.

The data published with NAICS code 339991 include the following SIC industry:

3053 Gaskets, packing and sealing devices

#### **339992 Musical Instrument Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

The data published with NAICS code 339992 include the following SIC industry:

3931 Musical instruments

#### **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).

The data published with NAICS code 339993 include the following SIC industries:

3131 Footwear cut stock and findings (pt)

3965 Fasteners, buttons, needles, and pins

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### **339994 Broom, Brush, and Mop Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

The data published with NAICS code 339994 include the following SIC industries:

2392 Housefurnishings, n.e.c. (pt)

3991 Brooms and brushes

### **339995 Burial Casket Manufacturing**

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

The data published with NAICS code 339995 include the following SIC industry:

3995 Burial caskets

### **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).

The data published with NAICS code 339999 include the following SIC industries:

2499 Wood products, n.e.c. (pt)

3999 Manufacturing industries, n.e.c. (pt)

This definition comes from the 1997 NAICS Manual. However, for this industry, the 1997 Economic Census – Manufacturing did not fully implement the conversion to NAICS. Data for NAICS industry 339999 do not include establishments primarily engaged in the manufacture of electronic cigarette lighters. The NAICS definitions will be fully implemented with the 2002 Economic Census.

# Appendix C.

## Coverage and Methodology

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### MAIL/NONMAIL UNIVERSE

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

1. Small single-establishment companies not sent a report form.

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

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

establishments but were included in the product and material “not specified by kind” (nsc) categories.

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

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

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

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

2. Establishments sent a report form.

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

- a. ASM sample establishments.

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



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

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

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

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

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

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

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

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

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

## **INDUSTRY CLASSIFICATION OF ESTABLISHMENTS**

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

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



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

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

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

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

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

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

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

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

## **ESTABLISHMENT BASIS OF REPORTING**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

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

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

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

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

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

### **QUALIFICATIONS OF THE ASM DATA**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

# Appendix D. Geographic Notes

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## CONNECTICUT

**Danielson.** See “Killingly town balance.”

**Groton.** See “Groton town balance.”

**Groton town balance.** The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census. Groton town balance contains all of Groton town except the incorporated place of Groton.

**Killingly town balance.** The term “balance” after the town refers to the portion of a town excluding an incorporated place recognized for the 1997 Economic Census.

Killingly town balance contains all of Killingly town except the incorporated place of Danielson.

**Milford.** See “Milford (consolidated city).”

**Milford (consolidated city)** is coextensive with Milford town. It includes Woodmont, which is not populous enough for separate tabulation. Therefore, “Milford” refers to the whole consolidated city.

# Appendix E.

## Metropolitan Areas

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### CONNECTICUT

#### **Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA**

Boston, MA—NH PMSA

- Bristol County, MA (Part)
  - Mansfield town, MA
  - Norton town, MA
  - Taunton city, MA
- Essex County, MA (Part)
  - Amesbury town, MA
  - Beverly city, MA
  - Danvers town, MA
  - Gloucester city, MA
  - Ipswich town, MA
  - Lynn city, MA
  - Lynnfield town, MA
  - Marblehead town, MA
  - Newburyport city, MA
  - Peabody city, MA
  - Salem city, MA
  - Saugus town, MA
  - Swampscott town, MA
- Middlesex County, MA (Part)
  - Acton town, MA
  - Arlington town, MA
  - Ashland town, MA
  - Bedford town, MA
  - Belmont town, MA
  - Burlington town, MA
  - Cambridge city, MA
  - Concord town, MA
  - Everett city, MA
  - Framingham town, MA

#### **Boston—Worcester—Lawrence, MA—NH—ME—CT CMSA—Con.**

Boston, MA—NH PMSA—Con.

Middlesex County, MA (Part)—Con.

- Holliston town, MA
- Hopkinton town, MA
- Hudson town, MA
- Lexington town, MA
- Malden city, MA
- Marlborough city, MA
- Maynard town, MA
- Medford city, MA
- Melrose city, MA
- Natick town, MA
- Newton city, MA
- North Reading town, MA
- Reading town, MA
- Somerville city, MA
- Stoneham town, MA
- Sudbury town, MA
- Wakefield town, MA
- Waltham city, MA
- Watertown city, MA
- Wayland town, MA
- Weston town, MA
- Wilmington town, MA
- Winchester town, MA
- Woburn city, MA

Norfolk County, MA (Part)

- Bellingham town, MA
- Braintree town, MA
- Brookline town, MA
- Canton town, MA



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**Boston—Worcester—Lawrence, MA—NH—ME—CT  
CMSA—Con.**

Boston, MA—NH PMSA—Con.

Norfolk County, MA (Part)—Con.

Dedham town, MA

Foxborough town, MA

Franklin city, MA

Holbrook town, MA

Medfield town, MA

Medway town, MA

Milton town, MA

Needham town, MA

Norfolk town, MA

Norwood town, MA

Quincy city, MA

Randolph town, MA

Sharon town, MA

Stoughton town, MA

Walpole town, MA

Wellesley town, MA

Westwood town, MA

Weymouth town, MA

Wrentham town, MA

Plymouth County, MA (Part)

Carver town, MA

Duxbury town, MA

Hanover town, MA

Hingham town, MA

Hull town, MA

Kingston town, MA

Marshfield town, MA

Pembroke town, MA

Plymouth town, MA

Rockland town, MA

Scituate town, MA

Wareham town, MA

**Boston—Worcester—Lawrence, MA—NH—ME—CT  
CMSA—Con.**

Boston, MA—NH PMSA—Con.

Suffolk County, MA

Boston city, MA

Chelsea city, MA

Revere city, MA

Winthrop town, MA

Worcester County, MA (Part)

Harvard town, MA

Milford town, MA

Rockingham County, NH (Part)

Brockton, MA PMSA

Bristol County, MA (Part)

Easton town, MA

Raynham town, MA

Norfolk County, MA (Part)

Plymouth County, MA (Part)

Abington town, MA

Bridgewater town, MA

Brockton city, MA

East Bridgewater town, MA

Middleborough town, MA

Whitman town, MA

Fitchburg—Leominster, MA PMSA

Middlesex County, MA (Part)

Worcester County, MA (Part)

Fitchburg city, MA

Gardner city, MA

Leominster city, MA

Lawrence, MA—NH PMSA

Essex County, MA (Part)

Andover town, MA

Haverhill city, MA

Lawrence city, MA

Methuen city, MA

North Andover town, MA

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**Boston—Worcester—Lawrence, MA—NH—ME—CT  
CMSA—Con.**

Lawrence, MA—NH PMSA—Con.

Rockingham County, NH (Part)

Derry town, NH

Salem town, NH

Lowell, MA—NH PMSA

Middlesex County, MA (Part)

Billerica town, MA

Chelmsford town, MA

Dracut town, MA

Lowell city, MA

Pepperell town, MA

Tewksbury town, MA

Westford town, MA

Hillsborough County, NH (Part)

Pelham town, NH

Manchester, NH PMSA

Hillsborough County, NH (Part)

Bedford town, NH

Goffstown town, NH

Manchester city, NH

Merrimack County, NH (Part)

Rockingham County, NH (Part)

Londonderry town, NH

Nashua, NH PMSA

Hillsborough County, NH (Part)

Hudson town, NH

Merrimack town, NH

Milford town, NH

Nashua city, NH

New Bedford, MA PMSA

Bristol County, MA (Part)

Dartmouth town, MA

Fairhaven town, MA

New Bedford city, MA

Plymouth County, MA (Part)

**Boston—Worcester—Lawrence, MA—NH—ME—CT  
CMSA—Con.**

Portsmouth—Rochester, NH—ME PMSA

York County, ME (Part)

York town, ME

Rockingham County, NH (Part)

Exeter town, NH

Hampton town, NH

Portsmouth city, NH

Strafford County, NH (Part)

Dover city, NH

Durham town, NH

Rochester city, NH

Somersworth city, NH

Worcester, MA—CT PMSA

Windham County, CT (Part)

Hampden County, MA (Part)

Worcester County, MA (Part)

Auburn town, MA

Charlton town, MA

Clinton town, MA

Grafton town, MA

Holden town, MA

Leicester town, MA

Millbury town, MA

Northborough town, MA

Northbridge town, MA

Oxford town, MA

Shrewsbury town, MA

Southbridge town, MA

Spencer town, MA

Uxbridge town, MA

Webster town, MA

Westborough town, MA

Worcester city, MA

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**Bridgeport, CT PMSA**

Fairfield County, CT (Part)  
Bridgeport city, CT  
Fairfield town, CT  
Monroe town, CT  
Shelton city, CT  
Stratford town, CT  
Trumbull town, CT  
New Haven County, CT (Part)  
Ansonia city, CT  
Derby city, CT  
Milford city, CT  
Seymour town, CT

**Danbury, CT PMSA**

Fairfield County, CT (Part)  
Bethel town, CT  
Brookfield town, CT  
Danbury city, CT  
New Fairfield town, CT  
Newtown town, CT  
Ridgefield town, CT  
Litchfield County, CT (Part)  
New Milford town, CT

**Hartford, CT MSA**

Hartford County, CT (Part)  
Avon town, CT  
Berlin town, CT  
Bloomfield town, CT  
Bristol city, CT  
East Hartford town, CT  
East Windsor town, CT  
Enfield town, CT  
Farmington town, CT  
Glastonbury town, CT  
Hartford city, CT  
Manchester town, CT  
New Britain city, CT  
Newington town, CT

**Hartford, CT MSA—Con.**

Hartford County, CT (Part)—Con.  
Plainville town, CT  
Rocky Hill town, CT  
Simsbury town, CT  
Southington town, CT  
South Windsor town, CT  
Suffield town, CT  
West Hartford town, CT  
Wethersfield town, CT  
Windsor town, CT  
Windsor Locks town, CT  
Litchfield County, CT (Part)  
Plymouth town, CT  
Winchester town, CT  
Middlesex County, CT (Part)  
Cromwell town, CT  
East Hampton town, CT  
Middletown city, CT  
New London County, CT (Part)  
Colchester town, CT  
Tolland County, CT (Part)  
Coventry town, CT  
Ellington town, CT  
Mansfield town, CT  
Stafford town, CT  
Tolland town, CT  
Vernon town, CT  
Windham County, CT (Part)  
Windham town, CT

**New Haven—Meriden, CT PMSA**

Middlesex County, CT (Part)  
Clinton town, CT  
New Haven County, CT (Part)  
Branford town, CT  
Cheshire town, CT  
East Haven town, CT  
Guilford town, CT

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**New Haven—Meriden, CT PMSA—Con.**

Hartford County, CT (Part)—Con.  
Hamden town, CT  
Madison town, CT  
Meriden city, CT  
New Haven city, CT  
North Branford town, CT  
North Haven town, CT  
Orange town, CT  
Wallingford town, CT  
West Haven city, CT

**New London—Norwich, CT—RI MSA**

Middlesex County, CT (Part)  
New London County, CT (Part)  
East Lyme town, CT  
Groton city, CT  
Groton town balance, CT  
Jewett City borough, CT  
Ledyard town, CT  
Montville town, CT  
New London city, CT  
Norwich city, CT  
Stonington town, CT  
Waterford town, CT  
Windham County, CT (Part)  
Plainfield town, CT  
Washington County, RI (Part)  
Westerly town, RI

**New York—Northern New Jersey—Long Island,  
NY—NJ—CT—PA CMSA**

Bergen—Passaic, NJ PMSA  
Bergen County, NJ  
Passaic County, NJ  
Bridgeport, CT PMSA  
Fairfield County, CT (Part)  
Bridgeport city, CT  
Fairfield town, CT  
Monroe town, CT

**New York—Northern New Jersey—Long Island,  
NY—NJ—CT—PA CMSA—Con.**

Bridgeport, CT PMSA—Con.  
Fairfield County, CT (Part)—Con.  
Shelton city, CT  
Stratford town, CT  
Trumbull town, CT  
New Haven County, CT (Part)  
Ansonia city, CT  
Derby city, CT  
Milford city, CT  
Seymour town, CT  
Danbury, CT PMSA  
Fairfield County, CT (Part)  
Bethel town, CT  
Brookfield town, CT  
Danbury city, CT  
New Fairfield town, CT  
Newtown town, CT  
Ridgefield town, CT  
Litchfield County, CT (Part)  
New Milford town, CT  
Dutchess County, NY PMSA  
Dutchess County, NY  
Jersey City, NJ PMSA  
Hudson County, NJ  
Middlesex—Somerset—Hunterdon, NJ PMSA  
Hunterdon County, NJ  
Middlesex County, NJ  
Somerset County, NJ  
Monmouth—Ocean, NJ PMSA  
Monmouth County, NJ  
Ocean County, NJ  
Nassau—Suffolk, NY PMSA  
Nassau County, NY  
Suffolk County, NY

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**New York—Northern New Jersey—Long Island,  
NY—NJ—CT—PA CMSA—Con.**

New Haven—Meriden, CT PMSA

Middlesex County, CT (Part)

Clinton town, CT

New Haven County, CT (Part)

Branford town, CT

Cheshire town, CT

East Haven town, CT

Guilford town, CT

Hamden town, CT

Madison town, CT

Meriden city, CT

New Haven city, CT

North Branford town, CT

North Haven town, CT

Orange town, CT

Wallingford town, CT

West Haven city, CT

New York, NY PMSA

Bronx County, NY

Kings County, NY

New York County, NY

Putnam County, NY

Queens County, NY

Richmond County, NY

Rockland County, NY

Westchester County, NY

Newark, NJ PMSA

Essex County, NJ

Morris County, NJ

Sussex County, NJ

Union County, NJ

Warren County, NJ

Newburgh, NY—PA PMSA

Orange County, NY

Pike County, PA

**New York—Northern New Jersey—Long Island,  
NY—NJ—CT—PA CMSA—Con.**

Stamford—Norwalk, CT PMSA

Fairfield County, CT (Part)

Darien town, CT

Greenwich town, CT

New Canaan town, CT

Norwalk city, CT

Stamford city, CT

Westport town, CT

Wilton town, CT

Trenton, NJ PMSA

Mercer County, NJ

Waterbury, CT PMSA

Litchfield County, CT (Part)

Watertown town, CT

New Haven County, CT (Part)

Naugatuck, CT

Southbury town, CT

Waterbury city, CT

Wolcott town, CT

**Stamford—Norwalk, CT PMSA**

Fairfield County, CT (Part)

Darien town, CT

Greenwich town, CT

New Canaan town, CT

Norwalk city, CT

Stamford city, CT

Westport town, CT

Wilton town, CT

**Waterbury, CT PMSA**

Litchfield County, CT (Part)

Watertown town, CT

New Haven County, CT (Part)

Naugatuck, CT

Southbury town, CT

Waterbury city, CT

Wolcott town, CT

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**Worcester, MA—CT PMSA**

Windham County, CT (Part)

Hampden County, MA (Part)

Worcester County, MA (Part)

Auburn town, MA

Charlton town, MA

Clinton town, MA

Grafton town, MA

Holden town, MA

Leicester town, MA

Millbury town, MA

Northborough town, MA

**Worcester, MA—CT PMSA—Con.**

Worcester County, MA (Part)—Con.

Northbridge town, MA

Oxford town, MA

Shrewsbury town, MA

Southbridge town, MA

Spencer town, MA

Uxbridge town, MA

Webster town, MA

Westborough town, MA

Worcester city, MA



