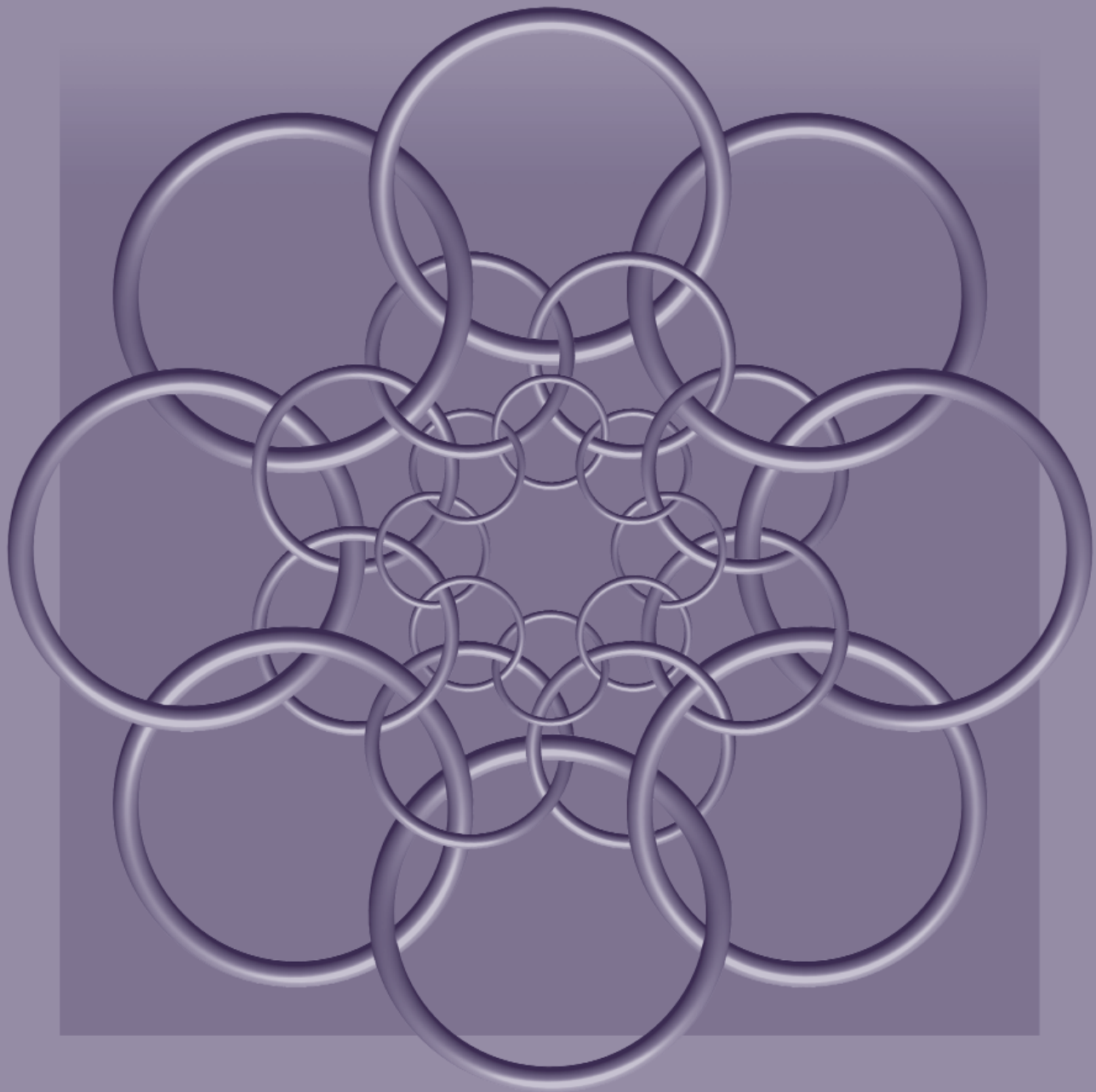


# Transportation Satellite Accounts

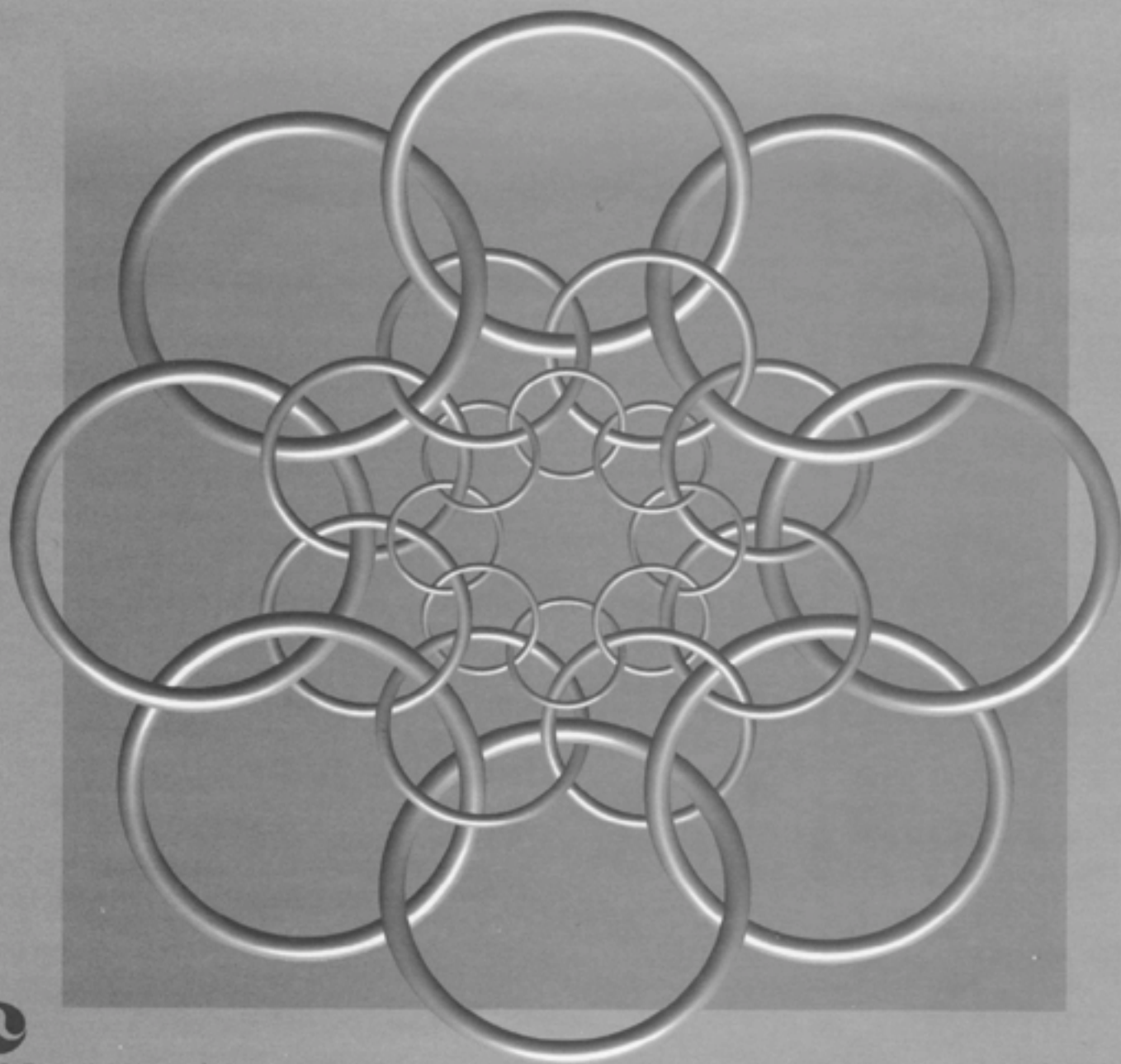
*A New Way of Measuring Transportation Services in America*





# Transportation Satellite Accounts

*A New Way of Measuring Transportation Services in America*



U.S. Department of Transportation  
Bureau of Transportation Statistics

BTS99-R-01  
February 1999



All material contained in this report is in the public domain and may be used and reprinted without special permission; source citation is required.

**Recommended citation**

U.S. Department of Transportation  
Bureau of Transportation Statistics  
*Transportation Satellite Accounts: A New Way of Measuring  
Transportation Services in America*  
BTS99-R-01  
Washington, DC: 1999

**For copies of this report and other BTS products,  
contact:**

Customer Service  
Bureau of Transportation Statistics  
U.S. Department of Transportation  
400 7<sup>th</sup> Street SW, Room 3430  
Washington, DC 20590

phone	202.366.DATA
fax	202.366.3640
e-mail (product orders)	orders@bts.gov
statistics by phone	800.853.1351
statistics by email	statistics@bts.gov
fax-on-demand	800.671.8012
Internet	www.bts.gov



# Acknowledgments

## **U.S. Department of Transportation**

Rodney E. Slater  
*Secretary*

Mortimer L. Downey  
*Deputy Secretary*

## **Bureau of Transportation Statistics**

Ashish K. Sen  
*Director*

Robert A. Knisely  
*Deputy Director*

Rolf R. Schmitt  
*Associate Director for  
Transportation Studies*

Susan J. Lapham  
*Acting Associate Director for  
Statistical Programs and  
Services*

## **Project Manager**

Xiaoli Han

## **Principal Authors**

Bingsong Fang

Xiaoli Han

## **Contributors**

### *Bureau of Transportation Statistics*

Jiemin Guo

Simon Randrianarivel

Wendell Fletcher

Joanne Sedor

### *Bureau of Economic Analysis*

Belinda L. Bonds

Brian D. Kajutti

John Turner

Mark A. Planting

Karen J. Horowitz

Timothy D. Aylor

William McCarthy

Robert E. Yuskavage

### *Oak Ridge National Laboratory*

David P. Vogt

## **Editor**

Chip Moore

## **Editorial Assistant**

Selena Giesecke

## **Cover Design**

Vincent Hughes

## **Layout and Production**

Sandra Lawrence

The U.S. Transportation Satellite Accounts (TSAs) were jointly developed by the Bureau of Transportation Statistics (BTS), under the direction of Rolf R. Schmitt, Associate Director, and the Bureau of Economic Analysis (BEA), under the direction of Sumiye Okubo, Associate Director of Industry Accounts, and Ann M. Lawson, Chief of the Industry Economics Division. T.R. Lakshmanan, former Director of BTS, and J. Steven Landefeld, Director of BEA, initiated the project.





# Table of Contents

OVERVIEW .....	1
MEASURING TRANSPORTATION SERVICES .....	3
Measures of Transportation Activities .....	5
Conceptual Overview .....	7
Relationship of the TSAs to the I-O Accounts .....	7
Components of the TSAs .....	9
TSAs Make Table .....	9
TSAs Use Table .....	9
TSAs Direct Requirements Table .....	10
TSAs Industry-by-Commodity Total Requirements Table .....	10
Methodological Overview .....	16
Step 1. Estimating Transportation Inputs .....	16
Step 2. Deriving the TSAs Make and Use Tables .....	18
Transportation Services as a Share of GDP .....	18
Use of Transportation Services by Industry .....	18
Transportation Services Cost by Commodities .....	19
The Multiplier Effect of Transportation Services .....	19
Future Work .....	20

## List of Tables

1. Components and Output of Transportation Services .....	8
2. TSA Make of Commodities by Industries, 1992 .....	11
3. TSA Use of Major Commodity Groups by Major Industry Sector, 1992 .....	12
4. TSA Commodity-by-Industry Direct Requirements, 1992 .....	14
5. TSA Industry-by-Commodity Total Requirements, 1992 .....	15
6. Principal Data Sources .....	17

## APPENDIX OF DETAILED TABLES

A. Detailed Make of 100 Commodities by 100 Industries .....	22
B. Detailed Use of Commodities by Industries .....	42
C. Detailed Commodity-by-Industry Direct Requirements .....	66
D. Detailed Industry-by-Commodity Total Requirements .....	86



---



# Overview

The magnitude of transportation services has long been underestimated in national economic data used by government and private sector decisionmakers. One reason is that, until now, national measures of transportation services only counted the value of for-hire transportation services. For-hire transportation services are provided by transportation firms to industries and the public on a fee basis, such as railroads, transit agencies, common carrier trucking companies, and pipeline companies. The sizable contribution of in-house transportation (i.e., transportation services that take place within nontransportation industries) was not explicitly identified, and their output was counted as part of nontransportation industries' output, rather than transportation output.

Now, a new accounting tool, called the Transportation Satellite Accounts (TSAs), provides a way to measure both in-house and for-hire transportation services. Developed jointly by the Bureau of Transportation Statistics (BTS) of the U.S. Department of Transportation and the Bureau of Economic Analysis of the U.S. Department of Commerce, the TSAs reveal several important features concerning the relationship between transportation and the U.S. economy that have not been known before:

- Transportation services contributed about \$313 billion, or 5 percent of U.S. gross domestic product (GDP) in 1992, the latest year for which Economic Census data are available (see page 2 box). The value-added by in-house transportation services was about \$121 billion, compared with about \$192 billion contributed by for-hire transportation.
- Of the total value-added by transportation services, trucking accounted for 65 percent: 38 percent for in-house trucking and 27 percent for for-hire trucking. Air transportation and railroads accounted for 13 percent and 11 percent, respectively.
- Agriculture, construction, and wholesale/retail trade are the most transportation-intensive sectors, counting both in-house and for-hire services.

Although manufacturing is the most intensive user of for-hire transportation services (about 3¢ of for-hire transportation services per dollar of output) and consumes the most transportation services in absolute terms, it ranks below the agriculture, construction, and wholesale-retail trade sectors in overall transportation intensity because these industries rely more heavily on in-house services.

- Total transportation costs embodied in construction and agricultural products are larger than those embodied in manufactured products on a per-dollar basis. Therefore, transportation costs have a greater effect on agricultural product prices and markets than on manufacturing or mining products. A \$1 increase in the final demand for agricultural products will require 14.2¢ in transportation services, compared with 9.1¢ in the case of manufactured goods and about 8¢ for mining products.
- Transportation may have a greater influence on the competitiveness of U.S. products in international markets than previously thought, and the economic benefits of transportation infrastructure investments are larger than estimates based on for-hire transportation data alone.
- Transportation continues to play a key role in the economy, even as the economy shifts from a focus on manufacturing to a focus on services. The services sector, as defined

in the national accounts, is the largest and fastest growing sector in the U.S. economy. According to the national accounts, demand for for-hire transportation generated from service sector growth between 1992 and 1996 was about \$6 billion. Analysis based on TSAs data shows that the services sector would have used an additional \$12 billion of in-house transportation to support this growth.

Although the TSAs demonstrate that transportation services command a much larger role in the economy than previously understood, the picture is still incomplete. Some in-house transportation services, such as the use of corporate aircraft and automobiles and private railcars and barges, have not yet been measured. Also, the TSAs do not fully reflect the economic role of personal transportation in getting people to work or school, in bringing goods home from retail outlets, and in supporting social and recreational activities.

\* \* \*

This report provides an overview of the background, framework, and methodology of the TSAs, including their relationship to the U.S. Input-Output Accounts. It also describes the major components of the TSAs and discusses the contribution of transportation to GDP and the relationship between transportation and other industries of the economy. Finally, the report provides detailed tables of TSAs estimates.

### Supply v. Demand Measures

It is important to note that the TSAs measure for-hire and in-house transportation services from the supply side, and comprise only services that move people and goods in the transportation system. It should not be confused with a demand-side measure that includes all purchases of transportation-related goods and services (e.g., motor vehicles, gasoline, and automobile insurance) by consumers and other end users. This transportation-related final demand was about 11 percent of GDP in 1992.

---



# Measuring Transportation Services

**T**he U.S. Transportation Satellite Accounts (TSAs) provide a new way to answer questions about the transportation system:

- How much do transportation services, including for-hire and in-house transportation activities, contribute to U.S. gross output and gross domestic product (GDP)?
- What industries rely heavily on transportation services? What is transportation's share in the total production costs of these industries?
- What is transportation's share in the total cost of commodities purchased by consumers and other end-users?

Jointly developed by the Bureau of Transportation Statistics (BTS)<sup>1</sup> of the U.S. Department of Transportation and the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce, the TSAs supplement the U.S. input-output (I-O) accounts<sup>2</sup> maintained by BEA. The TSAs provide a more comprehensive measure of transportation services in whatever industry they occur.

---

<sup>1</sup> The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) established BTS and charged it with carrying out various statistical functions, including “compiling, analyzing, and publishing a comprehensive set of transportation statistics to provide timely summaries and totals (including industry-wide aggregates and multi-year averages) of transportation-related information.” ISTEA also mandated that “such statistics shall be suitable for conducting cost-benefit studies (including comparisons among individual transportation modes and intermodal transport systems) and shall include information on—(A) productivity in various parts of the transportation sector.” See National Research Council, *Bureau of Transportation Statistics—Priorities for the Future* (Washington, DC: National Academy Press, 1997). Appendix A. In its first annual report to the U.S. Congress, BTS recommended that special studies be undertaken to measure total transportation services in a way that is consistent with the national economic accounts. U.S. Department of Transportation, Bureau of Transportation Statistics, *Transportation Statistics Annual Report, 1994* (Washington, DC: 1994), pp. 4–5.

### Satellite Accounts

In general, satellite accounts are frameworks designed to expand the analytical capacity of the basic economic accounts without overburdening them with details or interfering with their general-purpose orientation. Satellite accounts are meant to supplement rather than to replace existing accounts and organize information in an internally consistent way that suits a particular analytical focus, while maintaining links to the existing national accounts. They typically expand a particular segment of existing accounts with more details and additional dimensions of information, including nonmonetary information. They also may use definitions and classifications that differ from those in the existing accounts. Depending on the analytical focus, the production boundary of the national accounts can be maintained or modified.<sup>1</sup>

<sup>1</sup> For a discussion of the purposes and characteristics of satellite accounts, see Commission of the European Communities, International Monetary Fund, Organization for Economic Co-operation and Development, United Nations, World Bank, *System of National Accounts 1993* pp. 489–518.

For example, the TSAs identified and estimated transportation activities conducted by grocery companies' truck fleets when moving goods from warehouses to retail outlets, and presented these estimates on both industry and commodity bases.

To do this, the TSAs rearranged 1992 I-O data and added transportation data from other sources to provide a more complete picture of the economic impact of transportation on the U.S. economy. Because the TSAs estimates covered both for-hire transportation services (identified as transportation industries within the U.S. I-O accounts) and in-

<sup>2</sup> For a description of the I-O accounts, see Ann M. Lawson, "Benchmark Input-Output Accounts for the U.S. Economy, 1992: Make, Use, and Supplementary Tables," *Survey of Current Business* vol. 77, November 1997; pp. 36–82; and Ann M. Lawson "Benchmark Input-Output Accounts for the U.S. Economy, 1992: Requirements Tables," *Survey of Current Business*, vol. 77, December 1997, pp. 22–47.

house transportation services conducted by businesses for their own use (not separately identified as transportation in the I-O accounts), they have three major advantages for transportation analyses:

First, the TSAs permit analysts to measure all transportation activities, both in terms of their contribution to the economy and their use of inputs from other industries. For example, the TSAs show that the value-added by in-house and for-hire transportation services was 5 percent of GDP in 1992. In contrast, the total value-added attributed to all for-hire transportation industries identified in the I-O accounts was 3.1 percent of GDP.<sup>3</sup> The TSAs also show that in-house and for-hire transportation activities consumed \$33.2 billion of petroleum products in 1992, while the I-O accounts show that for-hire transportation industries used \$21.6 billion of these products in the same year.

Second, TSAs estimates show the *total* use of transportation services by industries. According to the I-O accounts, the top four users of purchased transportation services were manufacturing (\$80.2 billion, 21.0 percent), motor freight and warehousing (\$35.0 billion, 9.2 percent), services (\$21.5 billion, 5.6 percent), and air transportation (\$14.4 billion, 3.8 percent). In the TSAs estimates, manufacturing remained the largest user of all transportation services (\$102.0 billion, 18.7 percent), but the next largest user was services (\$63.5 billion, 11.6 percent), followed by construction (\$52.2 billion, 9.6 percent) and wholesale and retail trade (\$51.8 billion, 9.5 percent).

<sup>3</sup> Transportation industries in the I-O accounts include the following: railroads and related services and passenger ground transportation; motor freight transportation and warehousing; water transportation; air transportation; pipelines, freight forwarders, and related services; and state and local government passenger transit. These industries are described in table 1.

Third, the TSAs estimates of total transportation values are not affected when firms switch from in-house to for-hire services or vice versa, while I-O estimates are affected. For example, when a grocery company contracts out its formerly internal trucking operations to a common carrier trucking company, the I-O estimates show an increase in the output of transportation services; when the company switches back to its internal operations for its trucking needs, the I-O estimates show a decrease in the output of transportation services. In contrast, the TSAs estimates of total transportation values remain unchanged in both cases.

## MEASURES OF TRANSPORTATION ACTIVITIES

---

Statistics on transportation are presented in different ways, reflecting the multifaceted nature of transportation and the variety of ways these statistics are used. In general, statistics on transportation can be grouped into the following categories:

- *What is transported:* Statistics are divided into two groups: the conveyance of goods (freight transportation) and the conveyance of people (passenger transportation).
- *Mode of transportation:* Statistics are organized by means of transportation, such as rail, urban transit, highway, air, water, and pipeline.
- *Industry provider of transportation:* Until the TSAs were developed, statistics focused only on businesses or establishments that sold transportation services in the marketplace. As a group, these establishments are referred to as an industry, such as the air transportation industry, the water transportation industry, and the motor freight transportation industry.

Although useful for many analytical purposes, statistics based on “what is transported” or “mode of transportation” are often presented in ways that preclude direct comparisons. One example of a comparability problem arises when measures are expressed in physical units, such as ton-miles, passenger-miles, or vehicle-miles, rather than in dollar values or other statistical units. Furthermore, until the TSAs, statistics based on “industry provider of transportation” did not reflect those transportation activities for which there are no corresponding, identifiable market transactions.

U.S. I-O accounts are one of the most important sources of statistics in the provider of transportation services category. In the case of for-hire transportation services, most estimates in the I-O accounts are based on data from the Census Bureau,<sup>4</sup> which are collected at the establishment level of detail and are classified on the basis of the 1987 Standard Industrial Classification (SIC) system.<sup>5</sup> Two

---

<sup>4</sup> The Census Bureau collects information, such as revenues, payroll, employment, and other data, for all for-hire transportation industries, except railroads and air transportation in the quinquennial Census of Transportation, Communications, and Utilities (TCU). In addition, the Census publishes data collected by other sources on railroads and air transportation in the TCU. The Association of American Railroads collected railroad data. The Bureau of Transportation Statistics’ Office of Airline Information, U.S. Department of Transportation, collected air data.

Data on revenues and expenses for the trucking and warehousing industries are from the annual Motor Freight Transportation and Warehousing Survey. Data on goods flows are from the Commodity Flow Survey, and data on passenger flows are from the American Travel Survey, both of which are collected every 5 years by BTS and the Census Bureau. Data on the physical and operational characteristics of trucks are collected from the Truck Inventory and Use Survey, which is conducted by the Census Bureau at the same time as the quinquennial census.

<sup>5</sup> The SIC system defines an establishment as an economic unit that is typically at a single location where business is conducted or where services or industrial operations are performed. An establishment is classified into an industry on the basis of the primary activity of the establishment, which is the activity that makes up the largest proportion of the establishment’s output. All other activities of the establishment are secondary. See

types of establishments are distinguished in the SIC: *Operating* establishments that primarily produce goods or provide services for personal or household use or for use by other enterprises; and *Auxiliary* establishments that primarily perform management or support services within the same enterprise.<sup>6</sup>

If transportation activities are conducted by an operating establishment, the activities are referred to as “for-hire” transportation, and the establishment is classified as part of transportation in the SIC system. If transportation activities are conducted as a support activity by an operating establishment within a nontransportation enterprise, the activities are referred to as “in-house” transportation. Data on these in-house transportation activities are included under the primary activity of the establishment; hence they are not classified as transportation in the SIC system. In the SIC system, an exception is made for auxiliary establishments primarily engaged in long-distance trucking, stevedoring, and water and pipeline transportation within nontransportation enterprises. These are classified as for-hire transportation operating units in the SIC system, but auxiliary establishments performing other types of transportation activities, such as local furniture deliveries, are not.<sup>7</sup> Since statistics based on “industry provider of transportation” do not include in-house transportation, they present an incomplete

picture of the magnitude of transportation activities in the economy.

Statistics expressed in physical units, such as ton-miles and passenger miles, might present a complete measure of a transportation subsystem. But, they cannot be added together to form a single measure of the entire transportation system, which is frequently desired in transportation analyses. Also, transportation statistics expressed in physical units are generally organized by mode of transportation, rather than by detailed industry use of transportation services. The comparability problem and the lack of industry details of transportation statistics in physical units has made it difficult to combine them with data from national accounts in order to analyze changes in transportation and the relationships between transportation and other industries.

The 1993 manual of the System of National Accounts (SNA) recommended using satellite accounts to handle measurements of economic activities, such as in-house transportation.<sup>8</sup> In-house transportation in the TSAs is an *auxiliary* activity in the SIC and an *ancillary* activity in the SNA manual. The SNA manual defines an ancillary production unit as one whose sole function is to produce one or more common types of services for intermediate consumption within the same enterprise. Although the SNA manual does not treat ancillary units as separate units, it suggests that this may be useful and necessary to estimate and record the activities of ancillary units separately for some types of analyses—preferably by using satellite accounts. In addition, the United Nations handbook of I-O accounts suggests that the satellite account

---

Office of Management and Budget, *Standard Industrial Classification Manual, 1987* (Springfield, VA: National Technical Information Services) 1989, pp. 118 and 265.

<sup>6</sup> Auxiliaries primarily producing goods and services for other establishments of the same enterprise are generally classified as establishments in the industry where the goods or services are primary.

<sup>7</sup> Under the recently developed North American Industrial Classification System (NAICS), an auxiliary establishment is classified according to the nature of its own primary activity. Therefore, auxiliary establishments primarily engaged in transportation activities are classified as transportation.

---

<sup>8</sup> Commission of the European Communities, International Monetary Fund, Organization for Economic Co-operation and Development, United Nations, World Bank, *System of National Accounts 1993*. p. 490.



approach be used to estimate in-house transportation as an output of the transportation industry.<sup>9</sup> The satellite account approach has also been used for in-house transportation in other countries. For example, France's Ministry of Transportation and Tourism developed a 1992 national Transportation Satellite Account, the results of which were published in March 1996.<sup>10</sup>

## CONCEPTUAL OVERVIEW

---

As a satellite to the 1992 benchmark I-O accounts, the TSAs' primary purpose is to provide a systematic and consistent framework and data set for conducting analytical studies of the role of transportation in the economy on both an industry and commodity basis.

The TSAs covered all activities related to the use of vehicles (such as trucks, aircraft, and boats) and related structures (such as highways, airports, and port facilities) for the movement of goods and passengers. As shown in table 1, transportation in the TSAs consists of six groups of for-hire transportation industries from the I-O accounts and a single group for in-house transportation.

## RELATIONSHIP OF THE TSAs TO THE I-O ACCOUNTS

---

The I-O accounts provide detailed estimates of intermediate purchases by industries, including for-hire transportation industries;

this detailed information can be used to prepare the TSAs estimates. The I-O accounts also provide an analytical framework with detailed linkages among and between industries and final demand; this framework facilitates the estimates of the interdependencies between transportation and the rest of the economy. The TSAs used the following I-O account approaches:

- The measurement used to determine the value of in-house transportation activities is similar to that used for in-house construction activities in the I-O accounts. For example, the intermediate inputs and the value-added inputs associated with in-house construction, such as capital consumption allowance and labor costs, are moved—or, using I-O terminology, “redefined”—to the other industries in which the activities are primary. In the TSAs, these inputs are similarly redefined, but to a newly defined industry—in-house transportation.
- The overall industry and commodity classification system and the special definitions and conventions in the I-O accounts are used in the TSAs except for in-house transportation, which forms a new industry and a new commodity category in the TSAs.
- The total value-added (or GDP) by all industries is the same in the TSAs and the I-O accounts.<sup>11</sup>

<sup>9</sup> United Nations, Statistics Division, *Handbook of National Accounting—Input-Output Table Compilation and Analysis*, manuscript, November 1997, pp. 149–50.

<sup>10</sup> France's satellite account provides estimates of transportation expenditures by transportation modes in a framework similar to BEA's national income and product accounts. See Commission of National Accounts, Ministry of Transportation and Tourism, *Transportation Satellite Accounts 1992*, project report, March 1996.

<sup>11</sup> Although total value-added for the total economy remains unchanged, the value-added estimate for transportation industries is increased by the amount of value-added by the in-house transportation that is subtracted from other industries' value-added. In addition, although the output for each industry remains unchanged, the total gross output for all industries is increased by the amount of output identified for the in-house transportation industry; this is because the total of all purchases of intermediate inputs—including in-house transportation services—by industries is increased by the same amount as the sum of the in-house transportation industry output.

Table 1.

**Components and Output of Transportation Services**

	<b>Industry components</b>	<b>Industry output</b>
<b>For-hire transportation industries</b>		
Railroads and related services; passenger ground transportation	Railroads, including AMTRAK Switching and terminal companies Freight car rental Private local and suburban passenger transportation Intercity, rural, and other bus services, including charter and school buses Bus terminal and service facilities Taxicabs	Total operating revenues <i>Less:</i> Rental receipts
Motor freight transportation and warehousing	Trucking and courier services, except air Public warehousing and storage Trucking terminal facilities	Total operating revenues <i>Plus:</i> Trucking receipts of construction firms Warehousing revenues of wholesalers Delivery and storage charges of retailers <i>Less:</i> Merchandise sales Rental receipts
Water transportation	Deep sea and other water transportation of freight. Water transportation of passengers Services incidental to water transportation, including marinas and other services	Total operating revenues <i>Plus:</i> Docking and boat cleaning and maintenance at retailers Federal excise tax on cruise ship receipts <i>Less:</i> Merchandise sales Boat repair at marinas
Air transportation	Domestic and international passenger and freight air transportation Airport terminal services	Total operating revenues <i>Plus:</i> Federal taxes on air fares, air freight, and air facilities Aircraft storage and services by wholesalers and retailers <i>Less:</i> Rental receipts Flight training and instruction
Pipelines, freight forwarders, and related services	Refined petroleum pipelines Other pipelines, including crude petroleum and natural gas Arrangement of freight and passenger transportation, including freight forwarding Miscellaneous services incidental to transportation	Total operating revenues <i>Plus:</i> Pipeline receipts by wholesalers <i>Less:</i> Rental receipts
State and local government passenger transit	State and local government passenger transit	Total operating revenues <i>Less:</i> Operating subsidies
<b>In-house transportation services</b>		
In-house transportation	Private trucking and bus operations in all nontransportation industries	Total operating expenses of highway motor vehicles and overhead expenses <i>Less:</i> Expenses on advertising, depository institutions, security and commodity brokers, and other services unrelated to in-house transportation operations

- The general valuation conventions used in the TSAs are consistent with those in the I-O accounts: all transactions are valued in producers' prices, the valuations of purchases for final use are unchanged, and transportation costs (the costs to move commodities from producers to purchasers) are unchanged.

The TSAs differ from the I-O accounts only because of the specific need to separately measure in-house transportation. In the TSAs, in-house transportation is treated as a separate industry where the only output is in-house transportation service. The use of in-house transportation by an industry includes the costs of operating an industry's own trucks and buses, whether or not those vehicles are used to move an industry's intermediate inputs or its output. In the I-O accounts the use of for-hire transportation by an industry includes only those transportation expenses associated with moving intermediate inputs to the industry, plus the expenses for certain direct transportation services. For example, if a for-hire truck carries wheat from a farm to a mill, the I-O use table credits this activity to the mill, even though the farm may have purchased the transportation service. However, if an in-house truck of the mill transports the wheat from the farm, the TSAs use table shows the mill as providing the services, and if an in-house truck of the farm transports the wheat to the mill, the TSAs use table credits this activity to the farm.

## **COMPONENTS OF THE TSAs**

---

The TSAs data are presented in four tables: Make (production) table, Use (consumption) table, Direct Requirements table, and Industry-by-Commodity Total Requirements table. The TSAs make table (table 2) and the TSAs

use table (table 3) present for-hire and in-house transportation data in an I-O framework. The TSAs direct requirements table (table 4) presents data on industry use of intermediate and value-added inputs as a percentage of the industry output. The TSAs total requirements table (table 5) shows industry-by-commodity multipliers. Corresponding tables at summary-level detail for 100 industries and 100 commodities are provided in the appendix. The enclosed TSAs CD-ROM provides detailed data on about 500 industries and 500 commodities.

### **TSAs Make Table**

Table 2 is an I-O make table with an additional column for in-house transportation as a commodity and an additional row for an aggregation of all redefined in-house transportation activities as a new industry. An I-O make table shows the value in producers' prices of each commodity produced by each industry. In each row, the cell on the main diagonal shows the value of the production of the commodity for which the industry has been designated the primary producer. The other cells in the row show the value of the production of commodities for which the industry is a secondary producer. The sum of all the entries in a row is the total output of that industry.

In the TSAs make table, the cell value at the intersection of the in-house transportation column and row equals the total output of in-house transportation; all other cell entries in the in-house transportation column and row are zero. The data shown in other parts of the TSAs make table are the same as those provided in the 1992 I-O make table.

### **TSAs Use Table**

Table 3 is an I-O use table with an additional row for in-house transportation services and

### How To Read Tables 2 and 3 and Appendix Tables A and B.

In these tables, both the total *commodity* output (at the bottom of each commodity column) and the total *industry* output (at the right of each industry row) are given. The sum of the items in the row labeled *Total commodity output* is equal to the sum of the items in the column labeled *Total industry output*. This identical total is shown in the cell at the bottom right hand corner of the tables. For each commodity listed, there is an identically named industry, which is the major producer of that commodity.

Separate totals for both commodity outputs and industry outputs would not be needed if each industry produced only one commodity and that commodity was not produced by any other industry. However, the total output for an individual commodity rarely equals the total output of the major industry producing that commodity, and *visa versa*. This is because most industries produce more than one commodity. For instance, although the mining industry's primary commodity is ore, some mining companies also process the ore or produce other manufactured products. Hence, table 2 shows some manufacturing commodities for the mining industry. The table also shows that the manufacturing industry does some mining, which contributes to the total of mining commodities.

an additional column for an aggregation of all redefined in-house transportation activities as a new industry. An I-O use table shows the values, in producers' prices, of in-house transportation and all other intermediate and value-added inputs consumed by industries or final users. The cell in each row of a given column shows the commodity that is used by the industry or final user in that column. The sum of all the entries in a row is the total output of the commodity in that row, and the sum of all the entries in a column is the total output of the industry in that column.

In the TSAs use table the use of the in-house transportation services commodity is shown in the in-house transportation row. Because in-house transportation services are provided

by nontransportation industries for their own-use, the following cell values are equal to zero:

- the cell value at the intersection of the in-house transportation row and column (the use of in-house transportation services to support in-house transportation activities), and
- the cell values at the intersections between the in-house transportation row and the for-hire transportation columns (the use of in-house transportation services to support for-hire transportation activities).

### TSAs Direct Requirements Table

Table 4 is the TSAs direct requirements table. Each cell of table 4 shows the direct requirement per dollar output of the industry (on the column) for the commodity (on the row), which is also referred to as the "direct requirement coefficient." The sum of an industry's direct requirement coefficients for intermediate inputs and value-added categories is equal to one.

The TSAs direct requirements table is derived from the TSAs use table by dividing each industry's commodity and value-added inputs by that industry's total output. Unlike the TSAs use table, however, this table does not include the components of final use or GDP. In table 4, each column shows, for the industry named at the head of the column, the input coefficients for the commodities and for the value-added components that an industry directly requires to produce a dollar's worth of output.

### TSAs Industry-by-Commodity Total Requirements Table

Table 5 shows the total requirements coefficients for each industry's output that is directly and indirectly required to deliver a dollar's worth of goods and services to

Table 2.  
**The TSA Make of Commodities by Industries, 1992**  
(Millions of dollars at producers' prices)

Industry	Commodity															Total industry output
	Agriculture, forestry, and fisheries	Mining	Construction	Manufacturing	Transportation						Communications and utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services	Other <sup>1</sup>	
					Railroad and passenger ground	Motor freight and warehousing	Water	Air	Pipelines, freight forwarders, and related services	In-house						
Agriculture, forestry, and fisheries	235,591	0	0	1,022	0	11	0	0	0	0	0	0	0	1,038	0	<b>237,662</b>
Mining	0	147,001	0	9,716	0	0	0	0	0	0	0	0	0	0	0	<b>156,717</b>
Construction	0	0	679,330	0	0	0	0	0	0	0	0	0	0	0	0	<b>679,330</b>
Manufacturing	0	561	0	2,879,654	0	0	0	0	0	0	43	0	0	69,509	1,536	<b>2,951,303</b>
Transportation:																
Railroads and related services; passenger ground transportation, except transit	0	0	0	0	55,576	174	0	0	0	0	0	0	0	0	4	<b>55,754</b>
Motor freight and warehousing	0	0	0	0	0	155,590	0	0	0	0	11,363	0	0	0	0	<b>166,953</b>
Water	0	0	0	0	0	0	32,440	0	0	0	0	0	0	0	0	<b>32,440</b>
Air	0	0	0	0	0	0	0	94,141	0	0	0	0	0	0	0	<b>94,141</b>
Pipelines, freight forwarders, and related services	0	0	0	0	542	1,320	194	2,632	28,928	0	0	0	0	0	0	<b>33,616</b>
State and local passenger transit	0	0	0	0	5,876	0	0	0	0	0	0	0	0	0	0	<b>5,876</b>
In-house	0	0	0	0	0	0	0	0	0	165,461	0	0	0	0	0	<b>165,461</b>
Communications and utilities	0	0	0	0	0	0	0	0	0	0	491,312	0	0	28,838	538	<b>520,688</b>
Wholesale and retail trade	0	0	0	0	0	0	0	0	0	0	0	1,091,489	0	0	0	<b>1,091,489</b>
Finance, insurance, and real estate	0	0	0	0	0	0	0	0	0	0	0	0	1,629,618	25,114	0	<b>1,654,732</b>
Services	0	0	0	8	0	15	0	0	38	0	0	0	666	2,226,302	521	<b>2,227,550</b>
Other <sup>1</sup>	0	0	0	37	64	0	1,713	2,046	0	0	48,012	3,659	9,132	3,301	846,432	<b>914,396</b>
<b>Total commodity output</b>	<b>235,591</b>	<b>147,562</b>	<b>679,330</b>	<b>2,890,437</b>	<b>62,058</b>	<b>157,110</b>	<b>34,347</b>	<b>98,819</b>	<b>28,966</b>	<b>165,461</b>	<b>550,730</b>	<b>1,095,148</b>	<b>1,639,416</b>	<b>2,354,102</b>	<b>849,031</b>	<b>10,988,108</b>

<sup>1</sup> "Other" consists of government enterprise (except state and local government passenger transit) and other input-output special industries. See Ann M. Lawson, "Benchmark Input-Output Accounts for the U.S. Economy, 1992: Make, Use, and Supplementary Tables," *Survey of Current Business* 77 (November 1997): 58-62.

Table 3.

**TSA Use of Major Commodity Groups by Major Industry Sector: 1992**

(Millions of dollars at producers' prices)

Commodity	Industry												
	Agriculture forestry, and fisheries	Mining	Con- struction	Manu- facturing	Transportation							Communi- cations and utilities	Whole- sale and retail trade
					Railroad and passenger ground	Motor freight and ware- housing	Water	Air	Pipelines, freight forwarders, and related services	State and local passenger transit	In- house		
Agriculture, forestry, and fisheries	55,569	43	4,027	123,104	1	3	6	1	0	2	0	61	894
Mining	298	25,985	5,445	94,010	0	0	9	0	83	0	0	54,440	30
Construction	2,877	2,655	552	18,050	2,465	736	30	239	574	1,664	680	30,084	7,246
Manufacturing	36,994	11,446	199,947	1,017,125	7,174	12,818	3,208	13,201	1,475	3,460	14,760	20,577	44,062
Transportation:													
Railroads and related services; passenger ground transportation, except transit	1,515	1,039	1,294	14,759	2,368	442	19	128	33	69	211	4,937	881
Motor freight and warehousing	3,231	917	10,302	44,955	368	28,810	104	233	209	50	790	1,029	3,459
Water	436	427	723	4,261	78	209	4,282	164	56	29	183	838	169
Air	457	413	963	11,485	214	622	77	6,064	233	1	10	1,476	4,144
Pipelines, freight forwarders, and related services	81	14	4	4,788	442	4,966	1,407	7,820	763	24	112	523	311
In-house	13,177	3,870	38,950	21,806	0	0	0	0	0	0	0	1,187	42,819
Communications and utilities	3,954	7,218	4,343	74,295	596	5,499	192	1,636	1,444	643	4,503	55,863	33,509
Wholesale and retail trade	11,131	2,600	53,758	163,845	1,706	5,824	520	1,505	326	303	6,787	4,537	18,588
Finance, insurance, and real estate	15,528	19,183	11,224	48,672	1,849	6,108	1,990	3,157	1,769	116	1,323	13,890	71,101
Services	5,949	5,037	64,747	165,357	3,771	16,423	4,836	8,903	6,635	214	13,990	49,673	124,604
Other <sup>1</sup>	156	1,172	696	24,581	332	1,122	2,964	8,924	392	4	582	7,823	11,064
<b>Total intermediate inputs</b>	<b>151,352</b>	<b>82,021</b>	<b>396,974</b>	<b>1,831,093</b>	<b>21,364</b>	<b>83,582</b>	<b>19,644</b>	<b>51,975</b>	<b>13,992</b>	<b>6,579</b>	<b>43,931</b>	<b>246,938</b>	<b>362,881</b>
Compensation of employees	25,870	27,777	219,347	688,213	23,458	55,533	7,140	32,761	10,710	9,018	84,160	84,298	425,306
Indirect business tax and nontax liability	5,206	8,164	3,246	37,864	1,006	2,615	583	5,696	993	0	3,870	31,844	173,188
Other value-added <sup>2</sup>	55,234	38,755	59,762	394,134	9,926	25,223	5,073	3,709	7,921	-9,721	33,501	157,609	130,114
<b>Total value-added</b>	<b>86,310</b>	<b>74,696</b>	<b>282,356</b>	<b>1,120,210</b>	<b>34,390</b>	<b>83,371</b>	<b>12,796</b>	<b>42,166</b>	<b>19,624</b>	<b>-703</b>	<b>121,531</b>	<b>273,750</b>	<b>728,608</b>
<b>Total industry output</b>	<b>237,662</b>	<b>156,717</b>	<b>679,330</b>	<b>2,951,303</b>	<b>55,754</b>	<b>166,953</b>	<b>32,440</b>	<b>94,141</b>	<b>33,616</b>	<b>5,876</b>	<b>165,461</b>	<b>520,688</b>	<b>1,091,489</b>

KEY: — = Value too small to report.

<sup>1</sup> "Other" consists of government enterprise (except state and local government passenger transit) and other input-output special industries. See Ann M. Lawson, "Benchmark Input-Output Accounts for the U.S. Economy, 1992: Make, Use, and Supplementary Tables," *Survey of Current Business* 77 (November 1997): 58-62.<sup>2</sup> For all industries except in-house transportation, "other value-added" consists of the following national income and product account components of gross domestic income: consumption of fixed capital, net interest, proprietors' income, corporate profits, rental income of persons, business transfer payments, and subsidies less current surplus of government enterprises. "Other value-added" for in-house transportation consists of consumption of fixed capital.



Table 4.  
**The TSA Commodity by Industry Direct Requirements: 1992**  
 (Direct requirements per dollar of industry output, at producers' prices)

Commodity	Industry															
	Agriculture, forestry, and fisheries	Mining	Construction	Manufacturing	Transportation						Communications and utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services	Other <sup>1</sup>	
					Railroad and passenger ground	Motor freight and warehousing	Water	Air	Pipelines, freight forwarders, and related services	State and local passenger transit						In-house
Agriculture, forestry, and fisheries	0.23382	0.00027	0.00593	0.04171	0.00002	0.00002	0.00018	0.00001	0.00000	0.00034	0.00000	0.00012	0.00082	0.00406	0.00308	0.00034
Mining	.00125	.16581	.00802	.03185	.00000	.00000	.00028	.00000	.00247	.00000	.00000	.10455	.00003	.00000	.00001	.00294
Construction	.01210	.01694	.00081	.00612	.04421	.00441	.00092	.00254	.01708	.28319	.00411	.05778	.00664	.03203	.00866	.02131
Manufacturing	.15566	.07304	.29433	.34464	.12867	.07678	.09889	.14023	.04388	.58884	.08921	.03952	.04037	.01020	.10220	.00953
Transportation:																
Railroads and related services; passenger ground transportation, except transit	.00637	.00663	.00191	.00500	.04247	.00265	.00059	.00136	.00098	.01174	.00127	.00948	.00081	.00059	.00120	.00122
Motor freight and warehousing	.01359	.00585	.01516	.01523	.00660	.17256	.00321	.00248	.00622	.00851	.00477	.00198	.00317	.00348	.00409	.00146
Water	.00183	.00273	.00106	.00144	.00140	.00125	.13200	.00174	.00167	.00494	.00111	.00161	.00016	.00003	.00021	.00043
Air	.00192	.00263	.00142	.00389	.00384	.00373	.00237	.06441	.00693	.00017	.00006	.00283	.00380	.00222	.00360	.00180
Pipelines, freight forwarders, and related services	.00034	.00009	.00001	.00162	.00793	.02974	.04337	.08307	.02270	.00408	.00068	.00101	.00028	.00004	.00054	.00001
In-house	.05544	.02470	.05734	.00739	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00228	.03923	.00054	.01887	.00079
Communications and utilities	.01664	.04606	.00639	.02517	.01069	.03294	.00592	.01738	.04296	.10943	.02721	.10729	.03070	.01701	.02398	.00930
Wholesale and retail trade	.04683	.01659	.07913	.05552	.03060	.03488	.01603	.01599	.00970	.05157	.04102	.00871	.01703	.00253	.01976	.00091
Finance, insurance, and real estate	.06533	.12241	.01652	.01649	.03316	.03659	.06134	.03353	.05262	.01974	.00799	.02668	.06514	.13884	.06910	.00499
Services	.02503	.03214	.09531	.05603	.06764	.09837	.14908	.09457	.19738	.03642	.08455	.09540	.11416	.07462	.13599	.00851
Other <sup>1</sup>	.00066	.00748	.00102	.00833	.00595	.00672	.09137	.09479	.01166	.00068	.00352	.01502	.01014	.01006	.00867	.00284
<b>Total value-added</b>	<b>.36316</b>	<b>.47663</b>	<b>.41564</b>	<b>.37956</b>	<b>.61682</b>	<b>.49937</b>	<b>.39445</b>	<b>.44790</b>	<b>.58377</b>	<b>-.11964</b>	<b>.73450</b>	<b>.52575</b>	<b>.66754</b>	<b>.70374</b>	<b>.60003</b>	<b>.93363</b>
<b>Total output</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>

<sup>1</sup> "Other" consists of government enterprise (except state and local government passenger transit) and other input-output special industries. See Ann M. Lawson, "Benchmark Input-Output Accounts for the U.S. Economy, 1992: Make, Use, and Supplementary Tables," *Survey of Current Business* 77 (November 1997): 58-62.



Table 5.  
**TSA Industry by Commodity Total Requirements: 1992**  
 (Total requirements, direct and indirect, per dollar of delivery to final demand, at producers' prices)

Industry	Commodity														
	Agriculture, forestry, and fisheries	Mining	Construction	Manufacturing	Transportation					Communications and utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services	Other <sup>1</sup>	
					Railroad and passenger ground	Motor freight and warehousing	Water	Air	Pipelines, freight forwarders, and related services						In-house
Agriculture, forestry, and fisheries	1.32661	0.01332	0.03876	0.09211	0.02170	0.01294	0.01632	0.01771	0.00952	0.01085	0.01181	0.00901	0.01095	0.01863	0.00129
Mining	.02486	1.21270	.03724	.07757	.02166	.01678	.01578	.01861	.01754	.01309	.14927	.01112	.00706	.01539	.00157
Construction	.02990	.03596	1.01361	.02256	.08035	.01778	.02867	.02141	.03166	.01155	.08671	.01687	.04379	.02004	.01025
Manufacturing	.38378	.20388	.53168	1.61763	.35810	.20657	.25097	.29130	.14239	.18043	.17479	.12020	.07032	.25783	.01666
Transportation:															
Railroads and related services; passenger ground	.01081	.01005	.00567	.00971	.93508	.00645	.00290	.00385	.00283	.00286	.01312	.00228	.00163	.00332	.00070
transportation, except transit	.03265	.01728	.03216	.03545	.01965	1.20178	.01339	.01314	.01311	.01172	.03892	.00947	.00863	.01320	.00230
Motor freight and warehousing	.00368	.00437	.00249	.00331	.00295	.00235	1.07995	.00299	.00207	.00171	.00326	.00066	.00038	.00091	.00030
Water	.00565	.00545	.00532	.00834	.00662	.00714	.00584	1.01853	.00835	.00180	.00535	.00554	.00364	.00600	.00208
Air	.00360	.00232	.00322	.00563	.01990	.04849	.05630	.11725	1.02072	.00192	.00389	.00174	.00107	.00239	.00040
Pipelines, freight forwarders, and related services	.00114	.00106	.00060	.00102	.09886	.00054	.00031	.00041	.00030	.00030	.00139	.00024	.00017	.00035	.00007
State and local passenger transit	.08477	.03800	.07340	.02732	.01426	.00966	.01112	.01000	.00981	1.00758	.01649	.04612	.00716	.02783	.00197
In-house	.04616	.07109	.03732	.05871	.04215	.05863	.03498	.04387	.06043	.04027	1.01879	.04493	.02836	.05502	.00589
Communications and utilities	.09563	.04149	.12252	.10595	.06712	.06200	.04238	.04242	.02704	.05725	.03537	1.02887	.01433	.04198	.00286
Wholesale and retail trade	.13299	.19132	.06742	.07475	.07277	.08603	.11907	.08024	.09163	.03365	.07896	.09975	1.16842	.12299	.00558
Finance, insurance, and real estate	.10472	.09420	.17678	.14030	.13189	.17807	.23439	.17358	.24863	.12187	.13360	.15692	.11124	1.13745	.00897
Services	.01570	.02481	.01589	.02668	.01963	.02223	.16886	.13190	.02566	.01275	.12372	.02428	.02360	.02239	.99993
Other <sup>1</sup>															
<b>Total commodity output</b>	<b>2.30265</b>	<b>1.96730</b>	<b>2.16408</b>	<b>2.30704</b>	<b>1.91269</b>	<b>1.93744</b>	<b>2.08123</b>	<b>1.98721</b>	<b>1.71169</b>	<b>1.50960</b>	<b>1.89544</b>	<b>1.57800</b>	<b>1.50075</b>	<b>1.74572</b>	<b>1.06082</b>

<sup>1</sup> "Other" consists of government enterprise (except state and local government passenger transit) and other input-output special industries. See Ann M. Lawson, "Benchmark Input-Output Accounts for the U.S. Economy, 1992: Make, Use, and Supplementary Tables," *Survey of Current Business* 77 (November 1997): 58-62.

consumers and other final users. Each column shows the commodity delivered to final users, and each row shows the demand for an industry's output in response to a dollar increase in the final demand for a commodity. The coefficients in the table are referred to as industry-by-commodity total requirement coefficients. The table is derived from both the TSAs make and the TSAs use tables.

The last row of the table shows the sum of all the changes in industry outputs that are required to deliver a dollar's worth of goods and services to final users. Because each of these sums is a dollar multiple of the initial dollar spent for an industry group's output, the sum is often referred to as an "output multiplier." These multipliers can be used to estimate the impact of changes in the final demands of commodities on total industry output.<sup>12</sup> Hence, table 5 shows the interdependencies among the producers and consumers in the economy and can be used to derive estimates of the direct and indirect effects of changes in final demands on for-hire and in-house transportation industries and commodities. For example, this table can be used to analyze the relative effects on transportation and nontransportation industries of an increase in personal consumption expenditures or of a change in the composition of fixed investment that results from a change in business activity.<sup>13</sup>

<sup>12</sup> For more information on the derivation of the industry-by-commodity total requirements table, see U.S. Department of Commerce, Bureau of Economic Analysis, *Benchmark Input-Output Accounts of the United States, 1987* (Washington, DC: U.S. Government Printing Office, November 1994), appendix D.

<sup>13</sup> When using the TSAs industry-by-commodity total requirement coefficients to estimate the effects of changes in final demands on industries and commodities, the underlying I-O assumptions have to be kept in mind. For example, the table is based on a set of relationships that exist between producers and consumers in a given year; these relationships assume that technology and relative prices are constant. The inter-industry relationships reflect the average input structure in each industry for that year, but these relationships do not necessarily reflect the input structure of an additional unit of production. There-

## METHODOLOGICAL OVERVIEW

The magnitude of in-house transportation services was determined by first estimating the inputs used by each industry for its in-house transportation activities. These estimates were then used with the I-O make and use tables to derive the TSAs tables. The TSAs use table provides information on the amount of in-house transportation services produced and used by each industry of the economy. The following sections describe these two steps in more detail. The major sources of data are identified in table 6.

### Step 1. Estimating Transportation Inputs

Transportation inputs include both intermediate inputs (such as motor vehicle and gasoline) and value-added inputs (such as labor compensation, capital depreciation, taxes, and corporate profit). The value of these inputs for each industry in the I-O use table is for a combination of all uses. The TSAs transportation estimates were separated from all other uses through the following steps.

- *Identifying the transportation-related inputs.* A set of commodity inputs unique to or mostly used for transportation was identified from the estimates underlying the I-O accounts. These inputs, which are called "transportation-related inputs" (TRIs), consist of motor gasoline, light fuel oil, liquefied petroleum gases, tires, motor vehicle parts, and automotive repair services.
- *Developing industry distribution weights.* Distribution weights were developed that can be used separately or in combination to distribute TRIs commodities to relevant industries. Nine sets of weights were devel-

fore, for analyses that require alternative assumptions, other economic tools may be required. See Lawson, "Benchmark Input-Output Accounts for the U.S. Economy, 1992: Requirements Tables," footnote 2.

Table 6.

**Principal Data Sources**

<b>Data</b>	<b>Sources</b>
Estimates of input-output accounts, 1992	U.S. Department of Commerce, Bureau of Economic Analysis, <i>Benchmark Input-Output Accounts for the U.S. Economy, 1992</i> (forthcoming) and detailed underlying data files for the I-O accounts.
Trucks, truck mileage, fuel use by industry, 1992	U.S. Department of Commerce, Census Bureau, 1992 Census of Transportation, <i>Truck Inventory and Use Survey—United States</i> , May 1995.
Statistics on occupation and industry, 1990	Census Bureau, 1990 Census of Population and Housing, <i>Occupation and Industry—National and State Totals</i> (CD-ROM), March 1995.
Employment of truck drivers by industry, 1992	U.S. Department of Labor, Bureau of Labor Statistics, Employment Projection Division, <i>Industry-Occupation Employment Matrix, 1983–1993</i> (Diskettes).
Energy use, 1992	U.S. Department of Energy, Energy Information Administration, <i>Annual Energy Review</i> , Historical Data for 1949–1996. EIA Website.
Energy use by transportation modes, 1992	U.S. Department of Energy, Oak Ridge National Laboratory, <i>Transportation Energy Data Book: Edition 14</i> , May 1994.
Vehicle-miles of travel by type of vehicles, 1992	U.S. Department of Transportation, Federal Highway Administration, <i>Highway Statistics 1993</i> .

oped using industry-level information for the number of buses, the number of trucks, miles driven by trucks, and fuels used by trucks. These weights were based on several data sources, the most important of which are the Truck Inventory and Use Survey from the Census Bureau and the occupational employment data from the Bureau of Labor Statistics and the Census Bureau.

- *Distributing TRIs.* For each TRIs commodity an estimate was made of its total usage for nontransportation purposes, such as gasoline used for heating or for operating machinery; this nontransportation use was subtracted from the total output of the commodity. The remaining amount of the commodity was then distributed to different transportation modes. Finally, for modes for which the current TSAs provide estimates of in-house transportation, the distribution weights were matched with and applied to the TRIs.

- *Estimating other inputs.* Transportation activities require certain inputs that are not uniquely or mainly used for transportation. For example, office supplies and accounting services are shared by transportation and all other production activities. The transportation use of these commodities was estimated for each industry using the relationships from for-hire transportation industries.<sup>14</sup>

Two assumptions underlie these TSAs procedures:

- the distribution weights selected are reliable predictors of the use of TRIs for in-house transportation, and

<sup>14</sup> Adjustments were made before and after applying the for-hire relationship. First, some commodities, such as advertising and brokerage services, used by for-hire transportation industries, but not by other industries for in-house transportation, were excluded. Second, estimates were made to reflect the total use in the I-O accounts. Third, the estimates of value-added inputs were adjusted to exclude profits.

- the distribution of commodity inputs (except for some value-added inputs) within a for-hire transportation industry is similar to the distribution of these inputs within a nontransportation industry for its transportation-related activities.

### **Step 2. Deriving the TSAs Make and Use Tables**

As noted earlier the TSAs make and use tables are I-O make and use tables that have been modified using the estimates of transportation inputs. First, the estimates of transportation inputs for each industry are arranged in a matrix so that the rows and columns correspond to those in the intermediate industry portion of the I-O use table.<sup>15</sup> Second, the estimates in the transportation input matrix are subtracted from the corresponding elements of the I-O use table, resulting in a residual use table that shows the intermediate and value-added inputs to industries for nontransportation activities. Third, the TSAs make table is derived by adding an additional column and an additional row—representing in-house transportation—to the I-O make table. And, fourth, the TSAs use table is derived by combining the residual use table derived above, an in-house transportation column with row totals from the transportation input matrix, an in-house transportation row with column totals from the transportation input matrix, and the final-demand portion of the I-O use table.

### **TRANSPORTATION SERVICES AS A SHARE OF GDP**

The TSAs can be used to assess the size and impact of transportation on the U.S. econ-

omy. According to the TSAs, in-house transportation activities generated \$121.5 billion of value-added in 1992, and for-hire transportation generated \$191.6 billion. Together, these activities accounted for 5.0 percent of U.S. GDP in 1992—3.1 percent from for-hire and 1.9 percent from in-house transportation services.

### **USE OF TRANSPORTATION SERVICES BY INDUSTRY**

Although the manufacturing industry group was the largest user of all transportation services (\$102 billion in 1992), the wholesale and retail industry group was the largest user of in-house transportation services. In 1992, the wholesale and retail industry group generated and used \$42.8 billion of in-house transportation services, accounting for 25.9 percent of total in-house transportation. In contrast, this industry group used only \$9.0 billion of for-hire transportation services output.<sup>16</sup> The next largest group was services, which used \$42.0 billion, accounting for 25.4 percent of the in-house total; this industry group used only \$21.5 billion of for-hire transportation services. The smallest user of in-house transportation services (excluding the group “other”) was the finance, insurance, and real estate industry group.

Alternatively, measuring the use of in-house transportation as a share of an industry’s total output (in I-O terminology, the direct requirements for in-house transportation) presents a different picture. According to this measure, the construction industry group was the largest user among all industry groups, at 5.7 percent. In contrast, the share

<sup>15</sup> Inputs for for-hire transportation industries in this matrix are all zeros because it is assumed that these industries do not have any in-house transportation activities.

<sup>16</sup> See the section “Conceptual Overview” for an explanation of the different treatment of the uses of in-house and for-hire transportation in the TSAs.

for the wholesale and retail industry group, which was the largest user in absolute terms, was 3.9 percent, less than the share for agriculture (5.5 percent), which was only the fifth largest user of in-house transportation services in absolute terms. The finance, insurance, and real estate industry group had the smallest share.

The same measure for for-hire transportation shows the direct importance of for-hire transportation services in the industries' total output. Except for the transportation industries, manufacturing had the largest direct requirement of for-hire transportation services, at 2.7 percent of its total cost. The industry groups of trade; finance, insurance, and real estate; services; and "other" each had a share of less than 1 percent.

### **TRANSPORTATION SERVICES COST BY COMMODITIES**

---

The use of transportation on an industry basis differs from that on a commodity basis because many industries produce more than one commodity, and many commodities are produced by more than one industry. To analyze the importance of transportation costs in the purchasers' prices of commodities, both in-house transportation costs and for-hire transportation costs were distributed on a commodity-by-commodity basis.<sup>17</sup>

<sup>17</sup> The total direct use of in-house transportation for an industry from the TSAs use table is distributed to the commodities produced by the industry, using the industry's output mix from the I-O make table. Repeating this procedure for every industry results in a table that shows the contributions of in-house transportation within each industry to the output of various commodities, that is, the costs of in-house transportation in the producers' prices of commodities.

The costs of for-hire transportation are distributed to commodities in the same manner. If a commodity is produced in more than one industry, then the commodity will receive the distributed in-house and for-hire transportation costs from more than one industry; the sum of all these costs is the cost of transportation in the producers' prices of that commodity.

Among nontransportation commodity groups, agriculture, forestry, and fisheries had the highest transportation content (8.0 percent), followed by construction (7.7 percent), which reflects the general pattern of transportation use by industry. For both commodity groups, in-house transportation costs had a larger share in the total transportation cost than for-hire transportation costs. The services commodity group had a transportation content of 2.8 percent, of which 1.8 percent was in-house and 1.0 percent was for-hire. The finance, insurance, and real estate services and "other" commodities had the lowest transportation content, at less than 1 percent each.

### **THE MULTIPLIER EFFECT OF TRANSPORTATION SERVICES**

---

The multipliers derived from the TSAs capture the direct and indirect interdependence between transportation and the rest of the economy. For example, to meet a \$1 increase in the final demand for agricultural products would require an increase of 14.2¢ in total transportation services output, while to meet a \$1 increase in the final demand for the output of the services sector would require only a 5.4¢ increase in transportation services. In general, demand for for-hire transportation services are more sensitive to changes in the output levels of goods producing industries, such as manufacturing, while demand for in-house transportation services are more sensitive to changes in the output levels of the service industries, such as the wholesale and retail trade industry.

Changes in demand for for-hire and in-house transportation services also induce changes in the output of other industries. This effect can be measured by the total industry

output multiplier. The pipelines and freight forwarders group had the lowest total industry output multiplier, at 1.7. The multiplier for each of the other transportation groups was above 1.9. Overall, the economy's response to changes in demand for transportation was larger than that for communications and utilities; trade; finance, insurance, and real estate; and services, but less than that for agricultural, construction, and manufacturing commodities.

## FUTURE WORK

---

The TSAs now provide a more comprehensive picture of all for-hire and most in-house transportation activities. In the future, work could proceed in several directions to improve and extend the accounts. This includes the following activities:

- The TSAs could address omissions as additional information becomes available. Currently, the TSAs omit in-house transportation activities of modes other than truck and bus, such as the business use of automobiles, corporate aircraft, and watercraft. When the capital flow table for the 1992 benchmark I-O accounts is published by BEA in early 1999, additional information on the business use of automobiles will be available on which to base estimates of related operating expenses for in-house transportation activities in the TSAs.<sup>18</sup>
- The accounts could be expanded to include the service values of government-owned transportation capital, such as highway infrastructure, and to include the transpor-

tation services provided by households for their own use, such as commuting to and from work in a privately owned automobile. Inclusion of these services in the TSAs would result in the expansion of the production boundary beyond that of the I-O accounts.

- The TSAs could value in-house transportation output as a product of a quantity measure of output and the market price for a similar service. Because the value of in-house transportation output cannot be measured directly, the TSAs currently determine the output of in-house transportation by summing the costs of all intermediate inputs and value-added inputs of compensation, indirect business taxes, and capital consumption allowances that are used for its production. Although this approach is frequently used to measure the value of in-house types of production, the resulting estimates of output are understated because they do not include profits. As a result, such estimates have limited value for productivity analyses and other similar studies. This alternate approach would require the development of quantity and price estimates of for-hire transportation services. Before this approach could be implemented, however, quantity measures for transportation activities at the detailed industry-level would have to be developed.
- The treatment of in-house transportation used by industries in the TSAs could also be improved. Ideally, the TSAs should treat the use of in-house transportation as the I-O accounts treat the use of for-hire transportation, but doing so would require detailed information on the type of commodities carried by in-house trucks and on the origin and destination of the transported commodities.

<sup>18</sup> The capital flow table (CFT) shows industry use of each type of new structure and equipment included in the gross private fixed investment (GPI) category in the I-O use table.

---



# Appendix of Detailed Tables

Table A: Detailed Make of 100 Commodities by 100 Industries .....	22
Table B: Detailed Use of Commodities by Industries .....	42
Table C: Detailed Commodity-by-Industry Direct Requirements .....	66
Table D: Detailed Industry-by-Commodity Total Requirements .....	86





49	General industrial machinery and equipment	—	—	—	—	—	—	—	—	—	—
50	Miscellaneous machinery, except electrical	—	—	—	—	—	—	—	—	—	—
51	Computer and office equipment	—	—	—	—	—	—	—	—	—	—
52	Service industry machinery	—	—	—	—	—	—	—	—	—	—
53	Electrical industrial equipment and apparatus	—	—	—	—	—	—	—	—	—	—
54	Household appliances	—	—	—	—	—	—	—	—	—	—
55	Electric lighting and wiring equipment	—	—	—	—	—	—	—	—	—	—
56	Audio, video, and communication equipment	—	—	—	—	—	—	—	—	—	—
57	Electronic components and accessories	—	—	—	—	—	—	—	—	—	—
58	Miscellaneous electrical machinery and supplies	—	—	—	—	—	—	—	—	—	—
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	—	—	—	—	—	—	—	—	—	—
60	Aircraft and parts	—	—	—	—	—	—	—	—	—	—
61	Other transportation equipment	—	—	—	—	—	—	—	—	—	—
62	Scientific and controlling instruments	—	—	—	—	—	—	—	—	—	—
63	Ophthalmic and photographic equipment	—	—	—	—	—	—	—	—	—	—
64	Miscellaneous manufacturing	—	—	—	—	—	—	—	—	—	—
65A	Railroads and related services; passenger ground transportation	—	—	—	—	—	—	—	—	—	—
65B	Motor freight transportation and warehousing	—	—	—	—	—	—	—	—	—	—
65C	Water transportation	—	—	—	—	—	—	—	—	—	—
65D	Air transportation	—	—	—	—	—	—	—	—	—	—
65E	Pipelines, freight forwarders, and related services	—	—	—	—	—	—	—	—	—	—
65F	State and local passenger transit	—	—	—	—	—	—	—	—	—	—
65G	In-house transportation	—	—	—	—	—	—	—	—	—	—
66	Communications, except radio and TV	—	—	—	—	—	—	—	—	—	—
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	—	—	—	—	—	—	—	—	—	—
68B	Gas production and distribution (utilities)	—	—	—	—	—	—	—	—	—	—
68C	Water and sanitary services	—	—	—	—	—	—	—	—	—	—
69A	Wholesale trade	—	—	—	—	—	—	—	—	—	—
69B	Retail trade	—	—	—	—	—	—	—	—	—	—
70A	Finance	—	—	—	—	—	—	—	—	—	—
70B	Insurance	—	—	—	—	—	—	—	—	—	—
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	—	—	—	—	—	—	—	—	—	—
72A	Hotels and lodging places	—	—	—	—	—	—	—	—	—	—
72B	Personal and repair services (except auto)	—	—	—	—	—	—	—	—	—	—
73A	Computer and data processing services	—	—	—	—	—	—	—	—	—	—
73B	Legal, engineering, accounting, and related services	—	—	—	—	—	—	—	—	—	—
73C	Other business and professional services, except medical	—	—	—	—	—	—	—	—	—	—
73D	Advertising	—	—	—	—	—	—	—	—	—	—
74	Eating and drinking places	—	—	—	—	—	—	—	—	—	—
75	Automotive repair and services	—	—	—	—	—	—	—	—	—	—
76	Amusements	—	—	—	—	—	—	—	—	—	—
77A	Health services	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	—	—	—	—	—	—	—	—	—	—
78	Federal Government enterprises	—	—	—	—	—	—	—	—	—	—
79	State and local government enterprises	—	—	—	—	—	—	—	—	—	—
82	General government industry	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
<b>T</b>	<b>Total commodity output</b>	<b>89,375</b>	<b>104,546</b>	<b>11,865</b>	<b>29,805</b>	<b>10,739</b>	<b>26,917</b>	<b>97,623</b>	<b>12,283</b>	<b>456,949</b>	<b>222,381</b>

Table A (continued).

**Detailed Make of 100 Commodities by 100 Industries**

(Millions of dollars at producers' prices)

KEY: —

Industry number	Commodity number	Ordnance and accessories	Food and kindred products	Tobacco products	Broad and narrow fabrics, yarn and thread mills	Miscellaneous textile goods and floor coverings	Apparel	Miscellaneous fabricated textile products	Lumber and wood products	Furniture and fixtures	Paper and allied products, except containers
		(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20+21)	(22+23)	(24)
1	Livestock and livestock products	—	\$887	—	—	—	—	—	—	—	—
2	Other agricultural products	—	—	—	—	—	—	—	\$135	—	—
3	Forestry and fishery products	—	—	—	—	—	—	—	—	—	—
4	Agricultural, forestry, and fishery services	—	—	—	—	—	—	—	—	—	—
5+6	Metallic ores mining	—	—	—	—	—	—	—	—	—	—
7	Coal mining	—	—	—	—	—	—	—	—	—	—
8	Crude petroleum and natural gas	—	—	—	—	—	—	—	—	—	—
9+10	Nonmetallic minerals mining	—	—	—	—	—	—	—	—	—	—
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	—	—	—	—	—	—	—	—	—	—
13	Ordnance and accessories	\$21,180	—	—	—	—	—	—	—	—	—
14	Food and kindred products	—	407,209	—	—	—	—	\$7	—	—	\$18
15	Tobacco products	—	—	\$40,124	—	—	—	—	—	—	4
16	Broad and narrow fabrics, yarn and thread mills	—	—	—	\$37,131	\$254	\$226	1,675	—	—	1
17	Miscellaneous textile goods and floor coverings	—	—	—	37	16,995	6	118	1	\$1	96
18	Apparel	—	—	—	265	34	68,354	314	—	—	2
19	Miscellaneous fabricated textile products	—	—	—	80	48	13	18,650	4	40	26
20+21	Lumber and wood products	—	1	—	—	—	—	3	86,328	161	24
22+23	Furniture and fixtures	5	—	—	—	—	—	20	127	42,228	11
24	Paper and allied products, except containers	—	—	23	—	239	—	36	112	17	96,241
25	Paperboard containers and boxes	—	7	—	—	—	—	—	9	—	81
26A	Newspapers and periodicals	—	—	—	—	—	—	—	—	—	—
26B	Other printing and publishing	—	100	—	—	—	31	19	1	—	570
27A	Industrial and other chemicals	1	328	—	—	—	3	—	4	2	19
27B	Agricultural fertilizers and chemicals	—	62	—	—	—	—	9	—	—	1
28	Plastics and synthetic materials	—	—	—	—	219	—	—	—	—	—
29A	Drugs	—	38	—	—	—	—	—	—	—	—
29B	Cleaning and toilet preparations	—	49	—	—	—	1	3	—	—	23
30	Paints and allied products	—	—	—	—	—	—	—	—	—	6
31	Petroleum refining and related products	—	—	—	—	—	—	—	—	—	28
32	Rubber and miscellaneous plastics products	5	34	—	5	52	—	48	172	42	454
33+34	Footwear, leather, and leather products	—	9	—	8	—	11	23	1	4	—
35	Glass and glass products	—	—	—	—	—	—	3	3	15	—
36	Stone and clay products	—	1	—	—	69	—	7	14	5	133
37	Primary iron and steel manufacturing	—	—	—	—	—	—	2	—	—	2
38	Primary nonferrous metals manufacturing	—	—	—	2	—	—	—	—	1	—
39	Metal containers	—	—	—	—	—	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	—	—	—	—	—	—	1	71	67	—
41	Screw machine products and stampings	1	—	—	—	—	—	2	3	8	—
42	Other fabricated metal products	4	—	—	—	5	—	8	29	49	229
43	Engines and turbines	—	—	—	—	—	—	—	—	—	—
44+45	Farm, construction, and mining machinery	5	4	—	—	—	—	—	4	6	—
46	Materials handling machinery and equipment	—	4	—	—	—	—	—	1	33	—
47	Metalworking machinery and equipment	—	—	—	—	—	—	—	—	1	—
48	Special industry machinery and equipment	—	15	—	—	2	—	—	—	2	—

49	General industrial machinery and equipment	—	—	—	—	1	—	3	1	—	6
50	Miscellaneous machinery, except electrical	1	—	—	—	—	—	—	—	1	—
51	Computer and office equipment	—	—	—	—	—	—	—	—	—	19
52	Service industry machinery	—	5	—	—	—	—	—	—	41	1
53	Electrical industrial equipment and apparatus	4	—	—	—	—	—	3	—	—	—
54	Household appliances	—	—	—	—	—	—	6	18	5	—
55	Electric lighting and wiring equipment	—	—	—	—	—	—	—	2	2	10
56	Audio, video, and communication equipment	—	—	—	—	—	—	—	—	3	—
57	Electronic components and accessories	—	—	—	—	—	—	—	—	—	—
58	Miscellaneous electrical machinery and supplies	—	—	—	—	—	—	1	—	—	8
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	52	—	—	—	1	—	11	1	9	—
60	Aircraft and parts	418	—	—	—	—	—	—	—	—	—
61	Other transportation equipment	17	—	—	—	—	—	17	37	1	—
62	Scientific and controlling instruments	517	—	—	—	25	—	2	4	70	322
63	Ophthalmic and photographic equipment	—	—	—	—	3	—	1	—	5	150
64	Miscellaneous manufacturing	7	4	—	—	1	27	33	36	30	11
65A	Railroads and related services; passenger ground transportation	—	—	—	—	—	—	—	—	—	—
65B	Motor freight transportation and warehousing	—	—	—	—	—	—	—	—	—	—
65C	Water transportation	—	—	—	—	—	—	—	—	—	—
65D	Air transportation	—	—	—	—	—	—	—	—	—	—
65E	Pipelines, freight forwarders, and related services	—	—	—	—	—	—	—	—	—	—
65F	State and local passenger transit	—	—	—	—	—	—	—	—	—	—
65G	In-house transportation	—	—	—	—	—	—	—	—	—	—
66	Communications, except radio and TV	—	—	—	—	—	—	—	—	—	—
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	—	—	—	—	—	—	—	—	—	—
68B	Gas production and distribution (utilities)	—	—	—	—	—	—	—	—	—	—
68C	Water and sanitary services	—	—	—	—	—	—	—	—	—	—
69A	Wholesale trade	—	—	—	—	—	—	—	—	—	—
69B	Retail trade	—	—	—	—	—	—	—	—	—	—
70A	Finance	—	—	—	—	—	—	—	—	—	—
70B	Insurance	—	—	—	—	—	—	—	—	—	—
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	—	—	—	—	—	—	—	—	—	—
72A	Hotels and lodging places	—	—	—	—	—	—	—	—	—	—
72B	Personal and repair services (except auto)	—	—	—	—	—	—	—	—	—	—
73A	Computer and data processing services	—	—	—	—	—	—	—	—	—	—
73B	Legal, engineering, accounting, and related services	—	—	—	—	—	—	—	—	—	—
73C	Other business and professional services, except medical	—	—	—	—	—	—	—	—	—	—
73D	Advertising	—	—	—	—	—	—	—	—	—	—
74	Eating and drinking places	—	—	—	—	—	—	—	—	—	—
75	Automotive repair and services	—	—	—	—	—	—	—	—	—	—
76	Amusements	—	—	—	—	—	—	—	—	—	—
77A	Health services	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	—	—	—	—	—	—	—	—	—	—
78	Federal Government enterprises	—	—	—	—	—	—	—	—	—	—
79	State and local government enterprises	—	—	—	—	—	—	—	—	—	—
82	General government industry	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
<b>T</b>	<b>Total commodity output</b>	<b>22,217</b>	<b>408,757</b>	<b>40,147</b>	<b>37,528</b>	<b>17,983</b>	<b>68,637</b>	<b>21,021</b>	<b>87,127</b>	<b>42,849</b>	<b>98,496</b>

Table A (continued).

**Detailed Make of 100 Commodities by 100 Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

Industry number	Commodity number	Paperboard containers and boxes	News-papers and periodicals	Other printing and publishing	Industrial and other chemicals	Agricultural fertilizers and chemicals	Plastics and synthetic materials	Drugs	Cleaning and toilet preparations	Paints and allied products	Petroleum refining and related products
		(25)	(26A)	(26B)	(27A)	(27B)	(28)	(29A)	(29B)	(30)	(31)
1	Livestock and livestock products	—	—	—	—	—	—	—	—	—	—
2	Other agricultural products	—	—	—	—	—	—	—	—	—	—
3	Forestry and fishery products	—	—	—	—	—	—	—	—	—	—
4	Agricultural, forestry, and fishery services	—	—	—	—	—	—	—	—	—	—
5 + 6	Metallic ores mining	—	—	—	\$2	—	—	—	—	—	—
7	Coal mining	—	—	—	8	—	—	—	—	—	—
8	Crude petroleum and natural gas	—	—	—	102	—	—	—	—	—	\$7,654
9 + 10	Nonmetallic minerals mining	—	—	—	1,535	—	—	—	—	—	69
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	—	—	—	—	—	—	—	—	—	—
13	Ordinance and accessories	—	—	—	38	—	—	—	\$8	—	—
14	Food and kindred products	\$8	—	—	800	\$2	—	\$179	81	—	—
15	Tobacco products	—	—	—	13	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	—	—	—	—	—	\$2,338	—	—	—	—
17	Miscellaneous textile goods and floor coverings	3	—	—	—	—	116	2	—	—	25
18	Apparel	—	—	—	—	—	3	—	3	—	—
19	Miscellaneous fabricated textile products	—	—	\$18	—	—	—	—	15	—	—
20 + 21	Lumber and wood products	11	—	—	9	7	—	—	—	—	—
22 + 23	Furniture and fixtures	—	—	3	—	—	—	—	—	\$1	—
24	Paper and allied products, except containers	108	—	341	213	—	—	1	333	7	—
25	Paperboard containers and boxes	31,260	—	48	—	—	—	—	3	—	—
26A	Newspapers and periodicals	—	\$18,942	2,376	—	—	—	—	—	—	—
26B	Other printing and publishing	34	953	78,033	9	—	—	—	—	—	—
27A	Industrial and other chemicals	—	—	2	96,890	886	5,575	469	1,468	240	2,136
27B	Agricultural fertilizers and chemicals	—	—	—	1,218	16,041	334	93	44	—	10
28	Plastics and synthetic materials	—	—	—	4,718	235	41,780	137	86	15	17
29A	Drugs	—	—	—	578	173	10	60,829	761	—	—
29B	Cleaning and toilet preparations	—	—	—	944	358	150	340	37,522	38	73
30	Paints and allied products	—	—	—	81	5	114	—	9	13,893	7
31	Petroleum refining and related products	—	—	—	5,318	100	125	3	100	6	139,755
32	Rubber and miscellaneous plastics products	141	—	21	156	26	372	2	31	34	1
33 + 34	Footwear, leather, and leather products	1	—	15	—	—	—	—	—	—	—
35	Glass and glass products	33	—	—	—	—	—	—	—	—	—
36	Stone and clay products	—	—	—	104	2	8	37	27	19	65
37	Primary iron and steel manufacturing	—	—	—	27	5	1	—	—	—	—
38	Primary nonferrous metals manufacturing	—	—	—	187	—	—	—	—	—	—
39	Metal containers	29	—	11	—	—	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	—	—	—	34	—	1	—	—	—	—
41	Screw machine products and stampings	4	—	2	—	—	—	—	—	1	—
42	Other fabricated metal products	106	—	110	3	1	—	—	1	3	—
43	Engines and turbines	—	—	—	—	—	—	—	—	—	—
44 + 45	Farm, construction, and mining machinery	—	—	27	—	—	—	—	—	—	4
46	Materials handling machinery and equipment	—	—	—	—	—	—	—	—	—	—
47	Metalworking machinery and equipment	—	—	1	51	—	—	—	1	—	—
48	Special industry machinery and equipment	—	—	—	26	—	—	—	—	—	—

49	General industrial machinery and equipment	—	—	—	20	—	—	—	—	—	—
50	Miscellaneous machinery, except electrical	—	—	—	—	—	—	—	—	—	—
51	Computer and office equipment	—	—	—	18	—	—	—	—	—	—
52	Service industry machinery	—	—	—	—	—	—	—	26	—	—
53	Electrical industrial equipment and apparatus	—	—	—	—	—	5	—	—	—	15
54	Household appliances	—	—	—	9	—	—	—	1	—	—
55	Electric lighting and wiring equipment	—	—	26	12	—	10	—	—	55	—
56	Audio, video, and communication equipment	—	—	18	—	—	—	—	—	—	—
57	Electronic components and accessories	—	—	2	6	—	—	—	—	—	—
58	Miscellaneous electrical machinery and supplies	—	—	—	—	—	—	—	3	—	—
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	—	—	—	—	—	1	—	—	—	—
60	Aircraft and parts	—	—	—	19	—	—	1	—	—	—
61	Other transportation equipment	—	—	—	—	—	—	—	—	—	—
62	Scientific and controlling instruments	—	—	—	57	1	—	226	15	—	—
63	Ophthalmic and photographic equipment	—	—	17	127	8	—	—	—	67	—
64	Miscellaneous manufacturing	5	—	123	27	—	1	2	19	—	—
65A	Railroads and related services; passenger ground transportation	—	—	—	—	—	—	—	—	—	—
65B	Motor freight transportation and warehousing	—	—	—	—	—	—	—	—	—	—
65C	Water transportation	—	—	—	—	—	—	—	—	—	—
65D	Air transportation	—	—	—	—	—	—	—	—	—	—
65E	Pipelines, freight forwarders, and related services	—	—	—	—	—	—	—	—	—	—
65F	State and local passenger transit	—	—	—	—	—	—	—	—	—	—
65G	In-house transportation	—	—	—	—	—	—	—	—	—	—
66	Communications, except radio and TV	—	—	—	—	—	—	—	—	—	—
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	—	—	—	—	—	—	—	—	—	—
68B	Gas production and distribution (utilities)	—	—	—	—	—	—	—	—	—	—
68C	Water and sanitary services	—	—	—	—	—	—	—	—	—	—
69A	Wholesale trade	—	—	—	—	—	—	—	—	—	—
69B	Retail trade	—	—	—	—	—	—	—	—	—	—
70A	Finance	—	—	—	—	—	—	—	—	—	—
70B	Insurance	—	—	—	—	—	—	—	—	—	—
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	—	—	—	—	—	—	—	—	—	—
72A	Hotels and lodging places	—	—	—	—	—	—	—	—	—	—
72B	Personal and repair services (except auto)	—	—	—	—	—	—	—	—	—	—
73A	Computer and data processing services	—	—	—	—	—	—	—	—	—	—
73B	Legal, engineering, accounting, and related services	—	—	—	—	—	—	—	—	—	—
73C	Other business and professional services, except medical	—	—	8	—	—	—	—	—	—	—
73D	Advertising	—	—	—	—	—	—	—	—	—	—
74	Eating and drinking places	—	—	—	—	—	—	—	—	—	—
75	Automotive repair and services	—	—	—	—	—	—	—	—	—	—
76	Amusements	—	—	—	—	—	—	—	—	—	—
77A	Health services	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	—	—	—	—	—	—	—	—	—	—
78	Federal Government enterprises	—	—	—	—	—	—	—	—	—	—
79	State and local government enterprises	—	—	—	—	—	—	—	—	—	—
82	General government industry	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
<b>T</b>	<b>Total commodity output</b>	<b>31,743</b>	<b>19,895</b>	<b>81,202</b>	<b>113,359</b>	<b>17,850</b>	<b>50,944</b>	<b>62,321</b>	<b>40,557</b>	<b>14,379</b>	<b>149,831</b>

Table A (continued).

**Detailed Make of 100 Commodities by 100 Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

Industry number	Commodity number	Rubber and miscellane-ous plastics products	Footwear, leather, and leather products	Glass and glass products	Stone and clay products	Primary iron and steel manu-facturing	Primary nonferrous metals manu-facturing	Metal containers	Heating, plumb-ing, and fabri-cated structural metal products	Screw machine products and stampings	Other fabri-cated metal products
		(32)	(33 + 34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)
1	Livestock and livestock products	—	—	—	—	—	—	—	—	—	—
2	Other agricultural products	—	—	—	—	—	—	—	—	—	—
3	Forestry and fishery products	—	—	—	—	—	—	—	—	—	—
4	Agricultural, forestry, and fishery services	—	—	—	—	—	—	—	—	—	—
5+6	Metallic ores mining	—	—	—	\$2	—	—	—	—	—	—
7	Coal mining	—	—	—	—	—	—	—	—	—	—
8	Crude petroleum and natural gas	—	—	—	—	—	—	—	—	—	—
9+10	Nonmetallic minerals mining	—	—	—	344	—	—	—	—	—	—
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	—	—	—	—	—	—	—	—	—	—
13	Ordinance and accessories	—	—	—	—	\$12	\$13	—	\$9	\$19	\$4
14	Food and kindred products	\$27	\$143	—	—	—	—	\$3	—	—	—
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	2	2	—	—	—	—	—	—	—	7
17	Miscellaneous textile goods and floor coverings	99	29	—	—	—	1	—	—	—	5
18	Apparel	37	42	—	—	—	—	—	—	—	9
19	Miscellaneous fabricated textile products	57	12	—	—	—	—	—	1	2	26
20+21	Lumber and wood products	79	—	\$61	7	—	—	—	79	3	28
22+23	Furniture and fixtures	67	1	97	8	17	8	7	37	11	107
24	Paper and allied products, except containers	923	—	—	17	—	—	—	—	3	259
25	Paperboard containers and boxes	303	—	—	—	—	—	29	—	1	2
26A	Newspapers and periodicals	—	—	—	—	—	—	—	—	—	—
26B	Other printing and publishing	14	41	—	3	—	—	155	—	1	67
27A	Industrial and other chemicals	294	—	7	117	26	1,222	—	2	—	14
27B	Agricultural fertilizers and chemicals	1	1	—	1	—	—	—	1	—	1
28	Plastics and synthetic materials	788	—	—	3	2	—	—	—	—	—
29A	Drugs	2	—	—	—	—	—	—	—	—	—
29B	Cleaning and toilet preparations	17	—	—	14	—	—	—	—	—	1
30	Paints and allied products	3	—	—	22	—	—	—	—	—	—
31	Petroleum refining and related products	13	—	16	80	4	—	—	—	—	—
32	Rubber and miscellaneous plastics products	107,428	17	59	6	29	105	10	118	120	242
33+34	Footwear, leather, and leather products	33	9,226	—	—	—	—	—	—	1	7
35	Glass and glass products	64	—	17,551	6	—	—	—	10	35	5
36	Stone and clay products	125	—	49	41,399	13	34	—	29	26	33
37	Primary iron and steel manufacturing	3	—	—	9	72,986	452	—	121	18	2,182
38	Primary nonferrous metals manufacturing	39	—	60	8	342	62,324	—	—	38	214
39	Metal containers	13	—	—	—	—	1	12,986	3	1	21
40	Heating, plumbing, and fabricated structural metal products	412	—	23	34	43	80	28	47,327	176	439
41	Screw machine products and stampings	59	2	6	8	6	19	14	40	32,765	158
42	Other fabricated metal products	253	12	4	34	90	76	4	268	185	51,070
43	Engines and turbines	—	—	—	—	12	—	—	93	5	15
44+45	Farm, construction, and mining machinery	3	—	—	—	71	—	—	68	336	190
46	Materials handling machinery and equipment	13	—	—	—	2	—	—	36	2	21
47	Metalworking machinery and equipment	57	—	—	47	54	8	—	23	87	128
48	Special industry machinery and equipment	34	—	1	4	13	3	—	18	3	37

49	General industrial machinery and equipment	20	—	—	6	50	1	—	94	16	168
50	Miscellaneous machinery, except electrical	22	—	1	—	26	7	2	197	95	348
51	Computer and office equipment	13	—	—	9	6	—	—	1	9	13
52	Service industry machinery	18	—	—	—	32	1	—	192	33	64
53	Electrical industrial equipment and apparatus	6	—	—	9	1	1	—	7	23	12
54	Household appliances	3	—	13	—	—	1	—	30	52	1
55	Electric lighting and wiring equipment	33	2	20	1	75	21	—	2	2	74
56	Audio, video, and communication equipment	1	—	—	9	—	—	—	21	12	4
57	Electronic components and accessories	43	—	1	—	5	61	—	1	31	97
58	Miscellaneous electrical machinery and supplies	24	—	—	10	—	306	—	3	6	12
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	375	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	8	1	—	29	2	51	—	49	33	42
60	Aircraft and parts	35	—	—	—	2	7	—	14	2	111
61	Other transportation equipment	19	—	—	—	—	—	—	110	5	2
62	Scientific and controlling instruments	91	1	12	3	1	7	—	38	21	196
63	Ophthalmic and photographic equipment	82	—	—	1	—	—	—	1	4	—
64	Miscellaneous manufacturing	133	6	—	4	—	3	—	7	7	82
65A	Railroads and related services; passenger ground transportation	—	—	—	—	—	—	—	—	—	—
65B	Motor freight transportation and warehousing	—	—	—	—	—	—	—	—	—	—
65C	Water transportation	—	—	—	—	—	—	—	—	—	—
65D	Air transportation	—	—	—	—	—	—	—	—	—	—
65E	Pipelines, freight forwarders, and related services	—	—	—	—	—	—	—	—	—	—
65F	State and local passenger transit	—	—	—	—	—	—	—	—	—	—
65G	In-house transportation	—	—	—	—	—	—	—	—	—	—
66	Communications, except radio and TV	—	—	—	—	—	—	—	—	—	—
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	—	—	—	—	—	—	—	—	—	—
68B	Gas production and distribution (utilities)	—	—	—	—	—	—	—	—	—	—
68C	Water and sanitary services	—	—	—	—	—	—	—	—	—	—
69A	Wholesale trade	—	—	—	—	—	—	—	—	—	—
69B	Retail trade	—	—	—	—	—	—	—	—	—	—
70A	Finance	—	—	—	—	—	—	—	—	—	—
70B	Insurance	—	—	—	—	—	—	—	—	—	—
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	—	—	—	—	—	—	—	—	—	—
72A	Hotels and lodging places	—	—	—	—	—	—	—	—	—	—
72B	Personal and repair services (except auto)	—	—	—	—	—	—	—	—	—	—
73A	Computer and data processing services	—	—	—	—	—	—	—	—	—	—
73B	Legal, engineering, accounting, and related services	—	—	—	—	—	—	—	—	—	—
73C	Other business and professional services, except medical	—	—	—	—	—	—	—	—	—	—
73D	Advertising	—	—	—	—	—	—	—	—	—	—
74	Eating and drinking places	—	—	—	—	—	—	—	—	—	—
75	Automotive repair and services	—	—	—	—	—	—	—	—	—	—
76	Amusements	—	—	—	—	—	—	—	—	—	—
77A	Health services	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	—	—	—	—	—	—	—	—	—	—
78	Federal Government enterprises	—	—	—	—	—	—	—	—	—	—
79	State and local government enterprises	—	—	—	37	—	—	—	—	—	—
82	General government industry	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
<b>T</b>	<b>Total commodity output</b>	<b>111,813</b>	<b>9,538</b>	<b>17,981</b>	<b>42,291</b>	<b>73,922</b>	<b>64,813</b>	<b>13,238</b>	<b>49,050</b>	<b>34,564</b>	<b>56,518</b>

Table A (continued).

**Detailed Make of 100 Commodities by 100 Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

Industry number	Commodity number	Engines and turbines	Farm, construction, and mining machinery	Materials handling machinery and equipment	Metalworking machinery and equipment	Special industry machinery and equipment	General industrial machinery and equipment	Miscellaneous machinery, except electrical	Computer and office equipment	Service industry machinery	Electrical industrial equipment and apparatus
		(43)	(44 + 45)	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)
1	Livestock and livestock products	—	—	—	—	—	—	—	—	—	—
2	Other agricultural products	—	—	—	—	—	—	—	—	—	—
3	Forestry and fishery products	—	—	—	—	—	—	—	—	—	—
4	Agricultural, forestry, and fishery services	—	—	—	—	—	—	—	—	—	—
5 + 6	Metallic ores mining	—	—	—	—	—	—	—	—	—	—
7	Coal mining	—	—	—	—	—	—	—	—	—	—
8	Crude petroleum and natural gas	—	—	—	—	—	—	—	—	—	—
9 + 10	Nonmetallic minerals mining	—	—	—	—	—	—	—	—	—	—
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	—	—	—	—	—	—	—	—	—	—
13	Ordnance and accessories	—	\$1	\$11	\$17	\$4	\$6	\$6	—	\$22	\$1
14	Food and kindred products	—	—	—	—	1	—	—	—	4	—
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	—	—	—	—	—	—	—	—	—	—
17	Miscellaneous textile goods and floor coverings	—	—	—	—	—	—	—	—	—	—
18	Apparel	—	—	—	—	12	—	—	—	—	—
19	Miscellaneous fabricated textile products	—	—	—	—	—	—	—	\$2	—	—
20 + 21	Lumber and wood products	—	—	—	—	—	—	—	1	—	—
22 + 23	Furniture and fixtures	—	12	23	2	—	1	2	—	22	2
24	Paper and allied products, except containers	—	—	1	—	—	1	—	11	3	1
25	Paperboard containers and boxes	—	—	—	7	—	1	—	17	—	—
26A	Newspapers and periodicals	—	—	—	—	—	—	—	—	—	—
26B	Other printing and publishing	—	—	—	2	14	4	—	11	—	—
27A	Industrial and other chemicals	—	36	—	4	11	—	—	—	1	—
27B	Agricultural fertilizers and chemicals	—	—	—	—	—	9	—	—	1	—
28	Plastics and synthetic materials	—	—	—	—	—	4	—	—	—	—
29A	Drugs	—	—	—	—	1	—	—	—	—	—
29B	Cleaning and toilet preparations	—	—	—	—	1	1	—	—	8	—
30	Paints and allied products	—	—	—	—	7	1	—	—	—	3
31	Petroleum refining and related products	—	5	—	—	—	—	—	—	1	—
32	Rubber and miscellaneous plastics products	\$3	26	3	565	44	99	18	—	6	45
33 + 34	Footwear, leather, and leather products	—	—	—	—	1	—	—	—	—	—
35	Glass and glass products	—	—	—	3	—	—	—	—	1	1
36	Stone and clay products	—	8	—	81	3	—	1	—	4	7
37	Primary iron and steel manufacturing	—	21	—	189	3	21	18	4	—	9
38	Primary nonferrous metals manufacturing	—	1	—	197	4	—	9	—	1	—
39	Metal containers	—	—	—	—	—	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	7	36	37	70	47	99	133	2	55	4
41	Screw machine products and stampings	1	23	3	657	4	51	92	2	17	1
42	Other fabricated metal products	1	46	24	162	58	143	271	1	26	93
43	Engines and turbines	15,965	12	—	7	2	94	63	—	—	431
44 + 45	Farm, construction, and mining machinery	107	30,055	136	126	21	133	95	—	12	27
46	Materials handling machinery and equipment	—	65	7,773	28	28	73	13	1	7	26
47	Metalworking machinery and equipment	—	243	31	24,194	146	85	225	1	5	55
48	Special industry machinery and equipment	1	54	88	137	19,302	211	58	3	85	11



49	General industrial machinery and equipment	221	108	63	90	183	28,058	137	—	169	104
50	Miscellaneous machinery, except electrical	31	8	5	239	20	55	23,383	—	3	144
51	Computer and office equipment	1	1	—	5	1	1	14	58,040	—	19
52	Service industry machinery	2	4	9	4	64	122	13	4	24,998	9
53	Electrical industrial equipment and apparatus	26	15	4	26	2	144	2	29	17	26,759
54	Household appliances	—	4	—	23	1	12	—	—	182	174
55	Electric lighting and wiring equipment	—	—	4	34	6	8	137	34	—	203
56	Audio, video, and communication equipment	—	1	5	2	1	—	—	298	—	38
57	Electronic components and accessories	—	—	—	4	113	3	4	2,816	—	118
58	Miscellaneous electrical machinery and supplies	2	—	—	6	—	9	7	17	3	38
59A	Motor vehicles (passenger cars and trucks)	20	26	—	20	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	531	50	40	54	—	62	59	5	138	47
60	Aircraft and parts	784	1	—	19	5	27	95	3	3	2
61	Other transportation equipment	39	57	10	8	4	1	37	3	—	68
62	Scientific and controlling instruments	153	7	20	58	93	109	53	70	4	133
63	Ophthalmic and photographic equipment	—	—	—	—	9	11	—	688	—	—
64	Miscellaneous manufacturing	—	20	—	6	2	19	1	25	3	1
65A	Railroads and related services; passenger ground transportation	—	—	—	—	—	—	—	—	—	—
65B	Motor freight transportation and warehousing	—	—	—	—	—	—	—	—	—	—
65C	Water transportation	—	—	—	—	—	—	—	—	—	—
65D	Air transportation	—	—	—	—	—	—	—	—	—	—
65E	Pipelines, freight forwarders, and related services	—	—	—	—	—	—	—	—	—	—
65F	State and local passenger transit	—	—	—	—	—	—	—	—	—	—
65G	In-house transportation	—	—	—	—	—	—	—	—	—	—
66	Communications, except radio and TV	—	—	—	—	—	—	—	—	—	—
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	—	—	—	—	—	—	—	—	—	—
68B	Gas production and distribution (utilities)	—	—	—	—	—	—	—	—	—	—
68C	Water and sanitary services	—	—	—	—	—	—	—	—	—	—
69A	Wholesale trade	—	—	—	—	—	—	—	—	—	—
69B	Retail trade	—	—	—	—	—	—	—	—	—	—
70A	Finance	—	—	—	—	—	—	—	—	—	—
70B	Insurance	—	—	—	—	—	—	—	—	—	—
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	—	—	—	—	—	—	—	—	—	—
72A	Hotels and lodging places	—	—	—	—	—	—	—	—	—	—
72B	Personal and repair services (except auto)	—	—	—	—	—	—	—	—	—	—
73A	Computer and data processing services	—	—	—	—	—	—	—	—	—	—
73B	Legal, engineering, accounting, and related services	—	—	—	—	—	—	—	—	—	—
73C	Other business and professional services, except medical	—	—	—	—	—	—	—	—	—	—
73D	Advertising	—	—	—	—	—	—	—	—	—	—
74	Eating and drinking places	—	—	—	—	—	—	—	—	—	—
75	Automotive repair and services	—	—	—	—	—	—	—	—	—	—
76	Amusements	—	—	—	—	—	—	—	—	—	—
77A	Health services	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	—	—	—	—	—	—	—	—	—	—
78	Federal Government enterprises	—	—	—	—	—	—	—	—	—	—
79	State and local government enterprises	—	—	—	—	—	—	—	—	—	—
82	General government industry	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
T	<b>Total commodity output</b>	<b>17,895</b>	<b>30,946</b>	<b>8,290</b>	<b>27,046</b>	<b>20,218</b>	<b>29,678</b>	<b>24,946</b>	<b>62,088</b>	<b>25,801</b>	<b>28,574</b>

Table A (continued).

**Detailed Make of 100 Commodities by 100 Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

Industry number	Commodity number	Household appliances	Electric lighting and wiring equipment	Audio, video, and communication equipment	Electronic components and accessories	Miscellaneous electrical machinery and supplies	Motor vehicles (passenger cars and trucks)	Truck and bus bodies, trailers, and motor vehicles parts	Aircraft and parts	Other transportation equipment	Scientific and controlling instruments
		(54)	(55)	(56)	(57)	(58)	(59A)	(59B)	(60)	(61)	(62)
1	Livestock and livestock products	—	—	—	—	—	—	—	—	—	—
2	Other agricultural products	—	—	—	—	—	—	—	—	—	—
3	Forestry and fishery products	—	—	—	—	—	—	—	—	—	—
4	Agricultural, forestry, and fishery services	—	—	—	—	—	—	—	—	—	—
5+6	Metallic ores mining	—	—	—	—	—	—	—	—	—	—
7	Coal mining	—	—	—	—	—	—	—	—	—	—
8	Crude petroleum and natural gas	—	—	—	—	—	—	—	—	—	—
9+10	Nonmetallic minerals mining	—	—	—	—	—	—	—	—	—	—
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	—	—	—	—	—	—	—	—	—	—
13	Ordnance and accessories	—	—	\$116	\$16	\$47	—	\$8	\$2,986	—	\$1,235
14	Food and kindred products	—	—	—	—	—	—	—	—	—	—
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	—	—	—	—	—	—	—	—	—	10
17	Miscellaneous textile goods and floor coverings	—	—	—	—	—	—	—	—	—	26
18	Apparel	—	—	—	—	—	—	—	—	—	49
19	Miscellaneous fabricated textile products	\$5	—	—	—	—	—	—	—	—	3
20+21	Lumber and wood products	—	\$2	—	8	—	—	—	—	—	3
22+23	Furniture and fixtures	17	31	12	22	—	—	5	—	\$4	14
24	Paper and allied products, except containers	—	—	12	—	371	—	—	—	—	151
25	Paperboard containers and boxes	—	—	—	—	—	—	—	—	—	—
26A	Newspapers and periodicals	—	—	—	—	—	—	—	—	—	14
26B	Other printing and publishing	—	—	—	1	—	—	—	—	—	10
27A	Industrial and other chemicals	—	2	—	8	3	—	—	—	—	17
27B	Agricultural fertilizers and chemicals	—	—	—	—	1	—	—	—	—	—
28	Plastics and synthetic materials	—	—	—	—	—	—	—	—	—	—
29A	Drugs	—	—	—	—	—	—	—	—	—	240
29B	Cleaning and toilet preparations	4	—	—	—	4	—	—	—	—	20
30	Paints and allied products	—	—	—	—	—	—	29	—	—	—
31	Petroleum refining and related products	—	—	—	—	—	—	—	—	—	—
32	Rubber and miscellaneous plastics products	116	150	1	84	8	—	26	6	5	107
33+34	Footwear, leather, and leather products	—	—	—	—	—	—	—	—	—	13
35	Glass and glass products	—	5	—	—	—	—	25	1	—	37
36	Stone and clay products	—	9	—	28	17	—	41	5	—	22
37	Primary iron and steel manufacturing	—	173	—	5	—	—	175	—	—	62
38	Primary nonferrous metals manufacturing	—	13	143	106	12	—	—	3	—	7
39	Metal containers	—	—	—	—	—	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	97	7	—	12	6	—	39	5	21	22
41	Screw machine products and stampings	60	13	4	16	2	—	295	—	9	11
42	Other fabricated metal products	3	47	—	28	3	—	105	71	22	254
43	Engines and turbines	—	—	—	—	3	—	170	148	5	2
44+45	Farm, construction, and mining machinery	3	58	—	—	1	—	137	11	275	13
46	Materials handling machinery and equipment	—	1	—	—	—	—	8	1	12	—
47	Metalworking machinery and equipment	79	15	—	12	7	—	9	3	4	30
48	Special industry machinery and equipment	25	7	—	30	4	—	10	—	—	28

49	General industrial machinery and equipment	4	16	—	21	5	—	93	5	2	55
50	Miscellaneous machinery, except electrical	—	—	—	7	213	\$7	172	37	4	25
51	Computer and office equipment	—	4	83	3,683	267	—	—	—	—	36
52	Service industry machinery	83	3	7	13	4	—	633	—	7	18
53	Electrical industrial equipment and apparatus	7	185	23	162	100	—	64	16	1	139
54	Household appliances	16,033	16	9	—	6	—	20	—	—	9
55	Electric lighting and wiring equipment	3	17,802	64	170	12	8	161	2	—	98
56	Audio, video, and communication equipment	268	66	48,977	933	158	—	50	4	—	1,225
57	Electronic components and accessories	6	95	135	67,069	105	—	—	—	—	214
58	Miscellaneous electrical machinery and supplies	11	118	261	100	18,906	—	236	29	3	786
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	147,890	2,363	—	20	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	—	9	126	238	458	1,765	76,069	34	39	20
60	Aircraft and parts	—	2	59	2	11	—	100	98,325	48	1,606
61	Other transportation equipment	—	—	—	—	19	8	62	2	29,393	1
62	Scientific and controlling instruments	8	197	911	521	291	—	182	431	1	100,484
63	Ophthalmic and photographic equipment	—	2	20	—	53	—	—	—	—	738
64	Miscellaneous manufacturing	1	7	18	3	6	6	—	—	32	61
65A	Railroads and related services; passenger ground transportation	—	—	—	—	—	—	—	—	—	—
65B	Motor freight transportation and warehousing	—	—	—	—	—	—	—	—	—	—
65C	Water transportation	—	—	—	—	—	—	—	—	—	—
65D	Air transportation	—	—	—	—	—	—	—	—	—	—
65E	Pipelines, freight forwarders, and related services	—	—	—	—	—	—	—	—	—	—
65F	State and local passenger transit	—	—	—	—	—	—	—	—	—	—
65G	In-house transportation	—	—	—	—	—	—	—	—	—	—
66	Communications, except radio and TV	—	—	—	—	—	—	—	—	—	—
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	—	—	—	—	—	—	—	—	—	—
68B	Gas production and distribution (utilities)	—	—	—	—	—	—	—	—	—	—
68C	Water and sanitary services	—	—	—	—	—	—	—	—	—	—
69A	Wholesale trade	—	—	—	—	—	—	—	—	—	—
69B	Retail trade	—	—	—	—	—	—	—	—	—	—
70A	Finance	—	—	—	—	—	—	—	—	—	—
70B	Insurance	—	—	—	—	—	—	—	—	—	—
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	—	—	—	—	—	—	—	—	—	—
72A	Hotels and lodging places	—	—	—	—	—	—	—	—	—	—
72B	Personal and repair services (except auto)	—	—	—	—	—	—	—	—	—	—
73A	Computer and data processing services	—	—	—	—	—	—	—	—	—	—
73B	Legal, engineering, accounting, and related services	—	—	—	—	—	—	—	—	—	—
73C	Other business and professional services, except medical	—	—	—	—	—	—	—	—	—	—
73D	Advertising	—	—	—	—	—	—	—	—	—	—
74	Eating and drinking places	—	—	—	—	—	—	—	—	—	—
75	Automotive repair and services	—	—	—	—	—	—	—	—	—	—
76	Amusements	—	—	—	—	—	—	—	—	—	—
77A	Health services	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	—	—	—	—	—	—	—	—	—	—
78	Federal Government enterprises	—	—	—	—	—	—	—	—	—	—
79	State and local government enterprises	—	—	—	—	—	—	—	—	—	—
82	General government industry	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
<b>T</b>	<b>Total commodity output</b>	<b>16,833</b>	<b>19,055</b>	<b>50,981</b>	<b>73,298</b>	<b>21,103</b>	<b>149,684</b>	<b>81,258</b>	<b>102,154</b>	<b>29,907</b>	<b>107,915</b>



49	General industrial machinery and equipment	—	16	—	—	—	—	—	—	—	—	—
50	Miscellaneous machinery, except electrical	—	1	—	—	—	—	—	—	—	—	—
51	Computer and office equipment	88	85	—	—	—	—	—	—	—	—	—
52	Service industry machinery	—	4	—	—	—	—	—	—	—	—	—
53	Electrical industrial equipment and apparatus	—	2	—	—	—	—	—	—	—	—	—
54	Household appliances	6	2	—	—	—	—	—	—	—	—	—
55	Electric lighting and wiring equipment	7	8	—	—	—	—	—	—	—	—	—
56	Audio, video, and communication equipment	—	12	—	—	—	—	—	—	—	—	—
57	Electronic components and accessories	6	5	—	—	—	—	—	—	—	—	—
58	Miscellaneous electrical machinery and supplies	301	17	—	—	—	—	—	—	—	—	—
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	—	1	—	—	—	—	—	—	—	—	—
60	Aircraft and parts	—	8	—	—	—	—	—	—	—	—	—
61	Other transportation equipment	—	69	—	—	—	—	—	—	—	—	—
62	Scientific and controlling instruments	103	42	—	—	—	—	—	—	—	—	—
63	Ophthalmic and photographic equipment	22,143	1	—	—	—	—	—	—	—	—	—
64	Miscellaneous manufacturing	6	38,127	—	—	—	—	—	—	—	—	—
65A	Railroads and related services; passenger ground transportation	—	—	55,576	174	—	—	—	—	—	—	—
65B	Motor freight transportation and warehousing	—	—	—	155,590	—	—	—	—	—	—	—
65C	Water transportation	—	—	—	—	\$32,440	—	—	—	—	—	—
65D	Air transportation	—	—	—	—	—	\$94,141	—	—	—	—	—
65E	Pipelines, freight forwarders, and related services	—	—	542	1,320	194	2,632	\$28,928	—	—	—	—
65F	State and local passenger transit	—	—	5,876	—	—	—	—	—	—	—	—
65G	In-house transportation	—	—	—	—	—	—	—	\$165,461	—	—	—
66	Communications, except radio and TV	—	—	—	—	—	—	—	—	\$205,941	—	—
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	\$2,674	—
68A	Electric services (utilities)	—	—	—	—	—	—	—	—	—	—	—
68B	Gas production and distribution (utilities)	—	—	—	—	—	—	—	—	—	—	—
68C	Water and sanitary services	—	—	—	—	—	—	—	—	—	—	—
69A	Wholesale trade	—	—	—	—	—	—	—	—	—	—	—
69B	Retail trade	—	—	—	—	—	—	—	—	—	—	—
70A	Finance	—	—	—	—	—	—	—	—	—	—	—
70B	Insurance	—	—	—	—	—	—	—	—	—	—	—
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	—	—	—	—	—	—	—	—	—	—	—
72A	Hotels and lodging places	—	—	—	—	—	—	—	—	—	—	—
72B	Personal and repair services (except auto)	—	—	—	—	—	—	—	—	—	—	—
73A	Computer and data processing services	—	—	—	—	—	—	—	—	—	—	—
73B	Legal, engineering, accounting, and related services	—	—	—	—	—	—	—	—	—	—	—
73C	Other business and professional services, except medical	—	—	—	—	—	—	—	38	—	—	—
73D	Advertising	—	—	—	—	—	—	—	—	—	—	—
74	Eating and drinking places	—	—	—	—	—	—	—	—	—	—	—
75	Automotive repair and services	—	—	—	15	—	—	—	—	—	—	—
76	Amusements	—	—	—	—	—	—	—	—	—	—	—
77A	Health services	—	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	—	—	—	—	—	—	—	—	—	—	—
78	Federal Government enterprises	—	—	—	—	—	—	—	—	—	—	—
79	State and local government enterprises	—	—	64	—	1,713	2,046	—	—	—	—	—
82	General government industry	—	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—	—
<b>T</b>	<b>Total commodity output</b>	<b>22,745</b>	<b>39,450</b>	<b>62,058</b>	<b>157,110</b>	<b>34,347</b>	<b>98,819</b>	<b>28,966</b>	<b>165,461</b>	<b>205,941</b>	<b>2,674</b>	

Table A: Detailed Make of 100 Commodities by 100 Industries ▲ 35



49	General industrial machinery and equipment										
50	Miscellaneous machinery, except electrical										
51	Computer and office equipment										
52	Service industry machinery										
53	Electrical industrial equipment and apparatus										
54	Household appliances										
55	Electric lighting and wiring equipment										
56	Audio, video, and communication equipment										
57	Electronic components and accessories										
58	Miscellaneous electrical machinery and supplies										
59A	Motor vehicles (passenger cars and trucks)										
59B	Truck and bus bodies, trailers, and motor vehicles parts										
60	Aircraft and parts										
61	Other transportation equipment										
62	Scientific and controlling instruments										
63	Ophthalmic and photographic equipment										
64	Miscellaneous manufacturing										
65A	Railroads and related services; passenger ground transportation										
65B	Motor freight transportation and warehousing			\$11,363							
65C	Water transportation										
65D	Air transportation										
65E	Pipelines, freight forwarders, and related services										
65F	State and local passenger transit										
65G	In-house transportation										
66	Communications, except radio and TV										
67	Radio and TV broadcasting										
68A	Electric services (utilities)	\$170,428		468							
68B	Gas production and distribution (utilities)		92,953	204							
68C	Water and sanitary services			18,644							
69A	Wholesale trade				\$568,970						
69B	Retail trade					\$522,519					
70A	Finance					\$390,710		\$448			
70B	Insurance							231,097			
71A	Owner-occupied dwellings							\$457,250			
71B	Real estate and royalties							229	\$549,884		
72A	Hotels and lodging places								666	\$58,936	
72B	Personal and repair services (except auto)										
73A	Computer and data processing services										
73B	Legal, engineering, accounting, and related services										
73C	Other business and professional services, except medical										
73D	Advertising										
74	Eating and drinking places										
75	Automotive repair and services										
76	Amusements										
77A	Health services										
77B	Educational and social services, and membership organizations										
78	Federal Government enterprises	6,504				2,092		-177		422	
79	State and local government enterprises	18,763	3,159	19,586		1,567	64	57		8,766	
82	General government industry										
84	Household industry										
85	Inventory valuation adjustment										
<b>T</b>	<b>Total commodity output</b>	<b>195,695</b>	<b>96,155</b>	<b>50,265</b>	<b>568,970</b>	<b>526,178</b>	<b>390,774</b>	<b>231,654</b>	<b>457,250</b>	<b>559,738</b>	<b>58,936</b>

Table A: Detailed Make of 100 Commodities by 100 Industries ▲ 37





49	General industrial machinery and equipment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
50	Miscellaneous machinery, except electrical	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
51	Computer and office equipment	—	\$1,505	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
52	Service industry machinery	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
53	Electrical industrial equipment and apparatus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
54	Household appliances	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
55	Electric lighting and wiring equipment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
56	Audio, video, and communication equipment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
57	Electronic components and accessories	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	\$49
58	Miscellaneous electrical machinery and supplies	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
60	Aircraft and parts	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
61	Other transportation equipment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
62	Scientific and controlling instruments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
63	Ophthalmic and photographic equipment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
64	Miscellaneous manufacturing	—	—	—	—	—	—	—	—	—	2,401	—	—	—	—	—	—	—	—	—	—
65A	Railroads and related services; passenger ground transportation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65B	Motor freight transportation and warehousing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65C	Water transportation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65D	Air transportation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65E	Pipelines, freight forwarders, and related services	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65F	State and local passenger transit	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65G	In-house transportation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
66	Communications, except radio and TV	—	—	—	—	—	—	—	—	—	—	2,153	—	—	—	—	—	—	—	—	—
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	26,685	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
68B	Gas production and distribution (utilities)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
68C	Water and sanitary services	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
69A	Wholesale trade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
69B	Retail trade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
70A	Finance	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	\$25,114
70B	Insurance	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
72A	Hotels and lodging places	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
72B	Personal and repair services (except auto)	\$91,564	—	—	—	—	—	—	—	—	208	—	—	—	—	—	—	—	—	—	—
73A	Computer and data processing services	—	115,730	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
73B	Legal, engineering, accounting, and related services	—	387	\$251,701	—	—	—	—	—	—	4,273	—	—	—	—	—	—	—	—	—	—
73C	Other business and professional services, except medical	449	416	896	—	—	—	—	—	—	327,026	11,447	—	—	—	—	—	—	—	—	72 93
73D	Advertising	—	—	—	—	—	—	—	—	—	214	29,651	—	—	—	—	—	—	—	—	—
74	Eating and drinking places	—	—	—	—	—	—	—	—	—	—	—	\$280,187	—	—	—	—	—	—	—	—
75	Automotive repair and services	—	—	—	—	—	—	—	—	—	131	—	—	—	—	—	—	—	—	—	138,235
76	Amusements	—	—	—	—	—	—	—	—	—	74	18	—	—	—	—	—	—	—	—	121,276
77A	Health services	—	—	—	—	—	—	—	—	—	379	—	—	—	—	—	—	—	—	—	\$564,607
77B	Educational and social services, and membership organizations	—	—	—	—	—	—	—	—	—	—	701	—	—	—	—	—	—	—	—	—
78	Federal Government enterprises	—	3	—	—	—	—	—	—	—	—	—	1,830	—	—	—	—	—	—	—	98
79	State and local government enterprises	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	987 383
82	General government industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T	<b>Total commodity output</b>	<b>92,016</b>	<b>118,038</b>	<b>252,597</b>	<b>332,385</b>	<b>138,530</b>	<b>282,017</b>	<b>164,408</b>	<b>122,937</b>	<b>564,607</b>	<b>227,631</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

Table A: Detailed Make of 100 Commodities by 100 Industries ▲ 39

Table A (continued).

**Detailed Make of 100 Commodities by 100 Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

Industry number	Commodity number	Federal Government enterprises	State and local government enterprises	Scrap, used and second-hand goods	General government industry	Household industry	Inventory valuation adjustment	Total industry output
		(78)	(79)	(81)	(82)	(84)	(85)	
1	Livestock and livestock products	—	—	—	—	—	—	\$91,504
2	Other agricultural products	—	—	—	—	—	—	108,294
3	Forestry and fishery products	—	—	—	—	—	—	9,613
4	Agricultural, forestry, and fishery services	—	—	—	—	—	—	28,251
5 + 6	Metallic ores mining	—	—	—	—	—	—	10,749
7	Coal mining	—	—	—	—	—	—	26,917
8	Crude petroleum and natural gas	—	—	—	—	—	—	105,369
9 + 10	Nonmetallic minerals mining	—	—	—	—	—	—	13,682
11	New construction	—	—	—	—	—	—	456,949
12	Maintenance and repair construction	—	—	—	—	—	—	222,381
13	Ordnance and accessories	—	—	—	—	—	—	25,760
14	Food and kindred products	—	—	—	—	—	—	408,482
15	Tobacco products	—	—	\$5	—	—	—	40,146
16	Broad and narrow fabrics, yarn and thread mills	—	—	—	—	—	—	41,646
17	Miscellaneous textile goods and floor coverings	—	—	—	—	—	—	17,580
18	Apparel	—	—	—	—	—	—	69,132
19	Miscellaneous fabricated textile products	—	—	—	—	—	—	19,055
20 + 21	Lumber and wood products	—	—	36	—	—	—	86,865
22 + 23	Furniture and fixtures	—	—	12	—	—	—	42,977
24	Paper and allied products, except containers	—	—	79	—	—	—	99,613
25	Paperboard containers and boxes	—	—	132	—	—	—	31,938
26A	Newspapers and periodicals	—	—	19	—	—	—	56,711
26B	Other printing and publishing	—	—	72	—	—	—	110,564
27A	Industrial and other chemicals	—	—	57	—	—	—	109,880
27B	Agricultural fertilizers and chemicals	—	—	2	—	—	—	17,831
28	Plastics and synthetic materials	—	—	29	—	—	—	48,040
29A	Drugs	—	—	18	—	—	—	62,674
29B	Cleaning and toilet preparations	—	—	11	—	—	—	39,628
30	Paints and allied products	—	—	—	—	—	—	14,198
31	Petroleum refining and related products	—	—	19	—	—	—	145,709
32	Rubber and miscellaneous plastics products	—	—	64	—	—	—	111,361
33 + 34	Footwear, leather, and leather products	—	—	—	—	—	—	9,368
35	Glass and glass products	—	—	12	—	—	—	17,815
36	Stone and clay products	—	—	28	—	—	—	42,904
37	Primary iron and steel manufacturing	—	—	31	—	—	—	76,565
38	Primary nonferrous metals manufacturing	—	—	57	—	—	—	63,773
39	Metal containers	—	—	—	—	—	—	13,065
40	Heating, plumbing, and fabricated structural metal products	—	—	—	50	—	—	49,491
41	Screw machine products and stampings	—	—	317	—	—	—	34,703
42	Other fabricated metal products	—	—	17	—	—	—	53,974
43	Engines and turbines	—	—	17	—	—	—	17,044
44 + 45	Farm, construction, and mining machinery	—	—	21	—	—	—	32,031
46	Materials handling machinery and equipment	—	—	4	—	—	—	8,152
47	Metalworking machinery and equipment	—	—	8	—	—	—	25,611
48	Special industry machinery and equipment	—	—	5	—	—	—	20,231

49	General industrial machinery and equipment	—	—	78	—	—	—	29,814
50	Miscellaneous machinery, except electrical	—	—	17	—	—	—	25,071
51	Computer and office equipment	—	—	3	—	—	—	63,924
52	Service industry machinery	—	—	36	—	—	—	26,455
53	Electrical industrial equipment and apparatus	—	—	—	—	—	—	27,809
54	Household appliances	—	—	—	—	—	—	16,636
55	Electric lighting and wiring equipment	—	—	3	—	—	—	19,111
56	Audio, video, and communication equipment	—	—	—	—	—	—	52,155
57	Electronic components and accessories	—	—	—	—	—	—	70,940
58	Miscellaneous electrical machinery and supplies	—	—	—	—	—	—	21,223
59A	Motor vehicles (passenger cars and trucks)	—	—	24	—	—	—	150,738
59B	Truck and bus bodies, trailers, and motor vehicles parts	—	—	231	—	—	—	80,266
60	Aircraft and parts	—	—	—	—	—	—	101,709
61	Other transportation equipment	—	—	11	—	—	—	30,000
62	Scientific and controlling instruments	—	—	9	—	—	—	105,489
63	Ophthalmic and photographic equipment	—	—	—	—	—	—	24,131
64	Miscellaneous manufacturing	—	—	2	—	—	—	41,315
65A	Railroads and related services; passenger ground transportation	—	—	4	—	—	—	55,754
<b>65B</b>	<b>Motor freight transportation and warehousing</b>	—	—	—	—	—	—	<b>166,953</b>
65C	Water transportation	—	—	—	—	—	—	32,440
65D	Air transportation	—	—	—	—	—	—	94,141
65E	Pipelines, freight forwarders, and related services	—	—	—	—	—	—	33,616
65F	State and local passenger transit	—	—	—	—	—	—	5,876
65G	In-house transportation	—	—	—	—	—	—	165,461
66	Communications, except radio and TV	—	—	—	—	—	—	208,094
67	Radio and TV broadcasting	—	—	—	—	—	—	29,359
68A	Electric services (utilities)	—	—	—	—	—	—	170,896
68B	Gas production and distribution (utilities)	—	—	—	—	—	—	93,157
68C	Water and sanitary services	—	\$424	114	—	—	—	19,182
69A	Wholesale trade	—	—	—	—	—	—	568,970
69B	Retail trade	—	—	—	—	—	—	522,519
70A	Finance	—	—	—	—	—	—	416,272
70B	Insurance	—	—	—	—	—	—	231,097
71A	Owner-occupied dwellings	—	—	—	—	—	—	457,250
71B	Real estate and royalties	—	—	—	—	—	—	550,113
72A	Hotels and lodging places	—	—	—	—	—	—	59,602
72B	Personal and repair services (except auto)	—	—	—	—	—	—	91,772
73A	Computer and data processing services	—	—	—	—	—	—	115,730
73B	Legal, engineering, accounting, and related services	—	—	—	—	—	—	256,361
73C	Other business and professional services, except medical	—	—	—	—	—	—	340,445
73D	Advertising	—	—	—	—	—	—	29,865
74	Eating and drinking places	—	—	521	—	—	—	280,708
75	Automotive repair and services	—	—	—	—	—	—	138,381
76	Amusements	—	—	—	—	—	—	121,368
77A	Health services	—	—	—	—	—	—	564,986
77B	Educational and social services, and membership organizations	—	—	—	—	—	—	228,332
78	Federal Government enterprises	\$50,200	—	—	—	—	—	60,972
79	State and local government enterprises	—	29,738	—	—	—	—	86,930
82	General government industry	—	—	—	\$764,389	—	—	764,389
84	Household industry	—	—	—	—	\$10,087	—	10,087
85	Inventory valuation adjustment	—	—	—	—	—	-\$7,982	-7,982
<b>T</b>	<b>Total commodity output</b>	<b>50,200</b>	<b>30,162</b>	<b>2,175</b>	<b>764,389</b>	<b>10,087</b>	<b>-7,982</b>	<b>10,988,108</b>

Table B.

**Detailed Use of Commodities by Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

N = Not applicable

Commodity number	Industry number	Livestock and livestock products	Other agricultural products	Forestry and fishery products	Agricultural, forestry, and fishery services	Metallic ores mining	Coal mining	Crude petroleum and natural gas	Non-metallic minerals mining	New construction	Maintenance and repair construction
		(1)	(2)	(3)	(4)	(5 + 6)	(7)	(8)	(9 + 10)	(11)	(12)
1	Livestock and livestock products	\$12,133	\$5	\$66	\$672	—	—	—	—	—	—
2	Other agricultural products	22,177	3,044	—	3,160	—	—	\$1	—	\$1,217	\$661
3	Forestry and fishery products	—	—	262	38	—	—	—	—	—	—
4	Agricultural, forestry, and fishery services	4,050	7,787	2,023	152	\$16	\$17	3	\$6	1,335	814
5 + 6	Metallic ores mining	—	—	—	—	2,083	—	—	—	—	—
7	Coal mining	—	—	—	—	15	3,042	—	58	—	—
8	Crude petroleum and natural gas	—	—	—	—	—	—	20,296	—	—	—
9 + 10	Nonmetallic minerals mining	7	289	—	2	7	10	—	474	3,291	2,154
11	New construction.	—	—	—	—	—	—	—	—	170	—
12	Maintenance and repair construction	997	1,273	328	278	204	66	2,288	96	243	139
13	Ordnance and accessories	—	—	—	—	—	—	—	—	—	—
14	Food and kindred products	15,973	—	311	94	—	—	—	—	—	—
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	—	268	—	—	—	84	—	—	—	—
17	Miscellaneous textile goods and floor coverings	138	211	56	80	—	—	—	—	1,187	659
18	Apparel	—	—	—	—	—	3	1	—	—	—
19	Miscellaneous fabricated textile products	—	163	9	84	—	—	—	—	289	178
20 + 21	Lumber and wood products	44	460	—	—	36	67	1	—	23,353	14,386
22 + 23	Furniture and fixtures	—	—	—	—	—	—	—	—	1,346	5
24	Paper and allied products, except containers	211	250	17	7	4	4	1	9	1,796	601
25	Paperboard containers and boxes	5	724	22	136	4	5	2	2	244	131
26A	Newspapers and periodicals	7	8	—	5	—	1	2	18	—	—
26B	Other printing and publishing	6	8	9	6	—	1	1	1	120	69
27A	Industrial and other chemicals	119	58	3	5	515	243	1,173	257	1,591	674
27B	Agricultural fertilizers and chemicals	215	8,358	28	2,177	1	2	—	—	1	—
28	Plastics and synthetic materials	—	—	—	—	—	—	—	—	—	—
29A	Drugs	288	—	—	1	—	—	—	—	—	—
29B	Cleaning and toilet preparations	65	—	14	—	—	—	5	—	144	109
30	Paints and allied products	—	—	—	3	—	—	0	—	3,999	2,014
31	Petroleum refining and related products	314	1,515	274	48	228	547	530	366	4,492	4,006
32	Rubber and miscellaneous plastics products	359	513	3	22	88	239	10	142	6,815	3,767
33 + 34	Footwear, leather, and leather products	35	—	—	—	—	—	1	—	—	—
35	Glass and glass products	8	—	—	11	—	—	2	7	1,054	155
36	Stone and clay products	—	136	—	5	58	104	189	—	23,430	6,224
37	Primary iron and steel manufacturing	11	17	—	—	287	82	1,191	160	3,699	1,519
38	Primary nonferrous metals manufacturing	—	—	—	2	—	13	—	—	3,482	1,676
39	Metal containers	—	—	2	—	—	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	20	25	—	—	81	71	38	51	23,542	9,353
41	Screw machine products and stampings	34	—	—	—	13	134	—	—	284	111
42	Other fabricated metal products	132	250	7	66	2	62	444	8	9,047	3,590
43	Engines and turbines	—	—	11	—	27	92	21	41	—	—
44 + 45	Farm, construction, and mining machinery	253	684	40	22	316	884	288	508	907	408
46	Materials handling machinery and equipment	—	—	—	—	66	157	52	187	1,327	22
47	Metalworking machinery and equipment	31	45	—	1	7	5	19	3	318	103
48	Special industry machinery and equipment	—	—	—	0	—	—	—	—	0	2
49	General industrial machinery and equipment	30	71	1	2	35	223	103	94	3,286	635
50	Miscellaneous machinery, except electrical	48	131	1	12	23	114	169	14	237	6

51	Computer and office equipment	—	—	—	—	—	—	—	—	—	—	—	—
52	Service industry machinery	—	—	2	2	—	4	4	2	5,015	2,359	—	
53	Electrical industrial equipment and apparatus	8	20	3	—	15	52	70	43	2,648	1,000	—	
54	Household appliances	—	—	—	—	—	—	—	—	945	552	—	
55	Electric lighting and wiring equipment	34	43	2	17	—	16	9	1	8,255	3,643	—	
56	Audio, video, and communication equipment	—	—	—	—	—	—	—	—	1,896	626	—	
57	Electronic components and accessories	—	—	—	—	—	—	—	—	—	—	—	
58	Miscellaneous electrical machinery and supplies.	176	470	5	26	3	6	8	11	910	405	—	
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—	—	
59B	Truck and bus bodies, trailers, and motor vehicles parts	52	126	24	39	14	31	36	43	497	292	—	
60	Aircraft and parts	—	—	—	—	—	—	—	—	—	—	—	
61	Other transportation equipment	—	—	—	—	2	—	—	—	61	33	—	
62	Scientific and controlling instruments	—	—	14	8	2	1	1	—	1,496	582	—	
63	Ophthalmic and photographic equipment	—	—	—	8	—	3	11	—	48	23	—	
64	Miscellaneous manufacturing	28	46	—	4	2	4	4	5	1,541	731	—	
65A	Railroads and related services; passenger ground transportation	1,165	279	12	58	56	767	158	58	817	477	—	
65B	Motor freight transportation and warehousing	1,904	1,066	22	239	141	307	247	222	6,877	3,425	—	
65C	Water transportation	106	165	154	11	15	142	262	8	447	276	—	
65D	Air transportation	15	82	32	329	34	95	246	38	638	325	—	
65E	Pipelines, freight forwarders, and related services	76	5	0	1	1	4	8	1	3	1	—	
65G	In-house transportation	2,604	8,259	682	1,631	402	1,075	1,330	1,063	25,007	13,943	—	
66	Communications, except radio and TV	206	225	12	84	24	33	176	36	1,595	913	—	
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—	—	
68A	Electric services (utilities)	1,635	783	6	47	792	577	1,616	670	644	351	—	
68B	Gas production and distribution (utilities)	—	290	2	2	77	34	2,819	272	113	—	—	
68C	Water and sanitary services	103	544	14	—	—	3	82	7	459	268	—	
69A	Wholesale trade	4,706	5,316	171	913	287	806	887	417	17,578	8,416	—	
69B	Retail trade	—	—	18	7	14	33	117	41	17,963	9,802	—	
70A	Finance	466	508	79	174	80	183	589	129	2,934	1,329	—	
70B	Insurance	280	334	43	69	24	40	102	41	2,439	758	—	
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—	—	
71B	Real estate and royalties	3,973	9,375	12	215	94	564	17,181	157	2,470	1,293	—	
72A	Hotels and lodging places	23	32	25	39	29	74	256	34	367	200	—	
72B	Personal and repair services (except auto)	24	67	5	71	5	7	11	4	228	137	—	
73A	Computer and data processing services	48	54	12	14	22	21	110	47	307	182	—	
73B	Legal, engineering, accounting, and related services	54	68	214	382	153	404	1,876	126	31,216	7,993	—	
73C	Other business and professional services, except medical	388	1,012	144	284	129	190	365	112	12,495	6,889	—	
73D	Advertising	11	23	6	101	5	14	128	43	343	186	—	
74	Eating and drinking places	8	14	32	53	39	88	303	50	456	244	—	
75	Automotive repair and services	167	443	20	315	42	38	88	25	2,106	1,270	—	
76	Amusements	—	—	2	219	1	8	30	1	56	33	—	
77A	Health services	1,414	—	—	—	—	—	—	—	—	—	—	
77B	Educational and social services, and membership organizations	54	63	25	18	18	53	80	8	27	11	—	
78	Federal Government enterprises	8	9	5	26	9	1	—	7	421	247	—	
79	State and local government enterprises	14	32	1	14	4	3	2	—	14	8	—	
80	Noncomparable imports	—	44	—	—	83	21	1,025	19	—	—	—	
81	Scrap, used and secondhand goods	—	—	—	2	—	—	—	—	5	3	—	
82	General government industry	—	—	—	—	—	—	—	—	—	—	—	
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—	—	—	
84	Household industry	—	—	—	—	—	—	—	—	—	—	—	
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—	—	
I	Total intermediate inputs	77,461	56,091	5,288	12,512	6,732	11,970	57,067	6,252	273,580	123,394	—	
88	Compensation of employees	4,077	7,082	1,486	13,225	2,503	7,785	13,439	4,050	144,484	74,863	—	
89	Indirect business tax and nontax liability	1,166	3,048	462	530	531	2,401	4,696	536	2,605	641	—	
90	Other value added	8,799	42,073	2,378	1,984	983	4,761	30,167	2,844	36,280	23,483	—	
VA	Value added	14,043	52,203	4,325	15,739	4,017	14,947	48,302	7,430	183,369	98,987	—	
T	<b>Total industry output</b>	<b>91,504</b>	<b>108,294</b>	<b>9,613</b>	<b>28,251</b>	<b>10,749</b>	<b>26,917</b>	<b>105,369</b>	<b>13,682</b>	<b>456,949</b>	<b>222,381</b>	—	

Table B: Detailed Use of Commodities by Industries ▲ 43

Table B (continued).

**Detailed Use of Commodities by Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

N = Not applicable

Commodity number	Industry number	Ordnance and accessories	Food and kindred products	Tobacco products	Broad and narrow fabrics, yarn and thread mills	Miscellaneous textile goods and floor coverings	Apparel	Miscellaneous fabricated textile products	Lumber and wood products	Furniture and fixtures	Paper and allied products, except containers
		(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20 + 21)	(22 + 23)	(24)
1	Livestock and livestock products	—	\$71,965	—	\$389	\$52	\$19	—	—	—	—
2	Other agricultural products	—	31,764	\$3,095	2,692	46	56	—	—	—	\$11
3	Forestry and fishery products	—	2,988	—	—	—	195	—	\$7,058	\$5	—
4	Agricultural, forestry, and fishery services	\$25	117	4	10	5	11	\$5	25	22	41
5 + 6	Metallic ores mining	—	—	—	—	—	—	—	—	—	—
7	Coal mining	2	202	26	27	14	20	3	4	12	366
8	Crude petroleum and natural gas	—	—	—	—	—	—	—	—	—	—
9 + 10	Nonmetallic minerals mining	—	—	—	—	—	—	—	—	—	324
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	147	1,686	86	219	163	277	64	283	179	1,203
13	Ordnance and accessories	362	—	—	—	—	—	—	—	—	—
14	Food and kindred products	—	63,572	—	—	11	—	—	—	53	639
15	Tobacco products	—	—	3,348	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	14	—	—	8,781	2,974	14,833	5,101	—	1,927	109
17	Miscellaneous textile goods and floor coverings	—	20	4	61	550	23	1,160	169	1,129	664
18	Apparel	13	—	—	34	—	13,656	438	7	3	5
19	Miscellaneous fabricated textile products	—	73	2	—	2	2,210	607	2	20	2
20 + 21	Lumber and wood products	52	73	1	—	—	1	35	26,156	3,314	6,508
22 + 23	Furniture and fixtures	—	—	—	—	—	—	—	74	421	—
24	Paper and allied products, except containers	7	5,149	109	30	28	75	13	49	100	14,665
25	Paperboard containers and boxes	50	7,876	452	44	47	101	40	231	677	1,306
26A	Newspapers and periodicals	3	4	—	—	1	—	—	13	2	7
26B	Other printing and publishing	—	1,186	258	2	1	29	12	15	12	193
27A	Industrial and other chemicals	207	2,115	4	944	388	5	109	441	68	4,693
27B	Agricultural fertilizers and chemicals	21	1	—	—	—	—	—	211	—	24
28	Plastics and synthetic materials	80	162	283	6,874	4,264	840	395	323	129	2,432
29A	Drugs	—	1,277	—	—	—	—	—	—	—	—
29B	Cleaning and toilet preparations	—	484	68	43	75	283	—	8	32	421
30	Paints and allied products	8	—	—	—	—	—	—	143	390	9
31	Petroleum refining and related products	56	923	52	119	68	109	40	541	119	605
32	Rubber and miscellaneous plastics products	358	7,370	225	195	170	345	340	809	1,906	3,315
33 + 34	Footwear, leather, and leather products	—	—	—	—	—	258	430	9	45	—
35	Glass and glass products	—	4,014	—	298	10	—	—	271	169	—
36	Stone and clay products	36	12	3	1	—	—	—	346	121	83
37	Primary iron and steel manufacturing	370	—	—	—	2	—	—	38	1,617	29
38	Primary nonferrous metals manufacturing	461	—	—	—	—	—	—	17	439	90
39	Metal containers	—	9,422	—	—	—	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	—	—	—	—	—	—	—	490	—	—
41	Screw machine products and stampings	170	599	—	—	—	—	—	352	477	5
42	Other fabricated metal products	242	1,227	46	—	—	5	—	951	2,001	332
43	Engines and turbines	22	5	—	—	—	—	—	—	—	—
44 + 45	Farm, construction, and mining machinery	—	—	—	—	—	—	—	—	—	—
46	Materials handling machinery and equipment	—	—	—	—	—	—	—	29	—	—
47	Metalworking machinery and equipment	37	44	10	15	4	2	7	76	36	54
48	Special industry machinery and equipment	81	125	—	62	207	191	36	35	16	292
49	General industrial machinery and equipment	273	226	1	—	—	5	—	152	73	35
50	Miscellaneous machinery, except electrical	161	171	5	70	20	21	19	142	85	212

51	Computer and office equipment	—	—	2	—	—	—	—	—	—	—	—
52	Service industry machinery	—	45	6	—	—	1	—	70	2	8	—
53	Electrical industrial equipment and apparatus	166	100	15	2	—	—	—	6	12	22	—
54	Household appliances	—	—	—	—	—	—	—	173	—	—	—
55	Electric lighting and wiring equipment	20	94	17	2	—	—	—	132	7	23	—
56	Audio, video, and communication equipment	281	—	—	—	—	—	—	—	—	—	—
57	Electronic components and accessories	1,316	—	—	1	—	—	—	—	—	—	—
58	Miscellaneous electrical machinery and supplies	7	17	2	—	1	3	—	15	1	6	—
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	1	182	2	5	3	9	—	235	14	20	—
60	Aircraft and parts	1,976	—	—	—	—	—	—	—	—	—	—
61	Other transportation equipment	—	—	—	—	—	—	—	2	—	—	—
62	Scientific and controlling instruments	805	8	3	—	—	—	—	1	10	21	—
63	Ophthalmic and photographic equipment	6	9	1	3	1	2	1	12	6	10	—
64	Miscellaneous manufacturing	—	26	5	—	1	712	23	36	11	4	—
65A	Railroads and related services; passenger ground transportation	30	2,572	37	165	102	69	22	631	139	1,135	—
65B	Motor freight transportation and warehousing	178	6,148	182	427	293	579	239	2,072	576	2,807	—
65C	Water transportation	—	862	9	15	23	4	6	136	14	190	—
65D	Air transportation	115	1,388	110	129	58	287	89	281	153	357	—
65E	Pipelines, freight forwarders, and related services	1	12	2	—	—	2	—	4	—	8	—
65G	In-house transportation	124	4,624	36	365	65	517	69	1,014	1,325	489	—
66	Communications, except radio and TV	78	548	60	56	47	126	43	150	125	217	—
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	220	3,341	84	1,140	251	685	158	1,052	369	2,580	—
68B	Gas production and distribution (utilities)	44	1,650	15	203	96	229	67	182	99	1,188	—
68C	Water and sanitary services	21	494	5	46	34	30	19	115	35	540	—
69A	Wholesale trade	651	22,333	715	1,914	695	2,930	938	5,159	2,933	4,990	—
69B	Retail trade	3	733	115	26	3	11	4	74	68	135	—
70A	Finance	172	2,676	261	230	117	453	134	591	341	675	—
70B	Insurance	34	627	56	53	24	87	26	143	69	156	—
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	247	1,617	136	140	81	763	287	581	453	365	—
72A	Hotels and lodging places	77	1,038	121	106	53	205	58	254	122	296	—
72B	Personal and repair services (except auto)	23	461	37	247	72	105	11	131	32	291	—
73A	Computer and data processing services	223	657	66	102	57	94	27	171	78	380	—
73B	Legal, engineering, accounting, and related services	127	1,147	369	108	66	168	73	332	320	224	—
73C	Other business and professional services, except medical	395	3,962	291	490	192	3,059	177	988	657	1,419	—
73D	Advertising	125	10,554	3,166	107	173	764	92	335	467	620	—
74	Eating and drinking places	102	1,276	145	149	68	285	83	343	176	370	—
75	Automotive repair and services	48	1,345	115	169	76	134	34	393	79	655	—
76	Amusements	5	199	44	4	3	26	2	21	7	30	—
77A	Health services	—	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	18	250	33	23	10	45	114	255	63	96	—
78	Federal Government enterprises	4	163	54	21	19	62	26	51	51	55	—
79	State and local government enterprises	14	358	26	24	27	156	52	143	76	164	—
80	Noncomparable imports	6	485	17	28	10	23	2	8	31	99	—
81	Scrap, used and secondhand goods	—	—	—	—	37	—	—	—	7	800	—
82	General government industry	—	—	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—	—
I	Total intermediate inputs	10,920	286,851	14,440	27,405	11,857	46,193	11,728	55,763	24,525	60,117	—
88	Compensation of employees	10,103	53,793	3,345	10,237	3,558	18,831	5,122	17,980	12,319	20,127	—
89	Indirect business tax and nontax liability	309	10,133	5,539	240	119	234	84	460	203	855	—
90	Other value added	4,429	57,706	16,822	3,764	2,046	3,874	2,121	12,662	5,929	18,515	—
VA	Value added	14,841	121,631	25,706	14,241	5,723	22,939	7,327	31,102	18,452	39,496	—
T	<b>Total industry output</b>	<b>25,760</b>	<b>408,482</b>	<b>40,146</b>	<b>41,646</b>	<b>17,580</b>	<b>69,132</b>	<b>19,055</b>	<b>86,865</b>	<b>42,977</b>	<b>99,613</b>	—

Table B (continued).

**Detailed Use of Commodities by Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

N = Not applicable

Commodity number	Industry number	Paperboard containers and boxes	News-papers and periodicals	Other printing and publishing	Industrial and other chemicals	Agricultural fertilizers and chemicals	Plastics and synthetic materials	Drugs	Cleaning and toilet preparations	Paints and allied products	Petroleum refining and related products
		(25)	(26A)	(26B)	(27A)	(27B)	(28)	(29A)	(29B)	(30)	(31)
1	Livestock and livestock products	—	—	—	—	—	—	—	\$41	—	—
2	Other agricultural products	—	—	—	\$587	—	—	\$137	—	—	\$1
3	Forestry and fishery products	—	—	\$5	29	\$10	\$1	22	—	\$7	1
4	Agricultural, forestry, and fishery services	\$8	\$26	29	46	7	16	30	13	4	20
5 + 6	Metallic ores mining	—	—	—	1,055	17	—	—	—	20	21
7	Coal mining	25	—	—	206	29	58	18	9	2	7
8	Crude petroleum and natural gas	—	—	—	3,459	624	237	—	—	—	74,499
9 + 10	Nonmetallic minerals mining	—	—	—	1,009	918	—	1	13	4	407
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	159	331	561	1,091	148	498	454	215	52	1,094
13	Ordnance and accessories	—	—	—	—	—	—	—	—	—	—
14	Food and kindred products	—	—	—	363	287	52	216	401	129	139
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	—	—	72	—	—	9	—	—	—	—
17	Miscellaneous textile goods and floor coverings	—	4	41	1	—	1	8	12	—	—
18	Apparel	—	—	—	—	—	2	—	—	—	—
19	Miscellaneous fabricated textile products	—	—	—	1	—	—	2	4	—	—
20 + 21	Lumber and wood products	37	11	7	37	—	—	1	2	—	3
22 + 23	Furniture and fixtures	—	—	—	—	—	—	—	—	—	—
24	Paper and allied products, except containers	13,453	5,089	16,110	290	47	760	153	117	2	113
25	Paperboard containers and boxes	77	15	493	532	81	212	664	1,503	1	133
26A	Newspapers and periodicals	21	1,149	164	8	—	2	6	1	—	3
26B	Other printing and publishing	7	3,927	12,340	19	106	1	387	160	11	7
27A	Industrial and other chemicals	661	411	1,977	25,203	1,946	16,336	1,529	3,859	2,895	2,093
27B	Agricultural fertilizers and chemicals	—	—	—	926	2,046	226	—	—	—	—
28	Plastics and synthetic materials	151	—	7	860	—	1,591	—	—	1,777	—
29A	Drugs	—	—	—	—	—	—	8,365	—	—	—
29B	Cleaning and toilet preparations	—	—	—	116	71	279	49	2,147	2	419
30	Paints and allied products	106	1	2	529	—	16	—	11	253	—
31	Petroleum refining and related products	233	102	158	1,865	182	185	72	415	141	12,265
32	Rubber and miscellaneous plastics products	146	19	1,362	1,245	149	2,023	1,312	2,431	1	476
33 + 34	Footwear, leather, and leather products	—	1	2	—	—	—	—	—	—	1
35	Glass and glass products	—	—	—	107	16	7	256	214	3	330
36	Stone and clay products	—	—	2	120	30	8	11	3	185	278
37	Primary iron and steel manufacturing	233	1	28	319	1	1	—	1	5	20
38	Primary nonferrous metals manufacturing	71	—	47	9	—	—	—	—	1	—
39	Metal containers	—	—	—	647	85	4	81	431	500	137
40	Heating, plumbing, and fabricated structural metal products	—	—	—	—	—	—	—	—	—	—
41	Screw machine products and stampings	—	—	—	3	—	—	65	49	2	—
42	Other fabricated metal products	234	23	25	714	42	16	40	94	2	115
43	Engines and turbines	—	1	—	—	—	—	—	—	—	—
44 + 45	Farm, construction, and mining machinery	—	—	—	—	—	—	—	—	—	—
46	Materials handling machinery and equipment	—	—	—	—	—	—	—	—	—	—
47	Metalworking machinery and equipment	—	—	—	—	—	—	—	—	—	—
48	Special industry machinery and equipment	148	25	413	640	—	20	—	—	—	—
49	General industrial machinery and equipment	—	—	—	5	10	26	41	4	—	1
50	Miscellaneous machinery, except electrical	61	19	94	388	9	75	24	34	3	91



51	Computer and office equipment	—	22	49	—	—	—	—	—	—	—	—
52	Service industry machinery	—	2	1	47	—	1	2	7	—	—	1
53	Electrical industrial equipment and apparatus	—	—	1	79	1	5	7	21	—	—	1
54	Household appliances	—	—	—	—	—	—	—	—	—	—	—
55	Electric lighting and wiring equipment	—	3	3	6	2	4	12	20	—	—	8
56	Audio, video, and communication equipment	—	1	4	—	—	—	—	—	—	—	—
57	Electronic components and accessories	—	—	—	—	—	—	—	—	—	—	—
58	Miscellaneous electrical machinery and supplies	1	21	14	2	—	—	—	—	—	—	2
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	8	38	31	12	4	1	15	2	2	—	48
60	Aircraft and parts	—	—	—	—	—	—	—	—	—	—	—
61	Other transportation equipment	—	—	—	—	—	—	—	—	—	—	—
62	Scientific and controlling instruments	6	19	114	98	8	4	14	5	4	—	25
63	Ophthalmic and photographic equipment	2	147	792	21	1	4	42	5	1	—	6
64	Miscellaneous manufacturing	1	21	70	3	—	1	30	6	1	—	5
65A	Railroads and related services; passenger ground transportation	378	182	496	1,184	279	460	126	205	258	—	350
65B	Motor freight transportation and warehousing	1,211	508	1,802	2,538	986	945	254	453	360	—	696
65C	Water transportation	12	4	24	390	86	159	12	54	45	—	722
65D	Air transportation	145	197	436	396	54	169	211	134	40	—	97
65E	Pipelines, freight forwarders, and related services	2	4	3	186	1	13	2	2	2	—	4,499
65G	In-house transportation	86	128	1,039	344	17	189	158	106	18	—	659
66	Communications, except radio and TV	90	346	421	232	38	210	207	121	35	—	173
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	323	292	881	2,844	291	1,071	439	206	83	—	1,552
68B	Gas production and distribution (utilities)	77	56	235	2,188	375	602	153	83	24	—	11,666
68C	Water and sanitary services	29	15	72	869	102	255	117	66	50	—	420
69A	Wholesale trade	1,964	1,340	3,972	5,766	918	2,368	3,965	2,029	618	—	5,698
69B	Retail trade	8	40	35	63	11	27	45	126	2	—	25
70A	Finance	206	403	751	792	186	363	483	303	108	—	1,131
70B	Insurance	45	95	165	185	30	66	83	54	19	—	143
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	163	1,750	2,532	806	90	187	500	344	58	—	1,230
72A	Hotels and lodging places	95	171	331	332	55	144	195	123	44	—	136
72B	Personal and repair services (except auto)	56	45	128	266	49	134	60	35	9	—	252
73A	Computer and data processing services	78	366	395	389	78	206	155	83	22	—	321
73B	Legal, engineering, accounting, and related services	63	751	421	2,712	234	1,347	1,729	603	158	—	972
73C	Other business and professional services, except medical	394	2,068	1,815	1,740	384	641	1,526	624	115	—	1,196
73D	Advertising	52	1,536	1,170	757	249	280	3,715	2,604	187	—	532
74	Eating and drinking places	116	204	411	411	65	180	234	149	52	—	270
75	Automotive repair and services	144	206	494	575	111	284	154	98	32	—	451
76	Amusements	7	35	41	34	4	18	57	38	7	—	23
77A	Health services	—	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	20	49	145	88	21	92	229	64	9	—	105
78	Federal Government enterprises	17	431	272	65	4	13	22	41	7	—	44
79	State and local government enterprises	18	68	153	82	29	47	22	12	1	—	35
80	Noncomparable imports	14	63	183	875	28	214	1,910	378	68	—	330
81	Scrap, used and secondhand goods	—	—	—	—	5	—	—	—	—	—	—
82	General government industry	—	—	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—	—
I	Total intermediate inputs	21,701	22,783	53,871	69,846	11,657	33,386	30,831	21,395	8,440	—	126,515
88	Compensation of employees	7,939	19,034	33,676	21,783	2,482	9,146	11,964	5,794	2,871	—	8,628
89	Indirect business tax and nontax liability	278	316	596	1,728	159	393	681	339	121	—	4,180
90	Other value added	2,020	14,578	22,421	16,524	3,533	5,115	19,198	12,101	2,766	—	6,386
VA	Value added	10,237	33,928	56,693	40,034	6,174	14,654	31,843	18,233	5,758	—	19,194
T	<b>Total industry output</b>	<b>31,938</b>	<b>56,711</b>	<b>110,564</b>	<b>109,880</b>	<b>17,831</b>	<b>48,040</b>	<b>62,674</b>	<b>39,628</b>	<b>14,198</b>	—	<b>145,709</b>

Table B: Detailed Use of Commodities by Industries ▲ 47

Table B (continued).

**Detailed Use of Commodities by Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

N = Not applicable

Commodity number	Industry number	Rubber and miscellaneous plastics products	Footwear, leather, and leather products	Glass and glass products	Stone and clay products	Primary iron and steel manufacturing	Primary nonferrous metals manufacturing	Metal containers	Heating, plumbing, and fabricated structural metal products	Screw machine products and stampings	Other fabricated metal products
		(32)	(33 + 34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)
1	Livestock and livestock products	—	—	—	—	—	—	—	—	—	—
2	Other agricultural products	—	—	—	—	—	—	—	—	—	—
3	Forestry and fishery products	\$831	—	—	\$1	—	\$11	—	—	—	—
4	Agricultural, forestry, and fishery services	40	\$1	\$9	23	\$30	28	\$2	\$14	\$6	\$19
5 + 6	Metallic ores mining	—	—	17	19	2,194	2,399	—	13	—	2
7	Coal mining	16	2	98	283	1,349	18	1	2	2	3
8	Crude petroleum and natural gas	—	—	—	—	—	—	—	—	—	—
9 + 10	Nonmetallic minerals mining	13	—	192	2,889	231	15	—	—	—	1
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	754	64	140	319	573	365	63	177	334	316
13	Ordnance and accessories	—	—	—	—	—	—	—	—	—	—
14	Food and kindred products	11	843	—	16	—	—	—	—	—	—
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	1,029	248	—	150	—	9	—	—	—	—
17	Miscellaneous textile goods and floor coverings	1,192	201	1	—	—	—	—	—	—	—
18	Apparel	9	4	—	—	—	—	—	—	—	3
19	Miscellaneous fabricated textile products	12	—	1	5	—	—	—	—	—	—
20 + 21	Lumber and wood products	171	—	173	165	152	194	—	29	15	72
22 + 23	Furniture and fixtures	—	—	—	—	—	—	—	—	—	—
24	Paper and allied products, except containers	957	54	41	477	25	28	5	32	57	234
25	Paperboard containers and boxes	1,390	31	752	159	16	56	38	216	196	330
26A	Newspapers and periodicals	8	—	—	2	2	1	—	3	1	2
26B	Other printing and publishing	37	1	2	6	96	3	79	5	4	2
27A	Industrial and other chemicals	5,375	328	699	1,089	904	253	104	535	173	629
27B	Agricultural fertilizers and chemicals	—	—	—	—	—	—	—	—	—	—
28	Plastics and synthetic materials	19,776	11	—	242	—	929	—	37	85	289
29A	Drugs	—	—	—	—	—	—	—	—	—	—
29B	Cleaning and toilet preparations	78	40	35	93	2	—	—	3	5	15
30	Paints and allied products	74	—	12	53	19	7	285	251	81	363
31	Petroleum refining and related products	245	32	85	379	371	273	32	125	59	166
32	Rubber and miscellaneous plastics products	6,353	296	386	348	135	615	18	537	142	1,504
33 + 34	Footwear, leather, and leather products	—	2,132	—	—	—	—	—	3	—	—
35	Glass and glass products	611	—	1,608	103	—	239	—	281	28	54
36	Stone and clay products	155	6	245	4,374	1,183	140	8	70	60	123
37	Primary iron and steel manufacturing	519	—	19	356	14,171	666	2,249	8,750	7,476	6,173
38	Primary nonferrous metals manufacturing	70	—	—	61	1,465	21,355	4,166	4,235	1,673	3,087
39	Metal containers	—	—	—	—	2	—	1,177	—	3	6
40	Heating, plumbing, and fabricated structural metal products	33	—	—	19	5	—	—	1,818	—	59
41	Screw machine products and stampings	270	3	14	52	275	32	5	627	525	1,154
42	Other fabricated metal products	667	61	—	284	1,226	427	196	1,677	800	3,498
43	Engines and turbines	20	—	—	—	23	—	—	—	—	39
44 + 45	Farm, construction, and mining machinery	—	—	—	—	—	—	—	—	—	—
46	Materials handling machinery and equipment	2	—	—	—	17	11	—	—	—	—
47	Metalworking machinery and equipment	204	2	89	97	649	600	16	330	716	232
48	Special industry machinery and equipment	331	1	20	—	26	61	—	—	2	—
49	General industrial machinery and equipment	25	—	—	37	1,273	405	—	112	65	18
50	Miscellaneous machinery, except electrical	640	14	78	106	410	236	43	236	647	434

51	Computer and office equipment	—	—	—	—	—	—	—	—	—	—
52	Service industry machinery	6	—	2	4	1	—	10	—	1	
53	Electrical industrial equipment and apparatus	37	—	36	8	548	183	1	78	21	313
54	Household appliances	—	—	—	—	—	—	—	—	—	—
55	Electric lighting and wiring equipment	43	—	7	18	—	51	—	2	6	4
56	Audio, video, and communication equipment	—	—	—	—	—	—	—	—	—	—
57	Electronic components and accessories	63	—	—	—	—	—	—	—	—	—
58	Miscellaneous electrical machinery and supplies	19	—	—	12	4	—	—	1	—	5
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	13	—	5	41	12	9	1	10	24	5
60	Aircraft and parts	—	—	—	—	—	—	—	—	—	—
61	Other transportation equipment	—	—	—	—	—	—	—	—	—	—
62	Scientific and controlling instruments	11	—	8	15	87	5	—	108	—	3
63	Ophthalmic and photographic equipment	16	—	2	4	8	4	1	8	5	6
64	Miscellaneous manufacturing	16	14	1	32	3	2	—	9	2	2
65A	Railroads and related services; passenger ground transportation	766	10	258	600	1,224	562	58	186	156	154
65B	Motor freight transportation and warehousing	3,347	103	263	2,856	1,884	1,869	229	800	524	720
65C	Water transportation	182	—	59	411	426	92	8	17	21	37
65D	Air transportation	413	37	54	127	298	238	38	163	122	174
65E	Pipelines, freight forwarders, and related services	3	—	—	2	2	1	1	—	1	—
65G	In-house transportation	1,047	200	306	820	875	356	17	392	138	331
66	Communications, except radio and TV	292	26	45	139	137	123	21	146	67	174
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	2,238	70	522	1,166	2,797	2,300	166	415	440	780
68B	Gas production and distribution (utilities)	420	31	298	822	1,174	435	57	167	124	290
68C	Water and sanitary services	149	89	37	93	518	177	17	40	394	105
69A	Wholesale trade	4,741	401	787	1,510	5,486	5,425	865	2,991	1,991	2,934
69B	Retail trade	131	3	47	47	19	8	5	30	18	33
70A	Finance	832	58	118	297	542	412	84	331	261	383
70B	Insurance	156	16	26	87	116	88	17	63	49	73
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	1,034	62	113	331	288	299	61	507	274	474
72A	Hotels and lodging places	331	25	52	124	224	189	40	148	99	165
72B	Personal and repair services (except auto)	204	9	47	124	316	135	25	44	75	87
73A	Computer and data processing services	363	50	71	162	449	190	31	122	124	200
73B	Legal, engineering, accounting, and related services	690	26	62	223	313	164	46	216	285	364
73C	Other business and professional services, except medical	1,501	86	249	702	1,408	781	130	1,035	608	853
73D	Advertising	649	211	76	256	331	114	33	276	263	490
74	Eating and drinking places	435	41	72	166	290	246	50	206	140	229
75	Automotive repair and services	464	16	97	252	609	293	59	129	145	221
76	Amusements	32	1	3	8	18	13	5	8	11	9
77A	Health services	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	408	4	11	30	51	52	15	50	99	52
78	Federal Government enterprises	65	17	13	25	55	30	1	35	25	39
79	State and local government enterprises	71	25	8	100	57	86	6	61	19	62
80	Noncomparable imports	229	2	29	94	82	121	2	75	33	50
81	Scrap, used and secondhand goods	—	—	100	—	2,320	3,276	—	85	—	29
82	General government industry	—	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
1	Total intermediate inputs	63,334	6,008	8,597	23,916	49,795	47,702	10,576	29,081	19,719	28,675
88	Compensation of employees	30,598	2,269	5,399	12,099	20,484	11,293	2,009	14,963	12,821	17,287
89	Indirect business tax and nontax liability	907	62	153	398	845	717	93	350	245	376
90	Other value added	16,522	1,030	3,666	6,491	5,441	4,061	387	5,097	1,919	7,636
VA	Value added	48,027	3,360	9,218	18,988	26,770	16,071	2,489	20,410	14,984	25,299
T	<b>Total industry output</b>	<b>111,361</b>	<b>9,368</b>	<b>17,815</b>	<b>42,904</b>	<b>76,565</b>	<b>63,773</b>	<b>13,065</b>	<b>49,491</b>	<b>34,703</b>	<b>53,974</b>

Table B (continued).

**Detailed Use of Commodities by Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

N = Not applicable

Commodity number	Industry number	Engines and turbines	Farm, construction, and mining machinery	Materials handling machinery and equipment	Metalworking machinery and equipment	Special industry machinery and equipment	General industrial machinery and equipment	Miscellaneous machinery, except electrical	Computer and office equipment	Service industry machinery	Electrical industrial equipment and apparatus
		(43)	(44 + 45)	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)
1	Livestock and livestock products	—	—	—	—	—	—	—	—	—	—
2	Other agricultural products	—	—	—	—	—	—	—	—	—	—
3	Forestry and fishery products	—	—	—	—	—	—	—	—	—	—
4	Agricultural, forestry, and fishery services	\$8	\$13	\$2	\$9	\$7	\$15	\$12	\$16	\$7	\$17
5 + 6	Metallic ores mining	—	12	—	6	—	—	—	3	—	33
7	Coal mining	1	3	—	1	1	2	2	1	2	1
8	Crude petroleum and natural gas	—	—	—	—	—	—	—	—	—	—
9 + 10	Nonmetallic minerals mining	—	—	—	21	1	—	—	—	—	—
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	112	163	33	158	118	148	163	380	173	148
13	Ordnance and accessories	—	—	—	—	—	—	—	—	—	—
14	Food and kindred products	—	—	—	—	—	—	—	—	—	—
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	—	—	—	—	—	—	—	—	—	—
17	Miscellaneous textile goods and floor coverings	—	—	—	—	—	214	33	—	—	1
18	Apparel	7	—	—	3	2	1	—	—	1	—
19	Miscellaneous fabricated textile products	—	—	—	—	—	—	—	—	—	—
20 + 21	Lumber and wood products	—	50	10	82	54	27	4	—	63	23
22 + 23	Furniture and fixtures	—	—	—	—	—	—	—	—	—	—
24	Paper and allied products, except containers	7	10	4	16	137	128	8	35	124	142
25	Paperboard containers and boxes	14	33	1	94	22	122	67	182	98	99
26A	Newspapers and periodicals	—	1	—	1	1	—	3	8	1	2
26B	Other printing and publishing	2	5	1	5	2	3	4	8	1	2
27A	Industrial and other chemicals	1	22	3	166	26	2	5	—	60	40
27B	Agricultural fertilizers and chemicals	—	—	—	—	—	—	—	—	—	—
28	Plastics and synthetic materials	—	—	—	—	—	15	12	24	107	82
29A	Drugs	—	—	—	—	—	—	—	—	—	—
29B	Cleaning and toilet preparations	—	—	—	—	—	—	—	5	10	18
30	Paints and allied products	20	121	11	52	—	15	8	36	85	69
31	Petroleum refining and related products	22	49	23	59	45	72	47	39	32	154
32	Rubber and miscellaneous plastics products	202	1,351	162	237	400	772	120	812	704	778
33 + 34	Footwear, leather, and leather products	—	—	—	—	—	—	—	—	—	—
35	Glass and glass products	—	14	—	—	14	—	—	—	4	—
36	Stone and clay products	75	40	8	228	41	78	89	8	119	844
37	Primary iron and steel manufacturing	2,224	3,396	917	1,933	1,267	2,286	1,844	72	1,435	1,302
38	Primary nonferrous metals manufacturing	434	270	196	573	847	781	1,524	496	1,553	1,440
39	Metal containers	—	—	—	—	—	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	235	1,425	130	311	292	348	89	427	222	140
41	Screw machine products and stampings	643	458	250	218	194	287	245	482	840	511
42	Other fabricated metal products	577	529	191	296	572	376	401	197	459	199
43	Engines and turbines	1,236	1,700	64	—	67	143	24	—	29	248
44 + 45	Farm, construction, and mining machinery	—	1,215	—	—	—	—	—	—	—	—
46	Materials handling machinery and equipment	—	9	153	—	3	7	—	—	—	—
47	Metalworking machinery and equipment	106	160	37	1,184	185	150	383	28	125	61
48	Special industry machinery and equipment	—	—	—	—	672	—	—	—	—	—
49	General industrial machinery and equipment	283	882	463	265	508	2,306	319	23	467	123
50	Miscellaneous machinery, except electrical	760	886	245	777	803	966	1,585	85	577	202

51	Computer and office equipment	—	—	—	—	18	—	—	11,698	—	11
52	Service industry machinery	—	—	—	—	3	1	—	—	2,003	1
53	Electrical industrial equipment and apparatus	691	214	247	580	774	1,112	69	1,124	1,422	1,961
54	Household appliances	—	—	—	—	—	—	—	—	—	—
55	Electric lighting and wiring equipment	—	10	—	6	—	—	5	64	181	57
56	Audio, video, and communication equipment	—	—	—	—	—	—	—	71	—	—
57	Electronic components and accessories	—	—	—	12	35	53	78	13,515	4	701
58	Miscellaneous electrical machinery and supplies	199	192	33	45	19	20	18	15	—	11
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	75	128	1	5	2	4	3	4	4	2
60	Aircraft and parts	—	—	—	—	—	—	—	—	—	—
61	Other transportation equipment	—	—	—	—	—	—	—	—	—	—
62	Scientific and controlling instruments	—	—	—	11	—	12	—	3	432	40
63	Ophthalmic and photographic equipment	2	3	1	5	3	4	8	13	4	6
64	Miscellaneous manufacturing	—	7	4	3	1	—	—	1	12	3
65A	Railroads and related services; passenger ground transportation	20	66	12	37	29	32	47	48	45	77
65B	Motor freight transportation and warehousing	298	507	91	276	203	257	230	116	250	229
65C	Water transportation	—	17	—	6	3	2	6	5	5	20
65D	Air transportation	103	149	35	92	101	126	107	357	103	115
65E	Pipelines, freight forwarders, and related services	1	1	—	—	—	—	1	3	1	—
65G	In-house transportation	54	278	97	189	85	250	190	89	176	120
66	Communications, except radio and TV	37	87	27	108	92	125	68	243	75	111
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	135	258	48	284	162	319	303	347	198	277
68B	Gas production and distribution (utilities)	35	85	19	69	42	85	75	44	56	78
68C	Water and sanitary services	19	24	3	17	12	29	17	33	69	24
69A	Wholesale trade	958	2,336	697	1,206	1,410	1,807	941	6,628	1,780	1,947
69B	Retail trade	4	8	1	4	4	8	5	16	17	19
70A	Finance	112	228	52	175	132	202	176	484	194	236
70B	Insurance	21	46	12	36	24	40	32	81	36	35
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	97	154	61	276	221	207	337	819	136	220
72A	Hotels and lodging places	52	98	21	78	62	89	75	200	78	83
72B	Personal and repair services (except auto)	22	38	6	25	16	40	26	32	26	32
73A	Computer and data processing services	81	120	15	75	45	98	54	560	106	66
73B	Legal, engineering, accounting, and related services	48	223	67	202	192	215	188	602	157	120
73C	Other business and professional services, except medical	199	375	91	341	238	412	468	725	260	391
73D	Advertising	39	261	58	189	166	289	223	613	221	333
74	Eating and drinking places	69	133	31	122	91	130	100	230	106	117
75	Automotive repair and services	47	89	15	80	46	97	68	125	67	77
76	Amusements	5	11	1	3	5	5	8	25	9	6
77A	Health services	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	13	21	4	22	11	20	18	68	37	21
78	Federal Government enterprises	10	33	7	19	25	24	10	16	5	22
79	State and local government enterprises	19	32	23	56	27	59	65	45	23	23
80	Noncomparable imports	21	88	23	21	69	88	42	3,568	22	190
81	Scrap, used and secondhand goods	—	—	—	2	—	10	2	—	—	—
82	General government industry	—	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
I	Total intermediate inputs	10,452	19,135	4,706	11,369	10,648	15,531	11,050	45,996	15,614	14,459
88	Compensation of employees	4,530	8,626	2,625	11,685	7,370	10,628	11,803	13,314	7,398	9,138
89	Indirect business tax and nontax liability	132	252	61	198	159	230	191	506	207	202
90	Other value added	1,930	4,017	761	2,359	2,054	3,426	2,027	4,108	3,236	4,009
VA	Value added	6,592	12,896	3,446	14,242	9,583	14,283	14,021	17,928	10,841	13,350
T	<b>Total industry output</b>	<b>17,044</b>	<b>32,031</b>	<b>8,152</b>	<b>25,611</b>	<b>20,231</b>	<b>29,814</b>	<b>25,071</b>	<b>63,924</b>	<b>26,455</b>	<b>27,809</b>

Table B (continued).

**Detailed Use of Commodities by Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

N = Not applicable

Commodity number	Industry number	Household appliances	Electric lighting and wiring equipment	Audio, video, and communication equipment	Electronic components and accessories	Miscellaneous electrical machinery and supplies	Motor vehicles (passenger cars and trucks)	Truck and bus bodies, trailers, and motor vehicles parts	Aircraft and parts	Other transportation equipment	Scientific and controlling instruments
		(54)	(55)	(56)	(57)	(58)	(59A)	(59B)	(60)	(61)	(62)
1	Livestock and livestock products	—	—	—	—	—	—	—	—	—	—
2	Other agricultural products	—	—	—	—	—	\$1	\$1	\$1	—	—
3	Forestry and fishery products	—	—	—	—	—	—	—	—	—	—
4	Agricultural, forestry, and fishery services	\$8	\$7	\$13	\$54	\$17	22	24	63	\$14	\$51
5+6	Metallic ores mining	—	—	32	—	7	—	279	31	—	14
7	Coal mining	—	—	—	2	—	18	21	15	6	32
8	Crude petroleum and natural gas	—	—	—	—	—	—	—	—	—	—
9+10	Nonmetallic minerals mining	28	—	—	1	—	—	—	—	—	—
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	86	92	317	924	119	486	563	793	106	623
13	Ordnance and accessories	—	—	—	—	—	—	—	—	—	—
14	Food and kindred products	—	—	—	—	—	—	—	7	—	55
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	2	—	—	—	—	178	—	99	—	317
17	Miscellaneous textile goods and floor coverings	—	—	1	—	—	1,128	49	6	93	554
18	Apparel	—	—	—	1	—	5	—	6	—	18
19	Miscellaneous fabricated textile products	—	—	—	—	—	4,060	15	143	124	1
20+21	Lumber and wood products	11	1	2	—	—	4	141	20	400	74
22+23	Furniture and fixtures	2	—	609	13	1	2,522	30	55	36	51
24	Paper and allied products, except containers	236	123	208	148	42	43	70	26	8	381
25	Paperboard containers and boxes	172	261	119	107	250	19	329	15	5	479
26A	Newspapers and periodicals	—	2	4	9	4	5	4	5	1	11
26B	Other printing and publishing	6	1	17	5	2	16	25	30	2	71
27A	Industrial and other chemicals	113	50	17	800	193	712	353	70	16	156
27B	Agricultural fertilizers and chemicals	—	—	—	—	—	—	—	—	—	—
28	Plastics and synthetic materials	423	431	131	195	258	7	440	312	129	449
29A	Drugs	—	—	—	—	—	—	—	—	—	—
29B	Cleaning and toilet preparations	16	23	19	7	3	7	4	—	—	30
30	Paints and allied products	136	7	11	—	—	1,716	424	160	159	33
31	Petroleum refining and related products	58	60	40	61	37	64	95	158	67	130
32	Rubber and miscellaneous plastics products	1,449	560	1,011	1,057	1,380	9,191	2,068	1,665	617	2,127
33+34	Footwear, leather, and leather products	—	—	—	—	—	2	1	1	—	—
35	Glass and glass products	33	473	2	638	—	1,504	64	19	181	370
36	Stone and clay products	90	189	9	47	16	201	270	218	28	122
37	Primary iron and steel manufacturing	1,137	690	244	332	397	234	6,749	829	1,608	964
38	Primary nonferrous metals manufacturing	750	1,026	592	1,692	1,138	43	5,810	2,430	420	1,381
39	Metal containers	—	—	—	—	—	—	—	—	—	25
40	Heating, plumbing, and fabricated structural metal products	—	—	279	273	78	—	1,639	91	635	762
41	Screw machine products and stampings	492	548	544	731	226	12,604	3,233	888	218	1,263
42	Other fabricated metal products	276	410	341	2,482	423	2,788	1,101	1,583	531	1,579
43	Engines and turbines	—	—	—	—	—	2,018	197	—	1,283	—
44+45	Farm, construction, and mining machinery	—	—	—	—	—	—	—	—	35	—
46	Materials handling machinery and equipment	—	—	—	—	—	8	6	—	1	—
47	Metalworking machinery and equipment	31	55	37	111	47	197	195	1,022	59	152
48	Special industry machinery and equipment	—	—	—	73	—	—	—	—	—	—
49	General industrial machinery and equipment	62	—	18	—	80	55	1,351	275	654	70
50	Miscellaneous machinery, except electrical	35	85	104	314	98	793	3,069	1,364	241	450

51	Computer and office equipment	—	—	200	773	145	2	2	144	—	1,302
52	Service industry machinery	348	2	8	1	—	2,225	211	—	83	2
53	Electrical industrial equipment and apparatus	783	512	144	75	260	7	8	116	841	1,056
54	Household appliances	21	—	—	—	—	—	—	—	172	—
55	Electric lighting and wiring equipment	238	607	370	135	70	839	60	—	98	290
56	Audio, video, and communication equipment	—	—	1,659	107	32	1,770	1	750	17	827
57	Electronic components and accessories	145	141	12,301	12,958	2,032	2,617	2,072	1,621	8	9,413
58	Miscellaneous electrical machinery and supplies	1	1	271	—	597	2,493	1,395	36	111	45
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	643	431	—	662	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	—	1	2	3	4	40,353	7,056	6	642	9
60	Aircraft and parts	—	—	—	—	—	—	—	25,248	—	—
61	Other transportation equipment	—	—	—	—	—	—	—	—	804	—
62	Scientific and controlling instruments	653	—	129	143	57	883	4	5,054	93	3,040
63	Ophthalmic and photographic equipment	1	4	11	15	7	19	16	21	2	27
64	Miscellaneous manufacturing	9	69	1	—	1	12	7	13	3	12
65A	Railroads and related services; passenger ground transportation	43	37	48	135	39	517	268	113	65	112
65B	Motor freight transportation and warehousing	202	193	173	309	248	2,366	1,157	498	391	454
65C	Water transportation	5	2	4	18	7	47	32	17	4	13
65D	Air transportation	59	63	213	307	85	992	424	781	139	402
65E	Pipelines, freight forwarders, and related services	—	—	2	2	—	7	3	9	—	4
65G	In-house transportation	102	70	36	208	71	1,690	926	286	408	144
66	Communications, except radio and TV	55	57	213	250	55	146	132	220	61	525
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	134	194	276	919	226	475	785	674	200	813
68B	Gas production and distribution (utilities)	42	58	41	115	45	139	174	109	56	87
68C	Water and sanitary services	7	19	19	66	54	72	216	141	37	65
69A	Wholesale trade	1,137	1,365	3,008	3,848	1,721	12,343	5,542	3,079	1,555	4,302
69B	Retail trade	27	31	29	19	19	42	37	14	7	54
70A	Finance	122	137	388	543	170	1,013	603	913	193	800
70B	Insurance	23	25	67	98	29	204	107	131	43	144
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	62	204	500	727	165	518	322	482	410	1,082
72A	Hotels and lodging places	50	58	156	215	63	445	239	329	84	318
72B	Personal and repair services (except auto)	12	15	37	129	30	128	169	160	19	76
73A	Computer and data processing services	24	67	267	346	53	121	235	855	110	500
73B	Legal, engineering, accounting, and related services	55	103	429	999	73	1,194	496	964	165	1,199
73C	Other business and professional services, except medical	167	234	627	1,254	388	1,004	948	1,577	326	2,410
73D	Advertising	436	386	343	834	199	683	1,578	437	171	1,625
74	Eating and drinking places	71	87	196	271	97	540	307	405	120	435
75	Automotive repair and services	37	52	119	272	76	9,743	307	351	51	240
76	Amusements	5	4	16	27	4	53	40	36	5	38
77A	Health services	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	35	12	66	110	23	414	151	225	22	217
78	Federal Government enterprises	37	14	64	31	12	100	126	92	10	124
79	State and local government enterprises	19	30	17	37	30	48	39	29	53	144
80	Noncomparable imports	32	191	387	293	299	456	379	97	20	219
81	Scrap, used and secondhand goods	—	—	—	—	79	—	20	—	—	—
82	General government industry	—	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
I	Total intermediate inputs	10,849	10,137	27,556	36,668	12,378	128,015	55,643	58,430	15,935	45,364
88	Compensation of employees	3,455	5,674	14,432	23,497	6,233	16,142	21,913	34,922	10,395	39,513
89	Indirect business tax and nontax liability	128	141	383	521	158	920	417	663	173	635
90	Other value added	2,205	3,159	9,784	10,254	2,454	5,661	2,293	7,694	3,497	19,977
VA	Value added	5,787	8,974	24,599	34,272	8,845	22,723	24,623	43,279	14,065	60,125
T	<b>Total industry output</b>	<b>16,636</b>	<b>19,111</b>	<b>52,155</b>	<b>70,940</b>	<b>21,223</b>	<b>150,738</b>	<b>80,266</b>	<b>101,709</b>	<b>30,000</b>	<b>105,489</b>

Table B (continued).

**Detailed Use of Commodities by Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

N = Not applicable

Commodity number	Industry number	Ophthalmic, and photographic equipment	Miscellaneous manufacturing	Railroads and related services; passenger ground transportation	Motor freight transportation and warehousing	Water transportation	Air transportation	Pipelines, freight forwarders, and related services	State and local passenger transit	In-house transportation	Communications, except radio and TV
		(63)	(64)	(65A)	(65B)	(65C)	(65D)	(65E)	(65F)	(65G)	(66)
1	Livestock and livestock products	—	\$3	—	—	—	—	—	—	—	—
2	Other agricultural products	—	34	—	\$1	\$3	\$1	—	—	—	\$1
3	Forestry and fishery products	—	14	—	—	3	—	—	—	—	—
4	Agricultural, forestry, and fishery services	\$8	8	\$1	2	—	—	—	\$2	—	38
5+6	Metallic ores mining	—	11	—	—	—	—	—	—	—	—
7	Coal mining	19	2	—	—	9	—	—	—	—	—
8	Crude petroleum and natural gas	—	—	—	—	—	—	\$83	—	—	—
9+10	Nonmetallic minerals mining	—	5	—	—	—	—	—	—	—	—
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	149	188	2,465	736	30	239	574	1,664	\$680	8,177
13	Ordnance and accessories	—	—	—	—	—	—	5	—	—	—
14	Food and kindred products	—	90	—	—	83	231	—	—	—	—
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	—	462	—	—	—	1	—	10	—	—
17	Miscellaneous textile goods and floor coverings	1	29	—	8	44	—	—	—	8	1
18	Apparel	—	181	23	3	63	8	—	—	2	92
19	Miscellaneous fabricated textile products	—	45	—	11	101	6	76	2	12	3
20+21	Lumber and wood products	—	493	—	33	3	2	164	—	9	18
22+23	Furniture and fixtures	—	21	—	—	—	—	—	—	—	—
24	Paper and allied products, except containers	896	279	22	60	—	31	20	3	69	181
25	Paperboard containers and boxes	242	780	4	97	—	3	78	—	131	85
26A	Newspapers and periodicals	11	7	13	41	39	19	16	1	—	83
26B	Other printing and publishing	3	65	201	372	33	153	242	81	164	785
27A	Industrial and other chemicals	505	419	104	103	12	18	8	—	116	16
27B	Agricultural fertilizers and chemicals	—	—	—	—	—	—	—	—	—	—
28	Plastics and synthetic materials	278	992	—	—	4	—	—	—	—	—
29A	Drugs	—	—	—	—	—	—	—	—	—	5
29B	Cleaning and toilet preparations	14	38	—	2	—	3	—	9	10	24
30	Paints and allied products	—	240	—	56	26	4	—	—	263	56
31	Petroleum refining and related products	37	168	3,336	7,930	727	9,451	182	2,192	11,601	204
32	Rubber and miscellaneous plastics products	560	1,546	271	1,993	103	32	183	115	912	442
33+34	Footwear, leather, and leather products	—	31	1	2	—	1	1	—	1	2
35	Glass and glass products	154	24	52	3	4	—	12	—	3	18
36	Stone and clay products	10	140	2	8	2	1	4	—	2	—
37	Primary iron and steel manufacturing	42	774	404	—	—	2	—	—	—	—
38	Primary nonferrous metals manufacturing	108	2,003	1	4	21	—	—	—	4	16
39	Metal containers	—	—	—	—	—	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	7	145	—	—	5	—	—	2	—	—
41	Screw machine products and stampings	206	140	7	—	2	42	—	—	—	365
42	Other fabricated metal products	66	470	264	476	221	70	74	13	338	244
43	Engines and turbines	—	2	219	102	217	—	34	111	17	356
44+45	Farm, construction, and mining machinery	—	—	—	—	—	—	—	—	—	—
46	Materials handling machinery and equipment	—	—	—	5	—	—	—	—	2	—
47	Metalworking machinery and equipment	29	100	75	20	151	28	—	7	15	5
48	Special industry machinery and equipment	—	—	—	2	—	—	—	—	6	—
49	General industrial machinery and equipment	4	22	337	45	373	5	105	14	14	424
50	Miscellaneous machinery, except electrical	91	321	105	59	95	123	43	12	49	17



51	Computer and office equipment	11	21	—	2	—	2	19	—	—	322
52	Service industry machinery	1	3	8	9	—	4	4	10	15	3
53	Electrical industrial equipment and apparatus	119	187	250	191	10	13	28	440	95	348
54	Household appliances	—	—	—	—	1	—	—	—	—	—
55	Electric lighting and wiring equipment	6	18	21	45	12	7	—	1	49	66
56	Audio, video, and communication equipment	—	5	—	4	—	1	8	—	2	3,464
57	Electronic components and accessories	853	458	15	—	—	119	—	—	—	2,823
58	Miscellaneous electrical machinery and supplies	3	13	84	203	32	43	79	22	222	266
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	4	5	388	808	1	14	29	267	562	31
60	Aircraft and parts	—	—	—	—	—	2,705	—	—	—	—
61	Other transportation equipment	—	—	944	6	741	—	1	145	6	—
62	Scientific and controlling instruments	123	—	—	14	1	13	—	—	20	24
63	Ophthalmic and photographic equipment	1,243	11	10	62	7	19	28	1	—	83
64	Miscellaneous manufacturing	1	3,021	13	39	74	27	32	2	41	147
65A	Railroads and related services; passenger ground transportation	82	99	2,368	442	19	128	33	69	211	156
65B	Motor freight transportation and warehousing	173	491	368	28,810	104	233	209	50	790	248
65C	Water transportation	14	20	78	209	4,282	164	56	29	183	10
65D	Air transportation	84	139	214	622	77	6,064	233	1	10	673
65E	Pipelines, freight forwarders, and related services	1	—	442	4,966	1,407	7,820	763	24	112	12
65G	In-house transportation	89	393	—	—	—	—	—	—	—	90
66	Communications, except radio and TV	112	146	391	2,114	27	1,204	962	1	2,117	27,767
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	81
68A	Electric services (utilities)	147	321	96	1,128	120	294	438	546	1,282	809
68B	Gas production and distribution (utilities)	56	105	1	118	9	14	11	87	186	70
68C	Water and sanitary services	21	29	108	2,139	36	124	33	9	917	227
69A	Wholesale trade	1,439	3,442	1,521	5,070	505	1,462	300	300	5,637	1,795
69B	Retail trade	18	53	185	754	15	43	26	3	1,151	69
70A	Finance	206	309	971	1,292	1,048	1,535	882	50	4	2,218
70B	Insurance	34	70	261	1,341	46	151	181	13	1,216	337
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	131	504	617	3,475	896	1,471	706	53	103	3,340
72A	Hotels and lodging places	72	118	139	634	46	300	99	2	660	631
72B	Personal and repair services (except auto)	15	34	77	105	19	273	71	4	150	1,444
73A	Computer and data processing services	80	78	788	479	280	2,224	2,346	24	650	2,845
73B	Legal, engineering, accounting, and related services	57	254	404	868	683	1,071	1,752	11	1,128	6,159
73C	Other business and professional services, except medical	473	640	1,106	3,409	2,356	1,538	922	140	4,326	4,006
73D	Advertising	309	1,633	221	354	1,244	1,389	833	2	—	3,286
74	Eating and drinking places	94	184	230	747	57	1,832	124	11	804	744
75	Automotive repair and services	54	105	656	9,615	15	152	220	10	6,272	1,137
76	Amusements	9	17	14	71	15	59	17	—	—	2,818
77A	Health services	—	—	—	61	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	94	159	136	80	121	65	251	10	—	312
78	Federal Government enterprises	17	117	59	247	10	76	132	2	352	658
79	State and local government enterprises	9	94	90	271	—	21	10	2	60	39
80	Noncomparable imports	183	75	183	599	2,954	8,827	250	—	171	6,384
81	Scrap, used and secondhand goods	—	1	—	5	—	—	—	—	-1	—
82	General government industry	—	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
I	Total intermediate inputs	9,875	23,661	21,634	83,582	19,644	51,975	13,992	6,579	43,931	87,597
88	Compensation of employees	4,891	12,075	23,458	55,533	7,140	32,761	10,710	9,018	84,160	43,916
89	Indirect business tax and nontax liability	144	333	1,006	2,615	583	5,696	993	—	3,870	12,618
90	Other value added	9,221	5,247	9,926	25,223	5,073	3,709	7,921	-9,721	33,501	63,963
VA	Value added	14,256	17,654	34,390	83,371	12,796	42,166	19,624	-703	121,531	120,497
T	<b>Total industry output</b>	<b>24,131</b>	<b>41,315</b>	<b>55,754</b>	<b>166,953</b>	<b>32,440</b>	<b>94,141</b>	<b>33,616</b>	<b>5,876</b>	<b>165,461</b>	<b>208,094</b>

Table B (continued).

**Detailed Use of Commodities by Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

N = Not applicable

Commodity number	Industry number	Radio and TV broadcasting	Electric services (utilities)	Gas production and distribution (utilities)	Water and sanitary services	Wholesale trade	Retail trade	Finance	Insurance	Owner-occupied dwellings	Real estate and royalties
		(67)	(68A)	(68B)	(68C)	(69A)	(69B)	(70A)	(70B)	(71A)	(71B)
1	Livestock and livestock products	—	—	—	—	—	—	—	—	—	—
2	Other agricultural products	—	\$1	\$1	—	\$76	\$2	\$3	\$2	—	\$25
3	Forestry and fishery products	—	—	—	—	—	—	—	—	—	—
4	Agricultural, forestry, and fishery services	\$4	16	—	—	278	538	114	59	\$3,634	2,877
5 + 6	Metallic ores mining	—	—	—	—	—	—	—	—	—	—
7	Coal mining	—	15,676	—	—	9	5	2	—	—	4
8	Crude petroleum and natural gas	—	9	38,755	—	9	—	—	—	—	—
9 + 10	Nonmetallic minerals mining	—	—	—	—	6	1	—	—	—	—
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	259	13,323	6,798	\$1,528	2,332	4,914	1,145	612	21,663	29,576
13	Ordnance and accessories	—	—	—	—	—	—	—	—	—	—
14	Food and kindred products	—	—	—	—	659	92	—	—	—	—
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	—	—	—	—	87	51	—	—	—	—
17	Miscellaneous textile goods and floor coverings	—	—	—	—	53	43	1	—	—	1
18	Apparel	—	2	—	—	597	31	—	—	—	—
19	Miscellaneous fabricated textile products	—	—	—	—	272	31	175	19	—	10
20 + 21	Lumber and wood products	1	7	3	157	1,879	106	75	47	—	43
22 + 23	Furniture and fixtures	—	—	—	—	—	1	—	—	—	3
24	Paper and allied products, except containers	12	64	24	11	2,243	3,916	1,133	381	—	546
25	Paperboard containers and boxes	5	16	5	3	3,091	860	135	49	—	75
26A	Newspapers and periodicals	7	9	1	4	274	113	318	35	—	24
26B	Other printing and publishing	10	88	15	5	5,588	569	3,505	1,543	—	813
27A	Industrial and other chemicals	14	295	2	499	366	37	50	20	2	42
27B	Agricultural fertilizers and chemicals	—	—	—	—	335	23	—	—	344	132
28	Plastics and synthetic materials	—	—	—	—	5	12	—	—	—	—
29A	Drugs	—	—	—	—	33	—	—	—	—	—
29B	Cleaning and toilet preparations	—	3	5	—	465	158	23	7	—	50
30	Paints and allied products	—	—	—	2	7	14	1	46	—	26
31	Petroleum refining and related products	10	2,171	329	671	1,778	1,497	363	124	—	526
32	Rubber and miscellaneous plastics products	3	164	8	155	2,628	1,678	124	342	61	394
33 + 34	Footwear, leather, and leather products	—	2	1	—	9	128	17	6	—	8
35	Glass and glass products	—	7	—	21	198	14	26	9	—	4
36	Stone and clay products	—	4	—	16	114	19	10	—	—	359
37	Primary iron and steel manufacturing	—	—	1	—	71	6	2	1	—	—
38	Primary nonferrous metals manufacturing	—	100	—	1	334	4	—	15	—	8
39	Metal containers	—	1	—	—	464	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	—	—	—	—	106	8	—	—	134	83
41	Screw machine products and stampings	—	42	—	—	2	1	—	—	—	—
42	Other fabricated metal products	2	32	9	82	495	592	265	212	—	188
43	Engines and turbines	—	916	—	—	18	71	3	—	—	—
44 + 45	Farm, construction, and mining machinery	—	—	—	—	86	—	—	—	159	—
46	Materials handling machinery and equipment	—	13	—	—	438	8	—	—	—	—
47	Metalworking machinery and equipment	1	79	18	3	188	44	3	—	—	4
48	Special industry machinery and equipment	—	—	—	—	61	42	—	—	—	3
49	General industrial machinery and equipment	—	63	3	3	41	23	22	—	—	10
50	Miscellaneous machinery, except electrical	5	195	8	17	681	242	16	1	—	7

51	Computer and office equipment	33	7	152	—	258	81	240	187	—	38
52	Service industry machinery	—	1	1	8	172	128	2	1	—	2
53	Electrical industrial equipment and apparatus	29	188	—	—	96	39	18	4	—	5
54	Household appliances	—	—	—	—	—	6	1	—	—	48
55	Electric lighting and wiring equipment	—	130	1	19	170	222	22	20	—	37
56	Audio, video, and communication equipment	41	—	—	—	143	31	13	4	—	4
57	Electronic components and accessories	208	—	—	—	3,056	193	67	1	—	1
58	Miscellaneous electrical machinery and supplies	9	107	32	29	365	305	337	263	—	70
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	3	12	9	1,173	961	1,831	66	54	—	54
60	Aircraft and parts	—	—	—	—	—	—	—	—	—	—
61	Other transportation equipment	—	—	—	—	—	1	—	3	—	1
62	Scientific and controlling instruments	3	105	21	703	51	47	1	54	—	31
63	Ophthalmic and photographic equipment	40	9	8	6	622	190	619	324	—	138
64	Miscellaneous manufacturing	5	33	10	4	527	469	646	175	—	155
65A	Railroads and related services; passenger ground transportation	17	4,681	39	43	482	398	326	274	6	365
65B	Motor freight transportation and warehousing	45	581	45	111	2,103	1,356	4,294	887	25	553
65C	Water transportation	—	740	72	17	113	56	33	7	—	12
65D	Air transportation	73	389	275	66	2,656	1,488	1,383	1,014	—	1,277
65E	Pipelines, freight forwarders, and related services	1	34	468	9	276	35	26	16	—	25
65G	In-house transportation	298	385	231	184	22,583	20,237	372	27	0	500
66	Communications, except radio and TV	458	285	61	420	8,239	4,650	5,184	4,174	—	3,771
67	Radio and TV broadcasting	606	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	188	22	192	78	4,572	11,683	1,970	376	—	6,588
68B	Gas production and distribution (utilities)	5	4,711	17,687	515	1,123	831	478	41	—	944
68C	Water and sanitary services	41	188	23	1,429	866	1,546	1,044	118	—	3,464
69A	Wholesale trade	85	1,181	577	588	13,648	1,742	1,799	663	186	827
69B	Retail trade	7	35	29	169	1,405	1,793	130	117	191	267
70A	Finance	248	2,887	807	149	6,383	8,762	59,978	10,686	8,542	5,105
70B	Insurance	162	353	114	228	832	1,452	1,262	64,466	3,022	1,631
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	677	1,931	362	77	16,349	37,323	13,426	9,227	16,415	35,987
72A	Hotels and lodging places	74	399	129	47	1,839	1,484	1,200	1,081	—	1,406
72B	Personal and repair services (except auto)	98	95	26	79	1,218	1,645	439	175	—	1,944
73A	Computer and data processing services	423	1,745	244	59	7,609	3,318	12,743	2,241	—	623
73B	Legal, engineering, accounting, and related services	434	1,981	2,293	668	6,691	5,112	11,256	7,742	2,395	9,386
73C	Other business and professional services, except medical	770	1,785	479	217	23,681	17,943	16,387	8,847	1,640	14,294
73D	Advertising	831	131	22	1	14,423	26,490	7,426	2,730	—	5,001
74	Eating and drinking places	88	478	145	59	2,110	2,083	1,407	1,283	—	1,648
75	Automotive repair and services	112	199	153	72	3,851	2,374	994	3,413	—	3,568
76	Amusements	11,122	52	27	5	653	437	215	144	—	171
77A	Health services	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	157	534	48	12	1,135	507	865	338	—	476
78	Federal Government enterprises	33	458	104	31	3,225	3,007	8,903	1,781	—	1,558
79	State and local government enterprises	8	19	7	—	313	347	141	25	—	408
80	Noncomparable imports	—	23	57	2	4,092	78	3,111	724	—	—
81	Scrap, used and secondhand goods	—	—	—	—	1	1	—	1	—	1
82	General government industry	—	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
I	Total intermediate inputs	17,765	60,187	70,935	10,453	185,269	177,612	166,354	127,236	58,419	138,225
88	Compensation of employees	8,254	22,075	5,764	4,289	219,924	205,382	145,286	91,898	—	48,121
89	Indirect business tax and nontax liability	534	12,545	4,321	1,825	100,738	72,450	16,328	13,919	73,022	79,715
90	Other value added	2,806	76,089	12,136	2,614	63,039	67,075	88,304	—1,956	325,809	284,052
VA	Value added	11,594	110,709	22,222	8,729	383,701	344,907	249,918	103,861	398,831	411,888
T	<b>Total industry output</b>	<b>29,359</b>	<b>170,896</b>	<b>93,157</b>	<b>19,182</b>	<b>568,970</b>	<b>522,519</b>	<b>416,272</b>	<b>231,097</b>	<b>457,250</b>	<b>550,113</b>

Table B: Detailed Use of Commodities by Industries ▲ 57

Table B (continued).

**Detailed Use of Commodities by Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

N = Not applicable

Commodity number	Industry number	Hotels and lodging places	Personal and repair services (except auto)	Computer and data processing services	Legal engineering, accounting, and related services	Other business and professional services except medical	Advertising	Eating and drinking places	Auto-motive repair and services	Amuse-ments	Health services
		(72A)	(72B)	(73A)	(73B)	(73C)	(73D)	(74)	(75)	(76)	(77A)
1	Livestock and livestock products	—	—	—	—	\$44	—	\$321	—	\$39	\$55
2	Other agricultural products	\$5	—	\$2	\$6	2	—	1,843	\$2	147	203
3	Forestry and fishery products	3	—	—	—	—	—	1,747	—	6	37
4	Agricultural, forestry, and fishery services	275	\$42	54	113	101	\$9	186	53	271	748
5+6	Metallic ores mining	—	—	—	—	—	—	—	—	—	—
7	Coal mining	2	3	—	1	1	—	6	2	1	7
8	Crude petroleum and natural gas	—	—	—	—	—	—	—	—	—	—
9+10	Nonmetallic minerals mining	—	3	—	—	—	—	—	—	—	—
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	1,516	497	309	383	876	49	2,092	525	1,056	2,861
13	Ordnance and accessories	—	—	—	—	88	—	—	—	10	—
14	Food and kindred products	119	—	—	—	31	—	61,536	—	692	4,308
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	6	142	—	—	6	—	—	—	80	36
17	Miscellaneous textile goods and floor coverings	13	37	—	2	7	—	38	55	10	49
18	Apparel	49	376	—	—	89	—	8	43	107	618
19	Miscellaneous fabricated textile products	503	260	—	—	6	18	156	124	53	689
20+21	Lumber and wood products	12	43	18	75	89	4	25	11	78	135
22+23	Furniture and fixtures	—	—	2	5	2	—	—	166	2	5
24	Paper and allied products, except containers	202	254	287	727	1,399	85	895	189	217	2,350
25	Paperboard containers and boxes	123	58	25	94	569	7	997	89	94	774
26A	Newspapers and periodicals	53	34	35	128	154	6	29	41	63	387
26B	Other printing and publishing	189	945	1,039	1,961	2,440	2,222	571	105	269	3,052
27A	Industrial and other chemicals	10	153	10	43	1,237	2	295	217	116	8,156
27B	Agricultural fertilizers and chemicals	112	—	—	—	4	—	—	—	134	35
28	Plastics and synthetic materials	—	12	—	—	—	—	—	—	—	181
29A	Drugs	—	—	—	—	—	—	—	—	9	7,576
29B	Cleaning and toilet preparations	72	1,117	4	29	450	—	53	121	31	658
30	Paints and allied products	0	9	—	2	49	—	1	328	33	0
31	Petroleum refining and related products	112	211	85	128	1,087	1	105	1,756	192	550
32	Rubber and miscellaneous plastics products	243	379	191	238	1,015	24	2,166	2,860	133	6,547
33+34	Footwear, leather, and leather products	5	350	4	41	54	—	3	2	70	43
35	Glass and glass products	254	4	4	126	292	—	417	785	5	928
36	Stone and clay products	38	10	—	24	83	—	391	48	2	200
37	Primary iron and steel manufacturing	—	7	—	3	73	—	—	—	1	2
38	Primary nonferrous metals manufacturing	—	73	—	—	20	—	7	5	15	12
39	Metal containers	—	—	—	—	38	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	—	6	—	—	—	—	—	—	2	—
41	Screw machine products and stampings	6	85	—	—	103	—	57	1,467	19	332
42	Other fabricated metal products	35	236	42	171	309	9	99	1,669	86	422
43	Engines and turbines	—	3	—	—	139	—	2	655	—	1
44+45	Farm, construction, and mining machinery	—	—	—	—	80	—	—	—	4	—
46	Materials handling machinery and equipment	—	—	—	—	146	—	—	—	—	—
47	Metalworking machinery and equipment	1	12	4	11	567	—	1	32	7	11
48	Special industry machinery and equipment	—	41	2	5	394	—	148	35	—	4
49	General industrial machinery and equipment	—	37	—	—	427	—	162	25	—	7
50	Miscellaneous machinery, except electrical	8	91	19	77	435	6	35	304	26	116

51	Computer and office equipment	7	447	6,602	513	476	65	11	6	21	794
52	Service industry machinery	6	324	1	4	141	2	45	923	101	99
53	Electrical industrial equipment and apparatus	13	57	122	4	866	1	5	411	3	98
54	Household appliances	8	683	—	—	5	—	5	—	—	13
55	Electric lighting and wiring equipment	16	22	1	13	121	3	77	492	86	232
56	Audio, video, and communication equipment	4	12	5	8	63	2	16	16	9	13
57	Electronic components and accessories	—	933	4,396	20	2,469	3	—	272	3	200
58	Miscellaneous electrical machinery and supplies	15	57	331	414	397	15	42	709	630	290
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	108	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	31	69	17	82	467	21	315	15,666	84	252
60	Aircraft and parts	—	—	—	—	—	—	—	1	—	—
61	Other transportation equipment	—	—	—	—	279	—	—	—	39	—
62	Scientific and controlling instruments	15	73	67	18	169	1	5	95	13	9,593
63	Ophthalmic and photographic equipment	28	956	66	600	1,187	37	19	42	57	1,312
64	Miscellaneous manufacturing	84	1,321	53	312	627	33	368	49	306	405
65A	Railroads and related services; passenger ground transportation	62	68	81	180	534	18	474	265	76	726
65B	Motor freight transportation and warehousing	313	473	167	735	1,592	42	2,168	864	235	1,758
65C	Water transportation	14	28	10	34	112	3	64	58	28	96
65D	Air transportation	223	283	489	844	1,808	73	895	608	316	1,725
65E	Pipelines, freight forwarders, and related services	798	9	10	20	40	3	10	252	5	42
65G	In-house transportation	1,200	2,590	277	1,389	6,329	513	10,322	1,960	2,242	7,298
66	Communications, except radio and TV	767	1,092	2,380	2,993	4,353	302	988	1,233	892	4,846
67	Radio and TV broadcasting	—	—	—	—	—	148	—	—	—	—
68A	Electric services (utilities)	2,139	1,258	406	856	1,330	118	6,166	1,316	1,781	4,079
68B	Gas production and distribution (utilities)	355	398	29	128	284	6	985	325	160	889
68C	Water and sanitary services	791	444	38	114	256	3	1,455	382	292	1,480
69A	Wholesale trade	403	1,534	2,704	1,191	3,640	259	12,773	5,617	1,709	8,290
69B	Retail trade	109	73	26	58	666	16	353	1,044	103	397
70A	Finance	3,052	879	996	2,711	3,055	176	2,674	2,206	1,066	3,717
70B	Insurance	95	201	90	273	602	32	348	597	164	1,550
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	4,360	5,139	3,684	13,593	9,808	1,360	13,775	7,094	7,620	34,274
72A	Hotels and lodging places	211	229	321	1,356	1,587	68	749	467	294	1,666
72B	Personal and repair services (except auto)	402	4,476	171	206	605	30	880	1,584	313	1,293
73A	Computer and data processing services	389	531	9,272	6,144	5,212	247	708	562	528	6,191
73B	Legal, engineering, accounting, and related services	502	3,061	1,805	19,328	6,405	1,114	2,428	983	2,681	9,420
73C	Other business and professional services, except medical	4,205	2,472	3,630	21,077	17,944	2,442	5,640	2,838	4,014	24,470
73D	Advertising	1,048	2,267	1,084	924	2,818	181	6,112	2,281	4,728	2,524
74	Eating and drinking places	320	311	423	807	2,109	80	4,181	543	426	4,358
75	Automotive repair and services	326	447	628	1,085	1,997	281	802	1,648	713	3,064
76	Amusements	33	43	46	179	451	614	2,459	71	19,673	229
77A	Health services	—	—	—	—	2	—	—	—	33	11,974
77B	Educational and social services, and membership organizations	110	326	750	781	1,134	67	443	101	189	1,477
78	Federal Government enterprises	297	502	705	2,411	2,069	158	460	497	499	5,374
79	State and local government enterprises	102	65	13	69	81	5	192	162	41	188
80	Noncomparable imports	76	22	547	501	1,246	44	115	12	214	22
81	Scrap, used and secondhand goods	—	1	—	—	1	—	1	507	-153	—
82	General government industry	—	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
I	Total intermediate inputs	26,893	39,703	44,575	86,369	98,242	11,028	153,919	66,578	56,313	198,810
88	Compensation of employees	20,653	29,220	49,291	118,556	142,292	11,509	89,917	38,440	38,327	287,201
89	Indirect business tax and nontax liability	5,181	2,012	1,863	1,685	5,440	339	16,392	6,648	4,957	3,321
90	Other value added	6,874	20,837	20,002	49,752	94,471	6,989	20,480	26,715	21,772	75,654
VA	Value added	32,709	52,069	71,155	169,992	242,203	18,837	126,789	71,803	65,055	366,176
T	<b>Total industry output</b>	<b>59,602</b>	<b>91,772</b>	<b>115,730</b>	<b>256,361</b>	<b>340,445</b>	<b>29,865</b>	<b>280,708</b>	<b>138,381</b>	<b>121,368</b>	<b>564,986</b>

Table B (continued).

**Detailed Use of Commodities by Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

N = Not applicable

Commodity number	Industry number	Educational and social services, and membership organizations	Federal Government enterprises	State and local government enterprises	General government industry	Household industry	Inventory valuation adjustment	Total intermediate use	Personal consumption expenditures	Gross private fixed investment	Change in business inventories
		(77B)	(78)	(79)	(82)	(84)	(85)	(91)	(92)	(93)	
1	Livestock and livestock products	\$65	—	—	—	—	—	\$85,869	\$3,709	—	\$857
2	Other agricultural products	124	\$6	—	—	—	—	71,142	19,531	—	4,035
3	Forestry and fishery products	—	6	—	—	—	—	13,280	3,085	—	-45
4	Agricultural, forestry, and fishery services	358	2	\$301	—	—	—	27,310	729	—	—
5 + 6	Metallic ores mining	—	—	—	—	—	—	8,268	—	\$50	-24
7	Coal mining	3	734	1,273	—	—	—	23,786	68	—	-3
8	Crude petroleum and natural gas	—	—	630	—	—	—	138,601	—	23	-105
9 + 10	Nonmetallic minerals mining	3	—	51	—	—	—	12,371	39	—	25
11	New construction	—	—	—	—	—	—	170	—	339,916	—
12	Maintenance and repair construction	9,121	918	18,566	—	—	—	159,448	—	20,362	—
13	Ordnance and accessories	—	—	—	—	—	—	465	1,473	29	-1,855
14	Food and kindred products	2,507	179	—	—	—	—	153,699	248,010	—	150
15	Tobacco products	—	—	—	—	—	—	3,348	30,395	—	2,137
16	Broad and narrow fabrics, yarn and thread mills	34	8	—	—	—	—	37,127	1,683	—	477
17	Miscellaneous textile goods and floor coverings	9	4	11	—	—	—	10,074	5,578	2,343	19
18	Apparel	80	1	34	—	—	—	16,628	80,934	—	3,897
19	Miscellaneous fabricated textile products	80	109	—	—	—	—	10,770	11,189	—	470
20 + 21	Lumber and wood products	193	—	—	—	—	—	80,245	2,529	4,661	663
22 + 23	Furniture and fixtures	2	105	—	—	—	—	5,479	21,623	16,091	185
24	Paper and allied products, except containers	1,316	77	42	—	—	—	80,994	14,921	—	771
25	Paperboard containers and boxes	274	115	—	—	—	—	30,352	381	—	277
26A	Newspapers and periodicals	941	4	5	—	—	—	4,401	14,339	—	-62
26B	Other printing and publishing	9,335	735	69	—	—	—	56,500	15,282	—	753
27A	Industrial and other chemicals	204	104	1,209	—	—	—	97,797	2,154	1,957	729
27B	Agricultural fertilizers and chemicals	48	—	141	—	—	—	15,545	920	—	-153
28	Plastics and synthetic materials	—	—	—	—	—	—	46,036	—	—	239
29A	Drugs	63	—	3	—	—	—	17,620	43,864	—	1,292
29B	Cleaning and toilet preparations	166	38	30	—	—	—	8,826	30,098	—	186
30	Paints and allied products	42	—	—	—	—	—	12,894	480	—	42
31	Petroleum refining and related products	505	652	1,420	—	—	—	83,751	53,355	—	46
32	Rubber and miscellaneous plastics products	676	15	12	—	—	—	99,363	15,051	215	995
33 + 34	Footwear, leather, and leather products	151	18	—	—	—	—	3,871	16,491	—	331
35	Glass and glass products	296	3	49	—	—	—	16,883	979	—	185
36	Stone and clay products	3	—	523	—	—	—	42,481	2,570	—	-196
37	Primary iron and steel manufacturing	21	—	—	—	—	—	81,280	36	16	-339
38	Primary nonferrous metals manufacturing	2	43	—	—	—	—	68,611	71	52	-392
39	Metal containers	—	—	—	—	—	—	13,025	—	38	10
40	Heating, plumbing, and fabricated structural metal products	2	—	—	—	—	—	43,481	326	3,612	-110
41	Screw machine products and stampings	75	28	2	—	—	—	33,140	1,345	—	217
42	Other fabricated metal products	240	7	10	—	—	—	51,306	4,266	2,415	67
43	Engines and turbines	4	99	2	—	—	—	10,279	169	3,271	-184
44 + 45	Farm, construction, and mining machinery	—	—	160	—	—	—	6,049	400	17,803	277
46	Materials handling machinery and equipment	—	5	—	—	—	—	2,674	—	5,743	-41
47	Metalworking machinery and equipment	14	4	5	—	—	—	9,666	687	17,652	18
48	Special industry machinery and equipment	2	—	—	—	—	—	4,224	237	16,820	-106
49	General industrial machinery and equipment	—	8	—	—	—	—	17,643	—	11,300	-80
50	Miscellaneous machinery, except electrical	91	95	863	—	—	—	22,989	136	700	-59

51	Computer and office equipment	73	3	—	—	—	—	24,759	5,368	36,169	-1,241
52	Service industry machinery	39	15	376	—	—	—	14,939	910	7,376	165
53	Electrical industrial equipment and apparatus	22	—	2	—	—	—	21,175	200	6,826	77
54	Household appliances	15	—	10	—	—	—	2,658	13,100	2,668	-96
55	Electric lighting and wiring equipment	101	28	123	—	—	—	17,691	2,023	283	141
56	Audio, video, and communication equipment	64	—	43	—	—	—	12,017	21,682	24,513	374
57	Electronic components and accessories	182	—	42	—	—	—	75,400	216	—	-51
58	Miscellaneous electrical machinery and supplies	191	17	131	—	—	—	13,375	6,298	2,058	-149
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	1,844	105,552	75,132	1,114
59B	Truck and bus bodies, trailers, and motor vehicles parts	237	728	12	—	—	—	74,459	4,277	4,981	-220
60	Aircraft and parts	—	—	—	—	—	—	29,930	465	13,676	-8,011
61	Other transportation equipment	5	10	10	—	—	—	3,092	11,958	4,741	-298
62	Scientific and controlling instruments	227	1	13	—	—	—	25,540	5,479	43,637	-228
63	Ophthalmic and photographic equipment	451	11	12	—	—	—	9,589	6,240	6,915	368
64	Miscellaneous manufacturing	911	33	49	—	—	—	13,526	36,410	5,365	765
65A	Railroads and related services; passenger ground transportation	191	714	399	—	—	—	32,452	19,504	957	135
65B	Motor freight transportation and warehousing	755	964	375	—	—	—	110,656	25,965	4,138	629
65C	Water transportation	27	149	241	—	—	—	12,771	6,249	18	36
65D	Air transportation	758	1,549	99	—	—	—	39,502	36,404	1,539	137
65E	Pipelines, freight forwarders, and related services	23	5	6	—	—	—	22,544	3,474	—	8
65G	In-house transportation	7,916	718	—	—	—	—	165,461	—	—	—
66	Communications, except radio and TV	2,006	186	467	—	—	—	95,074	90,397	5,065	—
67	Radio and TV broadcasting	—	—	—	—	—	—	835	1,839	—	—
68A	Electric services (utilities)	2,014	300	3,350	—	—	—	98,868	79,337	—	—
68B	Gas production and distribution (utilities)	511	199	2,579	—	—	—	61,944	29,537	—	11
68C	Water and sanitary services	632	308	1,117	—	—	—	27,052	20,464	—	—
69A	Wholesale trade	2,746	375	428	—	—	—	280,569	158,445	48,167	2,658
69B	Retail trade	302	10	16	—	—	—	39,882	471,448	14,358	—
70A	Finance	2,664	407	1,052	—	—	—	163,754	198,007	—	—
70B	Insurance	477	95	185	—	—	—	90,095	138,181	—	—
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	457,250	—	—
71B	Real estate and royalties	25,599	717	2,103	—	—	—	330,296	166,640	28,407	—
72A	Hotels and lodging places	687	18	22	—	—	—	27,260	29,881	—	—
72B	Personal and repair services (except auto)	485	12	106	—	—	—	23,579	65,602	—	—
73A	Computer and data processing services	4,187	226	411	—	—	—	83,729	2,444	3,441	-41
73B	Legal, engineering, accounting, and related services	3,164	128	3,285	—	—	—	179,136	45,781	15,785	—
73C	Other business and professional services, except medical	11,003	888	1,539	—	—	—	271,050	20,917	—	—
73D	Advertising	5,736	5	202	—	—	—	136,364	676	—	—
74	Eating and drinking places	1,607	67	116	—	—	—	41,383	242,151	—	—
75	Automotive repair and services	1,074	198	482	—	—	—	70,073	90,099	—	4
76	Amusements	912	—	2	—	—	—	41,927	78,466	—	—
77A	Health services	—	—	—	—	—	—	13,484	611,328	—	—
77B	Educational and social services, and membership organizations	1,217	21	55	—	—	—	16,339	225,749	—	—
78	Federal Government enterprises	2,154	48	266	—	—	—	39,448	6,881	—	—
79	State and local government enterprises	95	23	1,001	—	—	—	6,810	22,489	—	—
80	Noncomparable imports	19	1,256	—	—	—	—	44,964	33,009	—	—
81	Scrap, used and secondhand goods	—	—	—	—	—	—	7,147	17,187	-30,293	1,529
82	General government industry	—	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	-66,481	—	—
84	Household industry	—	—	—	—	—	—	—	10,087	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	-7,982
I	Total intermediate inputs	108,525	14,552	46,138	—	—	—	4,754,203	—	—	—
88	Compensation of employees	110,582	47,284	18,581	\$654,208	\$10,087	—	NA	—	—	—
89	Indirect business tax and nontax liability	494	—	—	—	—	—	NA	—	—	—
90	Other value added	8,731	-864	22,211	110,181	—	-\$7,982	NA	—	—	—
VA	Value added	119,807	46,420	40,792	764,389	10,087	-7,982	NA	—	—	—
T	Total industry output	228,332	60,972	86,930	764,389	10,087	-7,982	NA	4,208,718	790,991	5,430

Table B (continued).

**Detailed Use of Commodities by Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

N = Not applicable

Commodity number	Industry number	Exports of goods and services (94)	Imports goods and services (95)	Federal government consumption and gross investment				
				Total	National defense: Consumption expenditures (96C)	National defense: Gross investment (96I)	Nondefense: Consumption expenditures (97C)	Nondefense: Gross investment (97I)
				96 + 97	(96C)	(96I)	(97C)	(97I)
1	Livestock and livestock products	\$800	-\$2,061	\$7	\$2	—	\$5	—
2	Other agricultural products	16,116	-6,860	-358	—	—	-358	—
3	Forestry and fishery products	2,880	-5,659	-1,169	-1	—	-1,168	—
4	Agricultural, forestry, and fishery services	61	-21	39	19	—	20	—
5 + 6	Metallic ores mining	1,104	1,488	-147	-148	—	1	—
7	Coal mining	3,122	-133	29	1	—	28	—
8	Crude petroleum and natural gas	3,290	-43,984	-202	—	—	-202	—
9 + 10	Nonmetallic minerals mining	686	-898	2	-3	—	5	—
11	New construction	—	—	15,803	—	\$5,234	—	\$10,569
12	Maintenance and repair construction	77	—	10,429	6,649	—	3,780	—
13	Ordnance and accessories	3,592	-809	19,177	7,568	8,911	482	2,216
14	Food and kindred products	19,630	-21,850	464	269	—	195	—
15	Tobacco products	5,874	-1,587	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	2,359	-4,397	63	51	—	12	—
17	Miscellaneous textile goods and floor coverings	1,724	-1,879	49	3	—	25	21
18	Apparel	4,065	-38,484	506	505	—	1	—
19	Miscellaneous fabricated textile products	810	-2,870	206	150	—	56	—
20 + 21	Lumber and wood products	5,965	-7,143	31	14	—	16	1
22 + 23	Furniture and fixtures	2,633	-6,026	198	—	10	—	188
24	Paper and allied products, except containers	8,567	-10,715	699	98	—	601	—
25	Paperboard containers and boxes	691	-247	91	40	—	51	—
26A	Newspapers and periodicals	653	-199	111	12	—	99	—
26B	Other printing and publishing	2,984	-1,783	996	290	—	706	—
27A	Industrial and other chemicals	17,292	-14,375	4,268	3,109	—	1,159	—
27B	Agricultural fertilizers and chemicals	3,341	-2,330	27	8	—	19	—
28	Plastics and synthetic materials	8,477	-3,827	17	11	—	6	—
29A	Drugs	7,272	-13,193	530	365	—	165	—
29B	Cleaning and toilet preparations	2,591	-2,052	180	126	—	54	—
30	Paints and allied products	745	-200	6	—	—	6	—
31	Petroleum refining and related products	9,084	-11,582	3,109	2,771	—	338	—
32	Rubber and miscellaneous plastics products	6,905	-13,253	625	423	—	152	50
33 + 34	Footwear, leather, and leather products	1,464	-12,824	45	41	—	4	—
35	Glass and glass products	1,544	-2,159	167	16	—	151	—
36	Stone and clay products	1,713	-4,551	94	30	—	64	—
37	Primary iron and steel manufacturing	3,505	-10,893	230	221	—	9	—
38	Primary nonferrous metals manufacturing	6,379	-10,228	242	48	36	84	74
39	Metal containers	341	-201	15	15	—	—	—
40	Heating, plumbing, and fabricated structural metal products	2,061	-1,008	677	158	184	239	96
41	Screw machine products and stampings	2,171	-2,628	193	122	—	71	—
42	Other fabricated metal products	4,849	-8,510	634	269	157	137	71
43	Engines and turbines	5,419	-2,413	964	119	558	2	285
44 + 45	Farm, construction, and mining machinery	9,002	-4,754	506	9	464	9	24
46	Materials handling machinery and equipment	1,302	-1,468	65	—	50	3	12
47	Metalworking machinery and equipment	3,686	-5,127	64	6	18	38	2
48	Special industry machinery and equipment	4,510	-5,881	158	2	21	123	12
49	General industrial machinery and equipment	7,834	-7,796	292	79	165	11	37
50	Miscellaneous machinery, except electrical	1,962	-1,895	851	195	389	31	236



51	Computer and office equipment	22,925	-32,687	<b>2,864</b>	222	963	732	947
52	Service industry machinery	3,320	-2,243	<b>157</b>	79	21	56	1
53	Electrical industrial equipment and apparatus	4,083	-5,295	<b>802</b>	376	126	147	153
54	Household appliances	2,329	-4,072	<b>40</b>	22	9	1	8
55	Electric lighting and wiring equipment	2,839	-4,985	<b>339</b>	227	—	112	—
56	Audio, video, and communication equipment	9,551	-25,409	<b>7,532</b>	3,548	2,356	183	1,445
57	Electronic components and accessories	16,150	-20,574	<b>1,920</b>	1,660	—	260	—
58	Miscellaneous electrical machinery and supplies	5,702	-8,062	<b>1,447</b>	504	692	201	50
59A	Motor vehicles (passenger cars and trucks)	16,336	-58,285	<b>2,104</b>	5	1,574	14	511
59B	Truck and bus bodies, trailers, and motor vehicles parts	16,995	-21,743	<b>839</b>	198	219	68	354
60	Aircraft and parts	40,656	-12,153	<b>37,546</b>	26,065	9,906	1,021	554
61	Other transportation equipment	3,354	-2,693	<b>8,841</b>	2,545	6,093	74	129
62	Scientific and controlling instruments	17,864	-14,773	<b>26,133</b>	6,223	15,617	1,960	2,333
63	Ophthalmic and photographic equipment	3,453	-8,153	<b>1,335</b>	964	294	55	22
64	Miscellaneous manufacturing	4,427	-23,335	<b>22</b>	41	108	-137	10
65A	Railroads and related services; passenger ground transportation	3,973	-164	<b>914</b>	606	23	279	6
65B	Motor freight transportation and warehousing	10,161	-2,059	<b>5,326</b>	4,174	177	926	49
65C	Water transportation	9,695	3,530	<b>1,624</b>	1,521	—	103	—
65D	Air transportation	23,317	-8,544	<b>3,353</b>	2,603	136	589	25
65E	Pipelines, freight forwarders, and related services	2,700	—	<b>22</b>	31	—	-9	—
65G	In-house transportation	-0-	—	—	—	—	—	—
66	Communications, except radio and TV	3,596	—	<b>3,319</b>	1,471	—	1,848	—
67	Radio and TV broadcasting	—	—	—	—	—	—	—
68A	Electric services (utilities)	267	-695	<b>2,451</b>	1,949	—	502	—
68B	Gas production and distribution (utilities)	548	—	<b>470</b>	346	—	124	—
68C	Water and sanitary services	65	—	<b>1,036</b>	495	—	541	—
69A	Wholesale trade	44,726	18,317	<b>4,467</b>	1,718	1,592	549	608
69B	Retail trade	20	—	<b>2</b>	—	—	2	—
70A	Finance	17,142	-265	<b>1,030</b>	—	—	1,030	—
70B	Insurance	1,685	-1,136	<b>2,297</b>	17	—	2,280	—
71A	Owner-occupied dwellings	—	—	—	—	—	—	—
71B	Real estate and royalties	20,683	-11	<b>3,691</b>	512	—	3,179	—
72A	Hotels and lodging places	48	—	<b>1,116</b>	967	—	149	—
72B	Personal and repair services (except auto)	42	—	<b>69</b>	51	—	18	—
73A	Computer and data processing services	3,092	-225	<b>16,719</b>	7,913	—	8,806	—
73B	Legal, engineering, accounting, and related services	5,013	-839	<b>3,733</b>	3,126	—	607	—
73C	Other business and professional services, except medical	5,677	-1,632	<b>21,244</b>	14,210	—	7,034	—
73D	Advertising	531	-615	<b>67</b>	55	—	12	—
74	Eating and drinking places	328	—	<b>1,230</b>	505	—	725	—
75	Automotive repair and services	34	-6	<b>496</b>	431	—	65	—
76	Amusements	4,289	-248	<b>573</b>	548	—	25	—
77A	Health services	26	-13	<b>1,681</b>	9	—	1,672	—
77B	Educational and social services, and membership organizations	450	-449	<b>9,527</b>	390	—	9,137	—
78	Federal Government enterprises	188	—	<b>1,058</b>	1,080	—	-22	—
79	State and local government enterprises	—	—	<b>205</b>	165	—	40	—
80	Noncomparable imports	—	-90,036	<b>12,063</b>	9,906	—	2,157	—
81	Scrap, used and secondhand goods	5,872	-2,746	<b>668</b>	933	18	126	-409
82	General government industry	—	—	<b>273,327</b>	196,793	—	76,534	—
83	Rest of the world adjustment to final uses	67,325	-74	<b>-770</b>	—	—	-770	—
84	Household industry	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—
I	Total intermediate inputs	—	—	—	—	—	—	—
88	Compensation of employees	—	—	—	—	—	—	—
89	Indirect business tax and nontax liability	—	—	—	—	—	—	—
90	Other value added	—	—	—	—	—	—	—
VA	Value added	—	—	—	—	—	—	—
<b>T</b>	<b>Total industry output</b>	<b>602,609</b>	<b>-631,637</b>	<b>525,912</b>	<b>318,866</b>	<b>56,121</b>	<b>130,235</b>	<b>20,690</b>

Table B (continued).

**Detailed Use of Commodities by Industries**

(Millions of dollars at producers' prices)

KEY: — = Value too small to report

N = Not applicable

Commodity number	Industry number	State and local government Consumption and gross investment					GDP	Total Commodity output
		Total	Education: Consumption expenditures	Education: Gross investment	Other: Consumption expenditures	Other: Gross investment		
		98 + 99	(98C)	(98I)	(99C)	(99I)		
1	Livestock and livestock products	\$194	\$40	—	\$154	—	\$3,506	\$89,375
2	Other agricultural products	940	297	—	643	—	33,404	104,546
3	Forestry and fishery products	-507	9	—	-516	—	-1,415	11,865
4	Agricultural, forestry, and fishery services	1,687	377	—	1,310	—	2,495	29,805
5 + 6	Metallic ores mining	—	—	—	—	—	2,471	10,739
7	Coal mining	48	28	—	20	—	3,131	26,917
8	Crude petroleum and natural gas	—	—	—	—	—	-40,978	97,623
9 + 10	Nonmetallic minerals mining	58	—	—	58	—	-88	12,283
11	New construction	101,060	—	\$20,251	—	\$80,809	456,779	456,949
12	Maintenance and repair construction	32,065	6,802	—	25,263	—	62,933	222,381
13	Ordnance and accessories	145	—	—	145	—	21,752	22,217
14	Food and kindred products	8,654	4,061	—	4,591	2	255,058	408,757
15	Tobacco products	-20	-1	—	-19	—	36,799	40,147
16	Broad and narrow fabrics, yarn and thread mills	216	73	—	143	—	401	37,528
17	Miscellaneous textile goods and floor coverings	75	6	12	47	10	7,909	17,983
18	Apparel	1,091	6	—	1,085	—	52,009	68,637
19	Miscellaneous fabricated textile products	446	67	—	379	—	10,251	21,021
20 + 21	Lumber and wood products	176	75	—	101	—	6,882	87,127
22 + 23	Furniture and fixtures	2,666	—	1,601	4	1,061	37,370	42,849
24	Paper and allied products, except containers	3,260	1,654	—	1,606	—	17,503	98,497
25	Paperboard containers and boxes	198	39	—	159	—	1,391	31,743
26A	Newspapers and periodicals	652	406	—	246	—	15,494	19,895
26B	Other printing and publishing	6,470	4,346	—	2,124	—	24,702	81,202
27A	Industrial and other chemicals	3,537	826	—	2,711	—	15,562	113,359
27B	Agricultural fertilizers and chemicals	500	146	—	354	—	2,305	17,850
28	Plastics and synthetic materials	2	1	—	1	—	4,908	50,944
29A	Drugs	4,936	119	—	4,817	—	44,701	62,321
29B	Cleaning and toilet preparations	728	136	—	592	—	31,731	40,557
30	Paints and allied products	412	296	—	116	—	1,485	14,379
31	Petroleum refining and related products	12,068	5,385	—	6,683	—	66,080	149,831
32	Rubber and miscellaneous plastics products	1,912	110	—	1,802	—	12,450	111,813
33 + 34	Footwear, leather, and leather products	160	—	—	160	—	5,667	9,538
35	Glass and glass products	382	73	—	309	—	1,098	17,981
36	Stone and clay products	180	80	—	100	—	-190	42,291
37	Primary iron and steel manufacturing	87	7	—	80	—	-7,358	73,922
38	Primary nonferrous metals manufacturing	78	5	—	73	—	-3,798	64,813
39	Metal containers	10	5	—	5	—	213	13,238
40	Heating, plumbing, and fabricated structural metal products	11	—	—	10	1	5,569	49,050
41	Screw machine products and stampings	126	39	—	87	—	1,424	34,564
42	Other fabricated metal products	1,491	256	196	696	343	5,212	56,518
43	Engines and turbines	390	91	5	143	151	7,616	17,895
44 + 45	Farm, construction, and mining machinery	1,663	62	24	14	1,563	24,897	30,946
46	Materials handling machinery and equipment	15	—	9	—	6	5,616	8,290
47	Metalworking machinery and equipment	400	98	124	69	109	17,380	27,046
48	Special industry machinery and equipment	256	95	154	—	7	15,994	20,218
49	General industrial machinery and equipment	485	81	66	73	265	12,035	29,678
50	Miscellaneous machinery, except electrical	262	130	40	55	37	1,957	24,946

51	Computer and office equipment	3,931	186	1,783	489	1,473	37,329	62,088
52	Service industry machinery	1,177	410	288	243	236	10,862	25,801
53	Electrical industrial equipment and apparatus	706	82	175	16	433	7,399	28,574
54	Household appliances	206	2	134	22	48	14,175	16,833
55	Electric lighting and wiring equipment	724	358	35	324	7	1,364	19,055
56	Audio, video, and communication equipment	721	15	299	129	278	38,964	50,981
57	Electronic components and accessories	237	81	—	156	—	-2,102	73,298
58	Miscellaneous electrical machinery and supplies	434	98	185	125	26	7,728	21,103
59A	Motor vehicles (passenger cars and trucks)	5,887	—	1,364	—	4,523	147,840	149,684
59B	Truck and bus bodies, trailers, and motor vehicles parts	1,670	669	—	984	17	6,799	81,258
60	Aircraft and parts	45	—	—	—	45	72,224	102,154
61	Other transportation equipment	912	—	218	35	659	26,815	29,907
62	Scientific and controlling instruments	4,263	65	496	2,204	1,498	82,375	107,915
63	Ophthalmic and photographic equipment	2,998	699	403	1,452	444	13,156	22,745
64	Miscellaneous manufacturing	2,270	807	464	970	29	25,924	39,450
65A	Railroads and related services; passenger ground transportation	4,287	3,663	16	557	51	29,606	62,058
65B	Motor freight transportation and warehousing	2,294	824	89	1,163	218	46,454	157,110
65C	Water transportation	424	84	—	340	—	21,576	34,347
65D	Air transportation	3,111	934	24	2,124	29	59,317	98,819
65E	Pipelines, freight forwarders, and related services	218	56	—	162	—	6,422	28,966
65G	In-house transportation	—	—	—	—	—	—	165,461
66	Communications, except radio and TV	8,490	3,585	—	4,905	—	110,867	205,941
67	Radio and TV broadcasting	—	—	—	—	—	1,839	2,674
68A	Electric services (utilities)	15,467	5,534	—	9,933	—	96,827	195,695
68B	Gas production and distribution (utilities)	3,645	2,023	—	1,622	—	34,211	96,155
68C	Water and sanitary services	1,648	1,395	—	253	—	23,213	50,265
69A	Wholesale trade	11,621	3,196	1,421	5,228	1,776	288,401	568,970
69B	Retail trade	468	—	—	468	—	486,296	526,178
70A	Finance	11,106	—	—	11,106	—	227,020	390,774
70B	Insurance	532	351	—	181	—	141,559	231,654
71A	Owner-occupied dwellings	—	—	—	—	—	457,250	457,250
71B	Real estate and royalties	10,032	806	—	9,226	—	229,442	559,738
72A	Hotels and lodging places	631	-2,697	—	3,328	—	31,676	58,936
72B	Personal and repair services (except auto)	2,724	1,060	—	1,664	—	68,437	92,016
73A	Computer and data processing services	8,879	2,003	—	6,876	—	34,309	118,038
73B	Legal, engineering, accounting, and related services	3,988	1,908	—	2,080	—	73,461	252,597
73C	Other business and professional services, except medical	15,129	5,595	—	9,534	—	61,335	332,385
73D	Advertising	1,507	621	—	886	—	2,166	138,530
74	Eating and drinking places	-3,075	-6,291	—	3,216	—	240,634	282,017
75	Automotive repair and services	3,708	1,094	—	2,614	—	94,335	164,408
76	Amusements	-2,070	224	—	-2,294	—	81,010	122,937
77A	Health services	-61,899	-17	—	-61,882	—	551,123	564,607
77B	Educational and social services, and membership organizations	-23,985	-27,527	—	3,542	—	211,292	227,631
78	Federal Government enterprises	2,625	182	—	2,443	—	10,752	50,200
79	State and local government enterprises	658	225	—	433	—	23,352	30,162
80	Noncomparable imports	—	—	—	—	—	-44,964	—
81	Scrap, used and secondhand goods	2,811	449	319	120	1,923	-4,072	2,175
82	General government industry	491,062	257,127	—	233,935	—	764,389	764,389
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	10,087	10,087
85	Inventory valuation adjustment	—	—	—	—	—	-7,982	-7,982
I	Total intermediate inputs	—	—	—	—	—	—	—
88	Compensation of employees	—	—	—	—	—	—	—
89	Indirect business tax and nontax liability	—	—	—	—	—	—	—
90	Other value added	—	—	—	—	—	—	—
VA	Value added	—	—	—	—	—	6,233,905	—
T	<b>Total industry output</b>	<b>731,882</b>	<b>286,205</b>	<b>30,195</b>	<b>317,405</b>	<b>98,077</b>	<b>—</b>	<b>10,988,108</b>

Table C.

**Detailed Commodity-by-Industry Direct Requirements**

(Direct requirements per dollar of industry output, at producers' prices)

KEY: — = Value too small to report

Commodity number	Industry number	Livestock and livestock products	Other agricultural products	Forestry and fishery products	Agricultural, forestry, and fishery services	Metallic ores mining	Coal mining	Crude petroleum and natural gas	Non-metallic minerals mining	New construction	Maintenance and repair construction
		(1)	(2)	(3)	(4)	(5 + 6)	(7)	(8)	(9 + 10)	(11)	(12)
1	Livestock and livestock products	0.13260	0.00005	0.00687	0.02379	—	—	—	—	—	—
2	Other agricultural products	.24236	.02811	—	.11185	—	—	.00001	—	.00266	.00297
3	Forestry and fishery products	—	—	.02725	.00135	—	—	—	—	—	—
4	Agricultural, forestry, and fishery services	.04426	.07191	.21044	.00538	.00149	.00063	.00003	.00044	.00292	.00366
5 + 6	Metallic ores mining	—	—	—	—	.19379	—	—	—	—	—
7	Coal mining	—	—	—	—	.00140	.11301	—	.00424	—	—
8	Crude petroleum and natural gas	—	—	—	—	—	—	.19262	—	—	—
9 + 10	Nonmetallic minerals mining	.00008	.00267	—	.00007	.00065	.00037	—	.03464	.00720	.00969
11	New construction	—	—	—	—	—	—	—	—	.00037	—
12	Maintenance and repair construction	.01090	.01176	.03415	.00985	.01902	.00245	.02172	.00705	.00053	.00062
13	Ordnance and accessories	—	—	—	—	—	—	—	—	—	—
14	Food and kindred products	.17456	—	.03235	.00333	—	—	—	—	—	—
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	—	.00247	—	—	—	.00312	—	—	—	—
17	Miscellaneous textile goods and floor coverings	.00151	.00195	.00582	.00283	—	—	—	—	.00260	.00296
18	Apparel	—	—	—	—	—	.00011	.00001	—	—	—
19	Miscellaneous fabricated textile products	—	.00151	.00091	.00297	—	—	—	—	.00063	.00080
20 + 21	Lumber and wood products	.00048	.00425	—	—	.00335	.00249	.00001	—	.05111	.06469
22 + 23	Furniture and fixtures	—	—	—	—	—	—	—	—	.00295	.00002
24	Paper and allied products, except containers	.00230	.00231	.00176	.00024	.00037	.00015	.00001	.00066	.00393	.00270
25	Paperboard containers and boxes	.00006	.00669	.00232	.00480	.00035	.00020	.00002	.00013	.00053	.00059
26A	Newspapers and periodicals	.00008	.00007	—	.00018	—	.00004	.00002	.00132	—	—
26B	Other printing and publishing	.00006	.00007	.00092	.00020	—	.00004	.00001	.00007	.00026	.00031
27A	Industrial and other chemicals	.00130	.00054	.00028	.00017	.04790	.00902	.01114	.01877	.00348	.00303
27B	Agricultural fertilizers and chemicals	.00235	.07718	.00291	.07706	.00009	.00007	—	—	.00000	—
28	Plastics and synthetic materials	—	—	—	—	—	—	—	—	—	—
29A	Drugs	.00315	—	—	.00004	—	—	—	—	—	—
29B	Cleaning and toilet preparations	.00071	—	.00145	—	—	—	.00005	—	.00032	.00049
30	Paints and allied products	—	—	—	.00010	—	—	—	—	.00875	.00906
31	Petroleum refining and related products	.00343	.01399	.02854	.00169	.02124	.02032	.00503	.02676	.00983	.01801
32	Rubber and miscellaneous plastics products	.00392	.00474	.00033	.00077	.00821	.00887	.00010	.01035	.01491	.01694
33 + 34	Footwear, leather, and leather products	.00038	—	—	—	—	—	.00001	—	—	—
35	Glass and glass products	.00009	—	—	.00039	—	—	.00002	.00051	.00231	.00070
36	Stone and clay products	—	.00126	—	.00018	.00540	.00386	.00179	—	.05128	.02799
37	Primary iron and steel manufacturing	.00012	.00016	—	—	.02670	.00305	.01130	.01169	.00809	.00683
38	Primary nonferrous metals manufacturing	—	—	—	.00007	—	.00048	—	—	.00762	.00754
39	Metal containers	—	—	.00021	—	—	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	.00022	.00023	—	—	.00754	.00264	.00036	.00373	.05152	.04206
41	Screw machine products and stampings	.00037	—	—	—	.00121	.00498	—	.00080	.00062	.00050
42	Other fabricated metal products	.00144	.00231	.00075	.00232	.00018	.00229	.00422	.00061	.01980	.01614
43	Engines and turbines	—	—	.00112	—	.00247	.00341	.00020	.00299	—	—
44 + 45	Farm, construction, and mining machinery	.00276	.00632	.00416	.00078	.02940	.03284	.00273	.03713	.00198	.00183
46	Materials handling machinery and equipment	—	—	—	—	.00614	.00583	.00049	.01366	.00290	.00010
47	Metalworking machinery and equipment	.00034	.00042	—	—	.00003	.00065	.00018	.00021	.00069	.00046
48	Special industry machinery and equipment	—	—	—	.00001	—	—	—	—	.00000	.00001
49	General industrial machinery and equipment	.00033	.00065	.00010	.00007	.00325	.00827	.00098	.00685	.00719	.00285
50	Miscellaneous machinery, except electrical	.00052	.00121	.00009	.00044	.00213	.00422	.00160	.00099	.00052	.00003

51	Computer and office equipment	—	—	—	—	—	—	—	—	—
52	Service industry machinery	—	—	.00019	.00006	—	.00015	.00004	.00014	.01097
53	Electrical industrial equipment and apparatus	.00009	.00018	.00031	—	.00138	.00194	.00066	.00315	.00579
54	Household appliances	—	—	—	—	—	—	—	—	.00207
55	Electric lighting and wiring equipment	.00038	.00040	.00020	.00061	—	.00058	.00008	.00007	.01806
56	Audio, video, and communication equipment	—	—	—	—	—	—	—	—	.00415
57	Electronic components and accessories	—	—	—	—	—	—	—	—	—
58	Miscellaneous electrical machinery and supplies	.00193	.00434	.00048	.00094	.00026	.00023	.00008	.00079	.00199
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00057	.00116	.00253	.00137	.00127	.00114	.00034	.00316	.00109
60	Aircraft and parts	—	—	—	—	—	—	—	—	—
61	Other transportation equipment	—	—	—	—	.00019	—	—	—	.00013
62	Scientific and controlling instruments	—	—	.00141	.00030	.00018	.00003	.00001	—	.00327
63	Ophthalmic and photographic equipment	—	—	—	.00028	—	.00011	.00010	—	.00011
64	Miscellaneous manufacturing	.00031	.00042	—	.00014	.00018	.00014	.00003	.00035	.00337
65A	Railroads and related services; passenger ground transportation	.01273	.00258	.00126	.00206	.00525	.02849	.00149	.00423	.00179
65B	Motor freight transportation and warehousing	.02080	.00984	.00234	.00846	.01316	.01140	.00234	.01620	.01505
65C	Water transportation	.00116	.00152	.01603	.00038	.00144	.00526	.00249	.00061	.00098
65D	Air transportation	.00016	.00075	.00332	.01164	.00316	.00353	.00233	.00277	.00140
65E	Pipelines, freight forwarders, and related services	.00083	.00004	.00004	.00002	.00008	.00015	.00007	.00010	.00001
65G	In-house transportation	.02846	.07627	.07097	.05775	.03739	.03994	.01263	.07769	.05473
66	Communications, except radio and TV	.00225	.00208	.00122	.00296	.00224	.00121	.00167	.00263	.00349
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	.01787	.00723	.00066	.00167	.07365	.02145	.01533	.04898	.00141
68B	Gas production and distribution (utilities)	—	.00268	.00019	.00006	.00712	.00125	.02676	.01988	.00025
68C	Water and sanitary services	.00113	.00502	.00146	—	—	.00010	.00078	.00054	.00100
69A	Wholesale trade	.05142	.04909	.01783	.03232	.02669	.02994	.00841	.03045	.03847
69B	Retail trade	—	—	.00187	.00025	.00127	.00124	.00111	.00296	.03931
70A	Finance	.00509	.00469	.00822	.00616	.00744	.00680	.00559	.00943	.00642
70B	Insurance	.00306	.00308	.00449	.00245	.00221	.00147	.00097	.00303	.00534
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.04342	.08657	.00120	.00760	.00872	.02096	.16306	.01146	.00541
72A	Hotels and lodging places	.00025	.00030	.00262	.00139	.00274	.00276	.00243	.00250	.00080
72B	Personal and repair services (except auto)	.00027	.00062	.00056	.00250	.00044	.00027	.00011	.00026	.00050
73A	Computer and data processing services	.00052	.00050	.00122	.00051	.00201	.00077	.00104	.00346	.00067
73B	Legal, engineering, accounting, and related services	.00059	.00062	.02228	.01354	.01426	.01499	.01780	.00918	.06831
73C	Other business and professional services, except medical	.00424	.00935	.01498	.01004	.01201	.00707	.00347	.00822	.02734
73D	Advertising	.00012	.00021	.00062	.00358	.00047	.00052	.00121	.00314	.00075
74	Eating and drinking places	.00009	.00013	.00328	.00189	.00363	.00328	.00287	.00362	.00100
75	Automotive repair and services	.00182	.00409	.00207	.01114	.00394	.00142	.00084	.00180	.00461
76	Amusements	—	—	.00021	.00775	.00009	.00030	.00028	.00007	.00012
77A	Health services	.01545	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	.00059	.00058	.00260	.00064	.00167	.00197	.00076	.00058	.00006
78	Federal Government enterprises	.00009	.00008	.00056	.00091	.00079	.00003	—	.00053	.00092
79	State and local government enterprises	.00016	.00030	.00009	.00051	.00034	.00010	.00002	—	.00003
80	Noncomparable imports	—	.00041	—	—	.00769	.00077	.00973	.00135	—
81	Scrap, used and secondhand goods	—	—	—	.00007	—	—	—	—	.00001
82	General government industry	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—
I	<b>Total intermediate inputs</b>	<b>.84650</b>	<b>.51792</b>	<b>.55002</b>	<b>.44287</b>	<b>.62627</b>	<b>.44466</b>	<b>.54156</b>	<b>.45694</b>	<b>.59867</b>
88	Compensation of employees	.04456	.06540	.15457	.46812	.23281	.28924	.12754	.29601	.31619
89	Indirect business tax and nontax liability	.01275	.02815	.04803	.01876	.04944	.08921	.04457	.03916	.00570
90	Other value added	.09616	.38850	.24735	.07022	.09146	.17687	.28630	.20786	.07940
VA	Value added	.15346	.48205	.44995	.55710	.37371	.55531	.45841	.54303	.40129
T	<b>Total industry output</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>

Table C.: Detailed Commodity-by-Industry Direct Requirements ▲ 67

Table C (continued).

**Detailed Commodity-by-Industry Direct Requirements**

(Direct requirements per dollar of industry output, at producers' prices)

KEY: — = Value too small to report

Commodity number	Industry number	Ordnance and accessories	Food and kindred products	Tobacco products	Broad and narrow fabrics, yarn and thread mills	Miscellaneous textile goods and floor coverings	Apparel	Miscellaneous fabricated textile products	Lumber and wood products	Furniture and fixtures	Paper and allied products, except containers
		(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20 + 21)	(22 + 23)	(24)
1	Livestock and livestock products	—	0.17618	—	0.00934	0.00296	0.00027	—	—	—	—
2	Other agricultural products	—	.07776	.07709	.06464	.00262	.00081	—	—	—	.00011
3	Forestry and fishery products	—	.00731	—	—	—	.00282	—	.08125	.00012	—
4	Agricultural, forestry, and fishery services	.00097	.00029	.00010	.00024	.00028	.00016	.00026	.00029	.00051	.00041
5 + 6	Metallic ores mining	—	—	—	—	—	—	—	—	—	—
7	Coal mining	.00008	.00049	.00065	.00065	.00080	.00029	.00016	.00005	.00028	.00367
8	Crude petroleum and natural gas	—	—	—	—	—	—	—	—	—	—
9 + 10	Nonmetallic minerals mining	—	—	—	—	—	—	—	—	—	.00325
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.00569	.00413	.00214	.00525	.00926	.00401	.00335	.00325	.00416	.01208
13	Ordnance and accessories	.01405	—	—	—	—	—	—	—	—	—
14	Food and kindred products	—	.15563	—	—	.00063	—	—	—	.00123	.00641
15	Tobacco products	—	—	.08340	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	.00054	—	—	.21085	.16917	.21456	.26770	—	.04484	.00109
17	Miscellaneous textile goods and floor coverings	—	.00005	.00010	.00146	.03129	.00033	.06088	.00195	.02627	.00667
18	Apparel	.00050	—	—	.00082	—	.19754	.02299	.00008	.00007	.00005
19	Miscellaneous fabricated textile products	—	.00018	.00005	—	.00011	.03197	.03186	.00002	.00046	.00002
20 + 21	Lumber and wood products	.00202	.00018	.00002	—	—	.00001	.00184	.30111	.07711	.06533
22 + 23	Furniture and fixtures	—	—	—	—	—	—	—	.00085	.00980	—
24	Paper and allied products, except containers	.00027	.01261	.00271	.00072	.00159	.00108	.00068	.00056	.00232	.14722
25	Paperboard containers and boxes	.00194	.01928	.01126	.00105	.00267	.00146	.00210	.00266	.01576	.01311
26A	Newspapers and periodicals	.00012	.00001	—	—	.00006	—	—	.00015	.00005	.00007
26B	Other printing and publishing	—	.00290	.00643	.00005	.00006	.00043	.00063	.00017	.00027	.00193
27A	Industrial and other chemicals	.00803	.00518	.00010	.02267	.02207	.00007	.00572	.00507	.00158	.04711
27B	Agricultural fertilizers and chemicals	.00082	.00000	—	—	—	—	—	.00243	—	.00024
28	Plastics and synthetic materials	.00311	.00040	.00705	.16506	.24255	.01215	.02073	.00372	.00300	.02441
29A	Drugs	—	.00313	—	—	—	—	—	—	—	—
29B	Cleaning and toilet preparations	—	.00118	.00169	.00103	.00427	.00409	—	.00009	.00074	.00423
30	Paints and allied products	.00031	—	—	—	—	—	—	.00165	.00908	.00009
31	Petroleum refining and related products	.00217	.00226	.00131	.00286	.00387	.00158	.00210	.00623	.00278	.00607
32	Rubber and miscellaneous plastics products	.01390	.01804	.00560	.00468	.00967	.00499	.01784	.00931	.04435	.03328
33 + 34	Footwear, leather, and leather products	—	—	—	—	.00373	—	.02257	.00010	.00105	—
35	Glass and glass products	—	.00983	—	.00716	.00057	—	—	.00312	.00393	—
36	Stone and clay products	.00140	.00003	.00007	.00002	—	—	—	.00398	.00282	.00083
37	Primary iron and steel manufacturing	.01436	—	—	—	—	.00011	—	.00044	.03762	.00029
38	Primary nonferrous metals manufacturing	.01790	—	—	—	—	—	—	.00020	.01021	.00090
39	Metal containers	—	.02307	—	—	—	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	—	—	—	—	—	—	—	.00564	—	—
41	Screw machine products and stampings	.00660	.00147	—	—	—	—	—	.00405	.01110	.00005
42	Other fabricated metal products	.00939	.00300	.00115	—	—	.00007	—	.01095	.04657	.00333
43	Engines and turbines	.00085	.00001	—	—	—	—	—	—	—	—
44 + 45	Farm, construction, and mining machinery	—	—	—	—	—	—	—	—	—	—
46	Materials handling machinery and equipment	—	—	—	—	—	—	—	.00033	—	—
47	Metalworking machinery and equipment	.00144	.00011	.00025	.00036	.00023	.00003	.00037	.00087	.00083	.00054
48	Special industry machinery and equipment	.00314	.00031	—	.00149	.01177	.00276	.00189	.00040	.00037	.00293
49	General industrial machinery and equipment	.01060	.00055	.00002	—	—	.00007	—	.00175	.00170	.00035
50	Miscellaneous machinery, except electrical	.00625	.00042	.00012	.00168	.00114	.00030	.00100	.00163	.00197	.00213

51	Computer and office equipment	—	—	.0005	—	—	—	—	—	—	—
52	Service industry machinery	—	.0011	.0015	—	—	.0001	—	.0081	.0004	.0008
53	Electrical industrial equipment and apparatus	.00644	.00024	.00037	.0005	—	—	—	.0007	.00028	.00022
54	Household appliances	—	—	—	—	—	—	—	.0199	—	—
55	Electric lighting and wiring equipment	.00078	.00023	.00042	.0005	—	—	—	.0152	.00016	.00023
56	Audio, video, and communication equipment	.01091	—	—	—	—	—	—	—	—	—
57	Electronic components and accessories	.05109	—	—	.0002	—	—	—	—	—	—
58	Miscellaneous electrical machinery and supplies	.00027	.00004	.00005	—	.00006	.00004	—	.00018	.00002	.00006
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00003	.00044	.00004	.00013	.00016	.00013	—	.00271	.00034	.00020
60	Aircraft and parts	.07671	—	—	—	—	—	—	—	—	—
61	Other transportation equipment	—	—	—	—	—	—	—	.0002	—	—
62	Scientific and controlling instruments	.03125	.0002	.00007	—	—	—	—	.0001	.00023	.00021
63	Ophthalmic and photographic equipment	.00023	.0002	.0002	.00007	.00006	.00003	.00005	.00014	.00014	.00010
64	Miscellaneous manufacturing	—	.0006	.00012	—	.00006	.01030	.00121	.00041	.00025	.00004
65A	Railroads and related services; passenger ground transportation	.00116	.00630	.00092	.00395	.00580	.00100	.00115	.00727	.00324	.01140
65B	Motor freight transportation and warehousing	.00690	.01505	.00453	.01024	.01666	.00837	.01254	.02385	.01341	.02818
65C	Water transportation	—	.00211	.00022	.00036	.00130	.00006	.00031	.00156	.00032	.00190
65D	Air transportation	.00446	.00340	.00274	.00310	.00330	.00415	.00467	.00323	.00356	.00358
65E	Pipelines, freight forwarders, and related services	.00004	.00003	.00005	—	—	—	—	.00005	—	.00008
65G	In-house transportation	.00481	.01132	.00090	.00876	.00368	.00748	.00363	.01167	.03083	.00491
66	Communications, except radio and TV	.00302	.00134	.00150	.00134	.00266	.00183	.00224	.00173	.00291	.00217
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	.00854	.00818	.00209	.02738	.01430	.00991	.00832	.01211	.00858	.02590
68B	Gas production and distribution (utilities)	.00170	.00404	.00037	.00486	.00546	.00332	.00351	.00209	.00230	.01193
68C	Water and sanitary services	.00083	.00121	.00012	.00111	.00191	.00044	.00099	.00132	.00080	.00542
69A	Wholesale trade	.02526	.05467	.01781	.04596	.03952	.04238	.04922	.05940	.06824	.05010
69B	Retail trade	.00011	.00179	.00286	.00061	.00016	.00016	.00020	.00085	.00158	.00135
70A	Finance	.00668	.00655	.00650	.00552	.00666	.00655	.00703	.00680	.00793	.00678
70B	Insurance	.00131	.00154	.00138	.00126	.00138	.00125	.00137	.00165	.00162	.00156
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.00959	.00396	.00339	.00336	.00461	.01103	.01506	.00669	.01053	.00366
72A	Hotels and lodging places	.00300	.00254	.00301	.00254	.00299	.00297	.00302	.00293	.00284	.00297
72B	Personal and repair services (except auto)	.00089	.00113	.00092	.00592	.00409	.00151	.00058	.00151	.00075	.00292
73A	Computer and data processing services	.00868	.00161	.00164	.00244	.00323	.00136	.00140	.00196	.00181	.00382
73B	Legal, engineering, accounting, and related services	.00494	.00281	.00919	.00260	.00373	.00243	.00381	.00383	.00744	.00225
73C	Other business and professional services, except medical	.01534	.00970	.00725	.01175	.01095	.04425	.00931	.01138	.01530	.01424
73D	Advertising	.00485	.02584	.07886	.00257	.00984	.01105	.00483	.00386	.01087	.00622
74	Eating and drinking places	.00396	.00312	.00361	.00357	.00384	.00412	.00433	.00395	.00409	.00371
75	Automotive repair and services	.00186	.00329	.00287	.00405	.00431	.00194	.00177	.00453	.00183	.00657
76	Amusements	.00019	.00049	.00110	.00010	.00017	.00038	.00010	.00024	.00016	.00030
77A	Health services	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	.00070	.00061	.00082	.00055	.00057	.00065	.00598	.00294	.00147	.00096
78	Federal Government enterprises	.00015	.00040	.00134	.00051	.00107	.00090	.00136	.00059	.00118	.00055
79	State and local government enterprises	.00054	.00088	.00065	.00058	.00154	.00226	.00273	.00164	.00177	.00164
80	Noncomparable imports	.00022	.00119	.00042	.00067	.00055	.00033	.00009	.00009	.00072	.00099
81	Scrap, used and secondhand goods	—	—	—	—	.00210	—	—	—	.00016	.00803
82	General government industry	—	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
I	<b>Total intermediate inputs</b>	<b>.42386</b>	<b>.70221</b>	<b>.35966</b>	<b>.65803</b>	<b>.67441</b>	<b>.66816</b>	<b>.61544</b>	<b>.64191</b>	<b>.57062</b>	<b>.60347</b>
88	Compensation of employees	.39218	.13169	.08332	.24581	.20238	.27239	.26879	.20699	.28665	.20205
89	Indirect business tax and nontax liability	.01199	.02481	.13798	.00577	.00679	.00338	.00443	.00529	.00472	.00858
90	Other value added	.17194	.14127	.41901	.09038	.11639	.05604	.11132	.14577	.13796	.18587
VA	Value added	.57611	.29776	.64031	.34195	.32556	.33181	.38454	.35805	.42934	.39650
T	<b>Total industry output</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>

Table C (continued).

**Detailed Commodity-by-Industry Direct Requirements**

(Direct requirements per dollar of industry output, at producers' prices)

KEY: — = Value too small to report

Commodity number	Industry number	Paperboard containers and boxes	News-papers and periodicals	Other printing and publishing	Industrial and other chemicals	Agricultural fertilizers and chemicals	Plastics and synthetic materials	Drugs	Cleaning and toilet preparations	Paints and allied products	Petroleum refining and related products
		(25)	(26A)	(26B)	(27A)	(27B)	(28)	(29A)	(29B)	(30)	(31)
1	Livestock and livestock products	—	—	—	—	—	—	—	0.00103	—	—
2	Other agricultural products	—	—	—	.00534	—	—	.00219	—	—	.00001
3	Forestry and fishery products	—	—	.00005	.00026	.00056	.00002	.00035	—	.00049	.00001
4	Agricultural, forestry, and fishery services	.00025	.00046	.00026	.00042	.00039	.00033	.00048	.00033	.00028	.00014
5 + 6	Metallic ores mining	—	—	—	.00960	.00095	—	—	—	.00141	.00014
7	Coal mining	.00078	—	—	.00187	.00163	.00121	.00029	.00023	.00014	.00005
8	Crude petroleum and natural gas	—	—	—	.03148	.03500	.00493	—	—	—	.51129
9 + 10	Nonmetallic minerals mining	—	—	—	.00918	.05148	—	.00002	.00033	.00028	.00279
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.00497	.00583	.00507	.00993	.00830	.01037	.00725	.00542	.00366	.00751
13	Ordnance and accessories	—	—	—	—	—	—	—	—	—	—
14	Food and kindred products	—	—	—	.00330	.01610	.00108	.00345	.01012	.00909	.00095
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	—	—	.00065	—	—	.00019	—	—	—	—
17	Miscellaneous textile goods and floor coverings	—	.00007	.00037	.00001	—	.00002	.00013	.00030	—	—
18	Apparel	—	—	—	—	—	.00004	—	—	—	—
19	Miscellaneous fabricated textile products	—	—	—	.00001	—	—	.00003	.00010	—	—
20 + 21	Lumber and wood products	.00116	.00019	.00006	.00034	—	—	.00002	.00005	—	.00002
22 + 23	Furniture and fixtures	—	—	—	—	—	—	—	—	—	—
24	Paper and allied products, except containers	.42122	.08974	.14571	.00264	.00264	.01582	.00244	.00295	.00014	.00078
25	Paperboard containers and boxes	.00241	.00026	.00445	.00484	.00454	.00441	.01059	.03793	.00007	.00091
26A	Newspapers and periodicals	.00066	.02026	.00148	.00007	—	.00004	.00010	.00003	—	.00002
26B	Other printing and publishing	.00022	.06924	.11161	.00017	.00594	.00002	.00617	.00403	.00077	.00005
27A	Industrial and other chemicals	.02069	.00725	.01789	.22937	.10914	.34005	.02439	.09738	.20390	.01436
27B	Agricultural fertilizers and chemicals	—	—	—	.00843	.11474	.00470	—	—	—	—
28	Plastics and synthetic materials	.00473	—	.00006	.00783	—	.03312	—	—	.12516	—
29A	Drugs	—	—	—	—	—	—	.13347	—	—	—
29B	Cleaning and toilet preparations	—	—	—	.00106	.00398	.00581	.00078	.05418	.00014	.00288
30	Paints and allied products	.00331	.00001	.00002	.00482	—	.00033	—	.00028	.01782	—
31	Petroleum refining and related products	.00729	.00180	.00143	.01697	.01019	.00385	.00115	.01048	.00991	.08418
32	Rubber and miscellaneous plastics products	.00457	.00033	.01232	.01133	.00836	.04211	.02093	.06135	.00007	.00327
33 + 34	Footwear, leather, and leather products	—	.00002	.00002	—	—	—	—	—	—	.00001
35	Glass and glass products	—	—	—	.00097	.00090	.00015	.00408	.00540	.00021	.00226
36	Stone and clay products	—	—	.00002	.00109	.00168	.00017	.00018	.00008	.01303	.00191
37	Primary iron and steel manufacturing	.00730	.00002	.00025	.00290	.00006	.00002	—	.00003	.00035	.00014
38	Primary nonferrous metals manufacturing	.00222	—	.00043	.00008	—	—	—	—	.00007	—
39	Metal containers	—	—	—	.00589	.00477	.00008	.00129	.01088	.03522	.00094
40	Heating, plumbing, and fabricated structural metal products	—	—	—	—	—	—	—	—	—	—
41	Screw machine products and stampings	.00056	—	—	.00003	—	—	.00104	.00124	.00014	—
42	Other fabricated metal products	.00732	.00040	.00022	.00650	.00236	.00033	.00064	.00237	.00014	.00079
43	Engines and turbines	—	.00002	—	—	—	—	—	—	—	—
44 + 45	Farm, construction, and mining machinery	—	—	—	—	—	—	—	—	—	—
46	Materials handling machinery and equipment	—	—	—	—	—	—	—	—	—	—
47	Metalworking machinery and equipment	.00075	.00007	.00027	.00038	.00006	.00050	.00005	.00018	.00007	.00013
48	Special industry machinery and equipment	.00463	.00044	.00374	.00582	—	.00042	—	—	—	—
49	General industrial machinery and equipment	—	—	—	.00005	.00056	.00054	.00065	.00010	—	.00001
50	Miscellaneous machinery, except electrical	.00191	.00033	.00085	.00353	.00050	.00156	.00038	.00086	.00021	.00062



51	Computer and office equipment	—	.00039	.00044	—	—	—	—	—	—	—
52	Service industry machinery	—	.00004	.00001	.00043	—	.00002	.00003	.00018	—	.00001
53	Electrical industrial equipment and apparatus	—	—	.00001	.00072	.00006	.00010	.00011	.00053	—	.00001
54	Household appliances	—	—	—	—	—	—	—	—	—	—
55	Electric lighting and wiring equipment	—	.00005	.00003	.00005	.00011	.00008	.00019	.00050	—	.00005
56	Audio, video, and communication equipment	—	.00002	.00004	—	—	—	—	—	—	—
57	Electronic components and accessories	—	—	—	—	—	—	—	—	—	—
58	Miscellaneous electrical machinery and supplies	.00003	.00037	.00013	.00002	—	—	—	—	—	.00001
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00024	.00067	.00028	.00011	.00022	.00002	.00023	.00005	.00013	.00033
60	Aircraft and parts	—	—	—	—	—	—	—	—	—	—
61	Other transportation equipment	—	—	—	—	—	—	—	—	—	—
62	Scientific and controlling instruments	.00019	.00033	.00103	.00089	.00045	.00008	.00022	.00013	.00028	.00017
63	Ophthalmic and photographic equipment	.00006	.00259	.00716	.00019	.00006	.00008	.00067	.00013	.00007	.00004
64	Miscellaneous manufacturing	.00003	.00037	.00063	.00003	—	.00002	.00048	.00015	.00007	.00003
65A	Railroads and related services; passenger ground transportation	.01183	.00321	.00448	.01078	.01565	.00957	.00201	.00517	.01817	.00240
65B	Motor freight transportation and warehousing	.03791	.00895	.01630	.02310	.05530	.01967	.00405	.01143	.02535	.00477
65C	Water transportation	.00037	.00007	.00021	.00355	.00482	.00330	.00019	.00136	.00317	.00496
65D	Air transportation	.00454	.00347	.00394	.00360	.00303	.00352	.00337	.00338	.00282	.00067
65E	Pipelines, freight forwarders, and related services	.00006	.00007	.00003	.00169	.00006	.00027	.00003	.00005	.00014	.03088
65G	In-house transportation	.00271	.00225	.00940	.00313	.00095	.00393	.00252	.00268	.00129	.00452
66	Communications, except radio and TV	.00280	.00610	.00381	.00211	.00211	.00438	.00330	.00306	.00244	.00119
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	.01012	.00515	.00797	.02589	.01631	.02229	.00700	.00520	.00584	.01065
68B	Gas production and distribution (utilities)	.00241	.00099	.00212	.01991	.02103	.01253	.00244	.00209	.00169	.08006
68C	Water and sanitary services	.00091	.00027	.00065	.00791	.00572	.00532	.00187	.00166	.00350	.00288
69A	Wholesale trade	.06150	.02363	.03593	.05248	.05151	.04929	.06327	.05119	.04356	.03911
69B	Retail trade	.00024	.00071	.00031	.00057	.00062	.00056	.00072	.00319	.00013	.00017
70A	Finance	.00645	.00711	.00679	.00721	.01043	.00756	.00771	.00765	.00761	.00776
70B	Insurance	.00142	.00167	.00149	.00168	.00167	.00137	.00133	.00136	.00132	.00098
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.00510	.03086	.02290	.00733	.00505	.00389	.00798	.00868	.00408	.00844
72A	Hotels and lodging places	.00296	.00302	.00300	.00302	.00308	.00300	.00311	.00311	.00309	.00094
72B	Personal and repair services (except auto)	.00175	.00079	.00116	.00242	.00275	.00279	.00095	.00088	.00063	.00173
73A	Computer and data processing services	.00243	.00645	.00357	.00354	.00437	.00429	.00248	.00208	.00154	.00220
73B	Legal, engineering, accounting, and related services	.00196	.01325	.00381	.02468	.01312	.02804	.02759	.01523	.01112	.00667
73C	Other business and professional services, except medical	.01234	.03647	.01642	.01584	.02151	.01334	.02436	.01574	.00807	.00821
73D	Advertising	.00163	.02708	.01058	.00689	.01396	.00583	.05927	.06571	.01317	.00365
74	Eating and drinking places	.00365	.00360	.00372	.00374	.00364	.00374	.00373	.00377	.00365	.00185
75	Automotive repair and services	.00450	.00362	.00447	.00524	.00623	.00591	.00245	.00248	.00223	.00309
76	Amusements	.00022	.00062	.00037	.00031	.00022	.00037	.00091	.00096	.00049	.00016
77A	Health services	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	.00063	.00086	.00131	.00080	.00118	.00192	.00365	.00162	.00063	.00072
78	Federal Government enterprises	.00053	.00760	.00246	.00059	.00022	.00026	.00035	.00103	.00049	.00030
79	State and local government enterprises	.00056	.00119	.00138	.00075	.00163	.00098	.00035	.00030	.00007	.00024
80	Noncomparable imports	.00043	.00112	.00165	.00796	.00157	.00445	.03048	.00955	.00478	.00226
81	Scrap, used and secondhand goods	—	—	—	—	.00028	—	—	—	—	—
82	General government industry	—	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
I	<b>Total intermediate inputs</b>	<b>.67945</b>	<b>.40171</b>	<b>.48721</b>	<b>.63562</b>	<b>.65370</b>	<b>.69494</b>	<b>.49189</b>	<b>.53986</b>	<b>.59439</b>	<b>.86824</b>
88	Compensation of employees	.24859	.33563	.30458	.19824	.13922	.19038	.19089	.14620	.20224	.05921
89	Indirect business tax and nontax liability	.00870	.00557	.00539	.01573	.00889	.00817	.01087	.00854	.00849	.02869
90	Other value added	.06323	.25706	.20279	.15038	.19815	.10648	.30631	.30536	.19484	.04383
VA	Value added	.32052	.59826	.51276	.36435	.34627	.30503	.50808	.46011	.40557	.13173
T	<b>Total industry output</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>

Table C (continued).

**Detailed Commodity-by-Industry Direct Requirements**

(Direct requirements per dollar of industry output, at producers' prices)

KEY: — = Value too small to report

Commodity number	Industry number	Rubber and miscellaneous plastics products	Footwear, leather, and leather products	Glass and glass products	Stone and clay products	Primary iron and steel manufacturing	Primary nonferrous metals manufacturing	Metal containers	Heating, plumbing, and fabricated structural metal products	Screw machine products and stampings	Other fabricated metal products
		(32)	(33 + 34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)
1	Livestock and livestock products	—	—	—	—	—	—	—	—	—	—
2	Other agricultural products	—	—	—	—	—	—	—	—	—	—
3	Forestry and fishery products	.00746	—	—	.00002	—	.00017	—	—	—	—
4	Agricultural, forestry, and fishery services	.00036	.00011	.00051	.00054	.00039	.00044	.00015	.00028	.00017	.00035
5 + 6	Metallic ores mining	—	—	.00095	.00044	.02866	.03762	—	.00026	—	.00004
7	Coal mining	.00014	.00021	.00550	.00660	.01762	.00028	.00008	.00004	.00006	.00006
8	Crude petroleum and natural gas	—	—	—	—	—	—	—	—	—	—
9 + 10	Nonmetallic minerals mining	.00012	—	.01078	.06734	.00302	.00024	—	—	—	.00002
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.00677	.00685	.00786	.00744	.00748	.00572	.00482	.00357	.00961	.00585
13	Ordnance and accessories	—	—	—	—	—	—	—	—	—	—
14	Food and kindred products	.00010	.08999	—	.00037	—	—	—	—	—	—
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	.00924	.02647	—	.00350	—	.00014	—	—	—	—
17	Miscellaneous textile goods and floor coverings	.01070	.02146	.00006	—	—	—	—	—	—	—
18	Apparel	.00008	.00043	—	—	—	—	—	—	—	.00006
19	Miscellaneous fabricated textile products	.00011	—	.00006	.00012	—	—	—	—	—	—
20 + 21	Lumber and wood products	.00154	—	.00971	.00384	.00198	.00304	—	.00059	.00043	.00133
22 + 23	Furniture and fixtures	—	—	—	—	—	—	—	—	—	—
24	Paper and allied products, except containers	.00859	.00576	.00230	.01112	.00032	.00044	.00038	.00065	.00164	.00434
25	Paperboard containers and boxes	.01248	.00330	.04220	.00370	.00020	.00088	.00291	.00436	.00565	.00611
26A	Newspapers and periodicals	.00007	—	.00005	.00003	.00003	.00002	—	.00006	.00003	.00004
26B	Other printing and publishing	.00034	.00010	.00011	.00014	.00126	.00005	.00605	.00010	.00011	.00003
27A	Industrial and other chemicals	.04827	.03501	.03923	.02539	.01180	.00397	.00796	.01081	.00498	.01165
27B	Agricultural fertilizers and chemicals	—	—	—	—	—	—	—	—	—	—
28	Plastics and synthetic materials	.17758	.00117	—	.00564	—	.01457	—	.00075	.00245	.00535
29A	Drugs	—	—	—	—	—	—	—	—	—	—
29B	Cleaning and toilet preparations	.00070	.00427	.00196	.00217	.00003	—	—	.00006	.00014	.00028
30	Paints and allied products	.00067	—	.00066	.00123	.00025	.00011	.02181	.00506	.00233	.00672
31	Petroleum refining and related products	.00220	.00346	.00478	.00883	.00485	.00429	.00243	.00253	.00170	.00308
32	Rubber and miscellaneous plastics products	.05705	.03160	.02167	.00811	.00177	.00964	.00138	.01085	.00409	.02786
33 + 34	Footwear, leather, and leather products	—	.22758	—	—	—	—	—	.00006	—	—
35	Glass and glass products	.00549	—	.09026	.00240	—	.00375	—	.00568	.00081	.00100
36	Stone and clay products	.00139	.00064	.01375	.10195	.01545	.00220	.00061	.00141	.00173	.00228
37	Primary iron and steel manufacturing	.00466	—	.00107	.00830	.18508	.01044	.17214	.17680	.21543	.11437
38	Primary nonferrous metals manufacturing	.00063	—	—	.00142	.01913	.33486	.31887	.08557	.04821	.05719
39	Metal containers	—	—	—	—	.00003	—	.09009	—	.00009	.00011
40	Heating, plumbing, and fabricated structural metal products	.00030	—	—	.00044	.00007	—	—	.03673	—	.00109
41	Screw machine products and stampings	.00242	.00032	.00079	.00121	.00359	.00050	.00038	.01267	.01513	.02138
42	Other fabricated metal products	.00599	.00651	—	.00661	.01602	.00669	.01500	.03388	.02305	.06480
43	Engines and turbines	.00018	—	—	—	.00030	—	—	—	—	.00072
44 + 45	Farm, construction, and mining machinery	—	—	—	—	—	—	—	—	—	—
46	Materials handling machinery and equipment	.00002	—	—	—	.00022	.00017	—	—	—	—
47	Metalworking machinery and equipment	.00183	.00021	.00499	.00226	.00847	.00941	.00122	.00667	.02063	.00430
48	Special industry machinery and equipment	.00297	.00011	.00112	—	.00034	.00096	—	—	.00006	—
49	General industrial machinery and equipment	.00022	—	—	.00086	.01662	.00635	—	.00226	.00187	.00033
50	Miscellaneous machinery, except electrical	.00574	.00149	.00437	.00248	.00535	.00370	.00329	.00477	.01864	.00804

51	Computer and office equipment	—	—	—	—	—	—	—	—	—
52	Service industry machinery	.00005	—	.00011	.00009	.00001	—	.00020	—	.00002
53	Electrical industrial equipment and apparatus	.00033	—	.00202	.00019	.00715	.00287	.00008	.00157	.00060
54	Household appliances	—	—	—	—	—	—	—	—	—
55	Electric lighting and wiring equipment	.00039	—	.00039	.00042	—	.00080	—	.00004	.00017
56	Audio, video, and communication equipment	—	—	—	—	—	—	—	—	—
57	Electronic components and accessories	.00057	—	—	—	—	—	—	—	—
58	Miscellaneous electrical machinery and supplies	.00017	—	—	.00028	.00005	—	—	.00002	—
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00011	—	.00030	.00095	.00015	.00015	.00008	.00020	.00070
60	Aircraft and parts	—	—	—	—	—	—	—	—	—
61	Other transportation equipment	—	—	—	—	—	—	—	—	—
62	Scientific and controlling instruments	.00010	—	.00045	.00035	.00114	.00008	—	.00218	—
63	Ophthalmic and photographic equipment	.00014	—	.00011	.00009	.00010	.00006	.00008	.00016	.00014
64	Miscellaneous manufacturing	.00014	.00149	.00006	.00074	.00004	.00003	—	.00018	.00006
65A	Railroads and related services; passenger ground transportation	.00688	.00106	.01446	.01399	.01598	.00880	.00444	.00375	.00449
65B	Motor freight transportation and warehousing	.03005	.01096	.01474	.06657	.02460	.02931	.01753	.01617	.01509
65C	Water transportation	.00163	—	.00329	.00959	.00556	.00144	.00061	.00034	.00060
65D	Air transportation	.00371	.00395	.00303	.00296	.00389	.00373	.00291	.00329	.00352
65E	Pipelines, freight forwarders, and related services	.00003	—	—	.00005	.00003	.00002	.00008	—	.00003
65G	In-house transportation	.00940	.02140	.01717	.01910	.01142	.00559	.00130	.00792	.00398
66	Communications, except radio and TV	.00262	.00283	.00254	.00324	.00178	.00192	.00159	.00294	.00194
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	.02009	.00750	.02928	.02718	.03654	.03606	.01270	.00839	.01268
68B	Gas production and distribution (utilities)	.00377	.00328	.01671	.01916	.01533	.00681	.00436	.00338	.00357
68C	Water and sanitary services	.00134	.00948	.00206	.00218	.00677	.00278	.00129	.00081	.01136
69A	Wholesale trade	.04258	.04285	.04418	.03519	.07165	.08506	.06624	.06044	.05738
69B	Retail trade	.00117	.00030	.00263	.00111	.00025	.00012	.00038	.00061	.00062
70A	Finance	.00747	.00619	.00662	.00692	.00708	.00646	.00643	.00669	.00752
70B	Insurance	.00140	.00170	.00147	.00204	.00152	.00138	.00129	.00127	.00142
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.00929	.00660	.00633	.00772	.00377	.00468	.00467	.01024	.00789
72A	Hotels and lodging places	.00297	.00267	.00293	.00290	.00293	.00296	.00305	.00299	.00286
72B	Personal and repair services (except auto)	.00184	.00095	.00262	.00290	.00413	.00211	.00191	.00088	.00216
73A	Computer and data processing services	.00326	.00538	.00398	.00379	.00586	.00297	.00237	.00247	.00359
73B	Legal, engineering, accounting, and related services	.00619	.00276	.00351	.00519	.00408	.00257	.00352	.00436	.00822
73C	Other business and professional services, except medical	.01348	.00914	.01398	.01636	.01839	.01225	.00992	.02092	.01752
73D	Advertising	.00583	.02252	.00427	.00597	.00432	.00179	.00253	.00558	.00758
74	Eating and drinking places	.00391	.00433	.00404	.00387	.00379	.00386	.00382	.00417	.00404
75	Automotive repair and services	.00416	.00171	.00545	.00587	.00796	.00459	.00454	.00262	.00419
76	Amusements	.00029	.00011	.00017	.00019	.00024	.00020	.00038	.00016	.00032
77A	Health services	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	.00366	.00043	.00062	.00070	.00067	.00082	.00115	.00101	.00285
78	Federal Government enterprises	.00059	.00179	.00075	.00059	.00071	.00047	.00008	.00071	.00073
79	State and local government enterprises	.00063	.00267	.00045	.00233	.00074	.00135	.00046	.00123	.00055
80	Noncomparable imports	.00206	.00019	.00160	.00218	.00108	.00190	.00015	.00151	.00094
81	Scrap, used and secondhand goods	—	—	.00561	—	.03030	.05137	—	.00172	—
82	General government industry	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—
<b>I</b>	<b>Total intermediate inputs</b>	<b>.56869</b>	<b>.64128</b>	<b>.48257</b>	<b>.55739</b>	<b>.65033</b>	<b>.74796</b>	<b>.80944</b>	<b>.58758</b>	<b>.56818</b>
88	Compensation of employees	.27476	.24220	.30308	.28201	.26754	.17708	.15380	.30233	.36944
89	Indirect business tax and nontax liability	.00814	.00659	.00857	.00928	.01104	.01125	.00709	.00708	.00705
90	Other value added	.14837	.10991	.20576	.15128	.07107	.06369	.02964	.10298	.05529
VA	Value added	.43127	.35870	.51741	.44257	.34964	.25201	.19053	.41239	.43179
<b>T</b>	<b>Total industry output</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>

Table C (continued).

**Detailed Commodity-by-Industry Direct Requirements**

(Direct requirements per dollar of industry output, at producers' prices)

KEY: — = Value too small to report

Commodity number	Industry number	Engines and turbines	Farm, construction, and mining machinery	Materials handling machinery and equipment	Metalworking machinery and equipment	Special industry machinery and equipment	General industrial machinery and equipment	Miscellaneous machinery, except electrical	Computer and office equipment	Service industry machinery	Electrical industrial equipment and apparatus
		(43)	(44 + 45)	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)
1	Livestock and livestock products	—	—	—	—	—	—	—	—	—	—
2	Other agricultural products	—	—	—	—	—	—	—	—	—	—
3	Forestry and fishery products	—	—	—	—	—	—	—	—	—	—
4	Agricultural, forestry, and fishery services	.00047	.00041	.00025	.00035	.00035	.00050	.00048	.00025	.00026	.00061
5 + 6	Metallic ores mining	—	.00037	—	.00023	—	—	—	.00005	—	.00119
7	Coal mining	.00006	.00009	—	.00004	.00005	.00007	.00008	.00002	.00008	.00004
8	Crude petroleum and natural gas	—	—	—	—	—	—	—	—	—	—
9 + 10	Nonmetallic minerals mining	—	—	—	.00082	.00005	—	—	—	—	—
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.00656	.00509	.00400	.00618	.00582	.00497	.00652	.00594	.00655	.00531
13	Ordnance and accessories	—	—	—	—	—	—	—	—	—	—
14	Food and kindred products	—	—	—	—	—	—	—	—	—	—
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	—	—	—	—	—	—	—	—	—	—
17	Miscellaneous textile goods and floor coverings	—	—	—	—	—	.00718	.00132	—	—	.00004
18	Apparel	.00041	—	—	.00012	.00010	.00003	—	—	.00004	—
19	Miscellaneous fabricated textile products	—	—	—	—	—	—	—	—	—	—
20 + 21	Lumber and wood products	—	.00156	.00123	.00320	.00267	.00091	.00016	—	.00238	.00083
22 + 23	Furniture and fixtures	—	—	—	—	—	—	—	—	—	—
24	Paper and allied products, except containers	.00041	.00031	.00049	.00062	.00677	.00429	.00032	.00055	.00469	.00511
25	Paperboard containers and boxes	.00082	.00102	.00012	.00367	.00108	.00409	.00267	.00285	.00370	.00356
26A	Newspapers and periodicals	—	.00003	—	.00004	.00005	—	.00012	.00013	.00004	.00007
26B	Other printing and publishing	.00011	.00015	.00012	.00019	.00010	.00010	.00015	.00012	.00004	.00007
27A	Industrial and other chemicals	.00006	.00069	.00037	.00648	.00129	.00007	.00020	—	.00226	.00144
27B	Agricultural fertilizers and chemicals	—	—	—	—	—	—	—	—	—	—
28	Plastics and synthetic materials	—	—	—	—	—	.00050	.00048	.00038	.00404	.00295
29A	Drugs	—	—	—	—	—	—	—	—	—	—
29B	Cleaning and toilet preparations	—	—	—	—	—	—	—	.00008	.00038	.00065
30	Paints and allied products	.00117	.00377	.00134	.00202	—	.00050	.00031	.00056	.00320	.00248
31	Petroleum refining and related products	.00130	.00153	.00288	.00231	.00221	.00242	.00188	.00060	.00122	.00555
32	Rubber and miscellaneous plastics products	.01185	.04219	.01985	.00925	.01977	.02589	.00477	.01270	.02660	.02798
33 + 34	Footwear, leather, and leather products	—	—	—	—	—	—	—	—	—	—
35	Glass and glass products	—	.00044	—	—	.00069	—	—	—	.00015	—
36	Stone and clay products	.00440	.00125	.00098	.00890	.00203	.00262	.00355	.00013	.00450	.03035
37	Primary iron and steel manufacturing	.13049	.10602	.11249	.07548	.06263	.07668	.07355	.00113	.05424	.04682
38	Primary nonferrous metals manufacturing	.02546	.00843	.02404	.02237	.04187	.02620	.06079	.00776	.05870	.05178
39	Metal containers	—	—	—	—	—	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	.01379	.04449	.01595	.01214	.01443	.01167	.00355	.00668	.00839	.00503
41	Screw machine products and stampings	.03773	.01430	.03067	.00851	.00959	.00963	.00977	.00754	.03175	.01838
42	Other fabricated metal products	.03385	.01653	.02341	.01155	.02826	.01260	.01601	.00308	.01733	.00715
43	Engines and turbines	.07252	.05307	.00784	—	.00331	.00479	.00095	—	.00109	.00892
44 + 45	Farm, construction, and mining machinery	—	.03793	—	—	—	—	—	—	—	—
46	Materials handling machinery and equipment	—	.00028	.01877	—	.00015	.00023	—	—	—	—
47	Metalworking machinery and equipment	.00622	.00499	.00454	.04623	.00914	.00503	.01528	.00044	.00472	.00219
48	Special industry machinery and equipment	—	—	—	—	.03322	—	—	—	—	—
49	General industrial machinery and equipment	.01660	.02753	.05679	.01035	.02511	.07735	.01272	.00036	.01765	.00442
50	Miscellaneous machinery, except electrical	.04459	.02766	.03005	.03034	.03969	.03240	.06322	.00133	.02181	.00726

51	Computer and office equipment	—	—	—	—	.00089	—	—	.18300	—	.00040
52	Service industry machinery	—	—	—	—	.00015	.00003	—	—	.07571	.00004
53	Electrical industrial equipment and apparatus	.04054	.00667	.03028	.02264	.03825	.03728	.00275	.01758	.05374	.07051
54	Household appliances	—	—	—	—	—	—	—	—	—	—
55	Electric lighting and wiring equipment	—	.00031	—	.00023	—	—	.00020	.00100	.00684	.00205
56	Audio, video, and communication equipment	—	—	—	—	—	—	—	—	.00111	—
57	Electronic components and accessories	—	—	—	.00047	.00173	.00178	.00311	.21142	.00015	.02521
58	Miscellaneous electrical machinery and supplies	.01167	.00599	.00405	.00176	.00094	.00067	.00072	.00023	—	.00040
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00439	.00400	.00011	.00021	.00009	.00012	.00011	.00006	.00014	.00006
60	Aircraft and parts	—	—	—	—	—	—	—	—	—	—
61	Other transportation equipment	—	—	—	—	—	—	—	—	—	—
62	Scientific and controlling instruments	—	—	—	.00043	—	—	.00040	—	.00005	.01633
63	Ophthalmic and photographic equipment	.00012	.00009	.00012	.00020	.00015	.00013	.00032	.00020	.00015	.00022
64	Miscellaneous manufacturing	—	.00022	.00049	.00012	.00005	—	—	.00002	.00045	.00011
65A	Railroads and related services; passenger ground transportation	.00117	.00205	.00146	.00144	.00143	.00106	.00186	.00075	.00169	.00276
65B	Motor freight transportation and warehousing	.01748	.01583	.01113	.01077	.01003	.00861	.00915	.00181	.00943	.00823
65C	Water transportation	—	.00052	—	.00023	.00015	.00007	.00023	.00008	.00018	.00072
65D	Air transportation	.00604	.00465	.00429	.00359	.00499	.00423	.00427	.00558	.00389	.00414
65E	Pipelines, freight forwarders, and related services	.00006	.00003	—	—	—	—	.00004	.00005	.00004	—
65G	In-house transportation	.00314	.00868	.01194	.00738	.00420	.00840	.00758	.00139	.00666	.00432
66	Communications, except radio and TV	.00217	.00271	.00332	.00423	.00457	.00420	.00273	.00381	.00283	.00398
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	.00790	.00805	.00592	.01107	.00803	.01070	.01207	.00543	.00747	.00996
68B	Gas production and distribution (utilities)	.00205	.00264	.00232	.00269	.00207	.00284	.00298	.00069	.00211	.00280
68C	Water and sanitary services	.00111	.00074	.00033	.00065	.00062	.00098	.00068	.00052	.00261	.00085
69A	Wholesale trade	.05622	.07292	.08545	.04708	.06971	.06060	.03752	.10369	.06729	.07002
69B	Retail trade	.00022	.00025	.00011	.00014	.00019	.00026	.00018	.00024	.00064	.00067
70A	Finance	.00657	.00712	.00638	.00683	.00652	.00678	.00702	.00757	.00733	.00849
70B	Insurance	.00125	.00142	.00145	.00139	.00121	.00135	.00126	.00127	.00136	.00124
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.00569	.00480	.00748	.01077	.01092	.00694	.01344	.01281	.00514	.00791
72A	Hotels and lodging places	.00303	.00307	.00263	.00304	.00304	.00297	.00299	.00312	.00295	.00300
72B	Personal and repair services (except auto)	.00129	.00118	.00073	.00097	.00079	.00134	.00103	.00050	.00098	.00115
73A	Computer and data processing services	.00474	.00374	.00179	.00294	.00221	.00329	.00216	.00875	.00402	.00236
73B	Legal, engineering, accounting, and related services	.00280	.00697	.00827	.00788	.00951	.00720	.00749	.00942	.00593	.00433
73C	Other business and professional services, except medical	.01167	.01170	.01112	.01330	.01177	.01380	.01866	.01134	.00983	.01407
73D	Advertising	.00229	.00815	.00711	.00738	.00821	.00969	.00889	.00959	.00835	.01197
74	Eating and drinking places	.00403	.00416	.00384	.00475	.00452	.00437	.00398	.00360	.00400	.00422
75	Automotive repair and services	.00277	.00279	.00186	.00311	.00225	.00324	.00270	.00196	.00252	.00278
76	Amusements	.00029	.00034	.00012	.00012	.00025	.00017	.00032	.00039	.00034	.00022
77A	Health services	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	.00076	.00066	.00049	.00086	.00054	.00067	.00072	.00106	.00140	.00076
78	Federal Government enterprises	.00058	.00104	.00084	.00073	.00123	.00079	.00039	.00025	.00018	.00078
79	State and local government enterprises	.00111	.00100	.00282	.00219	.00133	.00198	.00259	.00070	.00087	.00083
80	Noncomparable imports	.00122	.00276	.00287	.00083	.00339	.00294	.00168	.05581	.00084	.00685
81	Scrap, used and secondhand goods	—	—	—	.00008	—	.00034	.00008	—	—	—
82	General government industry	—	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
I	<b>Total intermediate inputs</b>	<b>.61321</b>	<b>.59737</b>	<b>.57727</b>	<b>.44389</b>	<b>.52630</b>	<b>.52089</b>	<b>.44072</b>	<b>.71950</b>	<b>.59019</b>	<b>.51992</b>
88	Compensation of employees	.26580	.26931	.32198	.45625	.36431	.35648	.47079	.20828	.27963	.32861
89	Indirect business tax and nontax liability	.00773	.00788	.00743	.00771	.00786	.00770	.00760	.00791	.00782	.00727
90	Other value added	.11323	.12541	.09330	.09212	.10151	.11491	.08087	.06427	.12233	.14417
VA	Value added	.38676	.40260	.42271	.55608	.47367	.47908	.55925	.28046	.40978	.48005
T	<b>Total industry output</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>

Table C.: Detailed Commodity-by-Industry Direct Requirements ▲ 75

Table C (continued).

**Detailed Commodity-by-Industry Direct Requirements**

(Direct requirements per dollar of industry output, at producers' prices)

KEY: — = Value too small to report

Commodity number	Industry number	Household appliances	Electric lighting and wiring equipment	Audio, video, and communication equipment	Electronic components and accessories	Miscellaneous electrical machinery and supplies	Motor vehicles (passenger cars and trucks)	Truck and bus bodies, trailers, and motor vehicles parts	Aircraft and parts	Other transportation equipment	Scientific and controlling instruments
		(54)	(55)	(56)	(57)	(58)	(59A)	(59B)	(60)	(61)	(62)
1	Livestock and livestock products	—	—	—	—	—	—	—	—	—	—
2	Other agricultural products	—	—	—	—	—	.00001	.00001	.00001	—	—
3	Forestry and fishery products	—	—	—	—	—	—	—	—	—	—
4	Agricultural, forestry, and fishery services	.00048	.00037	.00025	.00076	.00080	.00015	.00030	.00062	.00047	.00048
5+6	Metallic ores mining	—	—	.00061	—	.00033	—	.00348	.00030	—	.00013
7	Coal mining	—	—	—	.00003	—	.00012	.00026	.00015	.00020	.00030
8	Crude petroleum and natural gas	—	—	—	—	—	—	—	—	—	—
9+10	Nonmetallic minerals mining	.00168	—	—	.00001	—	—	—	—	—	—
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.00515	.00480	.00608	.01303	.00560	.00322	.00701	.00780	.00352	.00590
13	Ordnance and accessories	—	—	—	—	—	—	—	—	—	—
14	Food and kindred products	—	—	—	—	—	—	—	.00007	—	.00052
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	.00012	—	—	—	—	.00118	—	.00097	—	.00301
17	Miscellaneous textile goods and floor coverings	—	—	.00002	—	—	.00748	.00061	.00006	.00310	.00525
18	Apparel	—	—	—	.00001	—	.00003	—	.00006	—	.00017
19	Miscellaneous fabricated textile products	—	—	—	—	—	.02693	.00019	.00141	.00413	.00001
20+21	Lumber and wood products	.00066	.00005	.00004	—	—	.00003	.00175	.00020	.01333	.00070
22+23	Furniture and fixtures	.00012	—	.01168	.00018	.00005	.01673	.00037	.00054	.00120	.00048
24	Paper and allied products, except containers	.01419	.00644	.00399	.00209	.00198	.00029	.00087	.00025	.00027	.00361
25	Paperboard containers and boxes	.01033	.01365	.00228	.00151	.01178	.00012	.00410	.00015	.00016	.00454
26A	Newspapers and periodicals	—	.00010	.00008	.00013	.00019	.00003	.00005	.00005	.00003	.00010
26B	Other printing and publishing	.00035	.00005	.00033	.00007	.00009	.00011	.00031	.00029	.00006	.00067
27A	Industrial and other chemicals	.00679	.00262	.00033	.01128	.00909	.00473	.00440	.00069	.00053	.00148
27B	Agricultural fertilizers and chemicals	—	—	—	—	—	—	—	—	—	—
28	Plastics and synthetic materials	.02543	.02255	.00251	.00275	.01216	.00005	.00548	.00307	.00430	.00426
29A	Drugs	—	—	—	—	—	—	—	—	—	—
29B	Cleaning and toilet preparations	.00096	.00120	.00036	.00010	.00014	.00005	.00005	—	—	.00028
30	Paints and allied products	.00817	.00036	.00021	—	—	.01139	.00528	.00157	.00531	.00031
31	Petroleum refining and related products	.00351	.00314	.00078	.00086	.00174	.00043	.00118	.00155	.00222	.00123
32	Rubber and miscellaneous plastics products	.08710	.02930	.01938	.01490	.06502	.06097	.02577	.01637	.02057	.02016
33+34	Footwear, leather, and leather products	—	—	—	—	—	.00001	.00001	.00001	—	—
35	Glass and glass products	.00198	.02475	.00004	.00899	—	.00998	.00080	.00019	.00603	.00351
36	Stone and clay products	.00541	.00989	.00017	.00066	.00075	.00133	.00336	.00214	.00093	.00116
37	Primary iron and steel manufacturing	.06835	.03610	.00468	.00468	.01871	.00155	.08408	.00815	.05360	.00914
38	Primary nonferrous metals manufacturing	.04508	.05369	.01135	.02385	.05362	.00028	.07238	.02389	.01400	.01309
39	Metal containers	—	—	—	—	—	—	—	—	—	.00024
40	Heating, plumbing, and fabricated structural metal products	—	—	.00535	.00385	.00368	—	.02042	.00089	.02117	.00722
41	Screw machine products and stampings	.02957	.02867	.01043	.01030	.01065	.08362	.04028	.00873	.00727	.01197
42	Other fabricated metal products	.01658	.02145	.00654	.03498	.01993	.01850	.01371	.01557	.01771	.01497
43	Engines and turbines	—	—	—	—	—	.01339	.00245	—	—	.04276
44+45	Farm, construction, and mining machinery	—	—	—	—	—	—	—	—	.00117	—
46	Materials handling machinery and equipment	—	—	—	—	—	.00005	.00007	—	.00003	—
47	Metalworking machinery and equipment	.00186	.00288	.00071	.00156	.00221	.00130	.00243	.01005	.00196	.00144
48	Special industry machinery and equipment	—	—	—	.00103	—	—	—	—	—	—
49	General industrial machinery and equipment	.00373	—	.00035	—	.00377	.00036	.01683	.00270	.02180	.00066
50	Miscellaneous machinery, except electrical	.00210	.00445	.00199	.00443	.00462	.00526	.03823	.01341	.00803	.00427

51	Computer and office equipment	—	—	.00383	.01090	.00683	.00001	.00002	.00142	—	.01234
52	Service industry machinery	.02092	.00010	.00015	.00001	—	.01476	.00263	—	.00277	.00002
53	Electrical industrial equipment and apparatus	.04706	.02679	.00276	.00106	.01225	.00004	.00010	.00114	.02802	.01001
54	Household appliances	.00126	—	—	—	—	—	—	—	.00573	—
55	Electric lighting and wiring equipment	.01431	.03176	.00709	.00190	.00330	.00557	.00074	—	.00327	.00275
56	Audio, video, and communication equipment	—	—	.03181	.00151	.00151	.01174	.00001	.00737	.00057	.00784
57	Electronic components and accessories	.00872	.00738	.23585	.18266	.09575	.01736	.02581	.01594	.00027	.08923
58	Miscellaneous electrical machinery and supplies	.00006	.00005	.00520	—	.02813	.01654	.01737	.00035	.00369	.00043
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	.00427	.00537	—	.02207	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	—	.00005	.00004	.00004	.00017	.26771	.08791	.00006	.02140	.00008
60	Aircraft and parts	—	—	—	—	—	—	—	.24824	—	—
61	Other transportation equipment	—	—	—	—	—	—	—	—	.02680	—
62	Scientific and controlling instruments	.03925	—	.00247	.00202	.00269	.00586	.00005	.04969	.00310	.02882
63	Ophthalmic and photographic equipment	.00006	.00021	.00021	.00021	.00033	.00013	.00020	.00021	.00007	.00026
64	Miscellaneous manufacturing	.00054	.00361	.00002	—	.00005	.00008	.00009	.00013	.00010	.00011
65A	Railroads and related services; passenger ground transportation	.00258	.00193	.00092	.00190	.00183	.00343	.00334	.00111	.00218	.00106
65B	Motor freight transportation and warehousing	.01213	.01009	.00332	.00435	.01168	.01570	.01441	.00490	.01303	.00430
65C	Water transportation	.00030	.00010	.00008	.00025	.00033	.00031	.00040	.00016	.00013	.00012
65D	Air transportation	.00355	.00330	.00408	.00433	.00401	.00658	.00528	.00768	.00463	.00381
65E	Pipelines, freight forwarders, and related services	—	—	.00004	.00003	—	.00005	.00004	.00009	—	.00004
65G	In-house transportation	.00614	.00364	.00069	.00294	.00333	.01121	.01153	.00281	.01360	.00136
66	Communications, except radio and TV	.00332	.00297	.00409	.00353	.00258	.00097	.00164	.00216	.00202	.00498
67	Radio and TV broadcasting	—	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	.00807	.01018	.00529	.01296	.01067	.00315	.00978	.00663	.00667	.00771
68B	Gas production and distribution (utilities)	.00252	.00303	.00079	.00162	.00212	.00092	.00217	.00107	.00185	.00082
68C	Water and sanitary services	.00039	.00100	.00037	.00094	.00253	.00048	.00269	.00138	.00122	.00062
69A	Wholesale trade	.06833	.07142	.05767	.05425	.08108	.08189	.06904	.03027	.05183	.04079
69B	Retail trade	.00164	.00160	.00055	.00026	.00087	.00028	.00046	.00013	.00024	.00051
70A	Finance	.00733	.00717	.00744	.00765	.00801	.00672	.00751	.00898	.00643	.00758
70B	Insurance	.00137	.00132	.00128	.00139	.00137	.00135	.00133	.00128	.00143	.00137
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.00372	.01067	.00959	.01025	.00777	.00344	.00402	.00474	.01366	.01026
72A	Hotels and lodging places	.00303	.00301	.00299	.00303	.00295	.00295	.00298	.00324	.00279	.00302
72B	Personal and repair services (except auto)	.00072	.00078	.00071	.00182	.00141	.00085	.00211	.00157	.00062	.00072
73A	Computer and data processing services	.00142	.00349	.00512	.00488	.00248	.00081	.00293	.00841	.00368	.00474
73B	Legal, engineering, accounting, and related services	.00333	.00537	.00822	.01408	.00342	.00792	.00618	.00948	.00549	.01137
73C	Other business and professional services, except medical	.01002	.01227	.01203	.01768	.01830	.00666	.01180	.01550	.01087	.02285
73D	Advertising	.02621	.02020	.00658	.01176	.00938	.00453	.01966	.00430	.00570	.01540
74	Eating and drinking places	.00429	.00453	.00375	.00382	.00455	.00358	.00383	.00398	.00401	.00412
75	Automotive repair and services	.00219	.00274	.00227	.00384	.00359	.06464	.00383	.00345	.00170	.00228
76	Amusements	.00030	.00021	.00031	.00038	.00019	.00035	.00050	.00035	.00017	.00036
77A	Health services	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	.00210	.00063	.00127	.00155	.00108	.00275	.00188	.00221	.00073	.00206
78	Federal Government enterprises	.00221	.00073	.00123	.00043	.00056	.00066	.00157	.00091	.00035	.00117
79	State and local government enterprises	.00114	.00157	.00033	.00052	.00141	.00032	.00048	.00029	.00177	.00137
80	Noncomparable imports	.00189	.00997	.00742	.00413	.01407	.00302	.00472	.00096	.00066	.00208
81	Scrap, used and secondhand goods	—	—	—	—	.00372	—	.00025	—	—	—
82	General government industry	—	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
I	<b>Total intermediate inputs</b>	<b>.65210</b>	<b>.53038</b>	<b>.52833</b>	<b>.51686</b>	<b>.58318</b>	<b>.84922</b>	<b>.69319</b>	<b>.57444</b>	<b>.53114</b>	<b>.43000</b>
88	Compensation of employees	.20767	.29689	.27671	.33122	.29368	.10709	.27301	.34335	.34651	.37457
89	Indirect business tax and nontax liability	.00767	.00740	.00735	.00735	.00746	.00611	.00519	.00652	.00576	.00602
90	Other value added	.13254	.16531	.18759	.14455	.11564	.03756	.02857	.07564	.11656	.18938
VA	Value added	.34787	.46959	.47164	.48311	.41678	.15075	.30677	.42552	.46883	.56997
T	<b>Total industry output</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>

Table C (continued).

**Detailed Commodity-by-Industry Direct Requirements**

(Direct requirements per dollar of industry output, at producers' prices)

KEY: — = Value too small to report

Commodity number	Industry number	Ophthalmic, and photographic equipment	Miscellaneous manufacturing	Railroads and related services; passenger ground transportation	Motor freight transportation and warehousing	Water transportation	Air transportation	Pipelines, freight forwarders, and related services	State and local passenger transit	In-house transportation	Communications, except radio and TV
		(63)	(64)	(65A)	(65B)	(65C)	(65D)	(65E)	(65F)	(65G)	(66)
1	Livestock and livestock products	—	0.00007	—	—	—	—	—	—	—	—
2	Other agricultural products	—	.00082	—	.00001	.00009	.00001	—	—	—	.00000
3	Forestry and fishery products	—	.00034	—	—	.00009	—	—	—	—	—
4	Agricultural, forestry, and fishery services	.00033	.00019	.00002	.00001	—	—	—	.00034	—	.00018
5+6	Metallic ores mining	—	.00027	—	—	—	—	—	—	—	—
7	Coal mining	.00079	.00005	—	—	.00028	—	—	—	—	—
8	Crude petroleum and natural gas	—	—	—	—	—	—	.00247	—	—	—
9+10	Nonmetallic minerals mining	—	.00012	—	—	—	—	—	—	—	—
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.00616	.00454	.04421	.00441	.00092	.00254	.01708	.28319	.00411	.03929
13	Ordnance and accessories	—	—	—	—	—	—	.00015	—	—	—
14	Food and kindred products	—	.00218	—	—	.00256	.00245	—	—	—	—
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	—	.01118	—	—	—	.00001	—	.00170	—	—
17	Miscellaneous textile goods and floor coverings	.00004	.00070	—	.00005	.00136	—	—	—	.00005	.00000
18	Apparel	—	.00438	.00041	.00002	.00194	.00008	—	—	.00001	.00044
19	Miscellaneous fabricated textile products	—	.00109	—	.00007	.00311	.00006	.00226	.00034	.00007	.00001
20+21	Lumber and wood products	—	.01193	—	.00020	.00009	.00002	.00488	—	.00006	.00009
22+23	Furniture and fixtures	—	.00051	—	—	—	—	—	—	—	—
24	Paper and allied products, except containers	.03713	.00675	.00039	.00036	—	.00033	.00059	.00051	.00042	.00087
25	Paperboard containers and boxes	.01003	.01887	.00007	.00058	—	.00003	.00232	—	.00079	.00041
26A	Newspapers and periodicals	.00046	.00017	.00023	.00025	.00120	.00020	.00048	.00017	—	.00040
26B	Other printing and publishing	.00012	.00157	.00361	.00223	.00102	.00163	.00720	.01378	.00099	.00377
27A	Industrial and other chemicals	.02093	.01014	.00187	.00062	.00037	.00019	.00024	—	.00070	.00008
27B	Agricultural fertilizers and chemicals	—	—	—	—	—	—	—	—	—	—
28	Plastics and synthetic materials	.01152	.02401	—	—	.00012	—	—	—	—	—
29A	Drugs	—	—	—	—	—	—	—	—	—	.00002
29B	Cleaning and toilet preparations	.00058	.00092	—	.00001	—	.00003	—	.00153	.00006	.00012
30	Paints and allied products	—	.00580	—	.00034	.00080	.00004	—	—	.00159	.00027
31	Petroleum refining and related products	.00152	.00406	.05983	.04750	.02241	.10039	.00541	.37304	.07011	.00098
32	Rubber and miscellaneous plastics products	.02321	.03742	.00486	.01194	.00318	.00034	.00544	.01957	.00551	.00212
33+34	Footwear, leather, and leather products	—	.00075	.00002	.00001	—	.00001	.00003	—	.00000	.00001
35	Glass and glass products	.00638	.00058	.00093	.00002	.00012	—	.00036	—	.00002	.00009
36	Stone and clay products	.00041	.00339	.00004	.00005	.00006	.00001	.00012	—	.00001	—
37	Primary iron and steel manufacturing	.00174	.01873	.00725	—	—	.00002	—	—	—	—
38	Primary nonferrous metals manufacturing	.00448	.04848	.00002	.00002	.00065	—	—	—	.00003	.00008
39	Metal containers	—	—	—	—	—	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	.00029	.00351	—	—	.00015	—	—	.00034	—	—
41	Screw machine products and stampings	.00854	.00339	.00013	—	.00006	.00045	—	—	—	.00175
42	Other fabricated metal products	.00273	.01137	.00474	.00285	.00681	.00074	.00220	.00221	.00204	.00117
43	Engines and turbines	—	.00005	.00393	.00061	.00669	—	.00101	.01889	.00010	.00171
44+45	Farm, construction, and mining machinery	—	—	—	—	—	—	—	—	—	—
46	Materials handling machinery and equipment	—	—	—	.00003	—	—	—	—	.00001	—
47	Metalworking machinery and equipment	.00120	.00242	.00135	.00012	.00465	.00030	—	.00119	.00009	.00002
48	Special industry machinery and equipment	—	—	—	.00001	—	—	—	—	.00004	—
49	General industrial machinery and equipment	.00017	.00053	.00604	.00027	.01150	.00005	.00312	.00238	.00009	.00204
50	Miscellaneous machinery, except electrical	.00377	.00777	.00188	.00035	.00293	.00131	.00128	.00204	.00030	.00008





Table C (continued).

**Detailed Commodity-by-Industry Direct Requirements**

(Direct requirements per dollar of industry output, at producers' prices)

KEY: — = Value too small to report

Commodity number	Industry number	Radio and TV broadcasting	Electric services (utilities)	Gas production and distribution (utilities)	Water and sanitary services	Wholesale trade	Retail trade	Finance	Insurance	Owner-occupied dwellings	Real estate and royalties
		(67)	(68A)	(68B)	(68C)	(69A)	(69B)	(70A)	(70B)	(71A)	(71B)
1	Livestock and livestock products	—	—	—	—	—	—	—	—	—	—
2	Other agricultural products	—	.00001	.00001	—	.00013	.00000	.00001	.00001	—	.00005
3	Forestry and fishery products	—	—	—	—	—	—	—	—	—	—
4	Agricultural, forestry, and fishery services	.00014	.00009	—	—	.00049	.00103	.00027	.00026	.00795	.00523
5 + 6	Metallic ores mining	—	—	—	—	—	—	—	—	—	—
7	Coal mining	—	.09173	—	—	.00002	.00001	.00000	—	—	.00001
8	Crude petroleum and natural gas	—	.00005	.41602	—	.00002	—	—	—	—	—
9 + 10	Nonmetallic minerals mining	—	—	—	—	.00001	.00000	—	—	—	—
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.00882	.07796	.07297	.07965	.00410	.00940	.00275	.00265	.04738	.05376
13	Ordnance and accessories	—	—	—	—	—	—	—	—	—	—
14	Food and kindred products	—	—	—	—	.00116	.00018	—	—	—	—
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	—	—	—	—	.00015	.00010	—	—	—	—
17	Miscellaneous textile goods and floor coverings	—	—	—	—	.00009	.00008	.00000	—	—	.00000
18	Apparel	—	.00001	—	—	.00105	.00006	—	—	—	—
19	Miscellaneous fabricated textile products	—	—	—	—	.00048	.00006	.00042	.00008	—	.00002
20 + 21	Lumber and wood products	.00003	.00004	.00003	.00818	.00330	.00020	.00018	.00020	—	.00008
22 + 23	Furniture and fixtures	—	—	—	—	—	.00000	—	—	—	.00001
24	Paper and allied products, except containers	.00040	.00037	.00026	.00057	.00394	.00749	.00272	.00165	—	.00099
25	Paperboard containers and boxes	.00017	.00009	.00005	.00016	.00543	.00165	.00032	.00021	—	.00014
26A	Newspapers and periodicals	.00024	.00005	.00001	.00021	.00048	.00022	.00076	.00015	—	.00004
26B	Other printing and publishing	.00032	.00052	.00016	.00026	.00982	.00109	.00842	.00668	—	.00148
27A	Industrial and other chemicals	.00048	.00172	.00002	.02602	.00064	.00007	.00012	.00009	.00000	.00008
27B	Agricultural fertilizers and chemicals	—	—	—	—	.00059	.00004	—	—	.00075	.00024
28	Plastics and synthetic materials	—	—	—	—	.00001	.00002	—	—	—	—
29A	Drugs	—	—	—	—	.00006	—	—	—	—	—
29B	Cleaning and toilet preparations	—	.00002	.00005	—	.00082	.00030	.00006	.00003	—	.00009
30	Paints and allied products	—	—	—	.00010	.00001	.00003	.00000	.00020	—	.00005
31	Petroleum refining and related products	.00033	.01271	.00353	.03499	.00312	.00286	.00087	.00054	—	.00096
32	Rubber and miscellaneous plastics products	.00011	.00096	.00008	.00809	.00462	.00321	.00030	.00148	.00013	.00072
33 + 34	Footwear, leather, and leather products	—	.00001	.00001	—	.00002	.00024	.00004	.00003	—	.00001
35	Glass and glass products	—	.00004	—	.00109	.00035	.00003	.00006	.00004	—	.00001
36	Stone and clay products	—	.00002	—	.00083	.00020	.00004	.00002	—	—	.00065
37	Primary iron and steel manufacturing	—	—	.00001	—	.00012	.00001	.00000	.00000	—	—
38	Primary nonferrous metals manufacturing	—	.00059	—	.00005	.00059	.00001	—	.00006	—	.00001
39	Metal containers	—	.00001	—	—	.00082	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	—	—	—	—	.00019	.00002	—	—	.00029	.00015
41	Screw machine products and stampings	—	.00025	—	—	.00000	.00000	—	—	—	—
42	Other fabricated metal products	.00006	.00019	.00009	.00427	.00087	.00113	.00064	.00092	—	.00034
43	Engines and turbines	—	.00536	—	—	.00003	.00014	.00001	—	—	—
44 + 45	Farm, construction, and mining machinery	—	—	—	—	.00015	—	—	—	.00035	—
46	Materials handling machinery and equipment	—	.00008	—	—	.00077	.00002	—	—	—	—
47	Metalworking machinery and equipment	.00003	.00046	.00019	.00016	.00033	.00008	.00001	—	—	.00001
48	Special industry machinery and equipment	—	—	—	—	.00011	.00008	—	—	—	.00001
49	General industrial machinery and equipment	—	.00037	.00003	.00016	.00007	.00004	.00005	—	—	.00002
50	Miscellaneous machinery, except electrical	.00017	.00114	.00008	.00089	.00120	.00046	.00004	.00000	—	.00001

51	Computer and office equipment	.00112	.00004	.00163	—	.00045	.00016	.00058	.00081	—	.00007
52	Service industry machinery	—	.00001	.00001	.00042	.00030	.00025	.00000	.00000	—	.00000
53	Electrical industrial equipment and apparatus	.00098	.00110	—	—	.00017	.00007	.00004	.00002	—	.00001
54	Household appliances	—	—	—	—	—	.00001	.00000	—	—	.00009
55	Electric lighting and wiring equipment	—	.00076	.00001	.00099	.00030	.00042	.00005	.00009	—	.00007
56	Audio, video, and communication equipment	.00140	—	—	—	.00025	.00006	.00003	.00002	—	.00001
57	Electronic components and accessories	.00708	—	—	—	.00537	.00037	.00016	.00000	—	.00000
58	Miscellaneous electrical machinery and supplies	.00031	.00062	.00034	.00151	.00064	.00058	.00081	.00114	—	.00013
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00009	.00007	.00010	.06116	.00169	.00350	.00016	.00023	—	.00010
60	Aircraft and parts	—	—	—	—	—	—	—	—	—	—
61	Other transportation equipment	—	—	—	—	—	.00000	—	.00001	—	.00000
62	Scientific and controlling instruments	.00010	.00061	.00022	.03663	.00009	.00009	.00000	.00023	—	.00006
63	Ophthalmic and photographic equipment	.00136	.00005	.00009	.00031	.00109	.00036	.00149	.00140	—	.00025
64	Miscellaneous manufacturing	.00017	.00019	.00011	.00021	.00093	.00090	.00155	.00076	—	.00028
65A	Railroads and related services; passenger ground transportation	.00060	.02739	.00042	.00224	.00085	.00076	.00078	.00119	.00001	.00066
65B	Motor freight transportation and warehousing	.00153	.00340	.00048	.00576	.00370	.00259	.01031	.00384	.00005	.00101
65C	Water transportation	—	.00433	.00077	.00089	.00020	.00011	.00008	.00003	—	.00002
65D	Air transportation	.00249	.00228	.00295	.00344	.00467	.00285	.00332	.00439	—	.00232
65E	Pipelines, freight forwarders, and related services	.00003	.00020	.00502	.00047	.00048	.00007	.00006	—	—	.00005
65G	In-house transportation	.01015	.00225	.00248	.00958	.03969	.03873	.00089	.00012	—	.00091
66	Communications, except radio and TV	.01561	.00167	.00066	.02190	.01448	.00890	.01245	.01806	—	.00686
67	Radio and TV broadcasting	.02064	—	—	—	—	—	—	—	—	—
68A	Electric services (utilities)	.00640	.00013	.00206	.00408	.00804	.02236	.00473	.00163	—	.01197
68B	Gas production and distribution (utilities)	.00016	.02756	.18986	.02686	.00197	.00159	.00115	.00018	—	.00172
68C	Water and sanitary services	.00138	.00110	.00025	.07447	.00152	.00296	.00251	.00051	—	.00630
69A	Wholesale trade	.00290	.00691	.00619	.03067	.02399	.00333	.00432	.00287	.00041	.00150
69B	Retail trade	.00025	.00021	.00031	.00881	.00247	.00343	.00031	.00051	.00042	.00048
70A	Finance	.00845	.01689	.00866	.00777	.01122	.01677	.14408	.04624	.01868	.00928
70B	Insurance	.00553	.00207	.00122	.01189	.00146	.00278	.00303	.27895	.00661	.00297
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.02305	.01130	.00388	.00401	.02873	.07143	.03225	.03993	.03590	.06542
72A	Hotels and lodging places	.00253	.00233	.00139	.00242	.00323	.00284	.00288	.00468	—	.00256
72B	Personal and repair services (except auto)	.00333	.00055	.00028	.00413	.00214	.00315	.00105	.00076	—	.00353
73A	Computer and data processing services	.01440	.01021	.00262	.00306	.01337	.00635	.03061	.00970	—	.00113
73B	Legal, engineering, accounting, and related services	.01479	.01159	.02461	.03483	.01176	.00978	.02704	.03350	.00524	.01706
73C	Other business and professional services, except medical	.02624	.01044	.00514	.01129	.04162	.03434	.03937	.03828	.00359	.02598
73D	Advertising	.02830	.00077	.00024	.00005	.02535	.05700	.01784	.01181	—	.00909
74	Eating and drinking places	.00300	.00279	.00155	.00309	.00371	.00399	.00338	.00555	—	.00300
75	Automotive repair and services	.00382	.00116	.00165	.00374	.00677	.00454	.00239	.01477	—	.00649
76	Amusements	.37883	.00030	.00029	.00026	.00115	.00084	.00052	.00062	—	.00031
77A	Health services	—	—	—	—	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	.00535	.00312	.00052	.00063	.00199	.00097	.00208	.00146	—	.00087
78	Federal Government enterprises	.00114	.00268	.00112	.00160	.00567	.00575	.02139	.00771	—	.00283
79	State and local government enterprises	.00027	.00011	.00008	—	.00055	.00066	.00034	.00011	—	.00074
80	Noncomparable imports	—	.00013	.00061	.00010	.00719	.00015	.00747	.00313	—	—
81	Scrap, used and secondhand goods	—	—	—	—	.00000	.00000	—	.00000	—	.00000
82	General government industry	—	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
I	<b>Total intermediate inputs</b>	<b>.60507</b>	<b>.35215</b>	<b>.76143</b>	<b>.54492</b>	<b>.32558</b>	<b>.33988</b>	<b>.39960</b>	<b>.55054</b>	<b>.12775</b>	<b>.25123</b>
88	Compensation of employees	.28114	.12917	.06188	—	.38653	.39306	.34902	.39766	—	.08748
89	Indirect business tax and nontax liability	.01819	.07341	.04639	.09516	.17705	.13865	.03922	.06023	.15970	.14491
90	Other value added	.09559	.44523	.13028	.13628	.11080	.12837	.21213	-.00846	.71254	.51635
VA	Value added	.39491	.64781	.23854	.45506	.67438	.66008	.60037	.44943	.87224	.74873
T	<b>Total industry output</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>

Table C (continued).

**Detailed Commodity-by-Industry Direct Requirements**

(Direct requirements per dollar of industry output, at producers' prices)

KEY: — = Value too small to report

Commodity number	Industry number	Hotels and lodging places	Personal and repair services (except auto)	Computer and data processing services	Legal engineering, accounting, and related services	Other business and professional services except medical	Advertising	Eating and drinking places	Auto-repair and services	Amusements	Health services
		(72A)	(72B)	(73A)	(73B)	(73C)	(73D)	(74)	(75)	(76)	(77A)
1	Livestock and livestock products	—	—	—	—	0.00013	—	0.00114	—	0.00032	0.00010
2	Other agricultural products	.00008	—	.00002	.00002	.00001	—	.00657	.00001	.00121	.00036
3	Forestry and fishery products	.00005	—	—	—	—	—	.00622	—	.00005	.00007
4	Agricultural, forestry, and fishery services	.00461	.00046	.00047	.00044	.00030	.00030	.00066	.00038	.00223	.00132
5+6	Metallic ores mining	—	—	—	—	—	—	—	—	—	—
7	Coal mining	.00003	.00003	—	.00000	.00000	—	.00002	.00001	.00001	.00001
8	Crude petroleum and natural gas	—	—	—	—	—	—	—	—	—	—
9+10	Nonmetallic minerals mining	—	.00003	—	—	—	—	—	—	—	—
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.02544	.00542	.00267	.00150	.00257	.00165	.00745	.00379	.00870	.00506
13	Ordnance and accessories	—	—	—	—	.00026	—	—	—	.00008	—
14	Food and kindred products	.00200	—	—	—	.00009	—	.21922	—	.00570	.00762
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	.00010	.00155	—	—	.00002	—	—	—	.00066	.00006
17	Miscellaneous textile goods and floor coverings	.00022	.00040	—	.00001	.00002	—	.00014	.00040	.00008	.00009
18	Apparel	.00082	.00410	—	—	.00026	—	.00003	.00031	.00088	.00109
19	Miscellaneous fabricated textile products	.00844	.00283	—	—	.00002	.00060	.00056	.00089	.00044	.00122
20+21	Lumber and wood products	.00020	.00047	.00016	.00029	.00026	.00013	.00009	.00008	.00064	.00024
22+23	Furniture and fixtures	—	—	.00002	.00002	.00001	—	—	.00120	.00002	.00001
24	Paper and allied products, except containers	.00340	.00276	.00248	.00284	.00411	.00284	.00319	.00137	.00179	.00416
25	Paperboard containers and boxes	.00206	.00063	.00021	.00037	.00167	.00023	.00355	.00064	.00077	.00137
26A	Newspapers and periodicals	.00089	.00037	.00030	.00050	.00045	.00020	.00010	.00030	.00052	.00068
26B	Other printing and publishing	.00317	.01030	.00897	.00765	.00717	.07441	.00204	.00076	.00221	.00540
27A	Industrial and other chemicals	.00017	.00166	.00009	.00017	.00363	.00006	.00105	.00157	.00096	.01444
27B	Agricultural fertilizers and chemicals	.00188	—	—	—	.00001	—	—	—	.00110	.00006
28	Plastics and synthetic materials	—	.00013	—	—	—	—	—	—	—	.00032
29A	Drugs	—	—	—	—	—	—	—	—	.00007	.01341
29B	Cleaning and toilet preparations	.00121	.01217	.00003	.00011	.00132	—	.00019	.00087	.00025	.00116
30	Paints and allied products	.00000	.00010	—	.00001	.00015	—	.00000	.00237	.00028	—
31	Petroleum refining and related products	.00188	.00230	.00073	.00050	.00319	.00005	.00037	.01269	.00158	.00097
32	Rubber and miscellaneous plastics products	.00408	.00413	.00165	.00093	.00298	.00080	.00772	.02067	.00109	.01159
33+34	Footwear, leather, and leather products	.00008	.00381	.00003	.00016	.00016	—	.00001	.00001	.00058	.00008
35	Glass and glass products	.00426	.00004	.00003	.00049	.00086	—	.00148	.00567	.00004	.00164
36	Stone and clay products	.00064	.00011	—	.00009	.00024	—	.00139	.00034	.00002	.00035
37	Primary iron and steel manufacturing	—	.00008	—	.00001	.00021	—	—	—	.00001	.00000
38	Primary nonferrous metals manufacturing	—	.00080	—	—	.00006	—	.00002	.00004	.00012	.00002
39	Metal containers	—	—	—	—	.00011	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	—	.00007	—	—	—	—	—	—	.00002	—
41	Screw machine products and stampings	.00010	.00093	—	—	.00030	—	.00020	.01060	.00016	.00059
42	Other fabricated metal products	.00059	.00257	.00036	.00067	.00091	.00032	.00035	.01206	.00071	.00075
43	Engines and turbines	—	.00003	—	—	.00041	—	.00001	.00474	—	.00000
44+45	Farm, construction, and mining machinery	—	—	—	—	.00023	—	—	—	.00003	—
46	Materials handling machinery and equipment	—	—	—	—	.00043	—	—	—	—	—
47	Metalworking machinery and equipment	.00002	.00013	.00003	.00004	.00166	—	.00000	.00023	.00006	.00002
48	Special industry machinery and equipment	—	.00045	.00002	.00002	.00116	—	.00053	.00025	—	.00001
49	General industrial machinery and equipment	—	.00040	—	—	.00125	—	.00058	.00018	—	.00001
50	Miscellaneous machinery, except electrical	.00013	.00099	.00016	.00030	.00128	.00019	.00012	.00220	.00022	.00020

51	Computer and office equipment	.00012	.00487	.05705	.00200	.00140	.00218	.00004	.00004	.00017	.00141
52	Service industry machinery	.00010	.00353	.00001	.00002	.00041	.00007	.00016	.00667	.00083	.00017
53	Electrical industrial equipment and apparatus	.00022	.00062	.00105	.00002	.00254	.00003	.00002	.00297	.00002	.00017
54	Household appliances	.00013	.00744	—	—	.00001	—	.00002	—	—	.00002
55	Electric lighting and wiring equipment	.00026	.00024	.00001	.00005	.00035	.00009	.00027	.00356	.00071	.00041
56	Audio, video, and communication equipment	.00007	.00013	.00004	.00003	.00018	.00007	.00006	.00012	.00007	.00002
57	Electronic components and accessories	—	.01017	.03798	.00008	.00725	.00010	—	.00197	.00002	.00035
58	Miscellaneous electrical machinery and supplies	.00026	.00063	.00286	.00162	.00116	.00051	.00015	.00512	.00519	.00051
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—	—	.00078	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00051	.00075	.00015	.00032	.00137	.00069	.00112	.11321	.00069	.00045
60	Aircraft and parts	—	—	—	—	—	—	—	.00001	—	—
61	Other transportation equipment	—	—	—	—	.00082	—	—	—	.00032	—
62	Scientific and controlling instruments	.00025	.00079	.00058	.00007	.00050	.00003	.00002	.00068	.00011	.01698
63	Ophthalmic and photographic equipment	.00047	.01042	.00057	.00234	.00349	.00124	.00007	.00030	.00047	.00232
64	Miscellaneous manufacturing	.00141	.01440	.00046	.00122	.00184	.00110	.00131	.00036	.00252	.00072
65A	Railroads and related services; passenger ground transportation	.00105	.00074	.00070	.00070	.00157	.00061	.00169	.00192	.00062	.00128
65B	Motor freight transportation and warehousing	.00525	.00516	.00144	.00287	.00468	.00142	.00772	.00624	.00193	.00311
65C	Water transportation	.00023	.00030	.00008	.00013	.00033	.00009	.00023	.00042	.00023	.00017
65D	Air transportation	.00374	.00308	.00423	.00329	.00531	.00244	.00319	.00439	.00260	.00305
65E	Pipelines, freight forwarders, and related services	.01339	.00010	.00008	.00008	.00012	.00010	.00004	.00182	.00004	.00007
65G	In-house transportation	.02013	.02822	.00239	.00542	.01859	.01716	.03677	.01417	.01848	.01292
66	Communications, except radio and TV	.01286	.01190	.02057	.01168	.01279	.01010	.00352	.00891	.00735	.00858
67	Radio and TV broadcasting	—	—	—	—	—	.00496	—	—	—	—
68A	Electric services (utilities)	.03589	.01371	.00351	.00334	.00391	.00395	.02197	.00951	.01467	.00722
68B	Gas production and distribution (utilities)	.00596	.00434	.00025	.00050	.00083	.00021	.00351	.00235	.00132	.00157
68C	Water and sanitary services	.01327	.00484	.00033	.00045	.00075	.00009	.00518	.00276	.00240	.00262
69A	Wholesale trade	.00677	.01671	.02336	.00464	.01069	.00867	.04550	.04059	.01408	.01467
69B	Retail trade	.00182	.00080	.00023	.00023	.00196	.00054	.00126	.00754	.00085	.00070
70A	Finance	.05121	.00958	.00861	.01057	.00897	.00589	.00952	.01594	.00878	.00658
70B	Insurance	.00159	.00219	.00078	.00107	.00177	.00105	.00124	.00431	.00135	.00274
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.07315	.05600	.03183	.05302	.02881	.04553	.04907	.05126	.06279	.06066
72A	Hotels and lodging places	.00354	.00250	.00277	.00529	.00466	.00228	.00267	.00337	.00242	.00295
72B	Personal and repair services (except auto)	.00675	.04877	.00148	.00080	.00178	.00102	.00313	.01145	.00258	.00229
73A	Computer and data processing services	.00652	.00579	.08012	.02397	.01531	.00827	.00252	.00406	.00435	.01096
73B	Legal, engineering, accounting, and related services	.00843	.03335	.01560	.07539	.01881	.03729	.00865	.00710	.02209	.01667
73C	Other business and professional services, except medical	.07055	.02693	.03137	.08222	.05271	.08176	.02009	.02051	.03308	.04331
73D	Advertising	.01758	.02470	.00937	.00360	.00828	.00606	.02177	.01648	.03896	.00447
74	Eating and drinking places	.00537	.00339	.00366	.00315	.00619	.00269	.01489	.00392	.00351	.00771
75	Automotive repair and services	.00546	.00487	.00543	.00423	.00587	.00941	.00286	.01191	.00587	.00542
76	Amusements	.00055	.00047	.00040	.00070	.00132	.02056	.00876	.00051	.16209	.00041
77A	Health services	—	—	—	—	.00001	—	—	—	.00027	.02119
77B	Educational and social services, and membership organizations	.00185	.00355	.00648	.00305	.00333	.00224	.00158	.00073	.00156	.00261
78	Federal Government enterprises	.00498	.00547	.00609	.00941	.00608	.00529	.00164	.00359	.00411	.00951
79	State and local government enterprises	.00172	.00071	.00012	.00027	.00024	.00018	.00068	.00117	.00033	.00033
80	Noncomparable imports	.00127	.00024	.00472	.00195	.00366	.00147	.00041	.00008	.00176	.00004
81	Scrap, used and secondhand goods	—	.00001	—	—	.00000	—	.00000	.00366	.00126	—
82	General government industry	—	—	—	—	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
I	<b>Total intermediate inputs</b>	<b>.45118</b>	<b>.43259</b>	<b>.38513</b>	<b>.33687</b>	<b>.28852</b>	<b>.36923</b>	<b>.54829</b>	<b>.48109</b>	<b>.46395</b>	<b>.35185</b>
88	Compensation of employees	.34652	.31840	.42591	.46246	.41796	.38538	.32032	.27779	.31579	.50833
89	Indirect business tax and nontax liability	.08693	.02192	.01610	.00657	.01598	.01136	.05840	.04804	.04084	.00588
90	Other value added	.11534	.22706	.17283	.19407	.27749	.23401	.07296	.19305	.17939	.13390
VA	Value added	.56737	.61484	.61484	.66310	.71143	.63074	.45168	.51888	.53602	.64811
T	<b>Total industry output</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>

Table C (continued).

**Detailed Commodity-by-Industry Direct Requirements**

(Direct requirements per dollar of industry output, at producers' prices)

KEY: — = Value too small to report

Commodity number	Industry number	Educational and social services, and membership organizations	Federal Government enterprises	State and local government enterprises	General government industry	Household industry	Inventory valuation adjustment
		(77B)	(78)	(79)	(82)	(84)	(85)
1	Livestock and livestock products	0.00028	—	—	—	—	—
2	Other agricultural products	.00054	.00010	—	—	—	—
3	Forestry and fishery products	—	.00010	—	—	—	—
4	Agricultural, forestry, and fishery services	.00157	.00003	.00346	—	—	—
5 + 6	Metallic ores mining	—	—	—	—	—	—
7	Coal mining	.00001	.01204	.01464	—	—	—
8	Crude petroleum and natural gas	—	—	.00725	—	—	—
9 + 10	Nonmetallic minerals mining	.00001	—	.00059	—	—	—
11	New construction	—	—	—	—	—	—
12	Maintenance and repair construction	.03995	.01506	.21357	—	—	—
13	Ordnance and accessories	—	—	—	—	—	—
14	Food and kindred products	.01098	.00294	—	—	—	—
15	Tobacco products	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	.00015	.00013	—	—	—	—
17	Miscellaneous textile goods and floor coverings	.00004	.00006	.00013	—	—	—
18	Apparel	.00035	.00002	.00039	—	—	—
19	Miscellaneous fabricated textile products	.00035	.00179	—	—	—	—
20 + 21	Lumber and wood products	.00085	—	—	—	—	—
22 + 23	Furniture and fixtures	.00001	.00172	—	—	—	—
24	Paper and allied products, except containers	.00577	.00126	.00048	—	—	—
25	Paperboard containers and boxes	.00120	.00189	—	—	—	—
26A	Newspapers and periodicals	.00412	.00007	.00006	—	—	—
26B	Other printing and publishing	.04088	.01206	.00079	—	—	—
27A	Industrial and other chemicals	.00089	.00170	.01391	—	—	—
27B	Agricultural fertilizers and chemicals	.00021	—	.00162	—	—	—
28	Plastics and synthetic materials	—	—	—	—	—	—
29A	Drugs	.00028	—	.00003	—	—	—
29B	Cleaning and toilet preparations	.00073	.00062	.00035	—	—	—
30	Paints and allied products	.00018	—	—	—	—	—
31	Petroleum refining and related products	.00221	.01070	.01633	—	—	—
32	Rubber and miscellaneous plastics products	.00296	.00024	.00014	—	—	—
33 + 34	Footwear, leather, and leather products	.00066	.00030	—	—	—	—
35	Glass and glass products	.00130	.00005	.00056	—	—	—
36	Stone and clay products	.00001	—	.00602	—	—	—
37	Primary iron and steel manufacturing	.00009	—	—	—	—	—
38	Primary nonferrous metals manufacturing	.00001	.00071	—	—	—	—
39	Metal containers	—	—	—	—	—	—
40	Heating, plumbing, and fabricated structural metal products	.00001	—	—	—	—	—
41	Screw machine products and stampings	.00033	.00046	.00002	—	—	—
42	Other fabricated metal products	.00105	.00012	.00012	—	—	—
43	Engines and turbines	.00002	.00162	.00002	—	—	—
44 + 45	Farm, construction, and mining machinery	—	—	.00184	—	—	—
46	Materials handling machinery and equipment	—	.00008	—	—	—	—
47	Metalworking machinery and equipment	.00006	.00006	.00006	—	—	—
48	Special industry machinery and equipment	.00001	—	—	—	—	—
49	General industrial machinery and equipment	—	.00013	—	—	—	—
50	Miscellaneous machinery, except electrical	.00040	.00155	.00993	—	—	—

51	Computer and office equipment	.00032	.00005	—	—	—	—
52	Service industry machinery	.00017	.00024	.00433	—	—	—
53	Electrical industrial equipment and apparatus	.00010	—	.00002	—	—	—
54	Household appliances	.00007	—	.00012	—	—	—
55	Electric lighting and wiring equipment	.00044	.00046	.00141	—	—	—
56	Audio, video, and communication equipment	.00028	—	.00049	—	—	—
57	Electronic components and accessories	.00080	—	.00048	—	—	—
58	Miscellaneous electrical machinery and supplies	.00084	.00028	.00151	—	—	—
59A	Motor vehicles (passenger cars and trucks)	—	—	—	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00104	.01193	.00014	—	—	—
60	Aircraft and parts	—	—	—	—	—	—
61	Other transportation equipment	.00002	.00016	.00012	—	—	—
62	Scientific and controlling instruments	.00100	.00002	.00015	—	—	—
63	Ophthalmic and photographic equipment	.00198	.00018	.00014	—	—	—
64	Miscellaneous manufacturing	.00399	.00054	.00056	—	—	—
65A	Railroads and related services; passenger ground transportation	.00084	.01171	.00459	—	—	—
65B	Motor freight transportation and warehousing	.00331	.01581	.00431	—	—	—
65C	Water transportation	.00012	.00244	.00277	—	—	—
65D	Air transportation	.00332	.02540	.00114	—	—	—
65E	Pipelines, freight forwarders, and related services	.00010	.00008	.00007	—	—	—
65G	In-house transportation	.03467	.01177	—	—	—	—
66	Communications, except radio and TV	.00878	.00305	.00537	—	—	—
67	Radio and TV broadcasting	—	—	—	—	—	—
68A	Electric services (utilities)	.00882	.00492	.03854	—	—	—
68B	Gas production and distribution (utilities)	.00224	.00326	.02967	—	—	—
68C	Water and sanitary services	.00277	.00506	.01285	—	—	—
69A	Wholesale trade	.01203	.00615	.00492	—	—	—
69B	Retail trade	.00132	.00016	.00018	—	—	—
70A	Finance	.01167	.00668	.01210	—	—	—
70B	Insurance	.00209	.00156	.00213	—	—	—
71A	Owner-occupied dwellings	—	—	—	—	—	—
71B	Real estate and royalties	.11211	.01176	.02419	—	—	—
72A	Hotels and lodging places	.00301	.00030	.00025	—	—	—
72B	Personal and repair services (except auto)	.00212	.00020	.00122	—	—	—
73A	Computer and data processing services	.01834	.00371	.00473	—	—	—
73B	Legal, engineering, accounting, and related services	.01386	.00210	.03779	—	—	—
73C	Other business and professional services, except medical	.04819	.01456	.01770	—	—	—
73D	Advertising	.02512	.00008	.00232	—	—	—
74	Eating and drinking places	.00704	.00111	.00133	—	—	—
75	Automotive repair and services	.00470	.00325	.00554	—	—	—
76	Amusements	.00399	—	.00002	—	—	—
77A	Health services	—	—	—	—	—	—
77B	Educational and social services, and membership organizations	.00533	.00034	.00063	—	—	—
78	Federal Government enterprises	.00943	.00079	.00306	—	—	—
79	State and local government enterprises	.00041	.00037	.01152	—	—	—
80	Noncomparable imports	.00008	.02059	—	—	—	—
81	Scrap, used and secondhand goods	—	—	—	—	—	—
82	General government industry	—	—	—	—	—	—
83	Rest of the world adjustment to final uses	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—
<b>I</b>	<b>Total intermediate inputs</b>	<b>.47525</b>	<b>.23864</b>	<b>.53072</b>	—	—	—
88	Compensation of employees	.48430	.77550	.21375	.85586	1.00000	—
89	Indirect business tax and nontax liability	.00216	—	—	—	—	—
90	Other value added	.03824	-.01417	.25550	.14414	—	1.00000
VA	Value added	.52470	.76133	.46925	1.00000	1.00000	1.00000
<b>T</b>	<b>Total industry output</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>

Table D.

**Detailed Industry-by-Commodity Total Requirements**

(Total requirements per dollar of delivery to final demand at producers' prices)

KEY: — = Value too small to report

Industry number	Commodity number	Livestock and livestock products	Other agricultural products	Forestry and fishery products	Agricultural, forestry, and fishery services	Metallic ores mining	Coal mining	Crude petroleum and natural gas	Non-metallic minerals mining	New construction	Maintenance and repair construction
		(1)	(2)	(3)	(4)	(5 + 6)	(7)	(8)	(9 + 10)	(11)	(12)
1	Livestock and livestock products	1.20920	0.00461	0.04302	0.05041	0.00085	0.00062	0.00053	0.00060	0.00099	0.00107
2	Other agricultural products	.33378	1.04310	.21804	.16320	.00202	.00130	.00107	.00106	.00570	.00645
3	Forestry and fishery products	.00240	.00097	.82943	.00160	.00098	.00060	.00043	.00043	.00541	.00666
4	Agricultural, forestry, and fishery services	.07597	.07384	.17420	.96687	.00275	.00138	.00168	.00112	.00484	.00579
5 + 6	Metallic ores mining	.00096	.00087	.00059	.00074	1.24193	.00181	.00124	.00289	.00301	.00262
7	Coal mining	.00430	.00233	.00121	.00163	.01401	1.13077	.00333	.01130	.00309	.00265
8	Crude petroleum and natural gas	.02636	.03308	.03224	.02191	.04786	.03104	1.27216	.05103	.02280	.02845
9 + 10	Nonmetallic minerals mining	.00412	.00880	.00230	.00619	.00584	.00184	.00151	.99308	.01263	.01310
11	New construction	—	—	—	—	—	—	—	—	1.00037	—
12	Maintenance and repair construction	.03683	.02882	.04105	.02158	.04347	.01553	.04974	.02234	.01253	1.01224
13	Ordnance and accessories	.00006	.00005	.00005	.00005	.00010	.00006	.00004	.00008	.00015	.00012
14	Food and kindred products	.25311	.00438	.04443	.01752	.00370	.00236	.00212	.00262	.00269	.00267
15	Tobacco products	—	—	—	—	.00001	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	.00306	.00535	.00278	.00327	.00096	.00527	.00037	.00086	.00270	.00256
17	Miscellaneous textile goods and floor coverings	.00327	.00271	.00643	.00356	.00058	.00047	.00030	.00051	.00349	.00379
18	Apparel	.00037	.00033	.00028	.00036	.00020	.00038	.00012	.00018	.00031	.00031
19	Miscellaneous fabricated textile products	.00099	.00186	.00146	.00304	.00023	.00020	.00016	.00019	.00085	.00099
20 + 21	Lumber and wood products	.00904	.01081	.00560	.00448	.01151	.00655	.00530	.00363	.07672	.09503
22 + 23	Furniture and fixtures	.00013	.00010	.00008	.00008	.00016	.00012	.00007	.00015	.00344	.00051
24	Paper and allied products, except containers	.01751	.01099	.00808	.00818	.00558	.00380	.00290	.00536	.01257	.01042
25	Paperboard containers and boxes	.01006	.00952	.00522	.00775	.00255	.00172	.00090	.00194	.00403	.00375
26A	Newspapers and periodicals	.00483	.00255	.00249	.00334	.00241	.00198	.00208	.00402	.00347	.00334
26B	Other printing and publishing	.00941	.00541	.00565	.00614	.00496	.00404	.00386	.00515	.00701	.00655
27A	Industrial and other chemicals	.02003	.02493	.01169	.02287	.07453	.01844	.01912	.02909	.02104	.01979
27B	Agricultural fertilizers and chemicals	.03587	.08900	.02223	.08888	.00227	.00082	.00076	.00102	.00159	.00173
28	Plastics and synthetic materials	.00658	.00628	.00442	.00531	.00812	.00493	.00215	.00543	.00949	.00943
29A	Drugs	.00610	.00130	.00071	.00154	.00056	.00015	.00016	.00023	.00020	.00020
29B	Cleaning and toilet preparations	.00291	.00308	.00238	.00304	.00141	.00060	.00054	.00109	.00134	.00144
30	Paints and allied products	.00103	.00085	.00085	.00079	.00143	.00075	.00079	.00096	.00101	.01017
31	Petroleum refining and related products	.02599	.03031	.03808	.01823	.04517	.03592	.01385	.05663	.02439	.03267
32	Rubber and miscellaneous plastics products	.01891	.01193	.00772	.00775	.01907	.01664	.00388	.01946	.02635	.02740
33 + 34	Footwear, leather, and leather products	.00063	.00011	.00032	.00018	.00006	.00006	.00006	.00005	.00014	.00013
35	Glass and glass products	.00363	.00077	.00113	.00120	.00093	.00071	.00044	.00140	.00460	.00273
36	Stone and clay products	.00283	.00369	.00217	.00206	.01109	.00653	.00505	.04337	.05947	.03390
37	Primary iron and steel manufacturing	.00819	.00614	.00540	.00439	.05710	.02019	.02244	.02812	.03685	.03054
38	Primary nonferrous metals manufacturing	.00721	.00386	.00390	.00328	.00914	.00729	.00387	.00710	.02814	.02533
39	Metal containers	.00684	.00091	.00163	.00119	.00076	.00031	.00026	.00042	.00074	.00074
40	Heating, plumbing, and fabricated structural metal products	.00283	.00235	.00251	.00148	.01409	.00644	.00317	.00821	.05423	.04456
41	Screw machine products and stampings	.00210	.00113	.00108	.00099	.00416	.00770	.00092	.00337	.00493	.00428
42	Other fabricated metal products	.00678	.00550	.00419	.00499	.00625	.00663	.00763	.00541	.02688	.02242
43	Engines and turbines	.00096	.00078	.00154	.00047	.00600	.00646	.00082	.00556	.00108	.00093
44 + 45	Farm, construction, and mining machinery	.00622	.00750	.00516	.00250	.03819	.03817	.00397	.03967	.00339	.00313
46	Materials handling machinery and equipment	.00026	.00027	.00014	.00019	.00769	.00657	.00071	.01428	.00323	.00053
47	Metalworking machinery and equipment	.00135	.00106	.00073	.00059	.00280	.00190	.00090	.00193	.00294	.00234
48	Special industry machinery and equipment	.00060	.00046	.00038	.00042	.00094	.00057	.00028	.00073	.00078	.00068



49	General industrial machinery and equipment	.00211	.00184	.00163	.00102	.00832	.01281	.00248	.01113	.01027	.00539
50	Miscellaneous machinery, except electrical	.00307	.00295	.00188	.00190	.00676	.00829	.00322	.00504	.00450	.00340
51	Computer and office equipment	.00142	.00107	.00103	.00099	.00144	.00096	.00091	.00136	.00185	.00159
52	Service industry machinery	.00081	.00064	.00091	.00062	.00094	.00068	.00081	.00081	.01242	.01198
53	Electrical industrial equipment and apparatus	.00174	.00133	.00135	.00093	.00456	.00476	.00193	.00589	.00950	.00767
54	Household appliances	.00018	.00015	.00016	.00012	.00022	.00014	.00019	.00015	.00242	.00282
55	Electric lighting and wiring equipment	.00164	.00122	.00136	.00128	.00125	.00126	.00113	.00088	.01848	.01680
56	Audio, video, and communication equipment	.00052	.00041	.00040	.00036	.00045	.00028	.00035	.00037	.00479	.00342
57	Electronic components and accessories	.00317	.00250	.00214	.00214	.00266	.00198	.00145	.00251	.00527	.00456
58	Miscellaneous electrical machinery and supplies	.00441	.00493	.00225	.00227	.00141	.00117	.00062	.00183	.00309	.00281
59A	Motor vehicles (passenger cars and trucks)	.00021	.00018	.00021	.00019	.00026	.00028	.00008	.00029	.00023	.00024
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00467	.00424	.00504	.00458	.00476	.00394	.00177	.00605	.00461	.00487
60	Aircraft and parts	.00033	.00027	.00043	.00059	.00076	.00073	.00029	.00063	.00050	.00044
61	Other transportation equipment	.00059	.00029	.00053	.00023	.00079	.00100	.00024	.00043	.00062	.00061
62	Scientific and controlling instruments	.00109	.00070	.00170	.00080	.00112	.00063	.00051	.00073	.00469	.00389
63	Ophthalmic and photographic equipment	.00082	.00061	.00058	.00087	.00070	.00060	.00059	.00054	.00108	.00095
64	Miscellaneous manufacturing	.00158	.00116	.00107	.00096	.00111	.00079	.00073	.00114	.00469	.00451
65A	Railroads and related services; passenger ground transportation	.02050	.00639	.00419	.00607	.01244	.03263	.00400	.00828	.00653	.00637
65B	Motor freight transportation and warehousing	.05211	.02887	.01539	.02594	.03316	.02368	.01020	.03208	.03743	.03542
65C	Water transportation	.00403	.00323	.01565	.00200	.00414	.00753	.00421	.00292	.00309	.00315
65D	Air transportation	.00531	.00423	.00706	.01378	.00731	.00636	.00506	.00562	.00536	.00510
65E	Pipelines, freight forwarders, and related services	.00539	.00319	.00385	.00371	.00457	.00419	.00219	.00423	.00341	.00356
65F	State and local passenger transit	.00216	.00067	.00044	.00064	.00131	.00345	.00042	.00087	.00069	.00067
65G	In-house transportation	.07896	.09331	.09439	.07759	.05891	.05271	.02344	.08840	.07006	.07743
66	Communications, except radio and TV	.01355	.00991	.00840	.01012	.01034	.00719	.00789	.00977	.01314	.01313
67	Radio and TV broadcasting	.00329	.00167	.00166	.00221	.00162	.00131	.00143	.00190	.00236	.00229
68A	Electric services (utilities)	.03179	.01566	.00778	.01023	.09024	.02799	.02356	.04995	.01421	.01336
68B	Gas production and distribution (utilities)	.01076	.01301	.00779	.00794	.02486	.00966	.04496	.03386	.00946	.00920
68C	Water and sanitary services	.00265	.00333	.00140	.00135	.00133	.00089	.00143	.00128	.00161	.00164
69A	Wholesale trade	.12136	.07951	.04670	.06402	.06614	.05647	.02425	.06006	.07860	.07544
69B	Retail trade	.00379	.00280	.00471	.00252	.00479	.00315	.00423	.00535	.04137	.04609
70A	Finance	.02463	.01748	.01987	.01910	.02415	.01804	.01698	.02107	.02180	.02051
70B	Insurance	.01102	.00790	.01020	.00684	.00711	.00475	.00412	.00727	.01102	.00826
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.10825	.11358	.03190	.04103	.03542	.04157	.22709	.03380	.03217	.03122
72A	Hotels and lodging places	.00412	.00306	.00469	.00365	.00635	.00523	.00524	.00508	.00449	.00426
72B	Personal and repair services (except auto)	.00307	.00275	.00236	.00422	.00245	.00164	.00180	.00193	.00276	.00275
73A	Computer and data processing services	.00875	.00616	.00660	.00620	.01039	.00658	.00579	.01009	.00961	.00859
73B	Legal, engineering, accounting, and related services	.01766	.01487	.03322	.02490	.03432	.02761	.03685	.02266	.08662	.05138
73C	Other business and professional services, except medical	.03795	.03219	.03507	.03094	.03862	.02574	.02388	.02853	.05869	.05827
73D	Advertising	.00357	.00183	.00182	.00240	.00177	.00143	.00156	.00207	.00258	.00251
74	Eating and drinking places	.00477	.00345	.00571	.00475	.00826	.00642	.00597	.00694	.00553	.00533
75	Automotive repair and services	.01319	.01192	.00983	.01612	.01108	.00670	.00505	.00871	.01210	.01281
76	Amusements	.00318	.00206	.00312	.01041	.00166	.00155	.00162	.00164	.00215	.00211
77A	Health services	.01919	.00012	.00068	.00085	.00007	.00005	.00004	.00005	.00010	.00010
77B	Educational and social services, and membership organizations	.00263	.00180	.00338	.00179	.00364	.00332	.00189	.00187	.00194	.00181
78	Federal Government enterprises	.00477	.00318	.00313	.00349	.00727	.00319	.00337	.00474	.00513	.00490
79	State and local government enterprises	.01007	.00885	.00488	.00512	.01431	.00629	.01015	.00959	.00565	.00546
82	General government industry	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
<b>T</b>	<b>Total industry output multiplier</b>	<b>2.83444</b>	<b>1.97416</b>	<b>1.96153</b>	<b>1.89402</b>	<b>2.26996</b>	<b>1.83723</b>	<b>1.96765</b>	<b>1.89246</b>	<b>2.14928</b>	<b>2.07321</b>

Table D (continued).

**Detailed Industry-by-Commodity Total Requirements**

(Total requirements per dollar of delivery to final demand at producers' prices)

KEY: — = Value too small to report

Industry number	Commodity number	Ordnance and accessories	Food and kindred products	Tobacco products	Broad and narrow fabrics, yarn and thread mills	Miscellaneous textile goods and floor coverings	Apparel	Miscellaneous fabricated textile products	Lumber and wood products	Furniture and fixtures	Paper and allied products, except containers
		(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20 + 21)	(22 + 23)	(24)
1	Livestock and livestock products	0.00068	0.25604	0.00091	0.01578	0.00762	0.00594	0.00765	0.00573	0.00245	0.00327
2	Other agricultural products	.00126	.16848	.08842	.09009	.02371	.02844	.03275	.02859	.00843	.00595
3	Forestry and fishery products	.00066	.00841	.00039	.00064	.00086	.00344	.00089	.09624	.00836	.00817
4	Agricultural, forestry, and fishery services	.00163	.02513	.00670	.00797	.00316	.00370	.00370	.02118	.00336	.00315
5 + 6	Metallic ores mining	.00370	.00171	.00031	.00213	.00270	.00102	.00134	.00117	.00395	.00175
7	Coal mining	.00300	.00417	.00184	.00704	.00633	.00439	.00448	.00329	.00466	.00995
8	Crude petroleum and natural gas	.01193	.02330	.00820	.03582	.04067	.02113	.02497	.02357	.01969	.03633
9 + 10	Nonmetallic minerals mining	.00128	.00277	.00118	.00456	.00511	.00191	.00262	.00197	.00198	.00698
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.01630	.02471	.00955	.02554	.02996	.02045	.02116	.02032	.01833	.03170
13	Ordnance and accessories	.96874	.00006	.00003	.00008	.00010	.00007	.00006	.00006	.00008	.00009
14	Food and kindred products	.00270	1.23598	.00243	.00808	.00788	.00612	.00947	.00831	.00589	.01410
15	Tobacco products	—	.00001	1.09045	.00002	.00002	.00001	.00001	—	—	.00007
16	Broad and narrow fabrics, yarn and thread mills	.00241	.00244	.00143	1.27721	.24693	.36495	.45425	.00250	.06702	.00746
17	Miscellaneous textile goods and floor coverings	.00080	.00181	.00070	.00433	.97617	.00470	.06276	.00402	.02729	.00993
18	Apparel	.00093	.00034	.00014	.01310	.00508	1.24581	.04894	.00045	.00115	.00048
19	Miscellaneous fabricated textile products	.00033	.00078	.00033	.00330	.00383	.03781	.91556	.00052	.00194	.00067
20 + 21	Lumber and wood products	.00654	.00900	.00396	.00521	.00723	.00435	.00704	1.41773	.11913	.11404
22 + 23	Furniture and fixtures	.00665	.00021	.00005	.00014	.00011	.00015	.00110	.00347	.99594	.00051
24	Paper and allied products, except containers	.00666	.04033	.02146	.01217	.03268	.01120	.01438	.01109	.02001	1.15790
25	Paperboard containers and boxes	.00436	.02853	.01425	.00591	.00776	.00536	.00619	.00680	.01960	.01966
26A	Newspapers and periodicals	.00379	.01148	.02452	.00366	.00595	.00660	.00443	.00418	.00587	.00491
26B	Other printing and publishing	.00582	.02005	.03477	.00667	.01117	.01059	.00935	.00744	.00947	.01739
27A	Industrial and other chemicals	.02192	.02619	.01119	.13773	.17442	.05286	.07809	.02184	.03353	.09024
27B	Agricultural fertilizers and chemicals	.00160	.01680	.00794	.01295	.00898	.00456	.00580	.00712	.00230	.00372
28	Plastics and synthetic materials	.01034	.00947	.00992	.18632	.26320	.07018	.09826	.01182	.03116	.04119
29A	Drugs	.00027	.00587	.00023	.00112	.00132	.00056	.00068	.00030	.00031	.00083
29B	Cleaning and toilet preparations	.00068	.00318	.00248	.00531	.00910	.00705	.00369	.00127	.00213	.00708
30	Paints and allied products	.00121	.00150	.00037	.00179	.00224	.00098	.00116	.00317	.01024	.00167
31	Petroleum refining and related products	.00986	.01997	.00759	.02484	.02772	.01531	.01784	.02382	.01694	.02630
32	Rubber and miscellaneous plastics products	.02448	.03301	.01085	.02369	.03624	.01879	.03452	.02390	.05774	.05501
33 + 34	Footwear, leather, and leather products	.00007	.00024	.00006	.00050	.00022	.00738	.00272	.00031	.00158	.00011
35	Glass and glass products	.00161	.01397	.00040	.01094	.00356	.00362	.00489	.00573	.00667	.00165
36	Stone and clay products	.00439	.00251	.00096	.00236	.00669	.00163	.00237	.00830	.00689	.00570
37	Primary iron and steel manufacturing	.03533	.01311	.00222	.00533	.00725	.00418	.00491	.01335	.06435	.00827
38	Primary nonferrous metals manufacturing	.04417	.01826	.00160	.00401	.00516	.00394	.00359	.00811	.02603	.00702
39	Metal containers	.00036	.03128	.00028	.00139	.00166	.00074	.00095	.00069	.00097	.00124
40	Heating, plumbing, and fabricated structural metal products	.00284	.00203	.00073	.00176	.00219	.00142	.00160	.01104	.00460	.00296
41	Screw machine products and stampings	.01105	.00315	.00051	.00100	.00125	.00088	.00109	.00761	.01403	.00200
42	Other fabricated metal products	.01854	.00833	.00283	.00367	.00488	.00285	.00373	.01911	.05199	.01207
43	Engines and turbines	.00185	.00070	.00023	.00069	.00071	.00049	.00053	.00079	.00069	.00079
44 + 45	Farm, construction, and mining machinery	.00103	.00245	.00080	.00137	.00098	.00070	.00076	.00128	.00123	.00108
46	Materials handling machinery and equipment	.00022	.00024	.00008	.00024	.00027	.00020	.00019	.00068	.00109	.00034
47	Metalworking machinery and equipment	.00447	.00133	.00059	.00135	.00150	.00091	.00125	.00234	.00309	.00170
48	Special industry machinery and equipment	.00342	.00121	.00044	.00326	.01347	.00472	.00421	.00112	.00173	.00454

49	General industrial machinery and equipment	.01494	.00219	.00049	.00124	.00180	.00108	.00127	.00402	.00438	.00212
50	Miscellaneous machinery, except electrical	.01134	.00299	.00103	.00451	.00472	.00280	.00373	.00470	.00578	.00506
51	Computer and office equipment	.00774	.00143	.00099	.00151	.00171	.00149	.00133	.00136	.00141	.00186
52	Service industry machinery	.00053	.00079	.00044	.00067	.00080	.00058	.00081	.00197	.00181	.00098
53	Electrical industrial equipment and apparatus	.00905	.00175	.00097	.00140	.00191	.00123	.00133	.00185	.00244	.00191
54	Household appliances	.00018	.00015	.00006	.00019	.00020	.00014	.00043	.00316	.00050	.00040
55	Electric lighting and wiring equipment	.00196	.00125	.00081	.00095	.00098	.00069	.00074	.00295	.00126	.00149
56	Audio, video, and communication equipment	.01324	.00043	.00026	.00038	.00044	.00039	.00036	.00045	.00048	.00043
57	Electronic components and accessories	.06715	.00296	.00165	.00276	.00308	.00307	.00255	.00293	.00309	.00311
58	Miscellaneous electrical machinery and supplies	.00158	.00201	.00081	.00105	.00088	.00080	.00079	.00123	.00089	.00099
59A	Motor vehicles (passenger cars and trucks)	.00020	.00019	.00006	.00013	.00014	.00010	.00010	.00046	.00029	.00018
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00462	.00385	.00146	.00285	.00308	.00235	.00284	.00721	.00339	.00372
60	Aircraft and parts	.10843	.00041	.00022	.00042	.00046	.00044	.00045	.00046	.00054	.00046
61	Other transportation equipment	.00105	.00049	.00012	.00037	.00046	.00032	.00116	.00113	.00040	.00059
62	Scientific and controlling instruments	.05752	.00088	.00045	.00076	.00244	.00059	.00082	.00102	.00291	.00512
63	Ophthalmic and photographic equipment	.00111	.00096	.00084	.00099	.00128	.00094	.00091	.00089	.00112	.00290
64	Miscellaneous manufacturing	.00113	.00173	.00226	.00106	.00138	.01521	.00430	.00219	.00224	.00136
65A	Railroads and related services; passenger ground transportation	.00431	.01487	.00295	.01135	.01382	.00623	.00735	.01293	.00906	.01801
65B	Motor freight transportation and warehousing	.01996	.04510	.01355	.03455	.04470	.02843	.03467	.05140	.03620	.05767
65C	Water transportation	.00100	.00483	.00091	.00292	.00428	.00157	.00212	.00522	.00237	.00443
65D	Air transportation	.00802	.00801	.00489	.00788	.00854	.00959	.00937	.00799	.00774	.00801
65E	Pipelines, freight forwarders, and related services	.00241	.00443	.00165	.00402	.00479	.00332	.00368	.00457	.00347	.00515
65F	State and local passenger transit	.00045	.00157	.00031	.00120	.00146	.00066	.00077	.00136	.00095	.00190
65G	In-house transportation	.01382	.04782	.01393	.03050	.02057	.02591	.02168	.03727	.04592	.02015
66	Communications, except radio and TV	.00933	.01178	.00812	.01018	.01256	.01091	.01061	.01034	.01163	.01079
67	Radio and TV broadcasting	.00262	.00829	.01818	.00254	.00421	.00475	.00311	.00277	.00415	.00334
68A	Electric services (utilities)	.01708	.02382	.00699	.04450	.03516	.02813	.02864	.02294	.02243	.03835
68B	Gas production and distribution (utilities)	.00768	.01432	.00387	.02159	.02398	.01472	.01637	.01075	.01194	.02738
68C	Water and sanitary services	.00122	.00221	.00074	.00237	.00289	.00154	.00200	.00185	.00173	.00383
69A	Wholesale trade	.05903	.11973	.03667	.09597	.09596	.09683	.09943	.11075	.11360	.09523
69B	Retail trade	.00160	.00480	.00412	.00324	.00308	.00248	.00255	.00359	.00389	.00441
70A	Finance	.01773	.02472	.01511	.02258	.02502	.02308	.02271	.02386	.02265	.02371
70B	Insurance	.00400	.00772	.00396	.00581	.00597	.00549	.00553	.00684	.00570	.00597
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.02455	.05308	.02445	.03585	.03354	.03813	.03962	.03108	.03218	.02891
72A	Hotels and lodging places	.00557	.00618	.00477	.00645	.00730	.00727	.00687	.00684	.00636	.00662
72B	Personal and repair services (except auto)	.00260	.00369	.00214	.01024	.00850	.00597	.00550	.00397	.00354	.00568
73A	Computer and data processing services	.01476	.00969	.00597	.01104	.01266	.00980	.00963	.00969	.00971	.01214
73B	Legal, engineering, accounting, and related services	.01710	.01795	.01844	.02411	.02949	.01945	.02055	.01987	.02195	.01949
73C	Other business and professional services, except medical	.03562	.04225	.03051	.04077	.04280	.08295	.03854	.03941	.04249	.04144
73D	Advertising	.00285	.00899	.01968	.00277	.00457	.00519	.00338	.00302	.00452	.00363
74	Eating and drinking places	.00741	.00764	.00580	.00860	.00938	.00989	.00941	.00905	.00867	.00841
75	Automotive repair and services	.00605	.01207	.00607	.01156	.01237	.00886	.00904	.01248	.00933	.01393
76	Amusements	.00212	.00569	.01063	.00224	.00321	.00370	.00247	.00266	.00304	.00284
77A	Health services	.00006	.00411	.00005	.00031	.00019	.00020	.00018	.00015	.00010	.00012
77B	Educational and social services, and membership organizations	.00224	.00275	.00228	.00257	.00287	.00285	.00737	.00580	.00351	.00317
78	Federal Government enterprises	.00293	.00446	.00361	.00510	.00547	.00523	.00540	.00444	.00493	.00490
79	State and local government enterprises	.00533	.00869	.00337	.01065	.01137	.00985	.01044	.00882	.00831	.01294
82	General government industry	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
<b>T</b>	<b>Total industry output multiplier</b>	<b>1.84510</b>	<b>2.63626</b>	<b>1.66096</b>	<b>2.45937</b>	<b>2.51451</b>	<b>2.49729</b>	<b>2.39384</b>	<b>2.35202</b>	<b>2.17889</b>	<b>2.25520</b>

Table D (continued).

**Detailed Industry-by-Commodity Total Requirements**

(Total requirements per dollar of delivery to final demand at producers' prices)

KEY: — = Value too small to report

Industry number	Commodity number	Paperboard containers and boxes	News-papers and periodicals	Other printing and publishing	Industrial and other chemicals	Agricultural fertilizers and chemicals	Plastics and synthetic materials	Drugs	Cleaning and toilet preparations	Paints and allied products	Petroleum refining and related products
		(25)	(26A)	(26B)	(27A)	(27B)	(28)	(29A)	(29B)	(30)	(31)
1	Livestock and livestock products	0.00188	0.00083	0.00106	0.00210	0.00505	0.00218	0.00232	0.00484	0.00353	0.00092
2	Other agricultural products	.00341	.00135	.00193	.01136	.00553	.01163	.00516	.00516	.00610	.00161
3	Forestry and fishery products	.00381	.00105	.00168	.00098	.00119	.00106	.00093	.00111	.00104	.00057
4	Agricultural, forestry, and fishery services	.00202	.00131	.00139	.00224	.00196	.00223	.00162	.00171	.00172	.00163
5 + 6	Metallic ores mining	.00197	.00050	.00088	.01452	.00474	.00678	.00098	.00289	.00701	.00168
7	Coal mining	.00710	.00204	.00317	.00790	.00683	.00755	.00240	.00329	.00443	.00398
8	Crude petroleum and natural gas	.03214	.01081	.01625	.13680	.10958	.07841	.01386	.03601	.05426	.78781
9 + 10	Nonmetallic minerals mining	.00407	.00129	.00203	.03045	.05925	.01185	.00177	.00508	.00991	.00557
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.02588	.01630	.01883	.03370	.03111	.03344	.01756	.01978	.02267	.05246
13	Ordinance and accessories	.00008	.00005	.00006	.00050	.00011	.00020	.00006	.00030	.00016	.00006
14	Food and kindred products	.00850	.00346	.00453	.01794	.02416	.01010	.01228	.02016	.01820	.00409
15	Tobacco products	.00003	.00001	.00001	.00016	.00002	.00005	.00001	.00002	.00004	.00001
16	Broad and narrow fabrics, yarn and thread mills	.00400	.00123	.00329	.00182	.00119	.05498	.00133	.00286	.00773	.00071
17	Miscellaneous textile goods and floor coverings	.00458	.00129	.00249	.00072	.00066	.00383	.00092	.00196	.00083	.00061
18	Apparel	.00038	.00018	.00027	.00029	.00029	.00050	.00024	.00043	.00028	.00022
19	Miscellaneous fabricated textile products	.00043	.00023	.00052	.00031	.00029	.00034	.00025	.00078	.00026	.00031
20 + 21	Lumber and wood products	.05208	.01371	.02056	.00659	.00621	.00733	.00461	.00687	.00454	.00637
22 + 23	Furniture and fixtures	.00028	.00010	.00018	.00012	.00011	.00013	.00010	.00016	.00018	.00010
24	Paper and allied products, except containers	.49162	.12015	.19353	.01618	.01556	.02929	.02100	.04697	.01250	.00612
25	Paperboard containers and boxes	1.00112	.00380	.01059	.00870	.00885	.00961	.01484	.04214	.00493	.00275
26A	Newspapers and periodicals	.00468	.98826	.04056	.00511	.00753	.00519	.02051	.02078	.00671	.00377
26B	Other printing and publishing	.01266	.16827	1.09323	.00899	.01734	.00911	.03163	.02933	.01149	.00667
27A	Industrial and other chemicals	.06857	.02242	.03900	1.10983	.20680	.48463	.05255	.17304	.31034	.05098
27B	Agricultural fertilizers and chemicals	.00252	.00088	.00139	.02583	1.01398	.02169	.00352	.00527	.00852	.00141
28	Plastics and synthetic materials	.02613	.00598	.01177	.06910	.02858	.89042	.01103	.02395	.12809	.00430
29A	Drugs	.00058	.00020	.00034	.00787	.01384	.00308	1.12308	.02378	.00212	.00035
29B	Cleaning and toilet preparations	.00369	.00111	.00172	.01433	.02991	.01348	.00841	.97670	.00808	.00425
30	Paints and allied products	.00448	.00050	.00079	.00745	.00215	.00583	.00073	.00228	.98672	.00106
31	Petroleum refining and related products	.02755	.00930	.01311	.09751	.04509	.04778	.01024	.03250	.04420	1.02730
32	Rubber and miscellaneous plastics products	.03691	.00977	.02557	.02517	.02341	.05992	.03038	.07280	.01944	.00903
33 + 34	Footwear, leather, and leather products	.00013	.00012	.00035	.00009	.00009	.00011	.00008	.00014	.00007	.00009
35	Glass and glass products	.00223	.00052	.00079	.00219	.00227	.00188	.00585	.00726	.00155	.00316
36	Stone and clay products	.00360	.00133	.00186	.00578	.00678	.00397	.00230	.00310	.01819	.00709
37	Primary iron and steel manufacturing	.01739	.00273	.00476	.01606	.01086	.00995	.00404	.00931	.01619	.01661
38	Primary nonferrous metals manufacturing	.01040	.00236	.00465	.01193	.00766	.00693	.00350	.00985	.02293	.00464
39	Metal containers	.00206	.00035	.00068	.00815	.00767	.00394	.00242	.01319	.04024	.00161
40	Heating, plumbing, and fabricated structural metal products	.00228	.00110	.00148	.00295	.00246	.00251	.00129	.00176	.00183	.00316
41	Screw machine products and stampings	.00239	.00070	.00108	.00158	.00151	.00141	.00194	.00236	.00151	.00105
42	Other fabricated metal products	.01790	.00303	.00573	.01102	.00734	.00720	.00320	.00700	.00602	.00705
43	Engines and turbines	.00074	.00032	.00049	.00100	.00107	.00085	.00032	.00050	.00071	.00084
44 + 45	Farm, construction, and mining machinery	.00085	.00034	.00081	.00243	.00326	.00140	.00041	.00072	.00110	.00288
46	Materials handling machinery and equipment	.00029	.00011	.00016	.00062	.00107	.00038	.00016	.00023	.00031	.00058
47	Metalworking machinery and equipment	.00211	.00055	.00101	.00215	.00110	.00177	.00065	.00126	.00140	.00103
48	Special industry machinery and equipment	.00682	.00149	.00543	.00702	.00172	.00397	.00082	.00188	.00216	.00055

49	General industrial machinery and equipment	.00191	.00064	.00100	.00238	.00255	.00212	.00138	.00124	.00164	.00218
50	Miscellaneous machinery, except electrical	.00536	.00157	.00278	.00640	.00337	.00540	.00183	.00343	.00331	.00348
51	Computer and office equipment	.00169	.00221	.00196	.00201	.00190	.00200	.00153	.00150	.00152	.00175
52	Service industry machinery	.00079	.00045	.00053	.00125	.00085	.00099	.00048	.00145	.00068	.00094
53	Electrical industrial equipment and apparatus	.00188	.00084	.00122	.00275	.00203	.00216	.00103	.00185	.00174	.00193
54	Household appliances	.00025	.00011	.00014	.00028	.00018	.00021	.00010	.00016	.00015	.00022
55	Electric lighting and wiring equipment	.00108	.00060	.00106	.00121	.00105	.00133	.00078	.00121	.00477	.00126
56	Audio, video, and communication equipment	.00044	.00045	.00069	.00047	.00046	.00050	.00040	.00042	.00041	.00047
57	Electronic components and accessories	.00313	.00292	.00307	.00332	.00320	.00331	.00299	.00281	.00294	.00251
58	Miscellaneous electrical machinery and supplies	.00091	.00093	.00088	.00092	.00097	.00091	.00062	.00081	.00083	.00085
59A	Motor vehicles (passenger cars and trucks)	.00018	.00010	.00011	.00015	.00018	.00015	.00010	.00012	.00014	.00012
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00372	.00233	.00253	.00322	.00398	.00327	.00190	.00225	.00290	.00268
60	Aircraft and parts	.00052	.00031	.00039	.00074	.00046	.00055	.00034	.00041	.00045	.00033
61	Other transportation equipment	.00058	.00022	.00029	.00057	.00070	.00059	.00020	.00037	.00070	.00041
62	Scientific and controlling instruments	.00271	.00129	.00232	.00244	.00151	.00153	.00513	.00146	.00129	.00084
63	Ophthalmic and photographic equipment	.00174	.00390	.00988	.00258	.00174	.00157	.00185	.00141	.00626	.00083
64	Miscellaneous manufacturing	.00129	.00193	.00363	.00145	.00134	.00133	.00264	.00287	.00124	.00106
65A	Railroads and related services; passenger ground transportation	.02060	.00633	.00908	.01635	.02126	.01739	.00499	.01042	.02443	.00642
65B	Motor freight transportation and warehousing	.07535	.02214	.03532	.04775	.08874	.04919	.01562	.03313	.05468	.01794
65C	Water transportation	.00305	.00091	.00148	.00660	.00782	.00665	.00111	.00333	.00647	.00870
65D	Air transportation	.00978	.00667	.00747	.00788	.00763	.00854	.00653	.00735	.00738	.00562
65E	Pipelines, freight forwarders, and related services	.00601	.00237	.00322	.00894	.00744	.00661	.00218	.00410	.00616	.03517
65F	State and local passenger transit	.00217	.00067	.00096	.00172	.00224	.00183	.00053	.00110	.00258	.00068
65G	In-house transportation	.01790	.01059	.01987	.01997	.01943	.01996	.01329	.01537	.01461	.02515
66	Communications, except radio and TV	.01243	.01362	.01162	.01134	.01218	.01400	.01216	.01256	.01157	.01083
67	Radio and TV broadcasting	.00275	.00784	.00414	.00354	.00521	.00360	.01499	.01530	.00480	.00261
68A	Electric services (utilities)	.03008	.01188	.01803	.03897	.03190	.04021	.01398	.01798	.02378	.02843
68B	Gas production and distribution (utilities)	.01921	.00644	.01045	.04692	.04480	.03748	.00858	.01473	.02118	.12709
68C	Water and sanitary services	.00271	.00104	.00153	.00469	.00419	.00445	.00159	.00209	.00349	.00251
69A	Wholesale trade	.11632	.04966	.06892	.09230	.09364	.09928	.09166	.08890	.09198	.06602
69B	Retail trade	.00348	.00217	.00239	.00363	.00386	.00366	.00250	.00529	.00263	.00431
70A	Finance	.02496	.01817	.01957	.02488	.02915	.02659	.01927	.02181	.02437	.02687
70B	Insurance	.00627	.00447	.00491	.00611	.00668	.00608	.00415	.00497	.00561	.00551
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.03031	.05561	.04646	.05148	.04587	.04084	.02870	.03451	.03285	.15857
72A	Hotels and lodging places	.00726	.00549	.00589	.00672	.00699	.00725	.00579	.00638	.00693	.00554
72B	Personal and repair services (except auto)	.00524	.00240	.00325	.00488	.00534	.00608	.00263	.00318	.00347	.00381
73A	Computer and data processing services	.01197	.01409	.01059	.01273	.01392	.01436	.00961	.00997	.01041	.01200
73B	Legal, engineering, accounting, and related services	.01799	.02513	.01593	.04850	.03744	.05514	.04509	.03380	.03574	.04105
73C	Other business and professional services, except medical	.04282	.05777	.03964	.04526	.05252	.04728	.05541	.04831	.03800	.03606
73D	Advertising	.00300	.00852	.00450	.00386	.00567	.00393	.01625	.01658	.00522	.00285
74	Eating and drinking places	.00916	.00670	.00739	.00836	.00855	.00906	.00703	.00787	.00850	.00722
75	Automotive repair and services	.01431	.00742	.00982	.01194	.01490	.01347	.00652	.00851	.01019	.00849
76	Amusements	.00258	.00526	.00317	.00297	.00373	.00318	.00914	.00933	.00379	.00243
77A	Health services	.00011	.00009	.00007	.00010	.00017	.00011	.00010	.00014	.00012	.00006
77B	Educational and social services, and membership organizations	.00280	.00241	.00284	.00282	.00322	.00397	.00586	.00384	.00264	.00285
78	Federal Government enterprises	.00477	.01179	.00612	.00526	.00479	.00531	.00372	.00467	.00429	.00459
79	State and local government enterprises	.00989	.00616	.00754	.01383	.01344	.01362	.00511	.00672	.00919	.01415
82	General government industry	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
<b>T</b>	<b>Total industry output multiplier</b>	<b>2.44580</b>	<b>1.79604</b>	<b>1.95466</b>	<b>2.32998</b>	<b>2.35537</b>	<b>2.45593</b>	<b>1.85869</b>	<b>2.09752</b>	<b>2.30827</b>	<b>2.73243</b>

Table D (continued).

**Detailed Industry-by-Commodity Total Requirements**

(Total requirements per dollar of delivery to final demand at producers' prices)

KEY: — = Value too small to report

Industry number	Commodity number	Rubber and miscella- neous plastics products	Footwear, leather, and leather products	Glass and glass products	Stone and clay products	Primary iron and steel manu- facturing	Primary nonferrous metals manu- facturing	Metal containers	Heating, plumb- ing, and fabri- cated structural metal products	Screw machine products and stampings	Other fabri- cated metal products
		(32)	(33 + 34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)
1	Livestock and livestock products	0.00177	0.04878	0.00083	0.00095	0.00074	0.00089	0.00101	0.00078	0.00075	0.00081
2	Other agricultural products	.00647	.02940	.00192	.00196	.00128	.00189	.00174	.00131	.00121	.00150
3	Forestry and fishery products	.00728	.00177	.00189	.00098	.00071	.00119	.00083	.00070	.00062	.00085
4	Agricultural, forestry, and fishery services	.00290	.00521	.00154	.00149	.00134	.00169	.00143	.00121	.00109	.00126
5+6	Metallic ores mining	.00293	.00148	.00268	.00252	.04732	.06971	.03346	.01616	.01449	.01137
7	Coal mining	.00533	.00353	.01177	.01382	.03182	.00867	.01117	.00869	.00963	.00748
8	Crude petroleum and natural gas	.03470	.02572	.03276	.04230	.03342	.03087	.02924	.02098	.01981	.02130
9+10	Nonmetallic minerals mining	.00489	.00280	.01500	.08470	.00680	.00275	.00313	.00261	.00258	.00245
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.02459	.02513	.02360	.02615	.02825	.02759	.02720	.01926	.02610	.02076
13	Ordnance and accessories	.00010	.00007	.00007	.00007	.00030	.00038	.00022	.00036	.00071	.00021
14	Food and kindred products	.00621	.16607	.00362	.00399	.00317	.00372	.00468	.00337	.00318	.00343
15	Tobacco products	.00002	.00001	.00001	.00001	—	.00001	.00001	—	—	.00001
16	Broad and narrow fabrics, yarn and thread mills	.02619	.05395	.00161	.00574	.00106	.00253	.00169	.00133	.00142	.00263
17	Miscellaneous textile goods and floor coverings	.01330	.03153	.00092	.00067	.00058	.00074	.00063	.00064	.00069	.00117
18	Apparel	.00102	.00858	.00024	.00031	.00033	.00036	.00037	.00030	.00030	.00060
19	Miscellaneous fabricated textile products	.00101	.00246	.00029	.00039	.00028	.00029	.00031	.00028	.00059	.00077
20+21	Lumber and wood products	.00971	.00602	.02758	.01168	.00815	.01128	.00825	.00857	.00661	.00819
22+23	Furniture and fixtures	.00078	.00027	.00607	.00036	.00044	.00036	.00087	.00108	.00077	.00222
24	Paper and allied products, except containers	.03864	.02462	.03049	.02163	.00661	.00797	.01469	.00931	.01085	.02000
25	Paperboard containers and boxes	.01987	.01083	.04791	.00612	.00255	.00429	.00892	.00729	.00809	.00874
26A	Newspapers and periodicals	.00462	.01118	.00345	.00434	.00420	.00368	.00467	.00442	.00492	.00509
26B	Other printing and publishing	.00831	.02134	.00615	.00721	.00901	.00725	.02968	.00779	.00848	.00959
27A	Industrial and other chemicals	.15899	.07408	.06027	.04814	.02778	.06436	.04824	.03139	.02274	.03522
27B	Agricultural fertilizers and chemicals	.00614	.00504	.00181	.00153	.00098	.00176	.00149	.00109	.00087	.00127
28	Plastics and synthetic materials	.17988	.02899	.01114	.01250	.00505	.02473	.01482	.00948	.00879	.01641
29A	Drugs	.00112	.00140	.00050	.00041	.00023	.00030	.00031	.00024	.00019	.00027
29B	Cleaning and toilet preparations	.00476	.00710	.00341	.00389	.00091	.00116	.00120	.00095	.00092	.00127
30	Paints and allied products	.00272	.00120	.00189	.00288	.00129	.00118	.02427	.00622	.00352	.00752
31	Petroleum refining and related products	.02487	.02106	.02187	.03341	.02213	.02272	.02136	.01585	.01451	.01543
32	Rubber and miscellaneous plastics products	1.03609	.05507	.03549	.01809	.01198	.02618	.01790	.02408	.01912	.04176
33+34	Footwear, leather, and leather products	.00050	1.24099	.00008	.00008	.00009	.00008	.00009	.00015	.00012	.00023
35	Glass and glass products	.00781	.00293	1.07235	.00387	.00098	.00662	.00288	.00756	.00325	.00252
36	Stone and clay products	.00535	.00302	.02182	1.09452	.02442	.00776	.00923	.00908	.01018	.00872
37	Primary iron and steel manufacturing	.01574	.00769	.00897	.02163	1.22140	.04462	.24830	.24290	.27531	.21255
38	Primary nonferrous metals manufacturing	.00879	.00617	.01046	.00830	.04994	1.43023	.50528	.13982	.08939	.10019
39	Metal containers	.00164	.00441	.00074	.00070	.00050	.00073	1.07775	.00077	.00065	.00128
40	Heating, plumbing, and fabricated structural metal products	.00625	.00188	.00345	.00393	.00417	.00504	.00597	1.00446	.00859	.01229
41	Screw machine products and stampings	.00455	.00211	.00280	.00324	.00740	.00378	.00524	.01747	.97677	.02623
42	Other fabricated metal products	.01318	.01330	.00480	.01191	.02557	.01584	.02777	.04752	.03765	.96839
43	Engines and turbines	.00090	.00048	.00084	.00132	.00232	.00139	.00125	.00316	.00312	.00206
44+45	Farm, construction, and mining machinery	.00092	.00090	.00139	.00424	.00464	.00302	.00226	.00331	.01189	.00539
46	Materials handling machinery and equipment	.00038	.00020	.00042	.00139	.00111	.00098	.00067	.00124	.00053	.00078
47	Metalworking machinery and equipment	.00365	.00119	.00605	.00475	.01171	.01428	.00895	.01163	.02609	.01159
48	Special industry machinery and equipment	.00499	.00162	.00224	.00079	.00137	.00235	.00148	.00134	.00109	.00166

49	General industrial machinery and equipment	.00211	.00110	.00155	.00367	.02450	.01187	.00932	.01149	.01028	.00948
50	Miscellaneous machinery, except electrical	.00898	.00417	.00698	.00519	.01100	.00910	.01003	.01471	.02699	.01950
51	Computer and office equipment	.00178	.00178	.00142	.00185	.00214	.00207	.00204	.00171	.00210	.00207
52	Service industry machinery	.00091	.00066	.00072	.00083	.00143	.00081	.00089	.00537	.00208	.00196
53	Electrical industrial equipment and apparatus	.00214	.00121	.00378	.00252	.01220	.00694	.00548	.00661	.00621	.00955
54	Household appliances	.00020	.00014	.00099	.00017	.00027	.00024	.00021	.00084	.00174	.00024
55	Electric lighting and wiring equipment	.00160	.00112	.00254	.00133	.00239	.00266	.00189	.00137	.00174	.00266
56	Audio, video, and communication equipment	.00043	.00043	.00036	.00067	.00049	.00055	.00052	.00096	.00096	.00054
57	Electronic components and accessories	.00407	.00301	.00267	.00287	.00413	.00684	.00490	.00411	.00541	.00630
58	Miscellaneous electrical machinery and supplies	.00115	.00090	.00069	.00150	.00120	.00798	.00338	.00155	.00191	.00151
59A	Motor vehicles (passenger cars and trucks)	.00017	.00013	.00015	.00023	.00025	.00019	.00020	.00035	.01142	.00038
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00299	.00284	.00296	.00561	.00407	.00489	.00417	.00421	.00815	.00370
60	Aircraft and parts	.00084	.00046	.00038	.00043	.00068	.00074	.00067	.00097	.00082	.00307
61	Other transportation equipment	.00064	.00026	.00060	.00077	.00083	.00057	.00056	.00282	.00062	.00043
62	Scientific and controlling instruments	.00196	.00107	.00196	.00117	.00238	.00131	.00131	.00412	.00213	.00496
63	Ophthalmic and photographic equipment	.00191	.00091	.00082	.00086	.00093	.00090	.00129	.00099	.00106	.00092
64	Miscellaneous manufacturing	.00249	.00436	.00093	.00186	.00113	.00114	.00118	.00134	.00134	.00265
65A	Railroads and related services; passenger ground transportation	.01350	.00693	.01928	.01891	.02370	.01736	.01711	.01171	.02226	.00979
65B	Motor freight transportation and warehousing	.05682	.03788	.03419	.10027	.05181	.06486	.06124	.04244	.04275	.03663
65C	Water transportation	.00434	.00189	.00541	.01303	.00921	.00413	.00452	.00319	.00352	.00309
65D	Air transportation	.00805	.00894	.00634	.00663	.00845	.00930	.00976	.00789	.00806	.00736
65E	Pipelines, freight forwarders, and related services	.00504	.00384	.00380	.00718	.00506	.00536	.00530	.00379	.00380	.00345
65F	State and local passenger transit	.00142	.00073	.00203	.00199	.00250	.00183	.00180	.00123	.00129	.00103
65G	In-house transportation	.02265	.04359	.03023	.03787	.02954	.02458	.02235	.02332	.01972	.02008
66	Communications, except radio and TV	.01148	.01278	.00951	.01200	.01078	.01208	.01266	.01151	.01043	.01120
67	Radio and TV broadcasting	.00319	.00819	.00239	.00291	.00287	.00251	.00304	.00306	.00345	.00360
68A	Electric services (utilities)	.03361	.02164	.03729	.03882	.05256	.06021	.04702	.02832	.03104	.03017
68B	Gas production and distribution (utilities)	.01887	.01479	.03034	.03652	.03228	.02277	.02328	.01637	.01658	.01718
68C	Water and sanitary services	.00240	.00599	.00189	.00233	.00438	.00294	.00298	.00213	.00601	.00234
69A	Wholesale trade	.08614	.09687	.07588	.06783	.11936	.15516	.16157	.11546	.10966	.10187
69B	Retail trade	.00371	.00312	.00508	.00413	.00303	.00296	.00325	.00275	.00293	.00268
70A	Finance	.02362	.02243	.01992	.02309	.02484	.02575	.02878	.02221	.02343	.02169
70B	Insurance	.00555	.00666	.00494	.00693	.00592	.00625	.00671	.00517	.00538	.00495
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.03385	.03455	.02686	.03324	.02891	.03161	.03363	.03173	.02942	.02917
72A	Hotels and lodging places	.00659	.00660	.00569	.00608	.00657	.00744	.00858	.00667	.00643	.00636
72B	Personal and repair services (except auto)	.00467	.00374	.00460	.00506	.00717	.00524	.00627	.00390	.00519	.00429
73A	Computer and data processing services	.01169	.01435	.01072	.01157	.01556	.01311	.01431	.01135	.01252	.01182
73B	Legal, engineering, accounting, and related services	.02800	.01893	.01669	.02112	.02062	.02061	.02228	.01864	.02286	.02047
73C	Other business and professional services, except medical	.04075	.03982	.03519	.04122	.04761	.04434	.04817	.04434	.04583	.04179
73D	Advertising	.00347	.00889	.00261	.00317	.00313	.00274	.00331	.00334	.00376	.00392
74	Eating and drinking places	.00852	.00959	.00762	.00799	.00852	.00969	.01097	.00896	.00869	.00853
75	Automotive repair and services	.01176	.00932	.01073	.01469	.01540	.01354	.01524	.01029	.01205	.01050
76	Amusements	.00276	.00500	.00203	.00238	.00251	.00244	.00306	.00252	.00286	.00273
77A	Health services	.00010	.00083	.00007	.00010	.00009	.00009	.00009	.00008	.00008	.00007
77B	Educational and social services, and membership organizations	.00562	.00240	.00209	.00228	.00254	.00299	.00358	.00277	.00456	.00268
78	Federal Government enterprises	.00469	.00590	.00455	.00477	.00588	.00620	.00566	.00470	.00486	.00461
79	State and local government enterprises	.00949	.01427	.00922	.01368	.01441	.01422	.01229	.00908	.01281	.00935
82	General government industry	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
<b>T</b>	<b>Total industry output multiplier</b>	<b>2.21658</b>	<b>2.45659</b>	<b>1.94988</b>	<b>2.09823</b>	<b>2.24956</b>	<b>2.51833</b>	<b>2.85776</b>	<b>2.22372</b>	<b>2.19537</b>	<b>2.10678</b>

Table D (continued).

**Detailed Industry-by-Commodity Total Requirements**

(Total requirements per dollar of delivery to final demand at producers' prices)

KEY: — = Value too small to report

Industry number	Commodity number	Engines and turbines	Farm, construction, and mining machinery	Materials handling machinery and equipment	Metalworking machinery and equipment	Special industry machinery and equipment	General industrial machinery and equipment	Miscellaneous machinery, except electrical	Computer and office equipment	Service industry machinery	Electrical industrial equipment and apparatus
		(43)	(44 + 45)	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)
1	Livestock and livestock products	0.00076	0.00081	0.00073	0.00070	0.00076	0.00079	0.00063	0.00076	0.00081	0.00076
2	Other agricultural products	.00118	.00136	.00115	.00120	.00124	.00135	.00097	.00117	.00144	.00130
3	Forestry and fishery products	.00057	.00089	.00071	.00076	.00088	.00072	.00045	.00056	.00096	.00075
4	Agricultural, forestry, and fishery services	.00135	.00133	.00113	.00113	.00123	.00134	.00118	.00131	.00124	.00145
5 + 6	Metallic ores mining	.01102	.00905	.00947	.00738	.00799	.00760	.00897	.00262	.00946	.00908
7	Coal mining	.00730	.00669	.00632	.00543	.00500	.00565	.00537	.00265	.00527	.00498
8	Crude petroleum and natural gas	.01626	.01676	.01669	.01521	.01455	.01556	.01367	.01001	.01592	.01845
9 + 10	Nonmetallic minerals mining	.00224	.00197	.00178	.00319	.00171	.00175	.00157	.00101	.00216	.00393
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.02144	.01904	.01786	.01830	.01843	.01790	.01853	.02134	.02063	.01846
13	Ordnance and accessories	.00062	.00020	.00151	.00077	.00033	.00034	.00038	.00015	.00127	.00017
14	Food and kindred products	.00313	.00332	.00300	.00296	.00318	.00306	.00254	.00315	.00351	.00312
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	.00152	.00202	.00159	.00157	.00170	.00333	.00122	.00137	.00212	.00190
17	Miscellaneous textile goods and floor coverings	.00081	.00124	.00123	.00066	.00105	.00793	.00183	.00065	.00122	.00090
18	Apparel	.00078	.00036	.00032	.00036	.00117	.00035	.00022	.00034	.00038	.00030
19	Miscellaneous fabricated textile products	.00034	.00031	.00027	.00023	.00027	.00026	.00021	.00030	.00027	.00025
20 + 21	Lumber and wood products	.00492	.00698	.00653	.00844	.00888	.00610	.00440	.00467	.00914	.00625
22 + 23	Furniture and fixtures	.00034	.00069	.00312	.00026	.00023	.00023	.00026	.00075	.00119	.00029
24	Paper and allied products, except containers	.00793	.00875	.00814	.00857	.01528	.01402	.00669	.01174	.01585	.01525
25	Paperboard containers and boxes	.00417	.00467	.00346	.00643	.00418	.00721	.00453	.00711	.00759	.00676
26A	Newspapers and periodicals	.00397	.00529	.00499	.00431	.00505	.00530	.00471	.00704	.00555	.00601
26B	Other printing and publishing	.00721	.00872	.00839	.00708	.00887	.00850	.00719	.01098	.00877	.00903
27A	Industrial and other chemicals	.01567	.02081	.01541	.02197	.01703	.01671	.01238	.01502	.02360	.02102
27B	Agricultural fertilizers and chemicals	.00072	.00089	.00074	.00086	.00076	.00113	.00057	.00075	.00104	.00091
28	Plastics and synthetic materials	.00764	.01219	.00822	.01006	.00871	.01183	.00584	.00831	.01525	.01330
29A	Drugs	.00014	.00017	.00014	.00018	.00020	.00014	.00010	.00015	.00024	.00019
29B	Cleaning and toilet preparations	.00070	.00080	.00069	.00074	.00075	.00081	.00052	.00082	.00165	.00151
30	Paints and allied products	.00263	.00503	.00254	.00292	.00146	.00161	.00120	.00144	.00459	.00351
31	Petroleum refining and related products	.01267	.01318	.01361	.01185	.01173	.01219	.01040	.00843	.01245	.01581
32	Rubber and miscellaneous plastics products	.02581	.05544	.03209	.04039	.03344	.04051	.01433	.02865	.04202	.04078
33 + 34	Footwear, leather, and leather products	.00008	.00009	.00008	.00006	.00014	.00007	.00006	.00007	.00008	.00007
35	Glass and glass products	.00130	.00193	.00131	.00133	.00198	.00120	.00120	.00390	.00197	.00179
36	Stone and clay products	.01212	.00768	.00754	.01740	.00784	.00853	.00826	.00323	.01179	.03693
37	Primary iron and steel manufacturing	.19707	.17579	.17413	.12500	.10756	.12458	.11330	.01905	.10468	.08375
38	Primary nonferrous metals manufacturing	.07085	.04035	.06047	.05962	.08151	.05925	.01010	.03490	.11125	.09054
39	Metal containers	.00045	.00059	.00045	.00045	.00041	.00040	.00030	.00043	.00061	.00051
40	Heating, plumbing, and fabricated structural metal products	.01927	.05167	.02537	.01669	.02061	.01895	.01244	.01106	.01498	.00818
41	Screw machine products and stampings	.04286	.02150	.03483	.03748	.01454	.01627	.01721	.01470	.03846	.02244
42	Other fabricated metal products	.04392	.02990	.03616	.02505	.03899	.02647	.03446	.01934	.02836	.01960
43	Engines and turbines	.95752	.05151	.01023	.00251	.00537	.01046	.00500	.00102	.00368	.02692
44 + 45	Farm, construction, and mining machinery	.00861	1.01091	.01920	.00626	.00264	.00649	.00548	.00069	.00223	.00238
46	Materials handling machinery and equipment	.00051	.00307	.95524	.00147	.00206	.00330	.00090	.00028	.00076	.00134
47	Metalworking machinery and equipment	.01178	.01801	.01344	.93813	.02058	.01207	.02774	.00268	.00962	.00762
48	Special industry machinery and equipment	.00104	.00294	.01251	.00630	.98760	.00872	.00327	.00106	.00466	.00123



49	General industrial machinery and equipment	.03794	.04009	.07149	.01833	.04081	1.02921	.02360	.00214	.03163	.01286
50	Miscellaneous machinery, except electrical	.05389	.03752	.03857	.04326	.04645	.04069	1.00258	.00567	.02961	.01863
51	Computer and office equipment	.00288	.00204	.00185	.00180	.00314	.00212	.00227	1.15103	.00236	.00544
52	Service industry machinery	.00125	.00127	.00221	.00087	.00434	.00533	.00127	.00074	1.04822	.00103
53	Electrical industrial equipment and apparatus	.04653	.01482	.03679	.02553	.04294	.04725	.00738	.02444	.06215	1.00747
54	Household appliances	.00051	.00042	.00043	.00118	.00049	.00085	.00022	.00029	.00822	.00670
55	Electric lighting and wiring equipment	.00190	.00162	.00204	.00281	.00192	.00181	.00728	.00428	.00882	.01099
56	Audio, video, and communication equipment	.00112	.00062	.00122	.00057	.00069	.00057	.00045	.01250	.00099	.00251
57	Electronic components and accessories	.00979	.00505	.00566	.00480	.01451	.00744	.00732	.34505	.00817	.03915
58	Miscellaneous electrical machinery and supplies	.01231	.00708	.00495	.00272	.00209	.00214	.00221	.00194	.00185	.00339
59A	Motor vehicles (passenger cars and trucks)	.00207	.00147	.00067	.00102	.00027	.00028	.00051	.00025	.00056	.00038
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00281	.01153	.00878	.00506	.00275	.00532	.00521	.00330	.00939	.00501
60	Aircraft and parts	.06132	.00395	.00130	.00156	.00128	.00207	.00504	.00066	.00131	.00127
61	Other transportation equipment	.00305	.00264	.00175	.00072	.00070	.00050	.00189	.00033	.00052	.00311
62	Scientific and controlling instruments	.01255	.00227	.00426	.00378	.00632	.00584	.00330	.00529	.01857	.00826
63	Ophthalmic and photographic equipment	.00093	.00094	.00091	.00084	.00139	.00129	.00092	.01532	.00109	.00100
64	Miscellaneous manufacturing	.00101	.00203	.00156	.00124	.00118	.00173	.00095	.00168	.00176	.00123
65A	Railroads and related services; passenger ground transportation	.00798	.00832	.00746	.00662	.00650	.00642	.00664	.00429	.00760	.00801
65B	Motor freight transportation and warehousing	.04119	.03931	.03197	.02902	.02875	.02751	.02604	.01460	.03225	.02903
65C	Water transportation	.00237	.00275	.00210	.00205	.00184	.00187	.00186	.00105	.00211	.00270
65D	Air transportation	.01101	.00942	.00872	.00698	.00899	.00825	.00762	.01110	.00851	.00816
65E	Pipelines, freight forwarders, and related services	.00389	.00367	.00322	.00280	.00301	.00290	.00272	.00259	.00322	.00315
65F	State and local passenger transit	.00084	.00087	.00079	.00070	.00068	.00068	.00070	.00045	.00080	.00084
65G	In-house transportation	.01819	.02378	.02662	.01856	.01732	.02121	.01825	.01536	.02109	.01758
66	Communications, except radio and TV	.01075	.01156	.01206	.01111	.01275	.01224	.00942	.01438	.01162	.01206
67	Radio and TV broadcasting	.00277	.00374	.00354	.00304	.00357	.00380	.00330	.00493	.00393	.00427
68A	Electric services (utilities)	.02502	.02349	.02162	.02285	.02141	.02374	.02370	.01752	.02320	.02339
68B	Gas production and distribution (utilities)	.01281	.01297	.01239	.01143	.01067	.01197	.01114	.00653	.01181	.01241
68C	Water and sanitary services	.00215	.00182	.00168	.00161	.00148	.00165	.00143	.00120	.00250	.00158
69A	Wholesale trade	.11066	.12456	.13427	.08348	.11324	.10474	.07529	.16482	.12157	.11324
69B	Retail trade	.00240	.00239	.00214	.00196	.00208	.00215	.00191	.00237	.00282	.00262
70A	Finance	.02250	.02246	.02081	.01892	.01981	.02030	.01876	.02374	.02254	.02225
70B	Insurance	.00508	.00525	.00509	.00444	.00443	.00465	.00420	.00485	.00507	.00455
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.02661	.02603	.02811	.02783	.03016	.02594	.03005	.03736	.02598	.02755
72A	Hotels and lodging places	.00680	.00673	.00612	.00575	.00620	.00612	.00567	.00716	.00659	.00613
72B	Personal and repair services (except auto)	.00431	.00390	.00336	.00311	.00306	.00371	.00306	.00294	.00353	.00346
73A	Computer and data processing services	.01447	.01260	.01023	.00961	.00974	.01085	.00867	.01959	.01245	.01006
73B	Legal, engineering, accounting, and related services	.01698	.02109	.02196	.01940	.02228	.01989	.01873	.02815	.02012	.01727
73C	Other business and professional services, except medical	.04086	.04055	.03915	.03542	.03717	.03894	.04007	.04383	.03785	.03929
73D	Advertising	.00302	.00407	.00385	.00331	.00388	.00413	.00359	.00536	.00428	.00464
74	Eating and drinking places	.00904	.00898	.00845	.00825	.00868	.00852	.00750	.00872	.00882	.00834
75	Automotive repair and services	.01026	.00989	.00870	.00835	.00794	.00890	.00771	.00750	.00899	.00844
76	Amusements	.00254	.00306	.00269	.00231	.00280	.00280	.00261	.00389	.00315	.00310
77A	Health services	.00007	.00007	.00007	.00006	.00006	.00007	.00007	.00007	.00007	.00007
77B	Educational and social services, and membership organizations	.00269	.00253	.00223	.00229	.00214	.00229	.00207	.00336	.00332	.00246
78	Federal Government enterprises	.00446	.00488	.00454	.00390	.00466	.00431	.00356	.00411	.00394	.00434
79	State and local government enterprises	.00850	.00780	.00915	.00822	.00742	.00841	.00866	.00594	.00831	.00725
82	General government industry	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
T	<b>Total industry output multiplier</b>	<b>2.25330</b>	<b>2.20880</b>	<b>2.15032</b>	<b>1.90113</b>	<b>2.04188</b>	<b>2.04438</b>	<b>1.88798</b>	<b>2.30833</b>	<b>2.21198</b>	<b>2.04619</b>

Table D (continued).

**Detailed Industry-by-Commodity Total Requirements**

(Total requirements per dollar of delivery to final demand at producers' prices)

KEY: — = Value too small to report

Industry number	Commodity number	Household appliances	Electric lighting and wiring equipment	Audio, video, and communication equipment	Electronic components and accessories	Miscellaneous electrical machinery and supplies	Motor vehicles (passenger cars and trucks)	Truck and bus bodies, trailers, and motor vehicles parts	Aircraft and parts	Other transportation equipment	Scientific and controlling instruments
		(54)	(55)	(56)	(57)	(58)	(59A)	(59B)	(60)	(61)	(62)
1	Livestock and livestock products	0.00103	0.00082	0.00069	0.00071	0.00091	0.00130	0.00090	0.00081	0.00086	0.00089
2	Other agricultural products	.00215	.00154	.00116	.00128	.00178	.00304	.00162	.00140	.00179	.00160
3	Forestry and fishery products	.00131	.00078	.00064	.00057	.00098	.00123	.00096	.00055	.00188	.00061
4	Agricultural, forestry, and fishery services	.00160	.00126	.00116	.00162	.00176	.00153	.00140	.00156	.00159	.00128
5 + 6	Metallic ores mining	.00868	.00723	.00353	.00369	.00710	.00743	.01684	.00443	.00626	.00298
7	Coal mining	.00581	.00482	.00251	.00344	.00418	.00508	.00712	.00305	.00487	.00302
8	Crude petroleum and natural gas	.02206	.01816	.00929	.01203	.01690	.01973	.01934	.01119	.01528	.00964
9 + 10	Nonmetallic minerals mining	.00442	.00284	.00098	.00156	.00191	.00228	.00238	.00120	.00162	.00113
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.02126	.01851	.01864	.02578	.02042	.02236	.02414	.02015	.01646	.01664
13	Ordnance and accessories	.00061	.00012	.00259	.00038	.00250	.00038	.00035	.04021	.00019	.01235
14	Food and kindred products	.00422	.00344	.00282	.00295	.00376	.00454	.00368	.00316	.00314	.00339
15	Tobacco products	.00001	—	—	—	.00001	.00001	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	.00530	.00311	.00215	.00136	.00340	.01990	.00299	.00431	.00489	.00692
17	Miscellaneous textile goods and floor coverings	.00210	.00100	.00097	.00062	.00163	.01122	.00189	.00120	.00454	.00590
18	Apparel	.00041	.00032	.00026	.00028	.00034	.00188	.00041	.00047	.00054	.00106
19	Miscellaneous fabricated textile products	.00066	.00027	.00024	.00024	.00030	.02529	.00133	.00188	.00469	.00033
20 + 21	Lumber and wood products	.00855	.00667	.00556	.00511	.00583	.00863	.00866	.00417	.02351	.00511
22 + 23	Furniture and fixtures	.00257	.00210	.01161	.00128	.00043	.01753	.00130	.00103	.00210	.00098
24	Paper and allied products, except containers	.03308	.02319	.01295	.01039	.03885	.01353	.01301	.00657	.00756	.01530
25	Paperboard containers and boxes	.01545	.01815	.00545	.00485	.01578	.00735	.00840	.00273	.00366	.00730
26A	Newspapers and periodicals	.01039	.00830	.00503	.00619	.00592	.00715	.00906	.00403	.00447	.00674
26B	Other printing and publishing	.01462	.01156	.00800	.00907	.00938	.01165	.01320	.00692	.00729	.00994
27A	Industrial and other chemicals	.04965	.03272	.01613	.02707	.04037	.03859	.03074	.01525	.01911	.01744
27B	Agricultural fertilizers and chemicals	.00198	.00137	.00074	.00101	.00161	.00162	.00121	.00081	.00097	.00084
28	Plastics and synthetic materials	.04511	.03094	.01089	.01032	.02853	.02648	.01786	.01166	.01448	.01329
29A	Drugs	.00049	.00028	.00016	.00022	.00031	.00033	.00024	.00030	.00017	.00279
29B	Cleaning and toilet preparations	.00284	.00236	.00103	.00092	.00159	.00154	.00109	.00066	.00080	.00120
30	Paints and allied products	.00925	.00155	.00105	.00105	.00124	.01457	.00696	.00313	.00701	.00111
31	Petroleum refining and related products	.01751	.01411	.00762	.00940	.01321	.01643	.01519	.00968	.01284	.00798
32	Rubber and miscellaneous plastics products	.10798	.05000	.03197	.02692	.07900	.08725	.04416	.03073	.03545	.03108
33 + 34	Footwear, leather, and leather products	.00012	.00008	.00008	.00008	.00010	.00092	.00015	.00015	.00021	.00024
35	Glass and glass products	.00459	.02848	.00397	.01242	.00294	.01401	.00357	.00190	.00825	.00614
36	Stone and clay products	.01209	.01621	.00274	.00429	.00537	.00760	.01021	.00566	.00641	.00403
37	Primary iron and steel manufacturing	.10945	.07918	.02253	.02590	.04540	.08197	.15007	.03111	.10217	.02797
38	Primary nonferrous metals manufacturing	.08456	.08975	.03989	.05248	.09484	.05703	.13548	.05590	.04453	.03307
39	Metal containers	.00101	.00055	.00035	.00044	.00060	.00116	.00075	.00042	.00062	.00061
40	Heating, plumbing, and fabricated structural metal products	.00975	.00308	.00864	.00772	.00750	.01022	.02624	.00430	.02670	.00965
41	Screw machine products and stampings	.03716	.03098	.01532	.01477	.01549	.10030	.05288	.01489	.01692	.01536
42	Other fabricated metal products	.02590	.02933	.02031	.04253	.02852	.03567	.02776	.02693	.02830	.02466
43	Engines and turbines	.00215	.00154	.00053	.00061	.00130	.01573	.00645	.00262	.04540	.00077
44 + 45	Farm, construction, and mining machinery	.00178	.00458	.00070	.00086	.00110	.00278	.00411	.00105	.01248	.00086
46	Materials handling machinery and equipment	.00043	.00038	.00021	.00023	.00032	.00050	.00071	.00024	.00085	.00019
47	Metalworking machinery and equipment	.01057	.00676	.00280	.00397	.00528	.00738	.00851	.01445	.00567	.00382
48	Special industry machinery and equipment	.00297	.00137	.00093	.00226	.00153	.00147	.00140	.00089	.00093	.00112

49	General industrial machinery and equipment	.00915	.00446	.00210	.00237	.00695	.01060	.02570	.00600	.02843	.00307
50	Miscellaneous machinery, except electrical	.00858	.00885	.00592	.00837	.02076	.02517	.04976	.02126	.01689	.00791
51	Computer and office equipment	.00407	.00313	.03000	.00216	.03254	.00534	.00515	.00813	.00205	.02432
52	Service industry machinery	.02755	.00089	.00090	.00091	.00097	.02022	.01391	.00058	.00491	.00072
53	Electrical industrial equipment and apparatus	.05145	.04009	.00645	.00687	.02036	.00606	.00707	.00519	.03428	.01367
54	Household appliances	.95433	.00124	.00035	.00019	.00054	.00057	.00060	.00018	.00600	.00029
55	Electric lighting and wiring equipment	.01561	.96479	.01005	.00611	.00508	.00823	.00491	.00147	.00481	.00498
56	Audio, video, and communication equipment	.01830	.00441	.99632	.01868	.01179	.01334	.00240	.01228	.00161	.02197
57	Electronic components and accessories	.02702	.02226	.27490	1.12852	.11543	.03900	.03895	.04063	.00732	.11361
58	Miscellaneous electrical machinery and supplies	.00249	.00795	.01157	.00272	.92072	.02267	.02234	.00238	.00620	.00913
59A	Motor vehicles (passenger cars and trucks)	.00049	.00044	.00025	.00026	.00035	1.00448	.03658	.00026	.02417	.00024
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00309	.00313	.00574	.00645	.02752	.29872	1.03858	.00278	.03496	.00240
60	Aircraft and parts	.00147	.00068	.00219	.00065	.00168	.00237	.00266	1.27362	.00534	.02340
61	Other transportation equipment	.00050	.00037	.00021	.00025	.00133	.00083	.00144	.00027	1.00985	.00025
62	Scientific and controlling instruments	.03846	.01279	.02460	.01199	.01888	.00910	.00508	.06946	.00544	.96110
63	Ophthalmic and photographic equipment	.00141	.00113	.00155	.00137	.00408	.00145	.00127	.00149	.00083	.00860
64	Miscellaneous manufacturing	.00225	.00537	.00137	.00116	.00154	.00178	.00158	.00110	.00225	.00175
65A	Railroads and related services; passenger ground transportation	.00966	.00767	.00422	.00558	.00725	.01078	.01080	.00460	.00725	.00428
65B	Motor freight transportation and warehousing	.03811	.03090	.01549	.01757	.03313	.04753	.04296	.01928	.03359	.01618
65C	Water transportation	.00267	.00201	.00101	.00138	.00196	.00254	.00285	.00123	.00184	.00109
65D	Air transportation	.00862	.00730	.00821	.00840	.00852	.01399	.01104	.01330	.00900	.00727
65E	Pipelines, freight forwarders, and related services	.00374	.00306	.00220	.00242	.00326	.00487	.00418	.00308	.00326	.00211
65F	State and local passenger transit	.00102	.00081	.00044	.00059	.00076	.00113	.00114	.00048	.00076	.00045
65G	In-house transportation	.02177	.01712	.01155	.01434	.01704	.03308	.02913	.01310	.02663	.01077
66	Communications, except radio and TV	.01329	.01133	.01208	.01173	.01138	.01289	.01177	.00991	.00979	.01211
67	Radio and TV broadcasting	.00757	.00597	.00352	.00436	.00409	.00504	.00652	.00279	.00316	.00470
68A	Electric services (utilities)	.02585	.02394	.01583	.02251	.02464	.02367	.02935	.01727	.01949	.01619
68B	Gas production and distribution (utilities)	.01442	.01299	.00614	.00815	.01113	.01245	.01401	.00705	.01037	.00621
68C	Water and sanitary services	.00188	.00175	.00103	.00132	.00223	.00252	.00294	.00154	.00179	.00109
69A	Wholesale trade	.12500	.11564	.10046	.09911	.12717	.16328	.13528	.07090	.09985	.07466
69B	Retail trade	.00402	.00365	.00228	.00238	.00300	.00353	.00304	.00191	.00218	.00207
70A	Finance	.02397	.02097	.02038	.02108	.02302	.04078	.02617	.02403	.02038	.01884
70B	Insurance	.00546	.00470	.00426	.00452	.00496	.00680	.00579	.00455	.00498	.00406
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.02797	.03086	.02836	.03033	.02924	.03482	.02890	.02356	.03289	.02686
72A	Hotels and lodging places	.00704	.00620	.00609	.00615	.00644	.00844	.00736	.00681	.00613	.00562
72B	Personal and repair services (except auto)	.00363	.00315	.00277	.00388	.00391	.00525	.00535	.00377	.00296	.00251
73A	Computer and data processing services	.01073	.01128	.01308	.01346	.01115	.01263	.01295	.01841	.01129	.01160
73B	Legal, engineering, accounting, and related services	.02040	.01912	.02307	.02923	.01918	.02884	.02322	.02467	.01832	.02376
73C	Other business and professional services, except medical	.04238	.03871	.03758	.04363	.04558	.04699	.04628	.04200	.03581	.04444
73D	Advertising	.00821	.00648	.00383	.00474	.00445	.00548	.00708	.00304	.00343	.00511
74	Eating and drinking places	.00952	.00867	.00776	.00781	.00900	.01080	.00955	.00868	.00841	.00749
75	Automotive repair and services	.00968	.00864	.00678	.00831	.00967	.00691	.01384	.00816	.00930	.00624
76	Amusements	.00495	.00391	.00287	.00336	.00308	.00411	.00472	.00258	.00249	.00341
77A	Health services	.00008	.00007	.00006	.00007	.00008	.00009	.00008	.00007	.00007	.00007
77B	Educational and social services, and membership organizations	.00443	.00249	.00305	.00334	.00309	.00604	.00427	.00437	.00249	.00359
78	Federal Government enterprises	.00624	.00435	.00431	.00394	.00440	.00627	.00611	.00427	.00373	.00405
79	State and local government enterprises	.00834	.00817	.00479	.00616	.00850	.00887	.00948	.00562	.00795	.00576
82	General government industry	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
<b>T</b>	<b>Total industry output multiplier</b>	<b>2.34050</b>	<b>2.06368</b>	<b>2.01279</b>	<b>2.01775</b>	<b>2.15205</b>	<b>2.81494</b>	<b>2.45886</b>	<b>2.15186</b>	<b>2.10239</b>	<b>1.84733</b>

Table D: Detailed Industry-by-Commodity Total Requirements ▲ 97

Table D (continued).

**Detailed Industry-by-Commodity Total Requirements**

(Total requirements per dollar of delivery to final demand at producers' prices)

KEY: — = Value too small to report

Industry number	Commodity number	Ophthalmic, and photographic equipment	Miscellaneous manufacturing	Railroads and related services; passenger ground transportation	Motor freight transportation and warehousing	Water transportation	Air transportation	Pipelines, freight forwarders, and related services	In-house transportation	Communications, except radio and TV	Radio and TV broadcasting
		(63)	(64)	(65A)	(65B)	(65C)	(65D)	(65E)	(65G)	(66)	(67)
1	Livestock and livestock products	0.00077	0.00199	0.00063	0.00065	0.00127	0.00214	0.00057	0.00051	0.00063	0.00384
2	Other agricultural products	.00149	.00491	.00122	.00098	.00162	.00196	.00093	.00063	.00101	.00475
3	Forestry and fishery products	.00083	.00236	.00078	.00044	.00054	.00049	.00072	.00025	.00050	.00039
4	Agricultural, forestry, and fishery services	.00109	.00171	.00105	.00077	.00113	.00097	.00076	.00044	.00096	.00229
5+6	Metallic ores mining	.00159	.00632	.00143	.00063	.00084	.00052	.00037	.00043	.00049	.00032
7	Coal mining	.00330	.00381	.00263	.00191	.00215	.00156	.00216	.00152	.00113	.00203
8	Crude petroleum and natural gas	.01411	.02048	.08059	.05134	.02681	.08534	.01275	.05937	.00550	.00704
9+10	Nonmetallic minerals mining	.00181	.00238	.00188	.00083	.00091	.00100	.00061	.00068	.00085	.00060
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.01654	.01917	.08238	.01988	.02676	.02230	.02928	.01307	.05163	.02399
13	Ordinance and accessories	.00014	.00009	.00006	.00006	.00008	.00122	.00018	.00003	.00009	.00009
14	Food and kindred products	.00338	.00724	.00257	.00274	.00539	.00981	.00220	.00224	.00215	.00612
15	Tobacco products	.00001	.00001	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	.00228	.02269	.00121	.00094	.00342	.00070	.00173	.00052	.00074	.00109
17	Miscellaneous textile goods and floor coverings	.00118	.00279	.00071	.00054	.00218	.00031	.00053	.00031	.00039	.00034
18	Apparel	.00024	.00669	.00067	.00025	.00301	.00030	.00028	.00018	.00080	.00067
19	Miscellaneous fabricated textile products	.00021	.00311	.00039	.00041	.00356	.00050	.00262	.00024	.00023	.00038
20+21	Lumber and wood products	.00796	.02376	.00944	.00375	.00487	.00407	.00917	.00211	.00594	.00395
22+23	Furniture and fixtures	.00019	.00193	.00017	.00016	.00014	.00009	.00010	.00009	.00031	.00010
24	Paper and allied products, except containers	.05565	.03375	.00604	.00568	.00820	.00596	.00830	.00370	.00674	.00892
25	Paperboard containers and boxes	.01388	.02321	.00188	.00234	.00172	.00168	.00293	.00185	.00160	.00173
26A	Newspapers and periodicals	.00642	.01463	.00372	.00367	.01488	.00709	.00920	.00164	.00708	.01467
26B	Other printing and publishing	.00934	.02979	.01109	.00892	.01902	.01224	.01903	.00432	.01351	.01886
27A	Industrial and other chemicals	.04319	.04785	.01242	.00956	.00890	.00890	.00482	.00773	.00443	.00524
27B	Agricultural fertilizers and chemicals	.00146	.00214	.00057	.00048	.00064	.00055	.00033	.00033	.00035	.00127
28	Plastics and synthetic materials	.02137	.03992	.00395	.00442	.00392	.00196	.00247	.00244	.00217	.00177
29A	Drugs	.00126	.00061	.00011	.00010	.00012	.00012	.00006	.00007	.00009	.00015
29B	Cleaning and toilet preparations	.00182	.00368	.00097	.00068	.00060	.00077	.00038	.00064	.00055	.00056
30	Paints and allied products	.00078	.00721	.00131	.00103	.00157	.00052	.00049	.00197	.00098	.00057
31	Petroleum refining and related products	.01085	.01725	.01155	.06389	.03122	.01089	.00983	.07522	.00545	.00669
32	Rubber and miscellaneous plastics products	.03656	.05543	.01395	.02002	.00958	.00558	.00844	.00916	.00708	.00457
33+34	Footwear, leather, and leather products	.00006	.00174	.00009	.00009	.00020	.00010	.00020	.00005	.00012	.00043
35	Glass and glass products	.00881	.00249	.00201	.00109	.00104	.00087	.00088	.00075	.00082	.00061
36	Stone and clay products	.00252	.00764	.00454	.00170	.00246	.00195	.00157	.00119	.00219	.00126
37	Primary iron and steel manufacturing	.01106	.03704	.02095	.00618	.01075	.00480	.00388	.00413	.00501	.00268
38	Primary nonferrous metals manufacturing	.01378	.08524	.00864	.00440	.00694	.00399	.00315	.00279	.00478	.00287
39	Metal containers	.00054	.00099	.00037	.00031	.00035	.00048	.00016	.00032	.00017	.00026
40	Heating, plumbing, and fabricated structural metal products	.00210	.00483	.00510	.00159	.00281	.00141	.00176	.00100	.00282	.00140
41	Screw machine products and stampings	.01037	.00663	.00274	.00205	.00202	.00154	.00103	.00121	.00330	.00094
42	Other fabricated metal products	.00794	.01856	.00944	.00633	.01056	.00381	.00406	.00393	.00450	.00241
43	Engines and turbines	.00054	.00080	.00697	.00146	.00854	.00050	.00157	.00056	.00218	.00036
44+45	Farm, construction, and mining machinery	.00056	.00094	.00110	.00049	.00102	.00058	.00034	.00040	.00035	.00032
46	Materials handling machinery and equipment	.00018	.00029	.00023	.00017	.00020	.00013	.00010	.00013	.00009	.00008
47	Metalworking machinery and equipment	.00241	.00461	.00239	.00073	.00572	.00112	.00049	.00049	.00058	.00045
48	Special industry machinery and equipment	.00141	.00129	.00042	.00034	.00057	.00028	.00033	.00026	.00029	.00030

49	General industrial machinery and equipment	.00131	.00360	.00840	.00152	.01476	.00125	.00442	.00079	.00311	.00059
50	Miscellaneous machinery, except electrical	.00617	.01117	.00499	.00246	.00651	.00333	.00238	.00154	.00129	.00120
51	Computer and office equipment	.01033	.00579	.00254	.00177	.00262	.00435	.00824	.00116	.00635	.00479
52	Service industry machinery	.00049	.00079	.00181	.00109	.00103	.00063	.00068	.00070	.00084	.00090
53	Electrical industrial equipment and apparatus	.00699	.00521	.01425	.00257	.00329	.00123	.00225	.00135	.00322	.00198
54	Household appliances	.00044	.00025	.00047	.00012	.00033	.00013	.00015	.00008	.00025	.00015
55	Electric lighting and wiring equipment	.00148	.00166	.00224	.00113	.00123	.00069	.00076	.00081	.00167	.00100
56	Audio, video, and communication equipment	.00120	.00118	.00072	.00069	.00051	.00107	.00122	.00049	.01992	.00251
57	Electronic components and accessories	.04625	.01851	.00461	.00350	.00391	.00696	.00800	.00242	.02635	.01287
58	Miscellaneous electrical machinery and supplies	.01477	.00189	.00283	.00250	.00207	.00135	.00296	.00189	.00224	.00317
59A	Motor vehicles (passenger cars and trucks)	.00019	.00017	.00097	.00058	.00068	.00008	.00012	.00033	.00011	.00010
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00202	.00272	.01483	.01447	.00266	.00169	.00276	.00836	.00203	.00237
60	Aircraft and parts	.00049	.00080	.00081	.00044	.00090	.03732	.00048	.00015	.00042	.00028
61	Other transportation equipment	.00026	.00235	.01872	.00029	.02513	.00021	.00021	.00020	.00014	.00030
62	Scientific and controlling instruments	.01132	.00226	.00104	.00086	.00086	.00260	.00062	.00054	.00131	.00079
63	Ophthalmic and photographic equipment	1.02536	.00139	.00087	.00113	.00132	.00103	.00173	.00045	.00122	.00252
64	Miscellaneous manufacturing	.00128	1.04501	.00132	.00113	.00438	.00148	.00216	.00076	.00201	.00298
65A	Railroads and related services; passenger ground transportation	.00668	.00785	.93497	.00632	.00276	.00328	.00269	.00271	.00220	.00254
65B	Motor freight transportation and warehousing	.02054	.03361	.01870	1.20510	.01324	.01082	.01205	.01188	.00745	.00902
65C	Water transportation	.00167	.00225	.00351	.00270	1.08001	.00344	.00203	.00212	.00051	.00061
65D	Air transportation	.00651	.00775	.00661	.00736	.00588	1.01843	.00865	.00187	.00577	.00594
65E	Pipelines, freight forwarders, and related services	.00243	.00337	.02260	.05046	.05686	.12018	1.02074	.00415	.00140	.00156
65F	State and local passenger transit	.00070	.00083	.09884	.00053	.00029	.00035	.00028	.00028	.00023	.00027
65G	In-house transportation	.01314	.02430	.01354	.00880	.00936	.00855	.00719	1.00692	.00867	.02603
66	Communications, except radio and TV	.01162	.01326	.01460	.02521	.01105	.02527	.03895	.01901	1.15840	.02900
67	Radio and TV broadcasting	.00430	.01057	.00232	.00228	.00998	.00492	.00623	.00109	.00519	1.03157
68A	Electric services (utilities)	.01443	.02173	.01761	.01445	.01272	.01166	.01711	.01172	.00813	.01614
68B	Gas production and distribution (utilities)	.00895	.01221	.01703	.01153	.00836	.01592	.00379	.01215	.00281	.00391
68C	Water and sanitary services	.00127	.00163	.00164	.00665	.00141	.00137	.00090	.00267	.00096	.00160
69A	Wholesale trade	.08837	.13056	.05679	.05492	.03688	.03579	.02303	.04763	.02499	.02282
69B	Retail trade	.00245	.00345	.00762	.00743	.00248	.00222	.00260	.00830	.00316	.00241
70A	Finance	.01946	.02243	.03267	.03513	.05154	.03247	.03700	.01448	.02166	.02345
70B	Insurance	.00409	.00564	.00894	.01580	.00484	.00515	.00868	.01166	.00407	.01060
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.02166	.03607	.04072	.05225	.05553	.04896	.04061	.02198	.03334	.07035
72A	Hotels and lodging places	.00535	.00634	.00473	.00676	.00411	.00567	.00512	.00549	.00513	.00563
72B	Personal and repair services (except auto)	.00233	.00335	.00308	.00296	.00235	.00484	.00356	.00231	.00936	.00616
73A	Computer and data processing services	.00951	.01017	.02191	.01307	.02168	.04015	.08130	.00833	.02148	.02334
73B	Legal, engineering, accounting, and related services	.01381	.02201	.02326	.02154	.04357	.03268	.06693	.01614	.04631	.03801
73C	Other business and professional services, except medical	.04023	.04599	.04250	.04499	.10727	.04066	.05225	.03916	.04094	.06522
73D	Advertising	.00468	.01147	.00253	.00248	.01086	.00534	.00676	.00120	.00514	.01138
74	Eating and drinking places	.00703	.00898	.00711	.00819	.00519	.02293	.00631	.00677	.00613	.00702
75	Automotive repair and services	.00645	.00909	.01395	.06194	.00492	.00553	.00923	.03483	.00808	.00931
76	Amusements	.00322	.00649	.00213	.00259	.00613	.00417	.00464	.00118	.02011	.46014
77A	Health services	.00007	.00009	.00007	.00051	.00015	.00008	.00007	.00006	.00006	.00026
77B	Educational and social services, and membership organizations	.00538	.00631	.00396	.00215	.00617	.00314	.00833	.00085	.00284	.00761
78	Federal Government enterprises	.00346	.00695	.00448	.00546	.00469	.00457	.00717	.00444	.00621	.00671
79	State and local government enterprises	.00484	.00870	.00846	.01297	.06263	.02738	.00458	.00594	.00334	.00719
82	General government industry	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
<b>T</b>	<b>Total industry output multiplier</b>	<b>1.78696</b>	<b>2.16820</b>	<b>1.92866</b>	<b>1.96278</b>	<b>1.95332</b>	<b>1.92052</b>	<b>1.67868</b>	<b>1.53824</b>	<b>1.68713</b>	<b>2.08166</b>

Table D (continued).

**Detailed Industry-by-Commodity Total Requirements**

(Total requirements per dollar of delivery to final demand at producers' prices)

KEY: — = Value too small to report

Industry number	Commodity number	Electric services (utilities)	Gas production and distribution (utilities)	Water and sanitary services	Wholesale trade	Retail trade	Finance	Insurance	Owner-occupied dwellings	Real estate and royalties	Hotels and lodging places
		(68A)	(68B)	(68C)	(69A)	(69B)	(70A)	(70B)	(71A)	(71B)	(72A)
1	Livestock and livestock products	0.00044	0.00057	0.00074	0.00086	0.00067	0.00050	0.00076	0.00050	0.00066	0.00148
2	Other agricultural products	.00103	.00141	.00209	.00122	.00099	.00066	.00091	.00169	.00169	.00247
3	Forestry and fishery products	.00071	.00093	.00151	.00063	.00038	.00024	.00030	.00036	.00053	.00058
4	Agricultural, forestry, and fishery services	.00101	.00174	.00318	.00115	.00184	.00088	.00113	.00821	.00596	.00560
5 + 6	Metallic ores mining	.00070	.00099	.00149	.00039	.00030	.00019	.00025	.00016	.00028	.00036
7	Coal mining	.10260	.00257	.00483	.00154	.00300	.00109	.00087	.00025	.00183	.00463
8	Crude petroleum and natural gas	.04362	.63543	.05596	.01030	.01011	.00550	.00496	.00207	.00683	.01390
9 + 10	Nonmetallic minerals mining	.00156	.00220	.00356	.00051	.00055	.00031	.00036	.00077	.00109	.00107
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.08978	.12526	.15125	.01249	.02197	.01120	.01347	.05096	.06653	.04227
13	Ordinance and accessories	.00005	.00005	.00025	.00004	.00004	.00004	.00005	.00001	.00003	.00006
14	Food and kindred products	.00171	.00216	.00264	.00356	.00249	.00198	.00312	.00042	.00159	.00529
15	Tobacco products	—	—	—	—	—	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	.00091	.00055	.00116	.00134	.00070	.00059	.00050	.00019	.00039	.00497
17	Miscellaneous textile goods and floor coverings	.00052	.00057	.00096	.00046	.00044	.00024	.00026	.00023	.00035	.00117
18	Apparel	.00016	.00016	.00047	.00149	.00021	.00014	.00015	.00003	.00011	.00163
19	Miscellaneous fabricated textile products	.00020	.00025	.00038	.00064	.00022	.00063	.00033	.00009	.00019	.00805
20 + 21	Lumber and wood products	.00937	.01243	.01997	.00761	.00420	.00257	.00285	.00489	.00689	.00589
22 + 23	Furniture and fixtures	.00008	.00010	.00022	.00009	.00012	.00007	.00007	.00003	.00008	.00011
24	Paper and allied products, except containers	.00339	.00391	.00615	.01402	.01624	.00997	.00924	.00108	.00429	.01101
25	Paperboard containers and boxes	.00109	.00117	.00225	.00673	.00274	.00132	.00138	.00034	.00085	.00366
26A	Newspapers and periodicals	.00162	.00207	.00319	.00918	.01513	.00786	.00694	.00056	.00359	.00787
26B	Other printing and publishing	.00395	.00444	.00683	.02166	.01883	.02044	.01977	.00127	.00664	.01374
27A	Industrial and other chemicals	.00814	.01319	.02896	.00595	.00487	.00323	.00374	.00158	.00352	.00693
27B	Agricultural fertilizers and chemicals	.00042	.00073	.00205	.00101	.00047	.00026	.00032	.00160	.00102	.00281
28	Plastics and synthetic materials	.00216	.00236	.00553	.00259	.00216	.00124	.00167	.00064	.00129	.00341
29A	Drugs	.00010	.00012	.00028	.00017	.00007	.00005	.00006	.00004	.00006	.00015
29B	Cleaning and toilet preparations	.00057	.00059	.00098	.00124	.00070	.00037	.00041	.00015	.00041	.00183
30	Paints and allied products	.00107	.00145	.00221	.00043	.00049	.00025	.00060	.00053	.00081	.00066
31	Petroleum refining and related products	.02602	.01673	.04796	.01007	.00977	.00485	.00491	.00213	.00569	.00990
32	Rubber and miscellaneous plastics products	.00642	.00558	.01573	.00860	.00694	.00322	.00551	.00183	.00388	.00896
33 + 34	Footwear, leather, and leather products	.00006	.00008	.00009	.00011	.00037	.00014	.00013	.00002	.00008	.00045
35	Glass and glass products	.00063	.00066	.00191	.00092	.00045	.00044	.00060	.00018	.00042	.00521
36	Stone and clay products	.00403	.00635	.00990	.00110	.00124	.00070	.00083	.00178	.00332	.00273
37	Primary iron and steel manufacturing	.00762	.01543	.01309	.00323	.00286	.00167	.00228	.00180	.00294	.00330
38	Primary nonferrous metals manufacturing	.00542	.00502	.01060	.00372	.00237	.00161	.00216	.00144	.00241	.00273
39	Metal containers	.00021	.00026	.00047	.00110	.00016	.00012	.00016	.00006	.00013	.00029
40	Heating, plumbing, and fabricated structural metal products	.00476	.00610	.00796	.00115	.00132	.00071	.00088	.00258	.00321	.00217
41	Screw machine products and stampings	.00188	.00110	.00327	.00088	.00080	.00054	.00085	.00027	.00061	.00093
42	Other fabricated metal products	.00390	.00653	.00871	.00276	.00275	.00192	.00279	.00130	.00238	.00285
43	Engines and turbines	.00597	.00061	.00110	.00034	.00049	.00023	.00033	.00009	.00026	.00052
44 + 45	Farm, construction, and mining machinery	.00396	.00244	.00204	.00042	.00031	.00018	.00020	.00055	.00039	.00048
46	Materials handling machinery and equipment	.00076	.00043	.00024	.00083	.00010	.00006	.00007	.00004	.00008	.00013
47	Metalworking machinery and equipment	.00110	.00101	.00130	.00075	.00044	.00029	.00035	.00016	.00033	.00053
48	Special industry machinery and equipment	.00023	.00027	.00050	.00048	.00037	.00025	.00029	.00006	.00017	.00038

49	General industrial machinery and equipment	.00267	.00199	.00250	.00071	.00064	.00045	.00053	.00033	.00061	.00081
50	Miscellaneous machinery, except electrical	.00299	.00280	.00863	.00219	.00145	.00072	.00085	.00026	.00086	.00129
51	Computer and office equipment	.00182	.00358	.00214	.00316	.00170	.00491	.00392	.00028	.00085	.00212
52	Service industry machinery	.00122	.00190	.00501	.00070	.00077	.00029	.00046	.00063	.00104	.00089
53	Electrical industrial equipment and apparatus	.00302	.00197	.00278	.00099	.00085	.00074	.00085	.00045	.00084	.00132
54	Household appliances	.00029	.00040	.00058	.00010	.00013	.00007	.00008	.00015	.00032	.00034
55	Electric lighting and wiring equipment	.00291	.00232	.00352	.00077	.00100	.00042	.00059	.00087	.00130	.00123
56	Audio, video, and communication equipment	.00050	.00067	.00164	.00090	.00053	.00061	.00083	.00021	.00048	.00072
57	Electronic components and accessories	.00263	.00276	.00578	.00944	.00293	.00499	.00425	.00049	.00153	.00332
58	Miscellaneous electrical machinery and supplies	.00137	.00122	.00314	.00121	.00115	.00145	.00218	.00024	.00061	.00100
59A	Motor vehicles (passenger cars and trucks)	.00012	.00009	.00112	.00015	.00020	.00007	.00015	.00002	.00008	.00012
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00211	.00205	.03063	.00375	.00537	.00179	.00353	.00042	.00175	.00289
60	Aircraft and parts	.00060	.00037	.00078	.00031	.00025	.00027	.00038	.00005	.00019	.00032
61	Other transportation equipment	.00082	.00025	.00041	.00015	.00015	.00013	.00017	.00005	.00012	.00022
62	Scientific and controlling instruments	.00126	.00101	.01506	.00058	.00056	.00042	.00075	.00023	.00056	.00097
63	Ophthalmic and photographic equipment	.00050	.00077	.00115	.00187	.00111	.00258	.00294	.00018	.00072	.00142
64	Miscellaneous manufacturing	.00101	.00118	.00171	.00207	.00249	.00279	.00220	.00035	.00112	.00283
65A	Railroads and related services; passenger ground transportation	.02944	.00356	.00549	.00245	.00268	.00219	.00288	.00054	.00198	.00375
65B	Motor freight transportation and warehousing	.01279	.01107	.30241	.01046	.00944	.01953	.01213	.00286	.00778	.01770
65C	Water transportation	.00613	.00365	.00336	.00074	.00070	.00048	.00043	.00021	.00053	.00109
65D	Air transportation	.00432	.00731	.00634	.00678	.00487	.00639	.00875	.00074	.00385	.00661
65E	Pipelines, freight forwarders, and related services	.00321	.00845	.01322	.00227	.00156	.00191	.00201	.00032	.00116	.01581
65F	State and local passenger transit	.00311	.00037	.00057	.00026	.00028	.00023	.00030	.00006	.00021	.00039
65G	In-house transportation	.01616	.02381	.02195	.04599	.04461	.00589	.00606	.00496	.00880	.02923
66	Communications, except radio and TV	.00648	.00853	.02469	.02254	.01656	.02246	.03555	.00199	.01189	.02265
67	Radio and TV broadcasting	.00104	.00139	.00206	.00616	.01109	.00486	.00462	.00037	.00253	.00499
68A	Electric services (utilities)	.87769	.03820	.03820	.01154	.02418	.00843	.00645	.00155	.01445	.03750
68B	Gas production and distribution (utilities)	.04070	1.20956	.04039	.00559	.00570	.00373	.00256	.00084	.00502	.01229
68C	Water and sanitary services	.00175	.00132	.38823	.00119	.00186	.00171	.00094	.00025	.00297	.00602
69A	Wholesale trade	.02559	.03042	.05243	1.03782	.01550	.01494	.01511	.00561	.01125	.02260
69B	Retail trade	.00490	.00724	.01254	.00388	.99821	.00138	.00197	.00282	.00385	.00462
70A	Finance	.02650	.02581	.02859	.02085	.02710	1.16748	.08826	.02437	.01755	.06982
70B	Insurance	.00501	.00551	.01409	.00390	.00592	.00624	1.38420	.00996	.00564	.00493
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	1.00000	—	—
71B	Real estate and royalties	.03109	.12730	.04585	.04365	.08757	.05256	.07686	.04200	1.06026	.09353
72A	Hotels and lodging places	.00387	.00530	.00490	.00500	.00463	.00492	.00855	.00064	.00503	1.00592
72B	Personal and repair services (except auto)	.00150	.00193	.00445	.00348	.00455	.00237	.00268	.00043	.00465	.00869
73A	Computer and data processing services	.01573	.01003	.01152	.01915	.01155	.04282	.02223	.00185	.00476	.01537
73B	Legal, engineering, accounting, and related services	.02519	.05959	.05488	.02175	.02076	.04229	.06132	.01073	.02793	.02467
73C	Other business and professional services, except medical	.02675	.03164	.04430	.05985	.05524	.06163	.07590	.01056	.04019	.09405
73D	Advertising	.00114	.00152	.00225	.00670	.01203	.00529	.00503	.00041	.00276	.00545
74	Eating and drinking places	.00481	.00612	.00647	.00596	.00616	.00586	.01018	.00071	.00452	.00832
75	Automotive repair and services	.00446	.00660	.02353	.00980	.00795	.00544	.02049	.00136	.00805	.00939
76	Amusements	.00128	.00183	.00222	.00504	.00692	.00373	.00427	.00039	.00209	.00397
77A	Health services	.00004	.00005	.00018	.00009	.00007	.00009	.00010	.00002	.00006	.00014
77B	Educational and social services, and membership organizations	.00389	.00218	.00220	.00315	.00223	.00359	.00340	.00029	.00160	.00344
78	Federal Government enterprises	.03803	.00490	.00672	.00837	.01308	.02630	.01395	.00117	.00595	.01020
79	State and local government enterprises	.10131	.04807	.41790	.00458	.01047	.00479	.00424	.00130	.02319	.01484
82	General government industry	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
<b>T</b>	<b>Total industry output multiplier</b>	<b>1.69968</b>	<b>2.58455</b>	<b>2.10247</b>	<b>1.55180</b>	<b>1.57542</b>	<b>1.64098</b>	<b>2.00289</b>	<b>1.22746</b>	<b>1.44729</b>	<b>1.77295</b>

Table D (continued).

**Detailed Industry-by-Commodity Total Requirements**

(Total requirements per dollar of delivery to final demand at producers' prices)

KEY: — = Value too small to report

Industry number	Commodity number	Personal and repair services (except auto)	Computer and data processing services	Legal, engineering, accounting, and related services	Other business and professional services except medical	Advertising	Eating and drinking places	Auto-motive repair and services	Amuse-ments	Health services	Educational and social services, and membership organizations
		(72B)	(73A)	(73B)	(73C)	(73D)	(74)	(75)	(76)	(77A)	(77B)
1	Livestock and livestock products	0.00090	0.00056	0.00048	0.00084	0.00143	0.05882	0.00067	0.00895	0.00300	0.00415
2	Other agricultural products	.00145	.00076	.00065	.00088	.00204	.04675	.00109	.01100	.00315	.00412
3	Forestry and fishery products	.00045	.00028	.00023	.00029	.00091	.00741	.00051	.00053	.00054	.00083
4	Agricultural, forestry, and fishery services	.00137	.00114	.00110	.00087	.00143	.00857	.00129	.00445	.00237	.00322
5 + 6	Metallic ores mining	.00068	.00050	.00019	.00041	.00053	.00065	.00234	.00036	.00053	.00045
7	Coal mining	.00247	.00113	.00087	.00105	.00215	.00390	.00261	.00255	.00162	.00197
8	Crude petroleum and natural gas	.01261	.00494	.00425	.00818	.01055	.01524	.01823	.00912	.00905	.01160
9 + 10	Nonmetallic minerals mining	.00075	.00040	.00030	.00050	.00115	.00131	.00097	.00074	.00099	.00114
11	New construction	—	—	—	—	—	—	—	—	—	—
12	Maintenance and repair construction	.01839	.01207	.00969	.00985	.01765	.02403	.01832	.02327	.01565	.05516
13	Ordinance and accessories	.00007	.00007	.00005	.00031	.00006	.00004	.00010	.00015	.00026	.00006
14	Food and kindred products	.00321	.00223	.00184	.00291	.00390	.27559	.00264	.01192	.01325	.01724
15	Tobacco products	—	—	—	—	.00001	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	.00624	.00048	.00035	.00060	.00140	.00149	.00183	.00221	.00191	.00132
17	Miscellaneous textile goods and floor coverings	.00116	.00026	.00020	.00030	.00107	.00097	.00107	.00050	.00068	.00066
18	Apparel	.00579	.00016	.00012	.00047	.00036	.00032	.00063	.00150	.00161	.00065
19	Miscellaneous fabricated textile products	.00311	.00016	.00015	.00019	.00038	.00087	.00110	.00071	.00136	.00059
20 + 21	Lumber and wood products	.00440	.00272	.00239	.00266	.01117	.00547	.00407	.00477	.00334	.00889
22 + 23	Furniture and fixtures	.00015	.00017	.00008	.00009	.00011	.00020	.00129	.00011	.00011	.00013
24	Paper and allied products, except containers	.01287	.00925	.00825	.01035	.08712	.01946	.00929	.01057	.01108	.02166
25	Paperboard containers and boxes	.00312	.00180	.00132	.00283	.00464	.01122	.00332	.00244	.00334	.00340
26A	Newspapers and periodicals	.00997	.00537	.00325	.00438	.27007	.01016	.00831	.01461	.00407	.01450
26B	Other printing and publishing	.02400	.01762	.01373	.01363	.28886	.01654	.01267	.01980	.01170	.05692
27A	Industrial and other chemicals	.01152	.00490	.00316	.00830	.01968	.01186	.01268	.00650	.02290	.00833
27B	Agricultural fertilizers and chemicals	.00061	.00035	.00028	.00041	.00097	.00490	.00064	.00280	.00114	.00112
28	Plastics and synthetic materials	.00506	.00223	.00123	.00222	.00593	.00493	.00711	.00237	.00523	.00319
29A	Drugs	.00042	.00006	.00005	.00014	.00020	.00139	.00014	.00028	.01569	.00050
29B	Cleaning and toilet preparations	.01304	.00041	.00047	.00172	.00103	.00133	.00145	.00081	.00193	.00132
30	Paints and allied products	.00076	.00035	.00025	.00049	.00075	.00076	.00319	.00079	.00048	.00103
31	Petroleum refining and related products	.01005	.00467	.00401	.00838	.00921	.01244	.01863	.00825	.00743	.01082
32	Rubber and miscellaneous plastics products	.01177	.00731	.00371	.00672	.01326	.01865	.02703	.00576	.01674	.00926
33 + 34	Footwear, leather, and leather products	.00516	.00011	.00027	.00026	.00021	.00015	.00019	.00096	.00021	.00093
35	Glass and glass products	.00094	.00114	.00095	.00150	.00069	.00510	.00620	.00064	.00261	.00217
36	Stone and clay products	.00155	.00100	.00075	.00117	.00143	.00315	.00291	.00132	.00150	.00245
37	Primary iron and steel manufacturing	.00561	.00388	.00169	.00379	.00356	.00529	.02349	.00304	.00304	.00417
38	Primary nonferrous metals manufacturing	.00675	.00612	.00164	.00317	.00316	.00599	.01865	.00320	.00273	.00371
39	Metal containers	.00039	.00017	.00011	.00032	.00037	.00712	.00039	.00044	.00060	.00060
40	Heating, plumbing, and fabricated structural metal products	.00152	.00173	.00066	.00092	.00160	.00156	.00395	.00139	.00115	.00279
41	Screw machine products and stampings	.00255	.00213	.00058	.00131	.00096	.00150	.01541	.00102	.00154	.00129
42	Other fabricated metal products	.00552	.00451	.00186	.00280	.00322	.00376	.01527	.00272	.00283	.00384
43	Engines and turbines	.00043	.00032	.00023	.00080	.00041	.00050	.00489	.00036	.00029	.00036
44 + 45	Farm, construction, and mining machinery	.00033	.00023	.00018	.00077	.00035	.00092	.00090	.00045	.00030	.00044
46	Materials handling machinery and equipment	.00011	.00009	.00008	.00051	.00011	.00016	.00019	.00010	.00009	.00011
47	Metalworking machinery and equipment	.00083	.00064	.00040	.00208	.00070	.00065	.00194	.00048	.00049	.00060
48	Special industry machinery and equipment	.00093	.00040	.00030	.00149	.00171	.00106	.00074	.00032	.00044	.00056



49	General industrial machinery and equipment	.00130	.00061	.00044	.00203	.00078	.00159	.00376	.00064	.00058	.00079
50	Miscellaneous machinery, except electrical	.00254	.00151	.00099	.00241	.00200	.00169	.00860	.00134	.00127	.00158
51	Computer and office equipment	.00860	.09209	.00569	.00467	.00343	.00139	.00279	.00191	.00397	.00327
52	Service industry machinery	.00454	.00035	.00030	.00077	.00060	.00078	.00775	.00155	.00059	.00108
53	Electrical industrial equipment and apparatus	.00239	.00362	.00084	.00361	.00172	.00109	.00480	.00101	.00116	.00127
54	Household appliances	.00754	.00010	.00007	.00013	.00012	.00016	.00030	.00014	.00013	.00028
55	Electric lighting and wiring equipment	.00105	.00089	.00040	.00078	.00081	.00106	.00404	.00145	.00096	.00162
56	Audio, video, and communication equipment	.00110	.00232	.00057	.00083	.00111	.00047	.00091	.00112	.00084	.00095
57	Electronic components and accessories	.01732	.07340	.00502	.01216	.00613	.00261	.00918	.00332	.00561	.00503
58	Miscellaneous electrical machinery and supplies	.00143	.00344	.00206	.00169	.00157	.00117	.00684	.00633	.00117	.00159
59A	Motor vehicles (passenger cars and trucks)	.00014	.00009	.00008	.00015	.00012	.00016	.00437	.00013	.00010	.00014
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00291	.00205	.00181	.00312	.00278	.00372	.10194	.00300	.00226	.00331
60	Aircraft and parts	.00033	.00035	.00025	.00040	.00031	.00033	.00087	.00027	.00066	.00032
61	Other transportation equipment	.00019	.00013	.00016	.00102	.00025	.00027	.00033	.00055	.00016	.00022
62	Scientific and controlling instruments	.00195	.00178	.00046	.00104	.00130	.00064	.00183	.00071	.01719	.00170
63	Ophthalmic and photographic equipment	.01206	.00225	.00335	.00388	.00524	.00087	.00131	.00140	.00326	.00322
64	Miscellaneous manufacturing	.01704	.00137	.00201	.00264	.02012	.00278	.00197	.00465	.00154	.00565
65A	Railroads and related services; passenger ground transportation	.00299	.00218	.00182	.00281	.00522	.00680	.00473	.00276	.00315	.00323
65B	Motor freight transportation and warehousing	.01516	.00704	.00766	.01046	.01965	.02608	.01998	.00978	.01084	.01349
65C	Water transportation	.00103	.00049	.00047	.00078	.00100	.00201	.00139	.00090	.00079	.00088
65D	Air transportation	.00590	.00731	.00567	.00729	.00635	.00684	.00785	.00534	.00551	.00630
65E	Pipelines, freight forwarders, and related services	.00201	.00157	.00139	.00190	.00222	.00279	.00424	.00159	.00166	.00201
65F	State and local passenger transit	.00031	.00023	.00019	.00030	.00055	.00072	.00050	.00029	.00033	.00034
65G	In-house transportation	.03720	.00901	.01086	.02285	.02204	.05568	.02274	.03001	.01985	.04559
66	Communications, except radio and TV	.02110	.03058	.01945	.01950	.03672	.01241	.01791	.01661	.01537	.01788
67	Radio and TV broadcasting	.00677	.00338	.00170	.00264	.20324	.00731	.00574	.01034	.00225	.00663
68A	Electric services (utilities)	.01866	.00830	.00655	.00745	.01377	.02919	.01650	.02030	.01175	.01448
68B	Gas production and distribution (utilities)	.00970	.00274	.00248	.00373	.00625	.01104	.00882	.00554	.00549	.00692
68C	Water and sanitary services	.00275	.00067	.00069	.00081	.00120	.00319	.00206	.00183	.00173	.00203
69A	Wholesale trade	.03757	.04878	.01408	.02283	.04004	.08505	.06441	.03117	.03040	.03194
69B	Retail trade	.00261	.00138	.00123	.00302	.00242	.00403	.00817	.00281	.00214	.00478
70A	Finance	.02109	.01908	.01963	.01765	.01912	.02386	.22134	.02085	.01596	.02388
70B	Insurance	.00548	.00279	.00296	.00391	.00565	.00550	.00846	.00434	.00568	.00570
71A	Owner-occupied dwellings	—	—	—	—	—	—	—	—	—	—
71B	Real estate and royalties	.07790	.04981	.07116	.04306	.05271	.07696	.06976	.09303	.07831	.13571
72A	Hotels and lodging places	.00493	.00500	.00732	.00630	.00530	.00574	.00604	.00483	.00490	.00555
72B	Personal and repair services (except auto)	1.04748	.00299	.00205	.00360	.00365	.00526	.01218	.00457	.00376	.00400
73A	Computer and data processing services	.01240	1.07041	.03112	.02170	.01445	.00940	.01509	.01082	.01661	.02545
73B	Legal, engineering, accounting, and related services	.04847	.03167	1.08604	.04207	.03209	.02230	.02413	.03858	.02843	.02879
73C	Other business and professional services, except medical	.05656	.05550	.10695	1.05241	1.48119	.04727	.05168	.06285	.06142	.07342
73D	Advertising	.00735	.00368	.00190	.00353	.21999	.00793	.00624	.01122	.00247	.00721
74	Eating and drinking places	.00635	.00646	.00541	.00829	.00659	1.01406	.00732	.00649	.01022	.01013
75	Automotive repair and services	.00889	.00786	.00653	.00849	.00984	.00941	.85502	.00982	.00818	.00938
76	Amusements	.00462	.00306	.00240	.00376	.09900	.01477	.00424	1.17992	.00228	.00872
77A	Health services	.00008	.00007	.00013	.00124	.00013	.00099	.00008	.00053	1.02179	.00015
77B	Educational and social services, and membership organizations	.00520	.00809	.00429	.00432	.00913	.00324	.00269	.00319	.00382	1.00682
78	Federal Government enterprises	.00920	.00900	.01252	.00843	.00797	.01227	.01257	.00916	.01236	.01312
79	State and local government enterprises	.00803	.00327	.00344	.00332	.00562	.00999	.01347	.01065	.00551	.00740
82	General government industry	—	—	—	—	—	—	—	—	—	—
84	Household industry	—	—	—	—	—	—	—	—	—	—
85	Inventory valuation adjustment	—	—	—	—	—	—	—	—	—	—
<b>T</b>	<b>Total industry output multiplier</b>	<b>1.76926</b>	<b>1.69357</b>	<b>1.53494</b>	<b>1.49064</b>	<b>1.82499</b>	<b>2.14505</b>	<b>1.91528</b>	<b>1.81390</b>	<b>1.61338</b>	<b>1.82220</b>

Table D (continued).

**Detailed Industry-by-Commodity Total Requirements**

(Total requirements per dollar of delivery to final demand at producers' prices)

KEY: — = Value too small to report

Industry number	Commodity number	Federal Government enterprises	State and local government enterprises	General government industry	Household industry	Inventory valuation adjustment
		(78)	(79)	(82)	(84)	(85)
1	Livestock and livestock products	0.00074	0.00083	—	—	—
2	Other agricultural products	.00081	.00303	—	—	—
3	Forestry and fishery products	.00024	.00194	—	—	—
4	Agricultural, forestry, and fishery services	.00038	.00626	—	—	—
5 + 6	Metallic ores mining	.00042	.00136	—	—	—
7	Coal mining	.00109	.00658	—	—	—
8	Crude petroleum and natural gas	.00856	.04558	—	—	—
9 + 10	Nonmetallic minerals mining	.00032	.00591	—	—	—
11	New construction	—	—	—	—	—
12	Maintenance and repair construction	.01056	.27649	—	—	—
13	Ordnance and accessories	.00006	.00008	—	—	—
14	Food and kindred products	.00329	.00230	—	—	—
15	Tobacco products	—	—	—	—	—
16	Broad and narrow fabrics, yarn and thread mills	.00157	.00121	—	—	—
17	Miscellaneous textile goods and floor coverings	.00043	.00119	—	—	—
18	Apparel	.00021	.00079	—	—	—
19	Miscellaneous fabricated textile products	.00209	.00040	—	—	—
20 + 21	Lumber and wood products	.00200	.02675	—	—	—
22 + 23	Furniture and fixtures	.00104	.00020	—	—	—
24	Paper and allied products, except containers	.00625	.00627	—	—	—
25	Paperboard containers and boxes	.00289	.00193	—	—	—
26A	Newspapers and periodicals	.00160	.00300	—	—	—
26B	Other printing and publishing	.01674	.00642	—	—	—
27A	Industrial and other chemicals	.00327	.02952	—	—	—
27B	Agricultural fertilizers and chemicals	.00021	.00361	—	—	—
28	Plastics and synthetic materials	.00142	.00495	—	—	—
29A	Drugs	.00006	.00027	—	—	—
29B	Cleaning and toilet preparations	.00095	.00104	—	—	—
30	Paints and allied products	.00034	.00309	—	—	—
31	Petroleum refining and related products	.00904	.03460	—	—	—
32	Rubber and miscellaneous plastics products	.00331	.01107	—	—	—
33 + 34	Footwear, leather, and leather products	.00053	.00009	—	—	—
35	Glass and glass products	.00039	.00200	—	—	—
36	Stone and clay products	.00075	.01845	—	—	—
37	Primary iron and steel manufacturing	.00393	.01289	—	—	—
38	Primary nonferrous metals manufacturing	.00330	.01027	—	—	—
39	Metal containers	.00016	.00047	—	—	—
40	Heating, plumbing, and fabricated structural metal products	.00099	.01278	—	—	—
41	Screw machine products and stampings	.00151	.00215	—	—	—
42	Other fabricated metal products	.00166	.00818	—	—	—
43	Engines and turbines	.00035	.00096	—	—	—
44 + 45	Farm, construction, and mining machinery	.00023	.00379	—	—	—
46	Materials handling machinery and equipment	.00015	.00029	—	—	—
47	Metalworking machinery and equipment	.00045	.00144	—	—	—
48	Special industry machinery and equipment	.00021	.00052	—	—	—

49	General industrial machinery and equipment	.00087	.00252	—	—	—
50	Miscellaneous machinery, except electrical	.00299	.01460	—	—	—
51	Computer and office equipment	.00074	.00176	—	—	—
52	Service industry machinery	.00076	.00927	—	—	—
53	Electrical industrial equipment and apparatus	.00064	.00313	—	—	—
54	Household appliances	.00006	.00100	—	—	—
55	Electric lighting and wiring equipment	.00091	.00514	—	—	—
56	Audio, video, and communication equipment	.00024	.00188	—	—	—
57	Electronic components and accessories	.00167	.00340	—	—	—
58	Miscellaneous electrical machinery and supplies	.00091	.00267	—	—	—
59A	Motor vehicles (passenger cars and trucks)	.00060	.00016	—	—	—
59B	Truck and bus bodies, trailers, and motor vehicles parts	.01644	.00347	—	—	—
60	Aircraft and parts	.00126	.00038	—	—	—
61	Other transportation equipment	.00040	.00053	—	—	—
62	Scientific and controlling instruments	.00045	.00174	—	—	—
63	Ophthalmic and photographic equipment	.00058	.00096	—	—	—
64	Miscellaneous manufacturing	.00103	.00235	—	—	—
65A	Railroads and related services; passenger ground transportation	.00938	.00495	—	—	—
65B	Motor freight transportation and warehousing	.02722	.02394	—	—	—
65C	Water transportation	.00288	.00433	—	—	—
65D	Air transportation	.03236	.00482	—	—	—
65E	Pipelines, freight forwarders, and related services	.00543	.00334	—	—	—
65F	State and local passenger transit	.00099	.00052	—	—	—
65G	In-house transportation	.01761	.02611	—	—	—
66	Communications, except radio and TV	.00636	.01605	—	—	—
67	Radio and TV broadcasting	.00072	.00200	—	—	—
68A	Electric services (utilities)	.00810	.05158	—	—	—
68B	Gas production and distribution (utilities)	.00394	.03847	—	—	—
68C	Water and sanitary services	.00264	.01935	—	—	—
69A	Wholesale trade	.01515	.03784	—	—	—
69B	Retail trade	.00122	.01339	—	—	—
70A	Finance	.01294	.02919	—	—	—
70B	Insurance	.00317	.00727	—	—	—
71A	Owner-occupied dwellings	—	—	—	—	—
71B	Real estate and royalties	.02220	.05578	—	—	—
72A	Hotels and lodging places	.00144	.00318	—	—	—
72B	Personal and repair services (except auto)	.00098	.00339	—	—	—
73A	Computer and data processing services	.00477	.01146	—	—	—
73B	Legal, engineering, accounting, and related services	.00646	.07306	—	—	—
73C	Other business and professional services, except medical	.02278	.05146	—	—	—
73D	Advertising	.00080	.00219	—	—	—
74	Eating and drinking places	.00309	.00494	—	—	—
75	Automotive repair and services	.00634	.01206	—	—	—
76	Amusements	.00067	.00183	—	—	—
77A	Health services	.00005	.00008	—	—	—
77B	Educational and social services, and membership organizations	.00092	.00214	—	—	—
78	Federal Government enterprises	1.00162	.00897	—	—	—
79	State and local government enterprises	.00579	1.01474	—	—	—
82	General government industry	—	—	1.00000	—	—
84	Household industry	—	—	—	1.00000	—
85	Inventory valuation adjustment	—	—	—	—	1.00000
T	<b>Total industry output multiplier</b>	<b>1.35307</b>	<b>2.14434</b>	<b>1.00000</b>	<b>1.00000</b>	<b>1.00000</b>

## CD-ROM INFORMATION

This CD contains data for nearly 500 industries and 500 commodities, plus related documents from the U.S. Transportation Satellite Accounts (TSAs). Jointly developed by the Bureau of Transportation Statistics of the U.S. Department of Transportation and the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce, TSAs supplement the U.S. Input-Output (I-O) accounts maintained by BEA. The TSAs cover both for-hire transportation services (identified as transportation industries within the I-O accounts) and in-house transportation services conducted by businesses for their own use (not separately identified as transportation in the I-O accounts). Hence, they present a more comprehensive measure of transportation services in the U.S. economy. TSAs provide detailed input and output information on transportation activities at both industry and commodity levels. These data not only provide information on the relationship between transportation and the U.S. economy, they can also be used with input/output analysis tools to do transportation impact analyses and projections. The TSA-CD is a Mac/ISO hybrid CD-ROM that contains TSA programs working on both PC and Macintosh systems. Files on the CD are organized as follows:

### **IBM compatible PC**

/Acroread/	Acrobat readers for Windows 3.11 and Windows 95/98.
/Browser3/	HTML files to browse the contents of the TSA-CD using a web browser that supports frame capabilities.
/Browser2/	HTML files to browse the contents of the TSA-CD using a web browser that does not support frame capabilities.
/Document/	Introduction, related articles, and industry and commodity code description.
/Data/	Data in ASCII and spreadsheet format.
/Extract/	A window-based program for data extraction according to user specified criteria. The User's Manual for this program, in Microsoft Word format, is also located in this subdirectory.

You may directly access the data files under “/Data/” and read related documents under “/Document/,” or you may install the browser to browse the CD. To extract data according to user-specified criteria, run the Extract program provided in this CD. The program requires about 50MB disk space. For more information about the Extract program, refer to the User's Manual in the “/Extract/” subdirectory.

### **Mac computer**

/Document/	Introduction, related articles, and industry and commodity code description.
/Data/	Data in ASCII and spreadsheet format.
/Mac/Browser/	HTML files for browsing the CD.
/Mac/Extract/	MAC program for data extraction according to user-specified criteria. The User's Manual for this program, in Microsoft Word format, is also located in this subdirectory.

You may directly access the data files under “/Data/” or use the web browser to open the page “/Mac/Browser/home.htm” to browse the content of this CD. To extract data according to user-specified criteria, run the Extract program provided in this CD. The program requires about 50MB hard disk space.

For more information about the Extract program, refer to the User's Manual in the “/Extract/” subdirectory.

### **Minimum Hardware and Software Requirements To Install CD Browser**

#### **IBM compatible PC**

- \* 486 or higher processor
- \* Windows 95/98, Windows NT
- \* 16 MB RAM or above
- \* Hard disk
- \* CD-ROM drive
- \* PDF file viewer (Acrobat Reader)
- \* XLS (Excel) file viewer
- \* A web browser

For best results, please view this CD with either Netscape 3.0 or later or Microsoft Internet Explorer 3.0 or later versions.

#### **Mac computer**

- \* MAC OS 7.1 or later
- \* 16 MB RAM or above
- \* Hard disk
- \* CD-ROM drive
- \* PDF file viewer (Acrobat Reader)
- \* XLS (Excel) file viewer
- \* A web browser (Netscape Navigator 3.0 or later or Microsoft Internet Explorer 3.0 or later versions)

### **To Run the CD Browser and the Extract Program on Windows 95/98 or Windows NT**

### ***Installation***

Insert the CD into your CD-ROM drive. A window will appear on the screen.

Click button "Install CD Browser (with frames)" to install CD browser for Netscape Navigator 3.0 or Microsoft Internet Explorer 3.0.

Click button "Install CD Browser (no frames)" to install CD browser for older version web browser that does not support frame display. You can also run installation from windows Start Menu.

Click "Start" menu and select "Run". If either Netscape Navigator 3.0 or Microsoft Internet Explorer 3.0 or later versions are installed in your machine, type:

**<CD drive letter>:\Browser3\setup.exe**

and follow the instructions.

For older version web browser that does not support frame display, type:

**<CD drive letter>:\Browser2\setup.exe**

and follow the instructions.

***Run CD browser***--Select "TSA-CD Browser" in "TSA-CD Browser Application" folder on Start/Program menu. Follow the links to navigate the CD content.

***Run EXTRACT program***--Select "Data Extract" in "TSA-CD Browser Application" folder on Start/Program menu.

### **To Remove "TSA-CD Browser Application" from Hard Disk**

In Control Panel, click "Add/Remove Programs." Find "TSA-CD Browser" and delete.

### **To Run the CD Browser and Extract on MAC**

***Run CD browser on Mac computer***--Insert the CD into your CD-ROM drive. Click icon TSA-MAC, then click icon "Welcome."

***Run EXTRACT program on Mac computer***--Insert the CD into your CD-ROM drive. Click icon TSA-MAC, then click icon "Extract."

### **For Queries about the CD-ROM and the Files It Contains**

Customer Service  
Bureau of Transportation Statistics  
U.S. Department of Transportation  
400 7th Street, SW, Room 3430  
Washington, DC 20590  
Phone: 202-366-DATA  
Fax: 202-366-3640  
E-mail (product orders): orders@bts.gov  
Statistics by phone: 1-800-853-1351  
Statistics by e-mail: statistics@bts.gov  
Fax-on-demand: 1-800-671-8012

