Automobile Manufacturing

1997

Issued October 1999

EC97M-3361A

1997 Economic Census

Manufacturing

Industry Series

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

Helping You Make Informed Decisions

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

ECONOMIC CENSUS 1997

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-- Not applicable for this report.

Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

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

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

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

ALL-NEW INDUSTRY CLASSIFICATIONS

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

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information
52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

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

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

RELATIONSHIP TO SIC

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

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

GEOGRAPHIC AREA CODING

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

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

BASIS OF REPORTING

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

DOLLAR VALUES

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

All dollar values are shown in thousands of dollars.

AVAILABILITY OF ADDITIONAL DATA

Reports in Print and Electronic Media

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

Special Tabulations

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

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

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

HISTORICAL INFORMATION

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

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

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

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

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

SOURCES FOR MORE INFORMATION

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

ABBREVIATIONS AND SYMBOLS

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

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

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Manufacturing

SCOPE

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

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

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

GENERAL

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

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

State reports, which include the District of Columbia, present similar statistics at the "all manufacturing" level for each state and its metropolitan areas (MAs) with 250 employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

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

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

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

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

GEOGRAPHIC AREAS COVERED

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

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

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

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

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

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

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

COMPARABILITY OF THE 1992 AND 1997 CENSUSES

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

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

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

DISCLOSURE

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

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

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

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

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

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

Table 1. **Industry Statistics on NAICS Basis With Distribution Among 1987 SIC-Based Industries: 1997**

[NAICS codes appear in bold type. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS or SIC code	Industry	Companies[1]	All establishments[2]	All employees		Production workers			Value added by manufacture ($1,000)	Cost of materials ($1,000)	Value of shipments ($1,000)	Total capital expenditures ($1,000)
				Number	Payroll ($1,000)	Number	Hours (1,000)	Wages ($1,000)				
336111	**Automobile mfg**	**174**	**194**	**114 060**	**6 411 952**	**97 979**	**197 578**	**5 197 210**	**28 954 639**	**66 546 225**	**95 385 563**	**3 355 800**
371110	Motor vehicles & car bodies (pt)	N	194	114 060	6 411 952	97 979	197 578	5 197 210	28 954 639	66 546 225	95 385 563	3 355 800

[1]For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.
[2]Includes establishments with payroll at any time during the year.

Table 2. **Industry Statistics for Selected States: 1997**

[States that are disclosures or with less than 100 employees are not shown. For explanation of terms, see appendixes. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E[1]	All establishments		All employees		Production workers			Value added by manufacture ($1,000)	Cost of materials ($1,000)	Value of shipments ($1,000)	Total capital expenditures ($1,000)
		Total	With 20 employees or more	Number	Payroll ($1,000)	Number	Hours (1,000)	Wages ($1,000)				
336111, AUTOMOBILE MFG												
United States	**–**	**194**	**72**	**114 060**	**6 411 952**	**97 979**	**197 578**	**5 197 210**	**28 954 639**	**66 546 225**	**95 385 563**	**3 355 800**
Arkansas	8	6	2	189	3 941	158	310	3 172	8 147	14 927	21 650	467
Illinois	–	12	5	10 179	565 508	9 228	16 563	491 741	2 945 421	6 485 642	9 448 185	207 464

* Hawaii has no incorporated places in the sense of functioning governmental units; however, in agreement with Hawaiian law, the Bureau of the Census reports data for census designated places (CDPs) which have been designated as place equivalents. Those CDPs, only for the state of Hawaii, with 2,500 or more population are recognized.

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

Table 3. **Detailed Statistics by Industry: 1997**

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

Item	Value
336111, AUTOMOBILE MFG	
Companies[1] ..... number	174
All establishments ..... number	194
Establishments with 1 to 19 employees ..... number	122
Establishments with 20 to 99 employees ..... number	31
Establishments with 100 employees or more ..... number	41
All employees ..... number	114 060
Total compensation[2] $1,000	8 991 393
Annual payroll $1,000	6 411 952
Total fringe benefits $1,000	2 579 441
Production workers, average for year ..... number	97 979
Production workers on March 12 ..... number	96 734
Production workers on May 12 ..... number	99 000
Production workers on August 12 ..... number	97 568
Production workers on November 12 ..... number	98 614
Production-worker hours 1,000	197 578
Production-worker wages $1,000	5 197 210
Total cost of materials $1,000	66 546 225
Cost of materials, parts, containers, etc., consumed $1,000	65 504 082
Cost of resales $1,000	600 336
Cost of fuels $1,000	119 930
Cost of purchased electricity $1,000	219 480
Cost of contract work $1,000	102 397
Quantity of electricity purchased for heat and power ..... 1,000 kWh	5 198 911
Quantity of electricity generated less sold for heat and power ... 1,000 kWh	S
Total value of shipments $1,000	95 385 563
Primary products value of shipments $1,000	89 610 989
Secondary products value of shipments $1,000	5 074 894
Total miscellaneous receipts $1,000	699 680
Value of resales $1,000	659 295
Contract receipts $1,000	D
Other miscellaneous receipts $1,000	D
Primary products specialization ratio ..... percent	94
Value of primary products shipments made in all industries $1,000	94 261 862
Value of primary products shipments made in this industry $1,000	89 610 989
Value of primary products shipments made in other industries $1,000	4 650 873
Coverage ratio ..... percent	95

Item	Value
336111, AUTOMOBILE MFG—Con.	
Value added $1,000	28 954 639
Total inventories, beginning of year $1,000	2 186 046
Finished goods inventories, beginning of year $1,000	133 552
Work-in-process inventories, beginning of year $1,000	509 564
Materials and supplies inventories, beginning of year $1,000	1 542 930
Total inventories, end of year $1,000	2 194 169
Finished goods inventories, end of year $1,000	203 528
Work-in-process inventories, end of year $1,000	554 889
Materials and supplies inventories, end of year $1,000	1 435 752
Gross book value of total assets at beginning of year $1,000	22 016 543
Total capital expenditures (new and used) $1,000	3 355 800
Capital expenditures for buildings and other structures (new and used) $1,000	266 940
Capital expenditures for machinery and equipment (new and used) $1,000	3 088 860
Total retirements[2] $1,000	1 191 224
Gross book value of total assets at end of year $1,000	24 181 119
Total depreciation during year[2] $1,000	1 496 521
Total rental payments[2] $1,000	137 750
Buildings and other structures rental payments[2] $1,000	59 519
Machinery and equipment rental payments[2] $1,000	78 231
Cost of purchased services for the repair of buildings and other structures[3] $1,000	33 803
Response coverage ratio[4] ..... percent	90
Cost of purchased services for the repair of machinery and equipment[3] $1,000	234 136
Response coverage ratio[4] ..... percent	90
Cost of purchased communications services[3] $1,000	43 583
Response coverage ratio[4] ..... percent	90
Cost of purchased legal services[3] $1,000	10 649
Response coverage ratio[4] ..... percent	90
Cost of purchased accounting and bookkeeping services[3] $1,000	611
Response coverage ratio[4] ..... percent	90
Cost of purchased advertising services[3] $1,000	155 497
Response coverage ratio[4] ..... percent	90
Cost of purchased software and other data processing services[3] $1,000	167 197
Response coverage ratio[4] ..... percent	90
Cost of purchased refuse removal (including hazardous waste) services[3] $1,000	37 864
Response coverage ratio[4] ..... percent	90

[1]For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.
[2]These items are collected in the ASM and estimated for the remaining establishments; therefore, the levels of estimation are higher than for other items in the table.
[3]Based on ASM sample data.
[4]A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those ASM establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

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

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

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

Employment size class	E[1]	All establishments		All employees		Production workers			Value added by manufacture ($1,000)	Cost of materials ($1,000)	Value of shipments ($1,000)	Total capital expenditures ($1,000)
		Total	With 20 employees or more	Number	Payroll ($1,000)	Number	Hours (1,000)	Wages ($1,000)				
336111, AUTOMOBILE MFG												
All establishments	**–**	**194**	**72**	**114 060**	**6 411 952**	**97 979**	**197 578**	**5 197 210**	**28 954 639**	**66 546 225**	**95 385 563**	**3 355 800**
Establishments with 1 to 4 employees	9	92	–	145	3 738	134	181	3 136	14 060	29 031	43 217	957
Establishments with 5 to 9 employees	9	19	–	132	3 944	113	160	3 340	11 928	25 083	37 127	731
Establishments with 10 to 19 employees	8	11	–	152	4 541	124	210	3 395	12 659	24 208	36 952	895
Establishments with 20 to 49 employees	8	19	19	598	18 811	457	776	13 455	61 683	90 140	152 766	3 836
Establishments with 50 to 99 employees	6	12	12	799	26 263	667	1 249	18 595	81 606	111 705	190 155	3 081
Establishments with 100 to 249 employees	4	13	13	D	D	D	D	D	D	D	D	D
Establishments with 250 to 499 employees	–	1	1	D	D	D	D	D	D	D	D	D
Establishments with 500 to 999 employees	–	1	1	D	D	D	D	D	D	D	D	D
Establishments with 1,000 to 2,499 employees	–	5	5	9 611	520 543	8 144	17 574	420 628	2 469 800	5 507 769	7 967 667	380 620
Establishments with 2,500 employees or more	–	21	21	99 506	5 724 000	86 012	172 491	4 659 283	26 003 892	60 219 872	86 129 408	2 953 651
Administrative records[2]	9	69	–	188	5 180	170	226	4 356	19 205	40 212	59 606	1 250

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

[2]Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Table 5. **Industry Statistics by Industry and Primary Product Class Specialization: 1997**

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

NAICS industry or product class code	Industry or primary product class	All establishments	All employees		Production workers			Value added by manufacture ($1,000)	Cost of materials ($1,000)	Value of shipments ($1,000)	Total capital expenditures ($1,000)
			Number	Payroll ($1,000)	Number	Hours (1,000)	Wages ($1,000)				
336111	**Automobile mfg**	**194**	**114 060**	**6 411 952**	**97 979**	**197 578**	**5 197 210**	**28 954 639**	**66 546 225**	**95 385 563**	**3 355 800**

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

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS product code	Product	1997				1992			
		Number of companies with shipments of $100,000 or more	Quantity of production for all purposes	Product shipments		Number of companies with shipments of $100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value ($1,000)			Quantity	Value ($1,000)
336111	**Automobiles**	**N**	**X**	**X**	**94 261 862**	**N**	**X**	**X**	**N**
3361110	Complete passenger vehicles, knockdown or assembled, passenger car chassis, and nonarmored military automobiles	N	X	X	94 261 862	N	X	X	N
33611101	Complete passenger vehicles, knockdown or assembled, passenger car chassis, and nonarmored military automobiles	N	X	X	93 833 362	N	X	X	N
3361110100	Complete passenger vehicles, knockdown or assembled, passenger car chassis, and nonarmored military automobiles	48	X	X	93 833 362	N	X	X	N
3361110Y	Automobile manufacturing, nsk, total	N	X	X	428 500	N	X	X	N
3361110YWW	Automobile manufacturing, nsk, for nonadministrative-record establishments	N	X	X	365 285	N	X	X	N
3361110YWY	Automobile manufacturing, nsk, for administrative-record establishments	N	X	X	63 215	N	X	X	N

Additional information is available for this item; see Appendix F.
@ Additional data are available for these codes at the aggregate U.S. level in the Current Industrial Report (CIR) series; see Appendix F for the CIR survey number and title.
$ This product is primary to more than one industry; see Appendix F for a listing of the related product codes.

Note: For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: [p] 10 to 19 percent estimated; [q] 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

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

[Not applicable for this report]

Table 7. **Materials Consumed by Kind: 1997 and 1992**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Material consumed	1997		1992	
		Quantity	Delivered cost ($1,000)	Quantity	Delivered cost ($1,000)
336111	**AUTOMOBILE MFG**				
33631200	Gasoline engines and parts specially designed for gasoline engines	X	10 536 759	X	N
33361803	Diesel engines and parts specially designed for diesel engines	X	D	X	N
33635007	Drive train components and parts	X	7 620 624	X	N
33621101	Car bodies	X	D	X	N
001900A6	Refrigeration compressors, compressor units, condensing units, and other heat transfer equipment	X	2 026 003	X	N
33633000	Shocks, struts, and other suspension equipment and parts	X	2 341 895	X	N
33639901	Exhaust systems and parts	X	1 130 261	X	N
33351501	Machine tool accessories, including cutting tools	X	D	X	N
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	266 241	X	N
33291207	Fluid power valves (hydraulic and pneumatic)	X	D	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	D	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	186 439	X	N
33399901	Fluid power filters (hydraulic and pneumatic)	X	D	X	N
00190089	Other fluid power products (hydraulic and pneumatic)	X	335 400	X	N
33637000	Automotive stampings (including body parts, hubcaps, fenders, etc.)	X	7 117 895	X	N
33261100	Steel springs, except wire	X	170 801	X	N
33251011	Motor vehicle metal hardware (lock units, door and window handles, hinges, etc.), except forgings	X	1 060 386	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	574 259	X	N
33200049	Other fabricated metal products, except forgings	X	1 084 143	X	N
33210001	Forgings	X	D	X	N
33100035	Castings (rough and semifinished)	X	64 250	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	D	X	N
33299101	Ball and roller bearings (mounted or unmounted)	X	65 814	X	N
32621003	Pneumatic tires and inner tubes	X	1 284 894	X	N
32622001	Rubber and plastics hose and belting	X	136 216	X	N
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	X	396 373	X	N
33999103	Gaskets (all types), and packing and sealing devices	X	D	X	N
32610033	Fabricated plastics products, including components, housings, accessories, etc. (except gaskets, hose and belting)	X	681 006	X	N
32720005	Glass and glass products including windows and mirrors	X	1 055 294	X	N
33636003	Seats (purchased separately) for automobiles, trucks, and buses	X	2 536 052	X	N

See footnotes at end of table.

Table 7. **Materials Consumed by Kind: 1997 and 1992**—Con.

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Material consumed	1997		1992	
		Quantity	Delivered cost ($1,000)	Quantity	Delivered cost ($1,000)
336111	**AUTOMOBILE MFG**—Con.				
33636007	Seat covers, seat belts, and shoulder harnesses	X	399 926	X	N
33639911	Automotive air bag assemblies and parts thereof	X	1 097 884	X	N
33636001	Automotive trimmings, textile (panels, headliners, etc.)	X	1 949 771	X	N
31411003	Carpeting	X	258 784	X	N
32700035	Ceramic and ceramic composite parts, components, and accessories	X	D	X	N
32552003	Glues and adhesives	X	240 620	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	605 840	X	N
33632200	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc.	X	1 217 588	X	N
33632100	Motor vehicle lighting fixtures (including headlights, taillights, running lights, and dome fixtures; except auto lamps)	X	976 009	X	N
33511003	Automotive lamps (bulbs and sealed beams)	X	483 231	X	N
33591103	Storage batteries, automotive	X	164 809	X	N
33431001	Automotive radios and loudspeakers	X	1 294 441	X	N
33451400	Motor vehicle clusters, meters, and gauges, except electrical (including speedometers, fuel level)	X	766 210	X	N
001900C1	Semiconductors and related devices and electronic control modules	X	963 257	X	N
33411103	Purchased computers for incorporation into motor vehicles, trucks, or buses	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	11 853 929	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	612 919	X	N

Additional information is available for this item; see Appendix F.

Note: For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: [p] 10 to 19 percent estimated; [q] 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Appendix A. Explanation of Terms

BEGINNING- AND END-OF-YEAR INVENTORIES

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

Inventory Data by Stage of Fabrication

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

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

COST OF MATERIALS

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

Included in this item are:

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

Specific Materials Consumed

In addition to the total cost of materials, which every establishment was required to report, information also was collected for most manufacturing industries on the consumption of major materials used in manufacturing. The inquiries were restricted to those materials which were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. If less than $25,000 of a listed material was consumed by an establishment, the cost data could be reported in the "Cost of all other materials...," Census material code 00970099. Also, the cost of materials for small establishments for which administrative records or short forms were used was imputed into the "Materials not specified by kind," Census materials code 00971000.

Duplication in Cost of Materials and Value of Shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive

stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the survey.

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

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

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

COST OF PURCHASED SERVICES

Annual Survey of Manufactures (ASM) establishments were requested to provide information on the cost of purchased services for the repair of buildings and other structures, the repair of machinery, communication services, legal services, accounting and bookkeeping services, advertising, software and other data processing services, and refuse removal. Each of these items reflects the costs paid directly by the establishment and excludes salaries paid to employees of the establishment for these services.

Included in the cost of purchased services for the repair of buildings and machinery are payments made for all maintenance and repair work on buildings and equipment. Payments made to other establishments of the same company and for repair and maintenance of any leased property also are included. Extensive repairs or reconstruction that was capitalized is considered capital expenditures and is, therefore, excluded from this item. Repair and maintenance costs provided by an owner as part of a rental contract or incurred directly by an establishment in using its own work force also are excluded.

Included in the cost of purchased advertising services are payments for printing, media coverage, and other advertising services and materials.

Included in the cost of purchased software and other data processing services are all purchases by the establishment from other companies. Excluded are services provided by other establishments of the same company (such as by a separate data processing unit).

Included in the cost of purchased refuse removal services are all costs of refuse removal services paid by the establishment, including costs for hazardous waste removal or treatment. Excluded are all costs included in rental payments or as capital expenditures.

Response Coverage Ratio

A response coverage ratio is a measure of the extent to which respondents report for an item. The estimate is made by calculating the ratio value of the weighted total employment data for all the ASM establishments that report the item to the weighted total employment data for all ASM establishments classified in an industry (reporters and non-reporters).

DEPRECIATION CHARGES FOR FIXED ASSETS

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

EMPLOYEES

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

Production Workers

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

All Other Employees

This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It

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

FRINGE BENEFITS

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

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

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

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

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

NUMBER OF ESTABLISHMENTS AND COMPANIES

A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

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

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

PAYROLL

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

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

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

PRODUCT CODES AND CLASSES OF PRODUCTS

NAICS United States industries are identified by a six-digit code, in contrast to the four-digit SIC code. The longer code accommodates the large number of sectors and allows more flexibility in designing subsectors. Each

product or service is assigned a ten-digit code. The product coding structure represents an extension by the Census Bureau of the six-digit industry classifications of the manufacturing and mining sectors. The classification system operates so that the industrial coverage is progressively narrower with the successive addition of digits. This is illustrated as follows:

NAICS level	NAICS code	Description
Industry	33461	Manufacturing and reproduction of magnetic and optical media
U.S. industry.	334612	Reproduction of software
Product class	3346120	Prerecorded compact disc (except software), tape, and record reproducing
BLS link code.	3346120X	
Product code	3346120XXX	

As in previous censuses, data were collected for most industries on the quantity and value of individual products shipped. In the 1997 census program, information was collected on the output of almost 10,000 individual product items.

In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products (ten-digit codes), and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits.

The list of products for which separate information was collected was prepared after consultation with industry and government representatives. Comparability with previous figures was given considerable weight in the selection of product categories so that comparable 1992 information is presented for most products.

Typically, both quantity and value of shipments information were collected. However, if quantity was not significant or could not be reported by manufacturers, only value of shipments was collected.

Shipments include both commercial shipments and transfers of products to other plants of the same company. For industries in which a considerable portion of the total shipments is transferred to other plants of the same company, separate information on interplant transfers also was collected. Moreover, for products that are used to a large degree within the same establishment as materials or components in the fabrication of other products, total production and often consumption of the item within the plant (quantity produced and consumed) was collected. Typically, the information on production also was collected for products for which there are significant differences between total production and shipments in a given year because of wide fluctuations in finished goods inventories. Other measures of output of products with long production cycles were used as appropriate and feasible.

PRIMARY PRODUCT CLASS CODE

This file presents selected statistics for establishments according to their degree of specialization in products primary to their industry. This field contains either the six-digit North American Industrial Classification System (NAICS) industry code corresponding to all establishments in the industry, or the seven-digit NAICS product class code for all establishments within the industry that are specialized in a particular product class. Product class specialization is determined by evaluating the ratio of the largest primary product class shipments to total product shipments (primary plus secondary, excluding miscellaneous receipts) for the establishment.

PRODUCTION-WORKER HOURS

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

QUANTITY OF ELECTRIC ENERGY CONSUMED FOR HEAT AND POWER

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

RENTAL PAYMENTS

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

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

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

RETIREMENTS OF DEPRECIABLE ASSETS

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

TOTAL CAPITAL EXPENDITURES (NEW AND USED)

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

Totals for expenditures include the costs of assets leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies and plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses.

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

VALUE ADDED

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

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

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

VALUE OF SHIPMENTS

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

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

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

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

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

1. Primary products value of shipments.
2. Secondary product value of shipments.
3. Total miscellaneous receipts.

Primary product shipments is used in the calculations of industry specialization ratio and industry coverage ratio. The term "Value of primary products shipments made in this industry" is used in this publication and refers to the same data.

Duplication in Cost of Materials and Value of Shipment

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

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

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

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

Specialization and Coverage Ratios

These items are not collected on the report forms but are derived from the data shown in Table 3. An establishment is classified in a particular industry if its shipments of primary products of that industry exceed in value its shipments of the products of any other single industry.

An establishment's shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.). Specialization and coverage ratios have been developed to measure the relationship of primary product shipments to the data on shipments for the industry shown in Tables 1a through 5 and data on product shipments shown in Tables 6a and 6b.

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

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

Appendix B.
NAICS Codes, Titles, and Descriptions

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)

Appendix C. Coverage and Methodology

MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

   Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

   Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these establishments but were included in the product and material "not specified by kind" (nsk) categories.

   The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

   Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as "All other" industries within the given subsector.

   As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

   The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

   The establishments covered in the mail canvass were divided into three groups:

   a. ASM sample establishments.

      This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no "resistance rules" or "frozen industries."

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry's output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than $5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least $500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

Nonmail component. The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

QUALIFICATIONS OF THE ASM DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

The CIR program uses a unified data collection, processing, and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic

census – manufacturing. The economic census – manufacturing provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

Appendix D. Geographic Notes

Not applicable for this report.

Appendix E.
Metropolitan Areas

Not applicable for this report.

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

Not applicable for this report.

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

1997 published	1997 collected	1992 published
3361110 pt	37110 pt	37110 pt
3361110 pt	37111 pt	37111 pt
3361110 pt	37114 pt	37114 pt
3361110100 pt	3711100 pt	3711100 pt
3361110100 pt	3711111	3711111 pt
3361110100 pt	3711151	3711151
3361110100 pt	3711400 pt	3711400 pt
3361110100 pt	3711403	3711400 pt
3361110YWW	3711000 pt	3711000 pt
3361110YWY	3711002 pt	3711002 pt
3361120 pt	37110 pt	37110 pt
3361120 pt	37114 pt	37114 pt
3361120 pt	37116	37116
3361120100 pt	3711405	3711400 pt
3361120100 pt	3711400 pt	3711400 pt
3361120100 pt	3711600	3711600
3361120YWW	3711000 pt	3711000 pt
3361120YWY	3711002 pt	3711002 pt
3361201 pt	37114 pt	37114 pt
3361201 pt	37115 pt	37117
3361201 pt	37115 pt	37118
3361201100 pt	3711407	3711400 pt
3361201100 pt	3711400 pt	3711400 pt
3361201100 pt	3711500 pt	3711700
3361201100 pt	3711500 pt	3711800
3361202 pt	37114 pt	37114 pt
3361202 pt	37119	37119
3361202100 pt	3711409	3711400 pt
3361202100 pt	3711400 pt	3711400 pt
3361202100 pt	3711900	3711900
3361203	37113	37113
3361203101	3711304	3711304
3361203104	3711303	3711303
3361203YWV	3711300	3711300
336120W	37110 pt	37110 pt
336120WYWW	3711000 pt	3711000 pt
336120WYWY	3711002 pt	3711002 pt
3362111 pt	37111 pt	37111 pt
3362111 pt	37131	37131
3362111 pt	37149 pt	37149 pt
3362111101	3713101	3713101
3362111204	3713102	3713102
3362111307	3713112	3713112
3362111411	3713115	3713115
3362111413	3713116	3713116
3362111416	3713117	3713117
3362111519	3713121	3713121
3362111522	3713131	3713131
3362111525	3713132	3713132
3362111528	3713135	3713135
3362111531	3713139	3713139
3362111534	3713143	3713143
3362111537	3713153	3713153
3362111541	3713155	3713155
3362111543	3713161	3713161
3362111546	3713162	3713162
3362111549	3713163	3713163
3362111552	3711171	3711171
3362111555	3711181	3711111 pt
3362111558	3714925	3714925
3362111571 pt	3713171	3713171
3362111571 pt	3714924	3714941 pt
3362111YWV pt	3711100 pt	3711100 pt
3362111YWV pt	3713100	3713100
3362111YWV pt	3714900 pt	3714900 pt
3362113 pt	37114 pt	37114 pt
3362113 pt	37132	37132
3362113101	3713201	3713201
3362113219	3713225	3713225
3362113304	3713211	3713211
3362113307	3713213	3713213
3362113311	3713215	3713215
3362113313	3713217	3713217
3362113316	3713218	3713218
3362113322	3713226	3713226
3362113325	3713227	3713227
3362113328	3713241	3713239 pt
3362113331 pt	3711411	3711400 pt
3362113331 pt	3713243	3713239 pt
3362113YWV pt	3711400 pt	3711400 pt
3362113YWV pt	3713200	3713200
336211W pt	37110 pt	37110 pt
336211W pt	37130	37130
336211W pt	37140 pt	37140 pt
336211WYWW pt	3711000 pt	3711000 pt
336211WYWW pt	3713000	3713000
336211WYWW pt	3714000 pt	3714000 pt
336211WYWY pt	3711002 pt	3711002 pt
336211WYWY pt	3713002	3713002
336211WYWY pt	3714002 pt	3714002 pt
3362121	37151	37151
3362121000	3715100	3715100
3362123	37152	37152
3362123100	3715200	3715200
336212W	37150	37150
336212WYWW	3715000	3715000
336212WYWY	3715002	3715002
3362130	37160	37160
3362130101	3716001	3716001
3362130104	3716005	3716005
3362130107	3716007	3716007
3362130111	3716021	3716021
3362130YWW	3716000	3716000
3362130YWY	3716002	3716002
3362141	37921	37921
3362141101	3792112	3792112
3362141104	3792114	3792114
3362141207	3792116	3792116
3362141311	3792118	3792118
3362141413	3792125	3792125
3362141516	3792128	3792128
3362141YWV	3792100	3792100
3362143	37996	37996
3362143101	3799611	3799601 pt
3362143105	3799613	3799602 pt
3362143108	3799615	3799604 pt
3362143111	3799617	3799607 pt
3362143114	3799619	3799609 pt
3362143117 pt	3799651 pt	3799601 pt
3362143117 pt	3799651 pt	3799602 pt
3362143117 pt	3799651 pt	3799604 pt
3362143117 pt	3799651 pt	3799607 pt
3362143117 pt	3799651 pt	3799609 pt
3362143YWV	3799600	3799600
3362145	37922	37922
3362145101	3792242	3792242
3362145204	3792244	3792244
3362145207	3792247	3792247
3362145311 pt	3792268 pt	3792261
3362145311 pt	3792268 pt	3792263
3362145311 pt	3792268 pt	3792269
3362145YWV	3792200	3792200
336214W pt	37920	37920
336214W pt	37990 pt	37990 pt
336214WYWW pt	3792000	3792000
336214WYWW pt	3799000 pt	3799000 pt
336214WYWY pt	3792002	3792002
336214WYWY pt	3799002 pt	3799002 pt
3363111	35921	35921
3363111101	3592101	3592101
3363111103	3592102	3592102
3363111105	3592103	3592103
3363111207	3592105	3592105
3363111YWV	3592100	3592100
3363113	35922	35922
3363113101	3592201	3592201
3363113103	3592202	3592202
3363113205	3592203	3592203
3363113207	3592204	3592204
3363113209	3592205	3592205
3363113211	3592206	3592206
3363113313	3592209	3592209
3363113YWV	3592200	3592200
3363115	35923	35923
3363115101	3592301	3592301
3363115103	3592302	3592302
3363115YWV	3592300	3592300
336311W	35920	35920
336311WYWW	3592000	3592000
336311WYWY	3592002	3592002
3363121	37142 pt	37142 pt
3363121101	3714201	3714201
3363121224	3714218	3714218
3363121351	3714231	3714231
3363121354	3714232	3714232
3363121457	3714234	3714234
3363121467	3714237	3714237
3363121504	3714206	3714206
3363121507	3714207	3714207
3363121511	3714208	3714208
3363121514	3714209	3714209
3363121517	3714215	3714215
3363121521	3714216	3714216
3363121527	3714217	3714217
3363121531	3714222	3714222
3363121534	3714224	3714224
3363121537	3714225	3714225
3363121541	3714226	3714226
3363121544	3714227	3714227
3363121571	3714241	3714241
3363121574	3714249	3714249
3363121YWV	3714200 pt	3714200 pt
3363123	3714A pt	3714A pt
3363123101	3714A02	3714A02
3363123104	3714A03	3714A03
3363123107	3714A23	3714A23
3363123111	3714A25	3714A25
3363123121	3714A43	3714A41 pt
3363123YWV	3714A00 pt	3714A00 pt
336312W	37140 pt	37140 pt
336312WYWW	3714000 pt	3714000 pt
336312WYWY	3714002 pt	3714002 pt
3363210	36470	36470
3363210100	3647000 pt	3647000 pt
3363210YWW	3647000 pt	3647000 pt
3363210YWY	3647002	3647002
3363221	36941	36941
3363221101	3694101	3694101
3363221104	3694102	3694102
3363221201	3694103	3694103
3363221204	3694104	3694104
3363221YWV	3694100	3694100
3363223	36942	36942
3363223101	3694201	3694201
3363223104	3694202	3694202
3363223201	3694203	3694203
3363223204	3694204	3694204
3363223YWV	3694200	3694200
3363225	36943	36943
3363225101	3694301	3694301
3363225104	3694302	3694302
3363225201	3694303	3694303
3363225YWV	3694300	3694300
3363227	36944	36944
3363227100	3694400	3694400
3363229	36947	36947
3363229101	3694701	3694701
3363229201	3694711	3694711
3363229301	3694702	3694702
3363229304	3694704	3694704
3363229307	3694705	3694705
3363229309	3694719	3694719
3363229YWV	3694700	3694700
336322A	36949	36949
336322A101	3694901	3694901
336322A204	3694907	3694907
336322A307	3694911	3694911
336322A409	3694912	3694912
336322A512	3694913	3694913
336322A615	3694919	3694919
336322AYWV	3694900	3694900
336322C pt	36799 pt	36799 pt
336322C pt	37149 pt	37149 pt
336322C pt	3714A pt	3714A pt
336322C102	3714913	3714913
336322C104	3714914	3714941 pt
336322C107	3714915	3714941 pt
336322C111 pt	3714921 pt	3714917
336322C111 pt	3714921 pt	3714941 pt
336322C114	3714942	3714904 pt
336322C117	3714944	3714904 pt
336322C119	3679926	3679920 pt
336322C121	3714945	3714941 pt
336322C122	3714946	3714941 pt
336322C124	3714A05	3714A41 pt
336322C127	3714A40	3714A41 pt

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336322C130	3714A51	3714A41 pt
336322CYWV pt	3679900 pt	3679900 pt
336322CYWV pt	3714900 pt	3714900 pt
336322CYWV pt	3714A00 pt	3714A00 pt
336322W pt	36790 pt	36790 pt
336322W pt	36940	36940
336322W pt	37140 pt	37140 pt
336322WYWW pt	3679000 pt	3679000 pt
336322WYWW pt	3694000	3694000
336322WYWW pt	3714000 pt	3714000 pt
336322WYWY pt	3679002 pt	3679002 pt
336322WYWY pt	3694002	3694002
336322WYWY pt	3714002 pt	3714002 pt
3363301 pt	37142 pt	37142 pt
3363301 pt	37149 pt	37149 pt
3363301101	3714905	3714905
3363301204	3714906	3714906
3363301307	3714907	3714907
3363301417	3714920	3714920
3363301511	3714908	3714908
3363301514	3714943	3714941 pt
3363301521	3714918	3714941 pt
3363301524	3714919	3714941 pt
3363301526	3714228	3714228
3363301528	3714911	3714911
3363301531	3714926	3714941 pt
3363301YWV pt	3714200 pt	3714200 pt
3363301YWV pt	3714900 pt	3714900 pt
3363303	3714A pt	3714A pt
3363303101	3714A06	3714A06
3363303104	3714A39	3714A39
3363303121	3714A47	3714A41 pt
3363303YWV	3714A00 pt	3714A00 pt
336330W	37140 pt	37140 pt
336330WYWW	3714000 pt	3714000 pt
336330WYWY	3714002 pt	3714002 pt
3363401 pt	32922	32922
3363401 pt	37148	37148
3363401 pt	37149 pt	37149 pt
3363401101	3714801	3714801
3363401104	3714802	3714802
3363401211	3714807	3714807
3363401313	3714809	3714809
3363401416	3714811	3714811
3363401519	3714813	3714813
3363401625	3714817	3714817
3363401707	3714803	3714803
3363401722	3714815	3714815
3363401737	3714821	3714821
3363401741	3714823	3714823
3363401744	3714825	3714825
3363401745	3714912	3714912
3363401747 pt	3292200 pt	3292200 pt
3363401747 pt	3292200 pt	3292211
3363401747 pt	3292200 pt	3292215
3363401747 pt	3292200 pt	3292221
3363401747 pt	3292200 pt	3292258
3363401747 pt	3714827	3714827
3363401YWV pt	3292200 pt	3292200 pt
3363401YWV pt	3714800	3714800
3363401YWV pt	3714900 pt	3714900 pt
3363403	3714A pt	3714A pt
3363403101	3714A09	3714A09
3363403104	3714A10	3714A10
3363403107	3714A11	3714A11
3363403111	3714A33	3714A33
3363403114	3714A35	3714A35
3363403117	3714A37	3714A37
3363403121	3714A44	3714A41 pt
3363403YWV	3714A00 pt	3714A00 pt
336340W pt	32920 pt	32920 pt
336340W pt	37140 pt	37140 pt
336340WYWW pt	3292000 pt	3292000 pt
336340WYWW pt	3714000 pt	3714000 pt
336340WYWY pt	3292002 pt	3292002 pt
336340WYWY pt	3714002 pt	3714002 pt
3363501	37146	37146
3363501101	3714603	3714603
3363501104	3714605	3714605
3363501207	3714613	3714613
3363501211	3714615	3714615
3363501313	3714623	3714623
3363501316	3714625	3714625
3363501434	3714641	3714641
3363501519	3714628	3714628
3363501522	3714631	3714631
3363501525	3714633	3714633
3363501528	3714635	3714635
3363501531	3714637	3714637
3363501537	3714643	3714643
3363501541	3714649	3714649
3363501YWV	3714600	3714600
3363503	3714A pt	3714A pt
3363503101	3714A04	3714A04
3363503104	3714A27	3714A27
3363503107	3714A29	3714A29
3363503111	3714A31	3714A31
3363503114	3714A32	3714A41 pt
3363503117	3714A30	3714A41 pt
3363503YWV	3714A00 pt	3714A00 pt
336350W	37140 pt	37140 pt
336350WYWW	3714000 pt	3714000 pt
336350WYWY	3714002 pt	3714002 pt
3363601	23962	23962
3363601100	2396200	2396200
3363602	23990 pt	23990 pt
3363602100	2399025	2399025
3363603	25312 pt	25312 pt
3363603101	2531213	2531213
3363603104	2531215	2531215
3363603YWV	2531200 pt	2531200 pt
336360W pt	23960 pt	23960 pt
336360W pt	23990 pt	23990 pt
336360W pt	25310 pt	25310 pt
336360WYWW pt	2396000 pt	2396000 pt
336360WYWW pt	2399000 pt	2399000 pt
336360WYWW pt	2531000 pt	2531000 pt
336360WYWY pt	2396002 pt	2396002 pt
336360WYWY pt	2399002 pt	2399002 pt
336360WYWY pt	2531002 pt	2531002 pt
3363700	34650	34650
3363700100	3465000 pt	3465000 pt
3363700YWW	3465000 pt	3465000 pt
3363700YWY	3465002	3465002
3363917	35857	35851 pt
3363917010	3585705	3585100 pt
3363917020	3585707	3585100 pt
3363917030	3585719	3585100 pt
3363917YWV	3585700	3585100 pt
336391B	3585B	35854 pt
336391B000	3585B00	3585400 pt
336391W	35850 pt	35850 pt
336391WYWW	3585000 pt	3585000 pt
336391WYWY	3585002 pt	3585002 pt
3363991	37144	37144
3363991101	3714401	3714401
3363991104	3714402	3714402
3363991107	3714404	3714404
3363991111	3714405	3714405
3363991113	3714407	3714407
3363991116	3714408	3714408
3363991119	3714409	3714409
3363991YWV	3714400	3714400
3363993	37145	37145
3363993101	3714501	3714501
3363993104	3714502	3714502
3363993107	3714503	3714503
3363993YWV	3714500	3714500
3363995	37147	37147
3363995101	3714701	3714701
3363995104	3714705	3714705
3363995107	3714707	3714707
3363995111	3714714	3714714
3363995YWV	3714700	3714700
3363997 pt	35199 pt	35199 pt
3363997 pt	37142 pt	37142 pt
3363997 pt	37149 pt	37149 pt
3363997 pt	3714A pt	3714A pt
3363997101	3714901	3714901
3363997204	3714902	3714902
3363997307	3714903	3714903
3363997401	3714235	3714235
3363997405	3714236	3714236
3363997409	3519987	3519987
3363997514	3714909	3714909
3363997524	3714916	3714916
3363997527	3714922	3714922
3363997531	3714923	3714923
3363997534	3714931	3714931
3363997551	3714951	3714941 pt
3363997554	3714A52	3714A41 pt
3363997YWV pt	3519900 pt	3519900 pt
3363997YWV pt	3714200 pt	3714200 pt
3363997YWV pt	3714900 pt	3714900 pt
3363997YWV pt	3714A00 pt	3714A00 pt
336399W pt	35190 pt	35190 pt
336399W pt	37140 pt	37140 pt
336399WYWW pt	3519000 pt	3519000 pt
336399WYWW pt	3714000 pt	3714000 pt
336399WYWY pt	3519002 pt	3519002 pt
336399WYWY pt	3714002 pt	3714002 pt
3364111	37211	37211
3364111100	3721100	3721100
3364113	37215	37215
3364113000	3721500	3721500
3364115	37217	37217
3364115101	3721711	3721711
3364115104	3721751	3721751
3364115YWV	3721700	3721700
3364117	37218	37218
3364117101	3721813	3721813
3364117104	3721815	3721815
3364117107	3721853	3721853
3364117111	3721855	3721855
3364117YWV	3721800	3721800
336411W	37210	37210
336411WYWW	3721000	3721000
336411WYWY	3721002	3721002
3364121	37241	37241
3364121100	3724100	3724100
3364123	37242	37242
3364123000	3724200	3724200
3364125	37243	37243
3364125101	3724321	3724321
3364125104	3724323	3724323
3364125107	3724331	3724331
3364125111	3724333	3724333
3364125YWV	3724300	3724300
3364127	37244	37244
3364127101	3724401	3724401
3364127204	3724402	3724402
3364127307	3724405	3724405
3364127411	3724406	3724406
3364127YWV	3724400	3724400
336412W	37240	37240
336412WYWW	3724000	3724000
336412WYWY	3724002	3724002
3364131	37282	37282
3364131101	3728210	3728210
3364131104	3728231	3728231
3364131107	3728251	3728251
3364131111	3728261	3728261
3364131YWV	3728200	3728200
3364133	37283	37283
3364133101	3728313	3728313
3364133104	3728315	3728315
3364133YWV	3728300	3728300
3364135	37285	37285
3364135101	3728513	3728513
3364135104	3728515	3728515
3364135207	3728594	3728594
3364135211	3728595	3728595
3364135313	3728598	3728598
3364135416	3728599	3728599
3364135YWV	3728500	3728500
336413W	37280 pt	37280 pt
336413WYWW	3728000 pt	3728000 pt
336413WYWY	3728002 pt	3728002 pt
3364141	37611	37611
3364141100	3761100	3761100
3364143	37613	37613
3364143100	3761300	3761300
3364145	37616	37616
3364145100	3761600	3761600
3364147	37612	37612
3364147101	3761201	3761201
3364147204	3761202	3761202
3364147YWV	3761200	3761200
3364149	37614	37614
3364149101	3761401	3761401
3364149104	3761402	3761402
3364149YWV	3761400	3761400
336414A	37617	37617
336414A101	3761702	3761702
336414A104	3761703	3761703
336414AYWV	3761700	3761700
336414W	37610	37610
336414WYWW	3761000	3761000
336414WYWY	3761002	3761002
3364151	37645	37645
3364151101	3764511	3764511
3364151204	3764513	3764513
3364151307	3764515	3764515
3364151YWV	3764500	3764500
3364153	37646	37646
3364153101	3764611	3764611
3364153104	3764613	3764613
3364153107	3764615	3764615
3364153YWV	3764600	3764600
3364155	37647	37647
3364155101	3764711	3764711
3364155104	3764713	3764713
3364155107	3764715	3764715
3364155YWV	3764700	3764700
3364157	37648	37648
3364157101	3764811	3764811
3364157104	3764813	3764813
3364157107	3764815	3764815
3364157YWV	3764800	3764800
336415W	37640	37640
336415WYWW	3764000	3764000
336415WYWY	3764002	3764002

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3364191101	3769211	3769211
3364191104	3769213	3769213
3364191207	3769219	3769219
3364191311	3769225	3769225
3364191413	3769235	3769235
3364191YWV	3769200	3769200
3364193	3769400	37694
3364193101	3769414	3769414
3364193104	3769419	3769419
3364193107	3769425	3769425
3364193111	3769435	3769435
3364193YWV	3769400	3769400
336419W	37690	37690
336419WYWW	3769000	3769000
336419WYWY	3769002	3769002
3365101	37431 pt	37431 pt
3365101101	3743102	3743101 pt
3365101104	3743104	3743101 pt
3365101107	3743105	3743101 pt
3365101111	3743113	3743103 pt
3365101YWV	3743100 pt	3743100 pt
3365103	37432	37432
3365103100 pt	3743200 pt	3743200
3365103100 pt	3743200 pt	3743211
3365103100 pt	3743200 pt	3743215
3365103100 pt	3743200 pt	3743235
3365103100 pt	3743200 pt	3743241
3365103100 pt	3743200 pt	3743265
3365105 pt	3531X pt	3531M pt
3365105 pt	3531X pt	3531P pt
3365105 pt	37433	37433
3365105301	3743301	3743301
3365105304	3743305	3743305
3365105405	3531X21	3531P21
3365105407	3743304	3743304
3365105411	3743311	3743311
3365105413	3743312	3743312
3365105416	3743314	3743314
3365105419 pt	3531X80	3531M21 pt
3365105419 pt	3743319	3743319
3365105YWV pt	3531X00 pt	3531M00 pt
3365105YWV pt	3531X00 pt	3531P00 pt
3365105YWV pt	3743300	3743300
336510W pt	35310 pt	35310 pt
336510W pt	37430 pt	37430 pt
336510WYWW pt	3531000 pt	3531000 pt
336510WYWW pt	3743000 pt	3743000 pt
336510WYWY pt	3531002 pt	3531002 pt
336510WYWY pt	3743002 pt	3743002 pt
3366111	37311	37311
3366111101	3731111	3731111
3366111104	3731107	3731107
3366111107	3731119	3731119
3366111YWV	3731100	3731100
3366113	37312	37312
3366113100	3731200	3731200
3366115	37313	37313
3366115101	3731315	3731315
3366115107	3731335	3731335
3366115111	3731343	3731343
3366115113	3731348	3731348
3366115116	3731357	3731357
3366115119	3731321	3731321
3366115121	3731332	3731332
3366115123	3731333	3731333
3366115124 pt	3731361 pt	3731324
3366115124 pt	3731361 pt	3731326
3366115124 pt	3731361 pt	3731328
3366115YWV	3731300	3731300
3366117	37314	37314
3366117101	3731441	3731441
3366117104	3731449	3731449
3366117YWV	3731400	3731400
3366119	37316	37316
3366119101	3731601	3731601
3366119104	3731602	3731602
3366119YWV	3731600	3731600
336611W	37310	37310
336611WYWW	3731000	3731000
336611WYWY	3731002	3731002
3366121	37322	37322
3366121101	3732201	3732201
3366121104	3732202	3732202
3366121107	3732211	3732211
3366121111	3732207	3732207
3366121113	3732209	3732219 pt
3366121116	3732210	3732219 pt
3366121119	3732220	3732219 pt
3366121222	3732221	3732221
3366121225	3732223	3732223
3366121228	3732225	3732225
3366121231	3732227	3732227
3366121234	3732226	3732229 pt
3366121239	3732222	3732229 pt
3366121243	3732224	3732229 pt
3366121246	3732231	3732229 pt
3366121337	3732228	3732228
3366121YWV	3732200	3732200
3366123	37323	37323
3366123104	3732311	3732311
3366123107	3732316	3732316
3366123201	3732304	3732304
3366123211	3732321	3732321
3366123YWV	3732300	3732300
3366125	37324	37324
3366125107	3732405	3732405
3366125201	3732401	3732401
3366125204	3732403	3732403
3366125211	3732406	3732409 pt
3366125213 pt	3732408 pt	3732407
3366125213 pt	3732408 pt	3732409 pt
3366125YWV	3732400	3732400
3366127	37327	37327
3366127101	3732702	3732702
3366127104	3732704	3732704
3366127107	3732706	3732706
3366127111	3732708	3732708
3366127113	3732712	3732712
3366127116	3732717	3732717
3366127119	3732719	3732719
3366127YWV	3732700	3732700
336612W	37320 pt	37320 pt
336612WYWW	3732000 pt	3732000 pt
336612WYWY	3732002 pt	3732002 pt
3369911 pt	37511	37511
3369911 pt	39443 pt	39443 pt
3369911101 pt	3751148 pt	3751139
3369911101 pt	3751148 pt	3751141
3369911101 pt	3751148 pt	3751143
3369911101 pt	3751148 pt	3751145
3369911101 pt	3751148 pt	3751147
3369911101 pt	3751148 pt	3751149
3369911101 pt	3751148 pt	3751155
3369911104 pt	3751109	3751109
3369911104 pt	3944336	3944346 pt
3369911109	3751110	3751110
3369911113	3751112	3751112
3369911116	3751115	3751115
3369911119	3751116	3751116
3369911122 pt	3751124 pt	3751113
3369911122 pt	3751124 pt	3751114
3369911122 pt	3751124 pt	3751123
3369911YWV pt	3751100	3751100
3369911YWV pt	3944300 pt	3944300 pt
3369913	37512	37512
3369913100 pt	3751200 pt	3751200
3369913100 pt	3751200 pt	3751201
3369913100 pt	3751200 pt	3751209
336991W pt	37510	37510
336991W pt	39440 pt	39440 pt
336991WYWW pt	3751000	3751000
336991WYWW pt	3944000 pt	3944000 pt
336991WYWY pt	3751002	3751002
336991WYWY pt	3944002 pt	3944002 pt
3369920 pt	37110 pt	37110 pt
3369920 pt	37114 pt	37114 pt
3369920 pt	37950	37950
3369920111	3795001	3795001
3369920214	3795051	3795051
3369920216	3711401	3711400 pt
3369920217	3795098	3795098
3369920YWW pt	3711000 pt	3711000 pt
3369920YWW pt	3711400 pt	3711400 pt
3369920YWW pt	3795000	3795000
3369920YWY pt	3711002 pt	3711002 pt
3369920YWY pt	3795002	3795002
3369991	37993	37993
3369991101	3799382	3799382
3369991104	3799384	3799384
3369991YWV	3799300	3799300
3369993	37999 pt	37999 pt
3369993101	3799903	3799903
3369993204	3799904	3799904
3369993307	3799905	3799905
3369993414	3799916	3799923 pt
3369993417	3799915	3799923 pt
3369993421	3799920	3799923 pt
3369993513	3799925	3799925
3369993YWV	3799900 pt	3799900 pt
336999W	37990 pt	37990 pt
336999WYWW	3799000 pt	3799000 pt
336999WYWY	3799002 pt	3799002 pt