Benchmark Input-Output Accounts for the U.S. Economy, 1987: Requirements Tables

THIS REPORT COMPLETES the presentation of the 1987 benchmark input-output (I-O) accounts for the U.S. economy. An article in last month's SURVEY OF CURRENT BUSINESS discussed the procedures used for the 1987 benchmark and described the concepts and methods underlying the I-O accounts; it presented, and illustrated how to use, the I-O make table (table 1) and use table (table 2).[1] This report presents, and illustrates how to use, the three remaining basic I-O tables: The commodity-by-industry direct requirements for a dollar of industry output, the commodity-by-commodity total requirements, direct and indirect, for a dollar of delivery to final use, and the industry-by-commodity total requirements, direct and indirect, for a dollar of delivery to final use.

The commodity-by-industry direct requirements table

The commodity-by-industry direct requirements for a dollar of industry output table is presented in two parts: Table 3.1 shows the input coefficients for each commodity that an industry requires to produce a dollar of output; table 3.2 shows component detail for the value added input coefficients that an industry requires to produce a dollar of output. The input coefficients in both tables are also referred to as "direct requirements coefficients." The coefficients for total intermediate inputs plus the total value added for each industry equal 1.00000.

Tables 3.1 and 3.2 are derived from tables 2.1 and 2.2, respectively, by dividing each industry's commodity or value added component by that industry's total output. However, table 3.1, unlike table 2.1, does not include the components of final uses or gross domestic product.

In table 3.1, each column shows, for the industry named at the head of the column, the input coefficients for the commodities and for the total value added that an industry directly requires to produce a dollar of output. Each row names the commodity or the total value added that the industry requires. For example, to produce a dollar of output, the radio and TV broadcasting *industry* (column 67) has direct requirements for 1.60 cents (calculated as 100 × 0.01601 from the table) of the *commodity* radio and TV broadcasting (row 67) and 0.28 cent of the *commodity* advertising (row 73D).

In table 3.2, industries are shown in the rows, and total output, total intermediate inputs, and the components of value added required to produce a dollar of output are shown in the columns.[2] For example, to produce a dollar of output, the radio and TV broadcasting industry (row 67) has direct requirements for 45.79 cents of value added; these requirements consist of 33.63 cents of labor compensation, 2.04 cents of indirect business tax and nontax liability, and 10.12 cents of other value added. The industry has direct requirements of 54.21 cents for intermediate inputs, which are shown in detail in column 67 of table 3.1.

The information in table 3.1 can be used with the make table (table 1) to trace the changes in an industry's output, as well as the changes in that industry's total requirements for other industries' output, that result from a change in final uses of a commodity. For example, tables 1 and 3.1 can be used to trace the direct effects on all industries producing household appliances of a $1 million increase in sales of household appliances to final users.

Table 1 shows that total output of the *commodity* household appliances (column 54) was about $16 billion. The household appliances *industry* (row 54) produced $15 billion, or 95 percent, of this commodity; the audio, video, and communication equipment *industry* (row 56) produced $0.3 billion, or 2 percent, and 21 other industries produced the rest. Based on these proportions, production in the household appliances industry would initially increase $950,000 ($1,000,000 × 0.95) to meet the $1 million increase in household appliances sold to final users. Production in the audio, video, and communication equipment industry would increase $20,000 ($1,000,000 × 0.02), and production in the 21 other industries would increase $30,000.

Table 3.1 can then be used to determine the commodities required by each industry to produce its share of the $1 million of household appliances sold to final users. The commodities required by the household appliances industry will be traced first. Column 54 in table 3.1 shows that the household appliances industry would require, in addition to other commodity inputs, $4,921 ($950,000 × 0.00518) of household appliances (row 54); to provide this commodity input, the industry's production would have to increase an additional $4,675 ($4,921 × 0.95). Thus, the increase in the production of the household appliances industry would be $954,675 ($950,000 for final users plus $4,675 for its own intermediate use). This production in turn would require $71,085 ($954,675 × 0.07446) of primary iron and steel manufacturing (row 37), $39,886 ($954,675 × 0.04178) of rubber and miscellaneous plastics products (row 32), and so on down column 54 in table 3.1. From table 3.2, the value added required by the household appliances industry would total $409,823 ($954,675 × 0.42928). Of this total, $227,489 ($954,675 × 0.23829) is compensation of employees, $7,867 ($954,675 × 0.00824) is indirect business tax and nontax liability, and $174,467 ($954,675 × 0.18275) is other value added.

The information in tables 1 and 3.1 now can be used to trace the continuing repercussions on the output of other industries from the $954,675 of additional output produced by the household appliances industry. For example, to supply the primary iron and steel manufacturing required by the household appliances industry, the primary iron and steel manufactur-

1. See "Benchmark Input-Output Accounts for the U.S. Economy," SURVEY 74 (April 1994): 73–115.

2. For the caveats on using the value added estimates, see "Benchmark Input-Output Accounts, 1987," 76.

ing industry (column 37 in table 3.1) requires $5,995 ($39,886 × 0.15029) of its own products (row 37 in table 3.1) plus $585 ($45,881 × 0.01275) of general industrial machinery and equipment (row 49), $976 ($45,881 × 0.02128) of coal mining (row 7), and so on. Similarly, all the other industries that produce primary iron and steel manufacturing (column 37 in table 1) as secondary products—for example, primary nonferrous metals manufacturing (row 38 in table 1)—would also require commodities to produce their shares of the output of primary iron and steel manufacturing that is required by the household appliances industry.

Similarly, the continuing effects of each industry producing its share of the $1 million of household appliances sold to final users can be traced, and the increase in production required from each industry can be derived. For each industry producing household appliances, either as a primary product or as a secondary product, the direct requirements coefficients corresponding to that same industry are used from tables 3.1 and 3.2.[3] For example, for household appliances as a primary product of the household appliances industry, the direct requirements coefficients from column 54 in table 3.1 are used; for household appliances as a secondary product of the audio, video, and communication equipment industry, the coefficients from column 56 are used.

Alternatively, the total commodity and industry outputs resulting from changes in final uses can be calculated more easily from the total requirements tables. These tables—which combine the information shown in tables 1, 3.1, and 3.2—completely trace and summarize the continuing repercussions of a dollar change in final use of a specified commodity.

3. For a discussion of the "industry-based technology assumption," which underlies this approach, see "Benchmark Input-Output Accounts, 1987," 82.

The commodity-by-commodity total requirements table

The commodity-by-commodity total requirements table (table 4) shows the inputs for each commodity that are directly and indirectly required to deliver a dollar of the commodity to final users. The head of each column names the commodity delivered to final users, and each row shows the total production of the commodity that is required. The coefficients in this table are referred to as "commodity-by-commodity total requirements coefficients." The table is derived from both the make and use tables.[4]

In the household appliances example, the total requirements for each commodity can be calculated from the entries in column 54. Providing consumers with $1 million of household appliances would require $1,005,120 ($1,000,000 × 1.00512) of household appliances (row 54) from all industries. Similarly, it would require $24,830 ($1,000,000 × 0.02483) of paperboard containers and boxes (row 25), $41,080 ($1,000,000 × 0.04108) of plastics and synthetic materials (row 28), and so on.

The total at the bottom of each column in table 4 is the sum of all the changes in commodity outputs that are required to deliver a dollar of a commodity to final users. Because each total change is a dollar multiple of the initial dollar spent for the output of the given commodity, the total change in output is often called the total commodity output multiplier.

The total commodity output multipliers can be used to estimate the impact of changes in the final uses of commodities on total commodity output. For example, for the household appliances commodity (column 54), the total commodity out-

4. The derivation of this table and the industry-by-commodity total requirements table is available on the diskettes that are offered for sale (see the box below).

Text continues on page 86.

Data Availability

The estimates from the 1987 benchmark I-O accounts are available on diskette at two-digit (95 I-O industries) and six-digit (480 I-O industries) levels. They can be ordered for "transactions," for "total requirements," or for "all." "Transactions" includes the six-digit make table, use table, direct requirements coefficients table, and estimates by commodity of transportation costs and of wholesale and retail trade margins. "Total requirements" includes six-digit industry-by-commodity or commodity-by-commodity coefficients. Products specifying "all" contain all above data, but for the two-digit I-O industry level only. Each product includes information on the mathematical derivation of the coefficients tables. The BEA accession numbers and the prices for these products are listed below.

For further information about I-O products or when ordering by MasterCard or Visa, call the Interindustry Economics Division at (202) 606–5585. To order by mail, write to the Public Information Office, Order Desk, BE-53, Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230. Specify the item, accession number, and price of the product. For foreign shipment, add 25 percent to the total amount of the order. A check or money order payable to "Bureau of Economic Analysis" must accompany all written orders. Be sure to include a return address.

Item	BEA accession number	Price
Diskettes (3 1/2 inch HD)		
1987 benchmark six-digit, transactions (three diskettes)	51–94–40–001	$40
1987 benchmark six-digit, industry-by-commodity total requirements (two diskettes)	51–94–40–002	40
1987 benchmark six-digit, commodity-by-commodity total requirements (two diskettes)	51–94–40–003	40
1987 benchmark two-digit, all	51–94–40–004	20
1987 benchmark commodity composition of NIPA final demand	51–94–40–005	20
1987 benchmark personal consumption expenditures and producers' durable equipment by NIPA category	51–94–40–006	20

BEA's 1987 benchmark I-O accounts, at both the two-digit and six-digit levels, are also available on CD-ROM through the Commerce Department's National Economic, Social, and Environmental Data Bank (NESE-DB) CD-ROM. The NESE-DB CD-ROM is produced quarterly in February, May, August, and November. Call the Office of Business Analysis at (202) 482–1986 for more information or to place an order. The NESE-DB CD-ROM is available for public use at over 900 Federal Depository Libraries.

Table 3.1.—Commodity-by-Industry

[Direct requirements per dollar

Commodity number	For the composition of inputs to an industry, read the column for that industry	Livestock and livestock products	Other agri-cultural products	Forestry and fishery products	Agricultural, forestry, and fishery services	Metallic ores mining	Coal mining	Crude petroleum and natural gas	Non-metallic minerals mining	Con-struction	Ordnance and access-ories	Food and kindred products
	Industry number	1	2	3	4	5+6	7	8	9+10	11+12	13	14
1	Livestock and livestock products	0.19224	0.01826	0.00355	0.05633	...	...	...	...	...	...	0.18658
2	Other agricultural products	.27179	.04444	...	.09409	...	...	...	...	.00039	...	.06829
3	Forestry and fishery products	...	...	.02250	.00144	...	...	...	...	...	...	.00624
4	Agricultural, forestry, and fishery services	.04576	.07542	.17281	.00037	.00006	.00002	.00002	.00014	.00525	.00005	.00002
5+6	Metallic ores mining	...	...	...	...	.07622	...	...	...	...	...	...
7	Coal mining	...	...	...	...	.00154	.10724	...	.00473	(*)	.00014	.00032
8	Crude petroleum and natural gas	...	...	...	...	...	...	.03738	...	...	...	...
9+10	Nonmetallic minerals mining	.00007	.00292	...	.00010	.00106	.00127	...	.03484	.00781	...	.00003
11	New construction	...	...	...	...	...	...	...	...	.00007	...	...
12	Maintenance and repair construction	.00524	.00819	.01111	.01299	.01285	.00766	.02189	.00895	.00055	.00660	.00249
13	Ordnance and accessories	...	...	.00394	...	...	...	...	...	.00002	.02860	...
14	Food and kindred products	.13220	...	.04090	.00150	.00018	.00002	.00004	.00015	...	.00001	.16779
15	Tobacco products	...	...	...	...	...	...	...	...	...	...	...
16	Broad and narrow fabrics, yarn and thread mills	...	.00051	...	...	.00009	.00070	...	.00027	...	.00013	...
17	Miscellaneous textile goods and floor coverings	.00029	.00030	.00960	.00515	...	...	...	...	.00284	.00004	.00004
18	Apparel	...	...	...	...	.00006	.00031	.00005	.00027	.00019	.00039	.00003
19	Miscellaneous fabricated textile products	...	.00102	.00414	.00355	...	...	(*)	...	.00036	.00001	.00022
20+21	Lumber and wood products	.00041	.00340	...	...	.00557	.00242	(*)	.00019	.05417	.00085	.00019
22+23	Furniture and fixtures	...	...	...	...	...	...	...	...	.00205	...	...
24	Paper and allied products, except containers	.00125	.00160	.00013	.00047	.00012	.00033	.00009	.00292	.00191	.00023	.00964
25	Paperboard containers and boxes	.00006	.00384	.00017	.00834	.00003	...	.00002	.00031	.00007	.00068	.01797
26A	Newspapers and periodicals	.00010	.00012	.00007	.00014	.00004	.00004	.00003	.00184	.00008	.00011	.00003
26B	Other printing and publishing	.00011	.00012	.00539	.00109	.00047	.00046	.00038	.00059	.00033	.00069	.00577
27A	Industrial and other chemicals	.00117	.00074	.00181	.00033	.02993	.00540	.00994	.01700	.00212	.00402	.00462
27B	Agricultural fertilizers and chemicals	.00162	.05311	.00535	.13389	.00013	.00008	...	.00003	.00001	.00018	.00058
28	Plastics and synthetic materials	...	...	...	...	...	...	...	...	...	.00097	.00037
29A	Drugs	.00227	...	...	.00005	...	...	...	...	...	...	.00273
29B	Cleaning and toilet preparations	.00062	...	...	...	...	...	.00008	.00012	.00002	.00005	.00047
30	Paints and allied products	...	...	.00056	...	...	...	.00007	...	.00758	.00013	...
31	Petroleum refining and related products	.00383	.01355	.03948	.00968	.01861	.01534	.00343	.01495	.01813	.00099	.00113
32	Rubber and miscellaneous plastics products	.00186	.00412	.00026	.00160	.01205	.00969	.00031	.00942	.01079	.00631	.01614
33+34	Footwear, leather, and leather products	.00029	(*)	...	.00011	...	.00001	.00001	...	.00005	.00002	(*)
35	Glass and glass products	.00007	...	.00024	.00045	.00021	.00001	.00010	.00031	.00161	.00008	.01204
36	Stone and clay products	...	.00115	...	.00055	.00339	.00316	.00315	.00014	.05018	.00160	.00006
37	Primary iron and steel manufacturing	.00015	.00018	...	...	.01972	.00075	.00309	.00328	.01620	.01504	.00001
38	Primary nonferrous metals manufacturing	...	...	...	...	.00220	.00052	...	.00536	.01001	.01787	...
39	Metal containers	...	...	.00236	...	...	...	...	...	...	...	.02664
40	Heating, plumbing, and fabricated structural metal products	.00019	.00022	...	...	.00633	.00259	.00054	.00470	.05064	...	...
41	Screw machine products and stampings	.00031	...	...	...	.00510	.00572	...	.00253	.00045	.00601	.00203
42	Other fabricated metal products	.00078	.00176	.00712	.00118	.00125	.00324	.00455	.00288	.01307	.01468	.00313
43	Engines and turbines	...	...	.00192	.00196	.00548	.00435	.00026	.00439	...	.00088	...
44+45	Farm, construction, and mining machinery	.00285	.00764	.00276	.00352	.01892	.04259	.00283	.01954	.00229	...	...
46	Materials handling machinery and equipment	...	...	...	...	.00507	.00371	...	.01093	.00229	...	(*)
47	Metalworking machinery and equipment	.00095	.00106	.00003	.00007	.00113	.00030	.00091	.00064	.00032	.00276	.00012
48	Special industry machinery and equipment	...	...	...	...	...	...	...	...	...	...	.00028
49	General industrial machinery and equipment	.00031	.00058	.00109	.00016	.01152	.01680	.00186	.01263	.00245	.00747	.00068
50	Miscellaneous machinery, except electrical	.00053	.00142	.00036	.00020	.00181	.00308	.00043	.00143	.00020	.00380	.00028
51	Computer and office equipment	...	...	...	.00007	...	...	...	...	...	...	...
52	Service industry machinery	...	...	...	...	...	...	...	...	.01073	...	.00002
53	Electrical industrial equipment and apparatus	.00012	.00031	...	...	.00395	.00352	.00197	.00491	.00443	.00078	...
54	Household appliances	...	...	...	...	...	...	...	...	.00243	...	...
55	Electric lighting and wiring equipment	.00022	.00050	.00016	.00034	.00057	.00110	.00022	.00063	.01599	.00005	.00002
56	Audio, video, and communication equipment	...	...	...	.00001	...	(*)	.00001	...	.00325	.02780	(*)
57	Electronic components and accessories	...	...	...	...	...	...	...	...	...	.02769	...
58	Miscellaneous electrical machinery and supplies	.00173	.00466	.00008	.00046	.00081	.00008	.00003	.00042	.00137	.00059	.00001
59A	Motor vehicles (passenger cars and trucks)	...	...	...	...	...	...	...	...	...	...	...
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00103	.00251	.00067	.00179	.00185	.00034	.00008	.00027	.00067	.00004	.00006
60	Aircraft and parts	...	...	...	.00002	...	...	...	...	...	.10162	...
61	Other transportation equipment	...	...	.02096	.00052	.00071	...	...	...	(*)	...	...
62	Scientific and controlling instruments	...	...	.00207	.00003	.00074	.00011	.00003	.00008	.00230	.01264	.00010
63	Ophthalmic and photographic equipment	...	...	.00005	.00034	.00013	.00010	.00012	.00013	.00019	.00061	.00006
64	Miscellaneous manufacturing	.00017	.00019	.00012	.00064	.00031	.00015	.00006	.00047	.00142	.00021	.00006
65A	Railroads and related services; passenger ground transportation	.00942	.00287	.00098	.00414	.00297	.02561	.00053	.00278	.00252	.00058	.00565
65B	Motor freight transportation and warehousing	.02188	.01487	.00319	.00935	.00768	.00625	.00183	.01402	.01337	.00488	.01574
65C	Water transportation	.00123	.00053	.00326	.00146	.00106	.00211	.00122	.00090	.00049	.00006	.00153
65D	Air transportation	.00023	.00115	.00090	.01881	.00361	.00073	.00103	.00373	.00138	.00461	.00148
65E	Pipelines, freight forwarders, and related services	.00004	.00017	.00028	.00015	.00024	.00024	.00005	.00020	.00006	.00003	.00001
66	Communications, except radio and TV	.00253	.00284	.00047	.00002	.00134	.00083	.00143	.00171	.00374	.00460	.00137
67	Radio and TV broadcasting	...	...	...	...	...	...	...	...	...	...	...
68A	Electric services (utilities)	.01111	.00594	.00046	.00266	.09506	.02401	.01534	.05023	.00169	.00828	.00844
68B	Gas production and distribution (utilities)	...	.00189	.00017	.00007	.01087	.00043	.00660	.01683	.00052	.00284	.00410
68C	Water and sanitary services	.00127	.00425	.00082	...	.00222	.00236	.00156	.01039	.00041	.00098	.00136
69A	Wholesale trade	.04413	.04112	.02497	.06541	.01955	.02830	.00621	.02007	.04277	.01862	.05169
69B	Retail trade	.00086	.00262	.00107	.00301	.00121	.00037	.00007	.00024	.03897	.00013	.00016
70A	Finance	.00910	.00979	.01037	.00464	.01012	.00663	.00265	.01783	.01147	.00185	.00288
70B	Insurance	.00501	.02071	.01369	.00361	.00342	.00122	.00022	.00049	.00318	.00102	.00109
71A	Owner-occupied dwellings	...	...	...	...	...	...	...	...	...	...	...
71B	Real estate and royalties	.03429	.08181	...	.00806	.01249	.02444	.17382	.01185	.00438	.00840	.00266
72A	Hotels and lodging places	.00056	.00062	.00182	.00108	.00179	.00020	.00032	.00817	.00114	.00087	.00064
72B	Personal and repair services (except auto)	.00030	.00081	.00093	.00819	.00029	.00017	.00012	.00156	.00022	.00039	.00059
73A	Computer and data processing services	...	...	.00220	.00404	.00488	.00011	.00006	.00889	.00001	.00047	.00038
73B	Legal, engineering, accounting, and related services	.00124	.00140	.03376	.01096	.01663	.00813	.00951	.00737	.05866	.01034	.00266
73C	Other business and professional services, except medical	.00414	.01100	.01776	.00927	.00558	.00322	.00171	.00867	.02416	.01102	.00553
73D	Advertising	.00021	.00024	.00043	.00414	.00075	.00179	.01012	.00144	.00039	.01958	.02656
74	Eating and drinking places	.00018	.00020	.00146	.00362	.00118	.00073	.00082	.00174	.00233	.00280	.00110
75	Automotive repair and services	.00058	.00206	.01761	.02648	.02743	.00775	.00226	.00134	.00989	.00088	.00146
76	Amusements	...	...	...	.01269	...	.00002	.00003	.00026	.00007	.00006	.00002
77A	Health services	.00850	...	...	...	...	...	...	...	...	...	...
77B	Educational and social services, and membership organizations	...	...	.00286	.00182	.00206	.00166	.00034	.00113	.00004	.00029	.00025
78	Federal Government enterprises	.00013	.00015	.00078	.00226	.00143	.00011	.00003	.00131	.00039	.00021	.00072
79	State and local government enterprises	.00017	.00036	.00070	.00078	.00085	.00015	.00004	.00025	.00020	.00018	.00088
80	Noncomparable imports	...	.00019	...	.00167	.00451	.00072	.00940	.00071	.00001	.00059	.01551
81	Scrap, used and secondhand goods	...	...	...	...	...	...	...	...	.00002	...	...
82	General government industry	...	...	...	...	...	...	...	...	...	...	...
83	Rest of the world adjustment to final uses	...	...	...	...	...	...	...	...	...	...	...
84	Household industry	...	...	...	...	...	...	...	...	...	...	...
85	Inventory valuation adjustment	...	...	...	...	...	...	...	...	...	...	...
I	Total intermediate inputs	.82769	.46138	.50271	.55191	.48939	.39148	.34126	.36645	.52974	.39794	.69170
VA	Value added	.17231	.53862	.49729	.44809	.51061	.60852	.65874	.63355	.47026	.60207	.30830
T	**Total**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**

*Less than .000005.

Direct Requirements, 1987 Benchmark

of industry output, at producers' prices]

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	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 prepar-ations	Paints and allied products	Commodity number
15	16	17	18	19	20+21	22+23	24	25	26A	26B	27A	27B	28	29A	29B	30	
...	0.00686	...	0.00020	...	...	...	...	...	...	...	...	...	...	0.00237	0.00046	...	1
.06472	.08346	.00210	.00048	...	...	...	...	...	...	...	.00102	...	...	.00076	...	...	2
...	...	...	.00460	...	.08060	...	.00132	...	...	...	.00080	...	...	.00016	...	.00128	3
.00002	.00007	.00003	...	...	.00030	.00002	.00007	.00001	.00001	.00002	.00003	.00004	.00002	.00004	.00001	...	4
...	...	...	...	...	...	...	.00018	...	...	...	.00754	...	.00015	...	...	.00358	5+6
.00056	.00072	.00061	.00006	.00025	.00029	.00019	.00522	.00009	.00002	.00015	.00323	.00034	.00325	.00024	.00016	...	7
...	...	...	...	...	...	...	...	...	...	...	.01236	.04084	.00010	...	...	.00104	8
...	...	...	...	...	...	...	.00370	...	...	...	.00682	.06855	...	...	.00027	.00141	9+10
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11
.00146	.00469	.00297	.00201	.00244	.00580	.00785	.00484	.00343	.00375	.00273	.00682	.00409	.00388	.00363	.00227	.00381	12
...	.00001	...	(*)	...	.00001	...	...	...	...	...	...	...	...	...	...	...	13
.00004	.00002	.00140	.00002	.00024	.00009	.00040	.00419	.00011	.00006	.00011	.00412	.00684	.00130	.00168	.01680	.01327	14
.13889	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15
...	.25878	.22654	.20317	.22810	.00007	.03361	.00826	...	...	.00107	...	...	.00301	...	...	...	16
...	.00905	.04274	.00030	.07441	.00187	.02645	.00434	...	.00009	.00061	...	...	...	...	.00054	...	17
.00007	.00004	.00066	.18879	.00945	.00017	.00035	.00014	.00005	.00002	.00006	(*)	.00002	.00013	.00001	.00002	.00002	18
...	...	.00106	.02346	.03248	.00023	.00159	.00001	...	.00001	.00001	.00028	.00007	.00001	.00001	.00006	...	19
(*)	.00008	.00008	...	.00306	.28756	.08781	.05859	...	.00004	...	.00057	...	...	...	.00019	...	20+21
...	...	...	...	...	.00098	.00398	.00001	...	...	...	...	...	...	...	...	...	22+23
.00498	.00063	.00591	.00174	.00228	.00087	.00138	.16027	.45268	.13042	.16745	.00855	.00356	.01138	.00448	.00183	.00015	24
.03608	.00342	.00617	.00312	.01177	.00383	.01509	.01327	.00209	.00024	.00385	.00485	.00410	.00660	.00871	.03448	...	25
.00007	.00005	.00006	.00006	.00009	.00010	.00011	.00005	.00005	.00890	.00236	.00008	.00004	.00005	.00003	.00005	.00003	26A
.01429	.00029	.00046	.00084	.00175	.00052	.00089	.00134	.00052	.06752	.08073	.00062	.01405	.00036	.00505	.01038	.00216	26B
.00193	.02227	.03719	.00122	.00606	.01164	.00584	.04201	.01924	.00763	.02734	.21601	.10145	.33215	.01937	.08941	.19337	27A
...	...	...	...	...	.00255	...	.00250	...	...	...	.00433	.18749	.00232	.00150	...	...	27B
...	.13730	.23932	.02378	.02999	.00451	.00309	.02446	.02183	...	.00147	.00898	...	.03615	...	.01409	.11933	28
...	...	...	...	...	...	...	...	...	...	...	.00161	...	...	.10434	...	...	29A
.00067	.00230	.00487	.00458	...	.00001	...	.00471	...	...	...	.00124	.00187	.00565	.00059	.04618	.00040	29B
...	.00004	.00007	.00001	...	.00529	.01022	.00024	.00257	...	.00044	.00484	...	.00219	...	.00189	.02083	30
.00132	.00272	.00196	.00174	.00078	.00612	.00229	.00689	.00713	.00163	.00272	.01199	.00509	.00254	.00107	.00989	.00659	31
.00269	.00519	.00733	.00471	.02922	.00946	.03256	.02438	.00285	.00066	.01849	.01178	.00853	.04143	.02081	.05155	.00009	32
...	.00004	...	.00487	.01351	.00012	.00282	.00001	.00012	.00003	.00015	.00003	...	(*)	.00001	...	...	33+34
.00002	.00542	.00036	...	...	.00289	.00371	.00006	.00001	...	.00001	.00157	.00289	.00065	.00648	.00696	.00062	35
.00002	.00010	.00009	.00001	.00007	.00561	.00355	.00110	.00003	.00002	.00010	.00080	.00192	.00034	.00003	.00010	.01091	36
.00003	.00005	.00027	(*)	.00006	.00042	.04155	.00003	.00265	.00003	.00007	.00210	.00001	.00001	...	.00005	.00132	37
...	...	...	...	...	.00073	.01274	.00057	.00210	...	.00204	.00069	...	.00005	.00003	...	.00058	38
.00009	...	...	...	...	...	...	...	...	...	...	.00547	.00409	.00007	.00384	.01304	.04422	39
...	...	...	...	...	.00657	...	...	...	...	...	...	...	...	.00033	.00047	...	40
...	...	...	...	...	.01382	.01012	...	...	...	.00001	.00012	.00010	...	.00179	.00591	.00053	41
.00702	.00004	.00004	.00012	.00008	.02065	.03748	.00612	.00483	.00001	.00061	.00770	.00294	.00032	.00181	.01173	.00175	42
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	43
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	44+45
.00004	.00032	...	.00002	...	.00054	...	.00001	...	...	...	...	...	...	...	...	...	46
.00023	.00036	.00029	.00014	.00035	.00202	.00215	.00053	.00072	.00013	.00026	.00041	.00013	.00051	.00009	.00019	.00007	47
...	.00286	.01399	.00249	.00107	.00113	.00036	.00449	.00391	.00155	.00411	.00486	...	.00021	...	...	...	48
.00027	...	...	.00011	...	.00155	.00193	.00068	...	.00004	.00002	.00025	.00121	.00205	.00047	.00176	.00003	49
.00053	.00081	.00061	.00032	.00045	.00261	.00103	.00116	.00105	.00026	.00046	.00091	.00039	.00118	.00027	.00076	.00012	50
...	...	...	...	...	...	...	...	...	.00015	.00053	...	...	...	.00023	...	...	51
...	...	...	...	...	.00031	...	...	...	...	...	.00025	...	...	...	...	...	52
...	...	...	...	...	.00061	.00160	...	...	...	(*)	.00049	...	...	...	...	...	53
...	.00001	...	.00001	.00001	.00202	...	...	...	...	...	...	...	...	...	...	...	54
.00001	.00003	.00001	.00002	.00004	.00157	.00015	.00006	.00002	.00003	.00003	.00004	.00002	.00001	.00002	.00001	.00001	55
(*)	.00001	.00001	...	.00001	.00001	.00002	.00001	(*)	.00002	.00003	.00001	...	.00001	.00001	.00001	...	56
...	.00006	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	57
.00002	.00002	...	(*)	...	.00017	.00002	.00005	.00003	.00076	.00033	.00001	.00001	...	.00002	.00001	...	58
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	59A
.00014	.00012	.00003	.00008	...	.00262	.00024	.00037	.00031	.00026	.00040	.00004	.00010	.00002	.00013	.00008	.00003	59B
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	60
...	...	...	...	...	.00008	...	...	...	...	...	...	...	...	...	...	...	61
.00017	.00010	.00006	.00006	.00015	.00017	.00039	.00047	.00027	.00087	.00197	.00099	.00045	.00013	.00078	.00017	.00019	62
.00006	.00012	.00013	.00009	.00014	.00019	.00028	.00014	.00011	.00243	.00604	.00024	.00007	.00013	.00014	.00016	.00007	63
.00005	.00008	.00012	.00475	.00620	.00058	.00168	.00011	.00013	.00027	.00161	.00006	.00003	.00006	.00008	.00134	.00011	64
.00039	.00196	.00271	.00028	.00087	.00910	.00434	.01010	.01123	.00350	.00493	.01076	.02081	.01168	.00074	.00337	.01310	65A
.00415	.00724	.01488	.00436	.00724	.01408	.01002	.01984	.02236	.00658	.01150	.01771	.05778	.01401	.00330	.01112	.02321	65B
.00011	.00023	.00170	.00011	.00042	.00152	.00040	.00131	.00067	.00009	.00035	.00185	.00363	.00322	.00034	.00115	.00157	65C
.00110	.00075	.00056	.00177	.00124	.00111	.00227	.00472	.00189	.01891	.00422	.00275	.00110	.00145	.00155	.00241	.00088	65D
.00001	.00003	.00003	.00001	...	.00007	.00002	.00011	.00004	.00003	.00005	.00049	.00009	.00029	.00003	.00006	.00015	65E
.00107	.00125	.00177	.00148	.00171	.00172	.00242	.00186	.00282	.00415	.00275	.00246	.00291	.00224	.00350	.00239	.00332	66
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	67
.00329	.02844	.01354	.00809	.00618	.01433	.00936	.02796	.01087	.00495	.00830	.03378	.02246	.02370	.00801	.00568	.00609	68A
.00074	.00397	.00700	.00149	.00234	.00472	.00223	.01212	.00314	.00043	.00109	.02831	.03452	.01895	.00463	.00503	.00354	68B
.00032	.00297	.00165	.00052	.00308	.00250	.00178	.01310	.00115	.00042	.00088	.00377	.00833	.00366	.00095	.00143	.00062	68C
.02032	.04726	.02708	.03383	.05600	.05223	.05543	.04437	.03917	.01572	.03525	.03723	.05528	.04286	.03996	.04764	.02840	69A
.00031	.00028	.00013	.00029	.00004	.00100	.00045	.00097	.00063	.00054	.00079	.00044	.00019	.00024	.00026	.00015	.00002	69B
.00497	.00278	.00377	.00438	.00761	.00612	.01032	.00370	.00162	.00515	.00513	.00324	.01671	.00255	.00517	.00265	.00133	70A
.00138	.00108	.00149	.00118	.00153	.00269	.00157	.00263	.00183	.00141	.00219	.00189	.00192	.00189	.00088	.00155	.00050	70B
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	71A
.00296	.00185	.00356	.00600	.00603	.00419	.00699	.00270	.00464	.01452	.01113	.00522	.00275	.00291	.00585	.00451	.00480	71B
.00031	.00007	.00014	.00024	.00092	.00030	.00051	.00204	.00006	.00174	.00397	.00048	.00023	.00075	.00037	.00076	.00056	72A
.00025	.00499	.00327	.00224	.00406	.00045	.00074	.00155	.00044	.00106	.00055	.00045	.00030	.00200	.00132	.00063	.00006	72B
.00042	.00080	.00064	.00020	.00022	.00030	.00042	.00224	.00113	.00907	.00304	.00079	.00041	.00041	.00014	.00020	.00008	73A
.00230	.00238	.00228	.00273	.00268	.00316	.01146	.00250	.00269	.01805	.00705	.02016	.00615	.02551	.04353	.00507	.00447	73B
.00368	.01218	.00619	.00533	.00800	.00749	.02036	.00549	.00723	.03910	.01217	.01379	.02476	.00880	.02974	.01188	.00513	73C
.02968	.00593	.02146	.01545	.01187	.01354	.01986	.01045	.00156	.01747	.01214	.01345	.01435	.01178	.01017	.02566	.00459	73D
.00072	.00198	.00202	.00297	.00297	.00299	.00436	.00161	.00209	.00403	.00610	.00261	.00124	.00139	.00183	.00182	.00145	74
.00384	.00296	.00124	.00455	.00025	.00689	.00483	.00893	.00721	.00657	.01006	.00137	.00223	.00225	.00307	.00165	.00057	75
.00006	.00002	.00004	.00004	.00002	.00007	.00042	.00003	.00003	.00011	.00018	.00006	.00002	.00003	.00006	.00005	.00003	76
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	77A
.00044	.00057	.00020	.00040	.00572	.00240	.00170	.00075	.00014	.00156	.00142	.00029	.00076	.00130	.00478	.00114	.00036	77B
.00205	.00099	.00150	.00232	.00225	.00097	.00170	.00087	.00085	.01179	.00680	.00101	.00040	.00047	.00071	.00154	.00066	78
.00029	.00047	.00046	.00018	...	.00035	.00037	.00187	.00030	.00017	.00024	.00080	.00048	.00047	.00047	.00056	.00007	79
.00178	.00065	.01039	.00092	.00518	.00018	.00087	.00103	.00007	.00111	.00268	.00753	.00748	.00361	.02158	.00562	.00536	80
...	...	.00033	...	...	...	...	.01011	...	...	...	...	.00247	...	...	...	...	81
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	82
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	83
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	84
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	85
.36341	.68257	.72757	.57928	.59293	.64428	.53071	.58188	.65481	.41606	.48333	.55820	.75105	.64682	.38431	.46895	.53877	I
.63659	.31743	.27244	.42072	.40707	.35572	.46930	.41812	.34519	.58394	.51667	.44180	.24895	.35319	.61569	.53105	.46123	VA
1.00000	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	T

Table 3.1.—Commodity-by-Industry

[Direct requirements per dollar

Commodity number	For the composition of inputs to an industry, read the column for that industry	Petroleum refining and related products	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
	Industry number	31	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	.00001	.00003	...	.00003	.00006	.00002	.00003	.00002	.00001	.00001	.00002
5+6	Metallic ores mining	...	...	...	...	.00074	.02892	.06975	...	.00029	...	...
7	Coal mining	.00015	.00029	.00013	.00012	.00912	.02128	.00060	.00005	.00012	.00037	.00048
8	Crude petroleum and natural gas	.55103	.00088	...	...	...	.00014	...	...	...	...	...
9+10	Nonmetallic minerals mining	.00355	.00041	.00017	.01144	.08032	.00339	.00031	...	.00011	...	.00018
11	New construction	...	...	...	...	...	...	...	...	...	...	...
12	Maintenance and repair construction	.00691	.00458	.00324	.00806	.00751	.01901	.00484	.00276	.01179	.01013	.01243
13	Ordnance and accessories	...	.00001	...	...	.00131	.00030	...	...	...	...	...
14	Food and kindred products	.00031	.00020	.10266	.00008	.00057	.00009	.00010	.00003	.00014	.00008	.00010
15	Tobacco products	...	...	...	...	...	...	...	...	...	...	...
16	Broad and narrow fabrics, yarn and thread mills	...	.00949	.02742	...	.00288	...	.00076	...	...	...	...
17	Miscellaneous textile goods and floor coverings	.00029	.01044	.02265	...	.00003	...	.00002	...	...	...	.00002
18	Apparel	.00001	.00014	.00043	.00017	.00014	.00012	.00006	.00007	.00003	.00008	.00022
19	Miscellaneous fabricated textile products	(*)	.00028	...	.00002	.00005	.00002	(*)	...	(*)	.00323	...
20+21	Lumber and wood products	.00043	.00221	.00270	.01473	.00218	.00200	.00267	.00096	.00314	.00100	.00398
22+23	Furniture and fixtures	...	...	...	...	...	.00041	...	...	...	...	...
24	Paper and allied products, except containers	.00007	.00922	.00074	.00095	.01260	.00022	.00030	.00034	.00075	.00098	.00022
25	Paperboard containers and boxes	.00138	.01154	.00762	.04394	.00324	.00117	.00184	.00233	.00525	.00414	.00741
26A	Newspapers and periodicals	.00001	.00010	.00007	.00008	.00010	.00005	.00005	.00003	.00010	.00006	.00008
26B	Other printing and publishing	.00013	.00116	.00055	.00153	.00057	.00051	.00044	.01851	.00062	.00048	.00064
27A	Industrial and other chemicals	.01275	.04564	.03114	.06106	.02902	.02530	.01268	.00516	.00270	.00756	.01671
27B	Agricultural fertilizers and chemicals	...	...	...	...	...	...	...	...	...	...	...
28	Plastics and synthetic materials	.00044	.18645	.01251	...	.00432	...	.01390	.00143	.00075	.00153	.00380
29A	Drugs	...	...	...	...	...	...	...	...	...	...	...
29B	Cleaning and toilet preparations	.00303	.00034	.00382	...	.00223	.00002	.00001	.00054	.00035	.00047	.00037
30	Paints and allied products	.00005	.00076	...	.00121	.00159	.00034	.00054	.01646	.00554	.00247	.00770
31	Petroleum refining and related products	.07204	.00275	.00109	.00281	.00544	.00487	.00646	.00145	.00237	.00126	.00265
32	Rubber and miscellaneous plastics products	.00449	.04761	.02878	.01077	.00286	.00204	.01147	.00164	.00967	.00302	.01933
33+34	Footwear, leather, and leather products	.00002	.00005	.18407	.00012	.00001	.00003	...	...	.00002	...	...
35	Glass and glass products	.00201	.00526	...	.08137	.00162	.00008	.00085	.00002	.00739	.00173	.00257
36	Stone and clay products	.00037	.00289	.00081	.01987	.11687	.01462	.00466	.00105	.00283	.00238	.00384
37	Primary iron and steel manufacturing	.00031	.00351	.00008	.00035	.00632	.15029	.00913	.21596	.18879	.24725	.11683
38	Primary nonferrous metals manufacturing	...	.00134	...	.00008	.00054	.02159	.30618	.25264	.07272	.03065	.04613
39	Metal containers	.00121	...	...	...	.00001	.00002	(*)	.01675	...	.00011	.00018
40	Heating, plumbing, and fabricated structural metal products	...	.00052	...	...	.00016	...	...	...	.02268	...	.00009
41	Screw machine products and stampings	...	.00513	.00108	.00219	.00229	.00403	.00160	.00128	.02753	.01488	.01641
42	Other fabricated metal products	.00288	.01005	.00495	.00012	.00502	.01134	.00936	.01338	.03357	.01828	.05522
43	Engines and turbines	...	.00017	...	...	.00004	.00016	...	...	.00003	...	.00073
44+45	Farm, construction, and mining machinery	...	...	...	...	.00029	...	...	...	...	...	...
46	Materials handling machinery and equipment	...	.00006	.00002	...	.00003	.00024	.00018	...	...	...	...
47	Metalworking machinery and equipment	.00014	.00188	.00051	.00541	.00057	.00769	.00865	.00146	.00913	.02978	.00576
48	Special industry machinery and equipment	...	.00273	.00014	.00067	...	...	...	...	...	.00005	...
49	General industrial machinery and equipment	.00001	.00034	.00002	.00027	.00072	.01275	.00986	.00023	.00460	.00197	.00068
50	Miscellaneous machinery, except electrical	.00030	.00298	.00100	.00305	.00110	.00304	.00202	.00170	.00262	.01157	.00421
51	Computer and office equipment	...	...	...	...	...	.00006	...	...	...	...	...
52	Service industry machinery	...	...	...	...	...	.00006	...	...	.00076	...	...
53	Electrical industrial equipment and apparatus	...	.00015	...	.00208	.00027	.00638	.00583	.00008	.00250	.00155	.00487
54	Household appliances	...	(*)	.00008	.00033	...	(*)	...	...	...	.00002	...
55	Electric lighting and wiring equipment	.00009	.00140	.00003	.00017	.00073	.00015	.00004	.00001	.00008	.00041	.00006
56	Audio, video, and communication equipment	(*)	.00001	...	.00001	.00001	(*)	(*)	.00001	.00002	.00001	.00001
57	Electronic components and accessories	...	.00065	...	...	.00002	...	...	...	...	...	.00024
58	Miscellaneous electrical machinery and supplies	.00001	.00027	...	.00003	.00002	.00005	.00002	.00002	.00003	...	.00037
59A	Motor vehicles (passenger cars and trucks)	...	...	...	...	...	...	...	...	.00021	...	...
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00040	.00015	.00002	.00022	.00022	.00010	.00021	.00016	.00025	.00065	.00024
60	Aircraft and parts	...	...	...	...	...	...	...	...	...	...	...
61	Other transportation equipment	...	...	...	...	...	.00006	...	...	...	...	...
62	Scientific and controlling instruments	.00017	.00050	.00013	.00098	.00036	.00031	.00025	.00009	.00217	.00017	.00029
63	Ophthalmic and photographic equipment	.00004	.00022	.00016	.00021	.00024	.00017	.00015	.00010	.00026	.00017	.00023
64	Miscellaneous manufacturing	.00002	.00022	.00948	.00010	.00091	.00016	.00009	.00007	.00051	.00013	.00033
65A	Railroads and related services; passenger ground transportation	.00111	.00705	.00212	.01151	.01472	.01687	.00595	.00346	.00311	.00334	.00241
65B	Motor freight transportation and warehousing	.00408	.02724	.01015	.01378	.05778	.01345	.03027	.01593	.01548	.01353	.01241
65C	Water transportation	.00645	.00134	.00039	.00073	.00352	.00469	.00101	.00024	.00030	.00040	.00047
65D	Air transportation	.00049	.00148	.00275	.00415	.00139	.00114	.00181	.00421	.00292	.00085	.00352
65E	Pipelines, freight forwarders, and related services	.03978	.00007	.00002	.00009	.00006	.00007	.00004	.00002	.00004	.00001	.00004
66	Communications, except radio and TV	.00135	.00291	.00258	.00760	.00674	.00220	.00196	.00094	.00266	.00266	.00389
67	Radio and TV broadcasting	...	...	...	...	...	...	...	...	...	...	...
68A	Electric services (utilities)	.01199	.02137	.00782	.02974	.02651	.04131	.04436	.01164	.00861	.01323	.01542
68B	Gas production and distribution (utilities)	.00914	.00597	.00214	.03606	.01804	.02787	.01431	.00587	.00362	.00517	.00590
68C	Water and sanitary services	.00152	.00236	.00109	.00210	.00275	.00718	.00169	.00219	.00078	.00247	.00123
69A	Wholesale trade	.04618	.04952	.04246	.04238	.02902	.06277	.06061	.06690	.05642	.05126	.05182
69B	Retail trade	.00014	.00037	.00005	.00039	.00065	.00034	.00047	.00029	.00067	.00010	.00046
70A	Finance	.00894	.00451	.00570	.00429	.00655	.00363	.00473	.00321	.00423	.00642	.00688
70B	Insurance	.00262	.00212	.00109	.00159	.00208	.00202	.00198	.00171	.00191	.00179	.00192
71A	Owner-occupied dwellings	...	...	...	...	...	...	...	...	...	...	...
71B	Real estate and royalties	.00446	.00629	.00514	.00536	.00497	.00230	.00326	.00449	.00648	.00435	.00497
72A	Hotels and lodging places	.00019	.00027	.00495	.00090	.00039	.00015	.00064	.00087	.00471	.00034	.00068
72B	Personal and repair services (except auto)	.00039	.00138	.00138	.00074	.00127	.00111	.00151	.00042	.00045	.00126	.00111
73A	Computer and data processing services	.00092	.00310	.00052	.00142	.00203	.00158	.00063	.00087	.00051	.00254	.00235
73B	Legal, engineering, accounting, and related services	.00273	.00678	.00346	.00328	.00385	.00280	.00248	.00194	.00407	.02243	.00520
73C	Other business and professional services, except medical	.00838	.00801	.01032	.00576	.00933	.01830	.00996	.00396	.00931	.00704	.01082
73D	Advertising	.00233	.00823	.01493	.02331	.01977	.02952	.00953	.02021	.00634	.00829	.01849
74	Eating and drinking places	.00037	.00287	.00318	.00232	.00278	.00174	.00162	.00119	.00317	.00215	.00301
75	Automotive repair and services	.00093	.00372	.00131	.00547	.00510	.00152	.00506	.00310	.00559	.00290	.00512
76	Amusements	.00002	.00008	.00002	.00004	.00004	.00003	.00004	.00002	.00011	.00004	.00005
77A	Health services	...	...	...	...	...	...	...	...	...	...	...
77B	Educational and social services, and membership organizations	.00105	.00347	.00026	.00052	.00090	.00019	.00066	.00076	.00086	.00305	.00091
78	Federal Government enterprises	.00052	.00101	.00358	.00119	.00113	.00127	.00082	.00029	.00106	.00114	.00118
79	State and local government enterprises	.00012	.00036	.00093	.00043	.00025	.00063	.00044	.00050	.00031	.00034	.00064
80	Noncomparable imports	.00284	.01350	.00021	.00538	.00298	.00124	.01399	.00062	.00045	.00064	.00146
81	Scrap, used and secondhand goods	...	...	...	.00445	...	.03794	.04215	...	.00093	...	.00076
82	General government industry	...	...	...	...	...	...	...	...	...	...	...
83	Rest of the world adjustment to final uses	...	...	...	...	...	...	...	...	...	...	...
84	Household industry	...	...	...	...	...	...	...	...	...	...	...
85	Inventory valuation adjustment	...	...	...	...	...	...	...	...	...	...	...
I	Total intermediate inputs	.82405	.56032	.57683	.48960	.52980	.62741	.74788	.71260	.56748	.55629	.49871
VA	Value added	.17595	.43968	.42317	.51040	.47020	.37259	.25212	.28740	.43252	.44371	.50129
T	**Total**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**

*Less than .000005.

Direct Requirements, 1987 Benchmark—Continued

of industry output, at producers' prices]

Engines and turbines	Farm, construction, and mining machinery	Materials handling machinery and equipment	Metal-working 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	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	Commodity number
43	44+45	46	47	48	49	50	51	52	53	54	55	56	57	58	59A	59B	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
.00004	.00006	.00001	.00003	.00002	.00003	.00004	.00002	.00002	.00005	.00001	.00003	.00004	.00004	.00004	.00003	.00004	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	.00428	...	...	5+6
.00028	.00046	.00004	.00027	.00001	.00005	.00006	...	.00010	.00024	.00029	.00011	.00008	.00002	.00011	.00047	.00025	7
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8
...	...	...	...	...	...	...	...	.00080	...	...	...	...	...	...	...	.00001	9+10
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11
.00655	.00834	.01031	.00598	.00756	.00669	.00961	.00777	.00607	.00818	.00472	.00605	.00376	.01014	.00534	.00321	.00680	12
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.00001	.00001	13
.00006	.00010	.00028	.00017	.00017	.00010	.00005	.00001	.00008	.00011	.00012	.00010	.00002	.00010	.00006	(*)	.00002	14
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15
...	...	...	...	...	...	...	...	...	...	.00222	.00060	...	...	...	.00087	.00003	16
...	...	...	...	...	.00585	.00086	...	...	.00017	...	...	...	...	.00038	.00245	.00162	17
.00016	.00005	.00006	.00011	.00006	.00015	.00006	.00003	.00008	.00009	.00010	.00007	.00024	.00026	.00014	.00010	.00004	18
...	...	...	.00001	...	(*)	.00001	.00001	(*)	...	...	...	.00001	.00001	.00001	.02625	.00070	19
...	.00173	.00156	.00123	.00168	.00109	.00026	.00002	.00479	.00127	.00638	.00164	.00066	...	.00005	.00003	.00288	20+21
...	(*)	.00008	...	...	...	...	.00001	...	...	.00108	...	.01097	.00022	.00011	.01251	.00005	22+23
.00052	.00026	.00028	.00029	.00026	.00111	.00037	.00141	.00048	.00529	.00227	.00028	.00248	.00070	.00061	.00074	.00040	24
.00169	.00240	.00063	.00390	.00179	.00358	.00320	.00161	.00578	.00583	.02003	.01354	.00336	.00164	.00672	.00042	.00167	25
.00006	.00008	.00011	.00012	.00009	.00010	.00011	.00011	.00007	.00010	.00008	.00012	.00008	.00009	.00017	.00003	.00005	26A
.00048	.00066	.00475	.00092	.00076	.00074	.00074	.00127	.00054	.00085	.00077	.00086	.00251	.00067	.00122	.00032	.00047	26B
.00027	.00132	.00133	.00789	.01188	.00079	.00097	.00023	.00382	.00188	.00625	.00564	.00262	.01622	.01874	.00452	.00312	27A
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	27B
...	...	...	...	...	.00175	.00180	.00100	.00428	.00394	.02383	.02320	.00257	.00348	.00531	.00041	.00529	28
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29A
...	...	...	...	...	...	.00004	...	...	...	...	...	...	...	...	...	.00012	29B
.00034	.00273	.00103	.00110	...	.00016	.00014	.00037	.00293	.00303	.00729	.00171	.00064	.00002	.00006	.01204	.00321	30
.00095	.00162	.00252	.00313	.00201	.00191	.00170	.00103	.00109	.00650	.00098	.00171	.00058	.00087	.00225	.00176	.00210	31
.00988	.02718	.01403	.00711	.01579	.01398	.00423	.01873	.01942	.02064	.04178	.02112	.03483	.05218	.04310	.06258	.03128	32
...	.00009	...	.00001	...	...	.00002	.00003	.00001	(*)	...	...	.00002	.00003	.00001	.00004	.00001	33+34
.00001	.00002	...	.00001	.00260	.00005	.00004	.00006	.00089	.00005	.01078	.03636	.00057	.00829	.00004	.00963	.00123	35
.00341	.00214	.00175	.01105	.00282	.00426	.00734	.00022	.00436	.00977	.00453	.00134	.00034	.00109	.00091	.00184	.00531	36
.13748	.11169	.08434	.06912	.06255	.09187	.06689	.00601	.05485	.04928	.07446	.04239	.00288	.00267	.01170	.00535	.06408	37
.04628	.00842	.01323	.02012	.02247	.02749	.04547	.01269	.05086	.05356	.02031	.04578	.01031	.04019	.05788	.00064	.04415	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
.01239	.03727	.02679	.01445	.01522	.00674	.01071	.00312	.00856	.00485	...	...	.00199	.00384	.00411	.00002	.01853	40
.01655	.01474	.01868	.00841	.00634	.00812	.00942	.00347	.02168	.01764	.01579	.03167	.00795	.00910	.01022	.07407	.03305	41
.01514	.01646	.03618	.00800	.01330	.00925	.01266	.00542	.01735	.00972	.03691	.01577	.01010	.03583	.02279	.01227	.02006	42
.09263	.04669	.00922	...	.00367	.00355	.00060	...	.00133	.00459	...	...	...	...	...	.01768	.00083	43
...	.03629	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	44+45
...	.00084	.05318	...	.00038	...	...	...	...	...	...	...	...	...	...	.00010	.00012	46
.00648	.00456	.00516	.03991	.00924	.00628	.01416	.00063	.00545	.00269	.00240	.00300	.00093	.00181	.00232	.00824	.00302	47
...	...	...	...	.02287	...	...	...	...	...	...	...	...	.00258	...	...	...	48
.01330	.02648	.03126	.00614	.02336	.06707	.01052	.00049	.01777	.00394	.00655	.00001	.00093	.00025	.00228	.00051	.02045	49
.03198	.02547	.02298	.02883	.02627	.01645	.05379	.00074	.01078	.00560	.00148	.00240	.00103	.00221	.00281	.00644	.03853	50
...	...	...	...	.00020	.00036	.00004	.20764	...	.00014	...	...	.00266	.00350	.00098	...	...	51
...	...	...	...	.00012	.00003	...	...	.05897	...	.02084	...	.00012	...	...	.02068	.00256	52
.03379	.00438	.03991	.02832	.06023	.04200	.00399	.02505	.06498	.03719	.03853	.02346	.00583	.00319	.00974	.00158	.00131	53
...	...	...	...	.00004	...	...	...	...	...	.00518	...	...	...	...	(*)	(*)	54
.00023	.00028	.00008	.00027	.00004	.00003	.00085	.00370	.00634	.00282	.01236	.02753	.00669	.00160	.00782	.00369	.00040	55
.00001	.00001	...	.00001	.00001	.00002	.00002	.01636	.00001	.00002	.00001	.00002	.03618	.00074	.00060	.01005	.00020	56
...	...	...	.00058	.00183	.00189	.00228	.07278	.00028	.02576	.00889	.00554	.20131	.09505	.06263	.00638	.00552	57
.01103	.00481	.00670	.00045	.00068	.00068	.00047	.00112	...	.00089	.00015	.00090	.00384	.00054	.04922	.02788	.01263	58
...	.00032	...	...	...	...	...	...	...	...	...	...	...	...	...	.01154	.00266	59A
.00159	.00268	.00015	.00043	.00015	.00017	.00012	.00016	.00005	.00019	...	.00017	.00005	.00007	.00027	.29829	.09072	59B
...	...	...	...	...	...	.00110	...	...	.00120	...	...	...	...	...	.00038	...	60
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.00016	.00020	61
.00011	.00017	.00018	.00021	.00017	.00046	.00015	.00030	.01769	.00176	.01971	.00017	.00132	.00400	.00043	.00920	.00039	62
.00020	.00026	.00029	.00033	.00028	.00028	.00033	.00027	.00018	.00028	.00018	.00031	.00024	.00028	.00043	.00013	.00020	63
.00010	.00043	.00049	.00032	.00012	.00015	.00011	.00042	.00141	.00074	.00700	.00212	.00032	.00022	.00019	.00044	.00017	64
.00054	.00143	.00100	.00127	.00130	.00093	.00108	.00047	.00135	.00270	.00202	.00178	.00050	.00094	.00172	.00426	.00251	65A
.00746	.01142	.00812	.00710	.00516	.00567	.00498	.00196	.00694	.00689	.01083	.00826	.00340	.00440	.00724	.01616	.01357	65B
.00023	.00056	.00024	.00025	.00017	.00025	.00020	.00012	.00036	.00023	.00020	.00011	.00008	.00021	.00034	.00032	.00038	65C
.00215	.00448	.00281	.00431	.00557	.00529	.00322	.01325	.00536	.00972	.00509	.00837	.00540	.00611	.01156	.00511	.00281	65D
...	.00002	.00001	.00004	.00003	.00002	.00001	.00003	.00002	.00003	...	.00006	.00001	.00004	.00005	.00002	.00003	65E
.00274	.00301	.00409	.00403	.00466	.00433	.00360	.00344	.00337	.00556	.00233	.00370	.00391	.00384	.00391	.00119	.00449	66
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	67
.00987	.00998	.00745	.01267	.00946	.01249	.01263	.00605	.00828	.01274	.00880	.01053	.00606	.01622	.01110	.00366	.01059	68A
.00309	.00432	.00275	.00268	.00244	.00346	.00213	.00054	.00227	.00359	.00447	.00305	.00127	.00204	.00247	.00255	.00378	68B
.00097	.00108	.00150	.00077	.00098	.00076	.00039	.00081	.00167	.00088	.00119	.00099	.00050	.00070	.00199	.00084	.00085	68C
.05013	.06511	.06394	.03692	.05717	.04961	.02824	.07429	.06810	.06207	.07255	.06463	.04840	.04367	.06621	.07863	.05346	69A
.00013	.00029	.00035	.00071	.00035	.00034	.00034	.00032	.00016	.00037	.00005	.00030	.00012	.00015	.00054	.00092	.00062	69B
.00355	.00389	.00445	.00509	.00653	.00473	.00830	.00646	.00262	.01087	.00715	.00926	.00400	.00925	.01064	.00368	.00231	70A
.00155	.00218	.00195	.00219	.00174	.00173	.00139	.00136	.00138	.00180	.00147	.00155	.00146	.00144	.00214	.00257	.00206	70B
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	71A
.00292	.00296	.00530	.00832	.00784	.00559	.00938	.00933	.00373	.00530	.00266	.00593	.00800	.00799	.00693	.00087	.00231	71B
.00005	.00092	.00072	.00189	.00176	.00165	.00100	.00603	.00159	.00563	.00212	.00493	.00074	.00309	.00643	.00059	.00035	72A
.00150	.00128	.00125	.00102	.00095	.00125	.00108	.00039	.00060	.00110	.00107	.00104	.00437	.00080	.00098	.00077	.00115	72B
.00367	.00299	.00184	.00194	.00137	.00249	.00278	.00093	.00122	.00185	.00128	.00170	.00237	.00176	.00177	.00079	.00133	73A
.00318	.00638	.00614	.00638	.00690	.00609	.00749	.00741	.00489	.00566	.00276	.00620	.00578	.00652	.00907	.00164	.00307	73B
.00635	.00742	.00894	.00965	.00924	.00955	.02424	.00848	.00588	.00975	.00766	.00941	.01104	.01205	.01174	.00405	.00702	73C
.00740	.02286	.02070	.01674	.01675	.01250	.01588	.00270	.01542	.03419	.02068	.01523	.01921	.00953	.02889	.01815	.02619	73D
.00158	.00277	.00329	.00427	.00348	.00328	.00421	.00356	.00250	.00338	.00229	.00376	.00228	.00323	.00567	.00144	.00218	74
.00186	.00130	.00165	.00866	.00389	.00337	.00571	.00411	.00117	.00446	.00102	.00390	.00122	.00146	.00659	.00359	.03183	75
.00011	.00005	.00022	.00007	.00005	.00023	.00011	.00008	.00004	.00004	.00002	.00010	.00010	.00047	.00115	.00017	.00005	76
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	77A
.00033	.00023	.00029	.00089	.00038	.00082	.00101	.00051	.00088	.00040	.00165	.00048	.00120	.00252	.00074	.00189	.00117	77B
.00080	.00160	.00163	.00102	.00176	.00141	.00079	.00039	.00038	.00114	.00324	.00117	.00194	.00070	.00095	.00110	.00249	78
.00037	.00027	.00006	.00033	.00012	.00024	.00022	.00015	.00022	.00031	.00049	.00032	.00020	.00040	.00047	.00048	.00060	79
.00186	.00627	.00168	.00356	.00413	.00251	.00216	.01909	.00036	.00627	.00341	.00179	.00573	.00400	.00354	.00217	.01330	80
...	.00046	...	.00054	...	.00047	.00034	...	...	...	...	.00009	...	...	.00519	...	.00225	81
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	82
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	83
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	84
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	85
.55833	.55700	.53996	.41252	.47119	.46633	.40816	.56655	.53492	.48779	.57072	.48436	.50032	.44721	.54607	.81356	.61922	I
.44167	.44300	.46004	.58748	.52881	.53367	.59184	.43345	.46508	.51221	.42928	.51564	.49968	.55279	.45393	.18644	.38078	VA
1.00000	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	T

Table 3.1.—Commodity-by-Industry

[Direct requirements per dollar

Commodity number	For the composition of inputs to an industry, read the column for that industry	Aircraft and parts	Other transportation equipment	Scientific and controlling instruments	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
	Industry number	60	61	62	63	64	65A	65B	65C	65D	65E
1	Livestock and livestock products					0.00005			0.00005		
2	Other agricultural products					.00060			.00012		
3	Forestry and fishery products								.00012		
4	Agricultural, forestry, and fishery services	.00003	(*)	.00004	.00007	.00008	.00006	.00005	.00013	.00008	.00007
5+6	Metallic ores mining			.00016							
7	Coal mining	.00010	.00013	.00007	.00103	.00010	(*)		.00036		
8	Crude petroleum and natural gas										.00360
9+10	Nonmetallic minerals mining			(*)		.00051					
11	New construction										
12	Maintenance and repair construction	.00602	.01954	.00477	.00459	.00570	.09693	.00377	.00532	.00616	.01704
13	Ordnance and accessories	.00046	.00001	.00001			.00001	(*)	.00002	.00001	.00016
14	Food and kindred products	.00007	.00009	.00090	.00005	.00198	.00021	.00001	.00272	.00366	.00031
15	Tobacco products										
16	Broad and narrow fabrics, yarn and thread mills	.00103	.00044	.00365		.00980				.00006	
17	Miscellaneous textile goods and floor coverings	.00117	.00508	.00461	.00092	.00130	.00002	.00004	.00260	(*)	
18	Apparel	.00007	.00012	.00038	.00003	.00054	.00035	.00006	.00394	.00019	.00002
19	Miscellaneous fabricated textile products	.00199	.00755	(*)	.00001	.00381	.00001	.00011	.00309	.00012	.00447
20+21	Lumber and wood products	.00038	.01957	.00203		.02187		.00013			.00137
22+23	Furniture and fixtures	.00031	.00250	.00073		.00026					
24	Paper and allied products, except containers	.00016	.00038	.00306	.06070	.00873	.00044	.00045	.00031	.00073	.00134
25	Paperboard containers and boxes	.00009	.00028	.00401	.00803	.01312	.00016	.00058	.00054	.00001	.00111
26A	Newspapers and periodicals	.00005	.00006	.00012	.00011	.00021	.00015	.00021	.00011	.00019	.00032
26B	Other printing and publishing	.00064	.00038	.00169	.00092	.00265	.00264	.00231	.00199	.00196	.00596
27A	Industrial and other chemicals	.00044	.00227	.00348	.02383	.01018	.00197	.00069	.00073	.00022	.00032
27B	Agricultural fertilizers and chemicals						.00076		.00087		
28	Plastics and synthetic materials	.00117	.00766	.00671	.00622	.02092					
29A	Drugs										
29B	Cleaning and toilet preparations			.00003		.00002	.00002	.00003		.00005	
30	Paints and allied products	.00170	.00599	.00052	.00005	.00433	.00005	.00015	.00173	.00005	
31	Petroleum refining and related products	.00139	.00194	.00148	.00159	.00271	.04905	.04991	.03040	.11256	.00342
32	Rubber and miscellaneous plastics products	.00856	.01200	.01690	.02040	.02863	.00330	.00963	.00315	.00024	.00253
33+34	Footwear, leather, and leather products	.00001	.00001	.00005	.00002	.00306	.00003	.00006	.00003	.00002	.00022
35	Glass and glass products	.00018	.00980	.00227	.00503	.00085	.00085	.00005		.00001	.00030
36	Stone and clay products	.00248	.00242	.00136	.00046	.00434	.00019	.00008	.00034	.00004	.00006
37	Primary iron and steel manufacturing	.01643	.03878	.01510	.00148	.01657	.00190	.00001	.00001	.00003	
38	Primary nonferrous metals manufacturing	.04310	.01815	.01587	.00633	.05557	.00016		.00810		
39	Metal containers			.00023							
40	Heating, plumbing, and fabricated structural metal products	.00223	.03541	.00514		.00002					
41	Screw machine products and stampings	.01166	.00753	.01207	.00365	.00395	.00021		.00008	.00063	
42	Other fabricated metal products	.01130	.01987	.01535	.01192	.00872	.00615	.00226	.02075	.00073	.00138
43	Engines and turbines		.04390			.00009	.00102	.00036	.00678		.00092
44+45	Farm, construction, and mining machinery		.00458								
46	Materials handling machinery and equipment		.00005					.00003			
47	Metalworking machinery and equipment	.01394	.00206	.00208	.00117	.00228	.00165	.00013	.00738	.00027	.00005
48	Special industry machinery and equipment										
49	General industrial machinery and equipment	.00200	.02087	.00181	.00096	.00077	.00670	.00066	.02381	.00005	.00449
50	Miscellaneous machinery, except electrical	.00940	.00296	.00224	.00190	.00376	.00357	.00022	.00652	.00057	.00071
51	Computer and office equipment	.00049		.00886	.00051	.00015	.00002	.00007	.00005	.00003	.00044
52	Service industry machinery		.00331			.00080	.00003	.00018	.00003	.00002	
53	Electrical industrial equipment and apparatus	.00113	.01667	.01515	.00337	.00273	.00341	.00084	.00049	.00013	.00105
54	Household appliances		.00615					(*)	.00055	(*)	
55	Electric lighting and wiring equipment	.00001	.00375	.00241	.00163	.00065	.00051	.00042	.00150	.00012	.00004
56	Audio, video, and communication equipment	.01171	.00055	.00023	.00002	.00011	.00001	.00003	.00001	.00009	.00029
57	Electronic components and accessories	.01474	.00030	.09217	.07973	.01200	.00025	.00005		.00118	.00029
58	Miscellaneous electrical machinery and supplies	.00094	.00536	.00254	.00144	.00036	.00127	.00060	.00138	.00033	.00173
59A	Motor vehicles (passenger cars and trucks)		.02501					.00016			
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00006	.01298	.00019	.00011	.00030	.00303	.00342	.00006	.00017	.00047
60	Aircraft and parts	.19375	.00166							.04374	
61	Other transportation equipment		.02599			.00012	.01970	.00005	.01514		.00043
62	Scientific and controlling instruments	.02699	.00292	.02685	.00942	.00025	.00005	.00003	.00135	.00039	.00005
63	Ophthalmic and photographic equipment	.00022	.00014	.00034	.01365	.00043	.00024	.00039	.00020	.00019	.00060
64	Miscellaneous manufacturing	.00018	.00020	.00054	.00023	.03681	.00032	.00026	.00202	.00048	.00092
65A	Railroads and related services; passenger ground transportation	.00048	.00206	.00100	.00188	.00251	.05344	.00224	.00063	.00086	.00302
65B	Motor freight transportation and warehousing	.00268	.00838	.00424	.00583	.01492	.00280	.16339	.00309	.00228	.00369
65C	Water transportation	.00014	.00034	.00019	.00079	.00071	.00087	.00079	.10279	.00203	.00119
65D	Air transportation	.01439	.00256	.00396	.00513	.00233	.00189	.00209	.00285	.05453	.02236
65E	Pipelines, freight forwarders, and related services	.00004	.00001	.00002	.00004	.00002	.01656	.03052	.05922	.06322	.04193
66	Communications, except radio and TV	.00437	.00380	.00505	.00213	.00214	.00109	.01227	.00471	.01215	.01840
67	Radio and TV broadcasting										
68A	Electric services (utilities)	.00804	.00794	.00886	.00618	.00885	.00228	.00831	.02369	.00320	.03755
68B	Gas production and distribution (utilities)	.00175	.00110	.00155	.00204	.00192	.00005	.00037	.00015	.00019	.00144
68C	Water and sanitary services	.00058	.00115	.00114	.00176	.00329	.00077	.00036	.00415	.00047	.00501
69A	Wholesale trade	.01889	.05513	.03759	.03651	.05230	.01814	.01541	.02347	.02972	.00506
69B	Retail trade	.00033	.00043	.00035	.00030	.00058	.00461	.02782	.00017	.00087	.00102
70A	Finance	.01075	.00206	.00529	.01053	.00786	.00773	.00421	.05419	.02767	.03960
70B	Insurance	.00137	.00120	.00185	.00255	.00214	.00436	.00824	.00032	.00486	.02048
71A	Owner-occupied dwellings										
71B	Real estate and royalties	.00559	.01437	.00905	.00439	.00731	.00693	.01865	.03301	.01318	.03611
72A	Hotels and lodging places	.00933	.00037	.00084	.00191	.00072	.00158	.00143	.00058	.00050	.00332
72B	Personal and repair services (except auto)	.00056	.00056	.00105	.00044	.00094	.00083	.00078	.00096	.00552	.00194
73A	Computer and data processing services	.00125	.00059	.00116	.00097	.00042	.00804	.00294	.01122	.00941	.01743
73B	Legal, engineering, accounting, and related services	.00619	.00373	.00939	.00591	.01004	.00395	.00471	.00303	.00460	.01700
73C	Other business and professional services, except medical	.01237	.00806	.01205	.01385	.01094	.01419	.01165	.06238	.01408	.01269
73D	Advertising	.02349	.00760	.02475	.02477	.05086	.00079	.00205	.01021	.02283	.02487
74	Eating and drinking places	.00180	.00155	.00360	.00299	.00713	.00412	.00478	.00235	.03001	.01838
75	Automotive repair and services	.00123	.00417	.00570	.00365	.00725	.01354	.03791	.00143	.00375	.01045
76	Amusements	.00025	.00050	.00033	.00062	.00033	.00010	.00013	.00005	.00056	.00041
77A	Health services										
77B	Educational and social services, and membership organizations	.00149	.00032	.00182	.00565	.00376	.00306	.00048	.00256	.00010	.00444
78	Federal Government enterprises	.00146	.00064	.00204	.00093	.00274	.00133	.00127	.00029	.00009	.00223
79	State and local government enterprises	.00021	.00016	.00028	.00020	.00025	.00143	.00116	.00002	.00029	.00029
80	Noncomparable imports	.00120	.00068	.00398	.01553	.02925	.00413	.00008	.11975	.05589	.00236
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										
I	Total intermediate inputs	.51895	.52680	.42532	.42898	.52426	.38598	.44251	.68209	.53832	.40911
VA	Value added	.48105	.47320	.57468	.57103	.47574	.61402	.55749	.31791	.46168	.59089
T	**Total**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**

*Less than .000005.

Direct Requirements, 1987 Benchmark—Continued

of industry output, at producers' prices]

Communications, except radio and TV	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	Hotels and lodging places	Personal and repair services (exc. auto)	Computer and data processing services	Legal, engineering, accounting, and related services	Other business and professional services, except medical	Advertising	Commodity number
66	67	68A	68B	68C	69A	69B	70A	70B	71A	71B	72A	72B	73A	73B	73C	73D	
...	...	...	...	...	...	...	...	...	...	...	0.00004	...	...	...	0.00012	...	1
...	...	...	...	...	...	...	...	...	...	.00005	.00008	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	.00003	...	...	...	...	...	3
.00002	.00013	.00015	.00003	.00052	.00034	.00020	.00010	.00004	.00795	.00527	.00529	.00015	.00006	.00006	.00026	.00004	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5+6
...	...	.10035	...	.00044	.00006	.00002	...	...	...	(*)	.00018	.00006	...	...	.00002	...	7
...	...	...	.24304	...	...	...	...	...	...	...	...	...	...	...	...	...	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9+10
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11
.04145	.00971	.06621	.00962	.07798	.00665	.01365	.00686	.00299	.04897	.05700	.03618	.00975	.00271	.00176	.00664	.00558	12
(*)	...	(*)	...	...	.00004	(*)	(*)	(*)	...	(*)	.00001	...	...	.00004	.00093	...	13
.00001	.00035	(*)	(*)	.00037	.00016	.00226	.00001	.00001	...	.00003	.00254	.00031	.00001	.00005	.00064	.00001	14
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15
...	...	...	...	...	(*)	...	...	...	...	...	.00116	.00286	...	...	(*)	...	16
...	...	...	...	...	.00014	.00006	...	...	...	(*)	.00019	.00023	(*)	.00001	.00003	...	17
.00045	.00001	.00003	(*)	.00011	.00015	.00005	...	...	...	(*)	.00235	.00512	...	...	.00035	.00001	18
.00001	.00001	(*)	(*)	...	.00039	.00011	.00045	.00007	...	.00001	.01294	.00542	.00001	(*)	.00005	.00111	19
...	...	...	...	.01258	.00315	.00013	...	...	...	.00009	.00012	.00038	.00015	.00018	.00013	.00007	20+21
...	...	...	...	...	.00001	.00001	...	...	...	.00001	.00001	.00002	.00002	.00002	.00002	.00001	22+23
.00049	.00046	.00027	.00007	.00605	.00412	.00701	.00290	.00083	...	.00119	.00719	.00458	.00600	.00359	.00407	.00329	24
.00027	.00003	.00009	...	...	.01000	.00125	.00001	.00001	...	.00006	.00014	.00033	.00019	.00020	.00016	.00054	25
.00011	.00022	.00005	.00002	.00020	.00022	.00021	.00106	.00014	...	.00004	.00082	.00033	.00028	.00018	.00035	.00021	26A
.00427	.00180	.00092	.00026	.00177	.00895	.00043	.01279	.00803	...	.00338	.00809	.01039	.03398	.00853	.01339	.04330	26B
.00058	.00100	.00319	.00006	.04520	.00016	.00006	.00004	.00003	(*)	.00006	.00012	.00353	.00006	.00008	.00351	.00020	27A
...	...	...	...	.00020	...	...	...	...	.00083	.00029	.00518	...	...	...	.00132	...	27B
...	...	...	...	...	...	.00009	...	...	...	...	...	.00052	...	...	...	...	28
.00032	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.00021	...	29A
...	...	...	.00008	...	.00009	.00007	.00010	...	...	.00010	.00589	.01354	.00014	.00021	.00325	.00007	29B
.00068	...	...	...	...	...	...	...	...	...	...	...	.00002	...	...	.00062	.00006	30
.00073	.00032	.02325	.00500	.02308	.00651	.00502	.00146	.00057	...	.00102	.00589	.00468	.00199	.00257	.00312	.00290	31
.00244	.00003	.00089	.00008	.02250	.00277	.00100	.00028	.00012	.00023	.00142	.01883	.01669	.01630	.00159	.00794	.00118	32
.00003	.00008	.00001	.00001	.00004	.00015	.00005	.00007	.00010	...	.00003	.00021	.01042	.00007	.00021	.00009	.00007	33+34
.00009	.00001	.00009	.00001	.00306	.00039	.00002	.00015	.00001	...	.00002	.01168	...	.00005	.00019	.00082	...	35
.00001	...	.00007	(*)	.00107	.00026	.00004	.00004	.00001	...	.00008	.00073	.00372	.00001	.00001	.00027	.00001	36
.00001	...	.00001	.00001	...	.00008	.00002	(*)	...	...	(*)	.00002	.00006	.00001	.00002	.00008	.00004	37
.00027	...	.00083	...	...	...	...	...	...	...	...	...	.00044	...	...	...	...	38
...	...	.00011	...	...	.00149	...	...	...	...	...	...	...	...	...	.00112	...	39
...	...	...	...	...	.00009	...	...	...	.00031	.00016	...	...	...	...	...	...	40
.00204	...	.00074	...	...	...	...	...	...	...	...	...	.00092	...	...	.00069	...	41
.00113	.00002	.00015	.00003	.02770	.00056	.00142	.00005	.00001	...	.00019	.00062	.00277	.00043	.00060	.00097	.00027	42
.00150	...	.00472	...	...	...	...	...	...	...	...	...	...	...	...	.00046	...	43
...	...	...	...	...	.00006	...	...	...	.00060	.00001	...	...	...	...	.00231	...	44+45
...	...	.00009	...	...	.00062	(*)	...	...	...	...	...	...	...	...	.00117	...	46
.00002	.00004	.00061	.00003	.00020	.00023	.00008	.00001	(*)	...	(*)	.00004	.00020	.00004	.00004	.00265	.00003	47
...	...	...	...	...	.00001	.00002	...	...	...	(*)	.00001	.00001	.00002	.00002	.00124	.00001	48
.00187	...	.00055	.00007	.00045	.00002	.00003	.00022	...	...	.00006	...	...	...	...	.00328	...	49
.00004	.00008	.00035	.00008	.00044	.00051	.00017	.00002	.00001	...	.00001	.00008	.00081	.00009	.00024	.00119	.00006	50
.00036	.00069	.00003	.00070	...	.00012	.00009	.00017	.00006	...	.00006	.00014	.00700	.01598	.00146	.00160	.00059	51
...	...	...	...	.00028	.00029	.00021	...	...	...	...	...	.00237	...	...	.00115	...	52
.00164	.00074	.00150	(*)	...	(*)	...	.00003	(*)	...	...	...	.00059	.00145	(*)	.00253	...	53
(*)	...	(*)	...	...	(*)	.00002	(*)	(*)	...	.00016	.00018	.00992	...	...	.00013	...	54
.00034	.00001	.00098	.00014	.00212	.00009	.00009	.00014	.00003	...	.00017	.00299	.00040	.00011	.00037	.00082	.00006	55
.01352	.00172	.00001	(*)	.00004	.00005	.00008	.00013	.00014	...	.00006	.00010	.00036	.00018	.00009	.00043	.00007	56
.01044	.02646	...	.00004	.00012	.00005	.00001	.00074	.00005	...	...	...	.02425	.02871	.00008	.01511	...	57
.00128	.00156	.00161	.00147	.00162	.00050	.00031	.00128	.00098	...	.00036	.00008	.00042	.00725	.00191	.00288	.00106	58
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	59A
.00009	.00008	.00010	.00008	.06445	.00082	.00057	.00017	.00024	...	.00013	.00040	.00047	.00024	.00100	.00051	.00061	59B
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	60
.00009	.00007	.00006	.00003	...	...	...	.00023	.00001	...	...	.00015	...	...	...	.00119	...	61
.00006	.00074	.00071	.00025	.03534	.00016	.00005	.00003	.00003	...	.00001	.00082	.00039	.00061	.00003	.00062	.00011	62
.00042	.00648	.00020	.00009	.00046	.00045	.00028	.00365	.00147	...	.00024	.00044	.00905	.00048	.00404	.00633	.00060	63
.00058	.00036	.00017	.00008	.00087	.00091	.00098	.00143	.00082	...	.00035	.00283	.02130	.00040	.00213	.00160	.00127	64
.00045	.00116	.02682	.00014	.00317	.00118	.00172	.00196	.00188	.00003	.00117	.00257	.00118	.00102	.00073	.00166	.00176	65A
.00088	.00210	.00308	.00023	.00646	.00228	.00273	.01839	.00235	.00004	.00157	.00422	.00457	.00186	.00126	.00309	.00231	65B
.00009	.00005	.00314	.00037	.00123	.00026	.00013	.00008	.00004	.00001	.00004	.00025	.00031	.00006	.00013	.00057	.00015	65C
.00145	.00716	.00254	.00160	.00248	.01023	.00185	.00728	.00290	(*)	.00112	.00112	.00282	.00906	.00940	.01484	.00268	65D
.00001	.00002	.00011	.00430	.00039	.00093	.00008	.00003	.00040	...	.00030	.00119	.00007	.00004	.00005	.00007	.00004	65E
.20595	.00646	.00144	.00037	.00654	.01315	.01087	.01812	.01391	...	.00405	.01433	.01479	.02582	.01239	.01542	.01324	66
...	.01601	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.02854	67
.00298	.00083	.00020	.00245	.00329	.00773	.02363	.00594	.00057	...	.00081	.03116	.01797	.00486	.00262	.00577	.00271	68A
.00014	.00011	.04391	.31024	.04425	.00432	.00240	.00036	.00003	...	.00016	.01474	.00718	.00063	.00048	.00190	.00062	68B
.00705	.00112	.00152	.00036	.05416	.00073	.00163	.00102	.00172	...	.00020	.00906	.00218	.00023	.00095	.00038	.00020	68C
.00548	.00523	.01014	.00431	.03193	.02349	.00403	.00435	.00160	.00044	.00130	.01361	.02289	.01486	.00674	.01376	.00441	69A
.00025	.00013	.00036	.00029	.00513	.00180	.00214	.00047	.00027	.00079	.00060	.00123	.00125	.00067	.00125	.00117	.00112	69B
.01178	.00998	.01167	.00658	.01410	.01364	.00874	.16855	.03374	.00498	.01655	.04711	.01273	.00893	.00794	.01138	.00969	70A
.00040	.00012	.00719	.00075	.09486	.00117	.00127	.01144	.31305	.02985	.01663	.00115	.00109	.00059	.00177	.00339	.00120	70B
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	71A
.01741	.05335	.00383	.00207	.00710	.02338	.05778	.03310	.02795	.03758	.08499	.03716	.05681	.03372	.04960	.02888	.06731	71B
.00050	.00113	.00031	.00011	.00333	.00703	.00142	.00281	.00606	...	.00239	.00069	.00126	.00143	.01758	.00476	.01201	72A
.00250	.01178	.00203	.00054	.01262	.00416	.00471	.00149	.00111	...	.00201	.01668	.02165	.00092	.00313	.00125	.00287	72B
.01022	.00418	.00686	.00354	.00786	.00094	.00466	.04361	.00667	...	.00020	.00043	.00537	.11605	.04656	.02734	.00133	73A
.00441	.01365	.00384	.00146	.01217	.01156	.03367	.02525	.01633	.00510	.00576	.01537	.04170	.00807	.08644	.02394	.01257	73B
.00657	.01598	.00392	.00253	.01188	.04882	.01777	.04543	.01136	.00414	.01936	.06561	.03387	.02752	.08999	.06352	.02751	73C
.00730	.00278	.00059	.00029	.00160	.02002	.04968	.01238	.01171	...	.01647	.01604	.02250	.00876	.00277	.01051	.00579	73D
.00312	.00786	.00102	.00053	.00476	.01365	.01308	.01171	.01652	...	.00878	.00123	.00697	.00778	.00642	.01149	.01255	74
.00325	.00134	.00358	.00323	.00032	.02130	.01633	.00542	.00462	...	.00363	.01319	.01312	.00763	.01527	.01093	.01999	75
.00434	.31920	.00004	.00002	.00012	.00244	.00047	.00042	.00038	...	.00019	.00040	.00028	.00018	.00068	.00069	.00774	76
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	77A
.00143	.00441	.00262	.00034	.00089	.00155	.00101	.00270	.00036	...	.00051	.00317	.01355	.00565	.00518	.00607	.00236	77B
.00156	.00075	.00246	.00191	.00385	.00206	.00346	.02482	.00398	...	.00123	.00461	.00460	.00426	.00763	.00706	.00399	78
.00021	.00089	.00015	.00012	.00008	.00089	.00102	.00015	.00014	...	.00030	.00567	.00184	.00032	.00064	.00054	.00147	79
.02332	.00118	.00005	.00021	.00007	.00640	.00032	.01360	.00358	...	.00015	.00146	.00015	.00295	.00261	.00420	.00153	80
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	81
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	82
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	83
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	84
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	85
.41072	.54212	.35253	.61028	.66387	.29688	.30277	.49550	.50002	.14182	.26254	.45824	.48745	.41188	.41167	.37290	.31110	I
.58928	.45788	.64747	.38972	.33613	.70312	.69724	.50450	.49998	.85818	.73746	.54176	.51255	.58812	.58833	.62710	.68890	VA
1.00000	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	T

Table 3.1.—Commodity-by-Industry Direct Requirements, 1987 Benchmark—Continued

[Direct requirements per dollar of industry output, at producers' prices]

Commodity number	For the composition of inputs to an industry, read the column for that industry	Eating and drinking places	Auto-motive repair and services	Amuse-ments	Health services	Educational and social services, and membership organizations	Federal Government enterprises	State and local government enterprises	General government industry	Household industry	Inventory valuation adjustment
	Industry number	74	75	76	77A	77B	78	79	82	84	85
1	Livestock and livestock products	0.00187	...	0.00026	0.00018	0.00054	0.00009	...	...	...	...
2	Other agricultural products	.00691	...	.00011	.00036	.00062	.00032	.00001	...	...	...
3	Forestry and fishery products	.00799	...	.00005	.00008	.00020	.00034	...	...	...	...
4	Agricultural, forestry, and fishery services	.00005	.00013	.00730	.00047	.00317	.00006	.00180	...	...	...
5+6	Metallic ores mining	...	...	...	...	...	...	...	...	...	...
7	Coal mining	.00002	.00005	.00002	.00002	.00005	.02336	.01528	...	...	...
8	Crude petroleum and natural gas	...	...	...	...	...	...	...	...	...	...
9+10	Nonmetallic minerals mining	...	...	...	...	.00002	...	.00036	...	...	...
11	New construction	...	...	...	...	...	...	...	...	...	...
12	Maintenance and repair construction	.00877	.00501	.01301	.00810	.04686	.01259	.23160	...	...	...
13	Ordnance and accessories	...	...	(*)	.00001	.00003	.00001	.00001	...	...	...
14	Food and kindred products	.22463	.00005	.00837	.00897	.01945	.00865	.00006	...	...	...
15	Tobacco products	...	...	...	...	...	...	...	...	...	...
16	Broad and narrow fabrics, yarn and thread mills	...	...	.00088	...	.00030	.00032	...	...	...	...
17	Miscellaneous textile goods and floor coverings	.00012	.00012	.00011	.00005	.00006	.00010	.00014	...	...	...
18	Apparel	...	.00129	.00177	.00111	.00159	.00002	.00044	...	...	...
19	Miscellaneous fabricated textile products	.00008	(*)	.00116	.00229	.00045	.00171	.00008	...	...	...
20+21	Lumber and wood products	.00013	.00007	.00267	.00014	.00131	...	...	...	...	...
22+23	Furniture and fixtures	(*)	(*)	.00012	.00001	.00001	...	...	...	...	...
24	Paper and allied products, except containers	.00351	.00145	.00195	.00456	.01001	.00070	.00073	...	...	...
25	Paperboard containers and boxes	.00415	.00012	.00008	.00037	.00079	.00032	.00001	...	...	...
26A	Newspapers and periodicals	.00003	.00033	.00036	.00053	.00378	.00007	.00009	...	...	...
26B	Other printing and publishing	.00141	.00061	.00495	.00774	.06383	.00843	.00233	...	...	...
27A	Industrial and other chemicals	.00030	.00045	.00214	.01925	.00148	.00017	.01637	...	...	...
27B	Agricultural fertilizers and chemicals	...	...	.00012	.00003	.00040	...	.00171	...	...	...
28	Plastics and synthetic materials	...	...	...	...	...	...	...	...	...	...
29A	Drugs	...	...	...	.01910	.00083	.00001	.00005	...	...	...
29B	Cleaning and toilet preparations	.00056	.00008	.00014	.00248	.00124	.00064	.00075	...	...	...
30	Paints and allied products	...	.00600	.00003	...	.00025	...	.00001	...	...	...
31	Petroleum refining and related products	.00061	.02802	.00133	.00272	.00644	.01412	.06116	...	...	...
32	Rubber and miscellaneous plastics products	.00698	.01018	.00494	.02314	.00678	.00108	.00165	...	...	...
33+34	Footwear, leather, and leather products	.00032	.00004	.00068	.00004	.00024	.00031	.00002	...	...	...
35	Glass and glass products	.00162	.00648	.00004	.00233	.00165	.00007	.00013	...	...	...
36	Stone and clay products	.00018	.00028	.00003	.00085	.00003	...	.00205	...	...	...
37	Primary iron and steel manufacturing	(*)	(*)	.00001	.00002	.00012	...	(*)	...	...	...
38	Primary nonferrous metals manufacturing	.00010	...	.00035	...	(*)	.00002	...	...	...	...
39	Metal containers	...	...	...	...	...	...	...	...	...	...
40	Heating, plumbing, and fabricated structural metal products	...	...	...	...	.00003	.00002	.00003	...	...	...
41	Screw machine products and stampings	.00004	.02549	.00038	.00072	.00110	.00198	.00005	...	...	...
42	Other fabricated metal products	.00025	.03684	.00075	.00052	.00189	.00018	.00044	...	...	...
43	Engines and turbines	...	.00187	...	...	...	...	.00088	...	...	...
44+45	Farm, construction, and mining machinery	...	...	.00002	...	(*)	...	.00304	...	...	...
46	Materials handling machinery and equipment	...	...	...	...	...	.00009	...	...	...	...
47	Metalworking machinery and equipment	(*)	.00014	.00023	.00002	.00007	.00012	.00022	...	...	...
48	Special industry machinery and equipment	.00025	.00010	.00002	.00001	.00001	...	...	...	...	...
49	General industrial machinery and equipment	.00044	.00041	.00002	(*)	...	.00038	.00018	...	...	...
50	Miscellaneous machinery, except electrical	.00055	.00958	.00018	.00006	.00021	.00030	.00618	...	...	...
51	Computer and office equipment	.00002	.00008	.00009	.00013	.00070	.00006	.00003	...	...	...
52	Service industry machinery	.00007	.00516	.00070	.00003	.00007	.00049	.00028	...	...	...
53	Electrical industrial equipment and apparatus	...	.00133	(*)	(*)	.00005	.00005	.00726	...	...	...
54	Household appliances	(*)	...	.00002	.00002	.00009	.00007	.00072	...	...	...
55	Electric lighting and wiring equipment	.00042	.00730	.00085	.00091	.00132	.00058	.00151	...	...	...
56	Audio, video, and communication equipment	.00003	.00138	.00005	.00002	.00080	.00012	.00001	...	...	...
57	Electronic components and accessories	...	...	.00009	.00007	.00124	.00014	.00057	...	...	...
58	Miscellaneous electrical machinery and supplies	.00002	.00407	.00046	.00092	.00110	.00083	.00163	...	...	...
59A	Motor vehicles (passenger cars and trucks)	...	...	...	...	...	...	...	...	...	...
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00011	.07633	.00013	.00032	.00078	.00589	.00279	...	...	...
60	Aircraft and parts	...	...	...	...	...	...	...	...	...	...
61	Other transportation equipment	...	.00026	.00131	.00001	.00006	.00074	.00186	...	...	...
62	Scientific and controlling instruments	...	.00028	.00017	.01979	.00081	.00009	.00024	...	...	...
63	Ophthalmic and photographic equipment	.00003	.00031	.00238	.00202	.00326	.00029	.00021	...	...	...
64	Miscellaneous manufacturing	.00140	.00036	.00234	.00077	.00502	.00116	.00062	...	...	...
65A	Railroads and related services; passenger ground transportation	.00184	.00225	.00118	.00099	.00155	.01594	.00633	...	...	...
65B	Motor freight transportation and warehousing	.00736	.00614	.00241	.00249	.00518	.03561	.00445	...	...	...
65C	Water transportation	.00030	.00086	.00052	.00025	.00027	.00169	.00288	...	...	...
65D	Air transportation	.00082	.00371	.00300	.00282	.01705	.02041	.00141	...	...	...
65E	Pipelines, freight forwarders, and related services	.00001	.00070	.00002	.00006	.00015	.00023	.00108	...	...	...
66	Communications, except radio and TV	.00384	.00781	.00841	.00819	.01154	.00322	.00336	...	...	...
67	Radio and TV broadcasting	...	...	...	...	...	...	...	...	...	...
68A	Electric services (utilities)	.02123	.00770	.01407	.00937	.01335	.00619	.06452	...	...	...
68B	Gas production and distribution (utilities)	.00174	.00398	.00282	.00443	.00632	.00182	.04435	...	...	...
68C	Water and sanitary services	.00157	.00063	.00160	.00086	.00167	.00182	.00437	...	...	...
69A	Wholesale trade	.04442	.03596	.00637	.01955	.01612	.00829	.02254	...	...	...
69B	Retail trade	.00013	.03714	.00058	.00085	.00086	.00023	.00032	...	...	...
70A	Finance	.01068	.03214	.00918	.00428	.01366	.00099	.00580	...	...	...
70B	Insurance	.00016	.01731	.00099	.00361	.00468	.00096	.00708	...	...	...
71A	Owner-occupied dwellings	...	...	...	...	...	...	...	...	...	...
71B	Real estate and royalties	.04250	.03553	.05301	.06437	.10665	.01166	.00987	...	...	...
72A	Hotels and lodging places	.00013	.00117	.00294	.00138	.00689	.00057	.00073	...	...	...
72B	Personal and repair services (except auto)	.00272	.01369	.00527	.00291	.00268	.00020	.00025	...	...	...
73A	Computer and data processing services	.00103	.00013	.00418	.01407	.00918	.00066	.00374	...	...	...
73B	Legal, engineering, accounting, and related services	.01063	.00585	.02735	.00641	.01519	.00174	.03169	...	...	...
73C	Other business and professional services, except medical	.01977	.03081	.04947	.02847	.03354	.00994	.01232	...	...	...
73D	Advertising	.02211	.01161	.03332	.00269	.02133	.00006	.00150	...	...	...
74	Eating and drinking places	.00377	.00662	.00740	.00573	.00762	.00170	.00163	...	...	...
75	Automotive repair and services	.00193	.01915	.00608	.00997	.00851	.01145	.00259	...	...	...
76	Amusements	.00461	.00014	.20386	.00026	.00635	.00085	.00005	...	...	...
77A	Health services	...	...	...	.01997	...	...	...	...	...	...
77B	Educational and social services, and membership organizations	.00143	.00129	.00485	.00212	.00233	.00028	.00117	...	...	...
78	Federal Government enterprises	.00057	.00404	.00467	.00551	.01368	.00839	.00101	...	...	...
79	State and local government enterprises	.00089	.00286	.00109	.00067	.00148	.00054	.00008	...	...	...
80	Noncomparable imports	.00035	.00009	.00197	.00013	.00560	.02389	...	...	...	...
81	Scrap, used and secondhand goods	...	.00129	...	...	...	...	...	...	...	...
82	General government industry	...	...	...	...	...	...	...	...	...	...
83	Rest of the world adjustment to final uses	...	...	...	...	...	...	...	...	...	...
84	Household industry	...	...	...	...	...	...	...	...	...	...
85	Inventory valuation adjustment	...	...	...	...	...	...	...	...	...	...
I	Total intermediate inputs	.48045	.52263	.51974	.35364	.52456	.25633	.60063	...	...	...
VA	Value added	.51955	.47738	.48026	.64636	.47545	.74367	.39937	1.00000	1.00000	1.00000
T	**Total**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**

*Less than .000005.

Table 3.2.—Input Components by Industry: Direct Requirements, 1987 Benchmark

[Direct requirements per dollar of total industry output, at producers' prices]

Industry number		Value added				Total intermediate inputs	Total	Industry number
		Total	Compensation of employees	Indirect business tax and nontax liability	Other value added			
1	Livestock and livestock products	0.17231	0.03754	0.01247	0.12231	0.82769	1.00000	1
2	Other agricultural products	.53862	.06478	.02923	.44461	.46138	1.00000	2
3	Forestry and fishery products	.49729	.10449	.02123	.37157	.50271	1.00000	3
4	Agricultural, forestry, and fishery services	.44809	.44779	.....	.00030	.55191	1.00000	4
5+6	Metallic ores mining	.51061	.26965	.07363	.16733	.48939	1.00000	5+6
7	Coal mining	.60852	.32937	.07986	.19929	.39148	1.00000	7
8	Crude petroleum and natural gas	.65874	.13889	.04676	.47308	.34126	1.00000	8
9+10	Nonmetallic minerals mining	.63355	.30914	.05306	.27136	.36645	1.00000	9+10
11+12	Construction	.47026	.30704	.00725	.15597	.52974	1.00000	11+12
13	Ordnance and accessories	.60207	.39347	.00746	.20113	.39794	1.00000	13
14	Food and kindred products	.30830	.13438	.02217	.15176	.69170	1.00000	14
15	Tobacco products	.63659	.10812	.17817	.35029	.36341	1.00000	15
16	Broad and narrow fabrics, yarn and thread mills	.31743	.21999	.00616	.09129	.68257	1.00000	16
17	Miscellaneous textile goods and floor coverings	.27244	.17078	.00638	.09528	.72757	1.00000	17
18	Apparel	.42072	.27269	.00373	.14430	.57928	1.00000	18
19	Miscellaneous fabricated textile products	.40707	.23828	.00491	.16388	.59293	1.00000	19
20+21	Lumber and wood products	.35572	.22187	.01717	.11668	.64428	1.00000	20+21
22+23	Furniture and fixtures	.46930	.31030	.00626	.15273	.53071	1.00000	22+23
24	Paper and allied products, except containers	.41812	.20152	.01641	.20019	.58188	1.00000	24
25	Paperboard containers and boxes	.34519	.24971	.00802	.08746	.65481	1.00000	25
26A	Newspapers and periodicals	.58394	.30950	.00513	.26931	.41606	1.00000	26A
26B	Other printing and publishing	.51667	.31472	.01095	.19100	.48333	1.00000	26B
27A	Industrial and other chemicals	.44180	.18468	.02162	.23551	.55820	1.00000	27A
27B	Agricultural fertilizers and chemicals	.24895	.14431	.01670	.08794	.75105	1.00000	27B
28	Plastics and synthetic materials	.35319	.16128	.01883	.17308	.64682	1.00000	28
29A	Drugs	.61569	.23026	.00423	.38119	.38431	1.00000	29A
29B	Cleaning and toilet preparations	.53105	.15973	.00553	.36579	.46895	1.00000	29B
30	Paints and allied products	.46123	.20750	.00263	.25109	.53877	1.00000	30
31	Petroleum refining and related products	.17595	.04973	.07681	.04941	.82405	1.00000	31
32	Rubber and miscellaneous plastics products	.43968	.27384	.01954	.14630	.56032	1.00000	32
33+34	Footwear, leather, and leather products	.42317	.27146	.00317	.14854	.57683	1.00000	33+34
35	Glass and glass products	.51040	.30307	.01357	.19376	.48960	1.00000	35
36	Stone and clay products	.47020	.27331	.01837	.17852	.52980	1.00000	36
37	Primary iron and steel manufacturing	.37259	.26280	.01738	.09241	.62741	1.00000	37
38	Primary nonferrous metals manufacturing	.25212	.18522	.01046	.05644	.74788	1.00000	38
39	Metal containers	.28740	.16959	.00712	.11069	.71260	1.00000	39
40	Heating, plumbing, and fabricated structural metal products	.43252	.29073	.01119	.13059	.56748	1.00000	40
41	Screw machine products and stampings	.44371	.35169	.01602	.07600	.55629	1.00000	41
42	Other fabricated metal products	.50129	.33126	.01127	.15877	.49871	1.00000	42
43	Engines and turbines	.44167	.28186	.01244	.14737	.55833	1.00000	43
44+45	Farm, construction, and mining machinery	.44300	.27951	.01678	.14671	.55700	1.00000	44+45
46	Materials handling machinery and equipment	.46004	.33485	.00919	.11600	.53996	1.00000	46
47	Metalworking machinery and equipment	.58748	.46371	.01295	.11083	.41252	1.00000	47
48	Special industry machinery and equipment	.52881	.37816	.01005	.14060	.47119	1.00000	48
49	General industrial machinery and equipment	.53367	.36769	.01127	.15471	.46633	1.00000	49
50	Miscellaneous machinery, except electrical	.59184	.46946	.01252	.10986	.40816	1.00000	50
51	Computer and office equipment	.43345	.24338	.00787	.18220	.56655	1.00000	51
52	Service industry machinery	.46508	.29362	.00674	.16473	.53492	1.00000	52
53	Electrical industrial equipment and apparatus	.51221	.34937	.01074	.15210	.48779	1.00000	53
54	Household appliances	.42928	.23829	.00824	.18275	.57072	1.00000	54
55	Electric lighting and wiring equipment	.51564	.29800	.00899	.20865	.48436	1.00000	55
56	Audio, video, and communication equipment	.49968	.27968	.00879	.21121	.50032	1.00000	56
57	Electronic components and accessories	.55279	.38079	.01751	.15449	.44721	1.00000	57
58	Miscellaneous electrical machinery and supplies	.45393	.31595	.01126	.12672	.54607	1.00000	58
59A	Motor vehicles (passenger cars and trucks)	.18644	.11354	.01572	.05719	.81356	1.00000	59A
59B	Truck and bus bodies, trailers, and motor vehicles parts	.38078	.27637	.02314	.08127	.61922	1.00000	59B
60	Aircraft and parts	.48105	.36531	.00747	.10827	.51895	1.00000	60
61	Other transportation equipment	.47320	.36180	.00486	.10654	.52680	1.00000	61
62	Scientific and controlling instruments	.57468	.39191	.01118	.17159	.42532	1.00000	62
63	Ophthalmic and photographic equipment	.57103	.21677	.01113	.34313	.42898	1.00000	63
64	Miscellaneous manufacturing	.47574	.26101	.00933	.20540	.52426	1.00000	64
65A	Railroads and related services; passenger ground transportation	.61402	.42909	.03637	.14856	.38598	1.00000	65A
65B	Motor freight transportation and warehousing	.55749	.35059	.02655	.18035	.44251	1.00000	65B
65C	Water transportation	.31791	.23829	.02855	.05108	.68209	1.00000	65C
65D	Air transportation	.46168	.30466	.07539	.08163	.53832	1.00000	65D
65E	Pipelines, freight forwarders, and related services	.59089	.30664	.02478	.25947	.40911	1.00000	65E
66	Communications, except radio and TV	.58928	.22815	.07392	.28721	.41072	1.00000	66
67	Radio and TV broadcasting	.45788	.33629	.02039	.10119	.54212	1.00000	67
68A	Electric services (utilities)	.64747	.14696	.06982	.43070	.35253	1.00000	68A
68B	Gas production and distribution (utilities)	.38972	.12770	.04665	.21537	.61028	1.00000	68B
68C	Water and sanitary services	.33613	.31170	.05185	–.02741	.66387	1.00000	68C
69A	Wholesale trade	.70312	.41227	.13622	.15463	.29688	1.00000	69A
69B	Retail trade	.69724	.44662	.12616	.12446	.30277	1.00000	69B
70A	Finance	.50450	.38188	.02902	.09360	.49550	1.00000	70A
70B	Insurance	.49998	.36059	.07191	.06749	.50002	1.00000	70B
71A	Owner-occupied dwellings	.85818	.....	.15677	.70142	.14182	1.00000	71A
71B	Real estate and royalties	.73746	.07161	.13997	.52588	.26254	1.00000	71B
72A	Hotels and lodging places	.54176	.26010	.09020	.19147	.45824	1.00000	72A
72B	Personal and repair services (except auto)	.51255	.31868	.01791	.17596	.48745	1.00000	72B
73A	Computer and data processing services	.58812	.41832	.01076	.15903	.41188	1.00000	73A
73B	Legal, engineering, accounting, and related services	.58833	.44407	.00460	.13966	.41167	1.00000	73B
73C	Other business and professional services, except medical	.62710	.41735	.01790	.19185	.37290	1.00000	73C
73D	Advertising	.68890	.46615	.00795	.21480	.31110	1.00000	73D
74	Eating and drinking places	.51955	.39117	.04588	.08250	.48045	1.00000	74
75	Automotive repair and services	.47738	.22184	.03290	.22263	.52263	1.00000	75
76	Amusements	.48026	.31601	.03653	.12772	.51974	1.00000	76
77A	Health services	.64636	.52626	.00562	.11449	.35364	1.00000	77A
77B	Educational and social services, and membership organizations	.47545	.44604	.00274	.02667	.52456	1.00000	77B
78	Federal Government enterprises	.74367	.68457	.....	.05910	.25633	1.00000	78
79	State and local government enterprises	.39937	.27771	.00037	.12130	.60063	1.00000	79
82	General government industry	1.00000	1.00000	.....	.....	.....	1.00000	82
84	Household industry	1.00000	1.00000	.....	.....	.....	1.00000	84
85	Inventory valuation adjustment	1.00000	.....	.....	1.00000	.....	1.00000	85

* Less than 0.000005.

Table 4.—Commodity-by-Commodity

[Total requirements, direct and indirect, per dollar

Commodity number	Each entry represents the output required, directly and indirectly, of the commodity named at the beginning of the row for each dollar of delivery to final demand of the commodity named at the head of the column	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	Nonmetallic minerals mining	New construction	Maintenance and repair construction	Ordnance and accessories
	Commodity number	1	2	3	4	5+6	7	8	9+10	11	12	13
1	Livestock and livestock products	1.31121	0.03283	0.03001	0.08195	0.00067	0.00045	0.00050	0.00061	0.00146	0.00149	0.00065
2	Other agricultural products	.39050	1.06613	.03557	.12721	.00079	.00058	.00056	.00068	.00222	.00226	.00072
3	Forestry and fishery products	.00213	.00092	1.01892	.00209	.00112	.00062	.00037	.00041	.00665	.00679	.00047
4	Agricultural, forestry, and fishery services	.09131	.08382	.14880	1.01938	.00079	.00060	.00147	.00067	.00681	.00694	.00052
5+6	Metallic ores mining	.00089	.00069	.00079	.00089	1.08507	.00134	.00061	.00184	.00377	.00375	.00485
7	Coal mining	.00362	.00220	.00151	.00256	.01578	1.12459	.00257	.01139	.00385	.00383	.00355
8	Crude petroleum and natural gas	.01734	.02007	.02738	.02529	.02745	.01668	1.04700	.02352	.01911	.01921	.00727
9+10	Nonmetallic minerals mining	.00511	.00981	.00309	.01289	.00289	.00256	.00111	1.04167	.01386	.01407	.00098
11	New construction	.....	.....	.....	.....	.....	.....	.....	.....	1.00010	.....	.....
12	Maintenance and repair construction	.02848	.02485	.02041	.02717	.03185	.02190	.03962	.02313	.01315	1.01322	.01631
13	Ordnance and accessories	.00006	.00005	.00329	.00006	.00006	.00004	.00003	.00011	.00020	.00020	1.02762
14	Food and kindred products	.21258	.00812	.05372	.02256	.00238	.00152	.00155	.00217	.00350	.00356	.00236
15	Tobacco products	(*)	.....	.....	(*)	.....	.....	.....	.....	.....	.....	.....
16	Broad and narrow fabrics, yarn and thread mills	.00164	.00206	.00471	.00383	.00096	.00183	.00032	.00108	.00240	.00245	.00156
17	Miscellaneous textile goods and floor coverings	.00149	.00123	.00955	.00593	.00059	.00052	.00025	.00049	.00375	.00383	.00077
18	Apparel	.00022	.00016	.00024	.00034	.00028	.00058	.00014	.00051	.00046	.00047	.00071
19	Miscellaneous fabricated textile products	.00106	.00160	.00435	.00403	.00025	.00019	.00012	.00029	.00069	.00070	.00052
20+21	Lumber and wood products	.00704	.00825	.00370	.00512	.01238	.00674	.00376	.00385	.07938	.08105	.00459
22+23	Furniture and fixtures	.00009	.00008	.00011	.00008	.00012	.00007	.00010	.00007	.00224	.00228	.00048
24	Paper and allied products, except containers	.01517	.00998	.00782	.01406	.00524	.00439	.00388	.00908	.01030	.01045	.00754
25	Paperboard containers and boxes	.00865	.00689	.00414	.01209	.00196	.00164	.00073	.00212	.00359	.00364	.00279
26A	Newspapers and periodicals	.00042	.00031	.00029	.00041	.00022	.00017	.00015	.00202	.00033	.00034	.00031
26B	Other printing and publishing	.00694	.00489	.00927	.00797	.00403	.00322	.00309	.00412	.00503	.00510	.00454
27A	Industrial and other chemicals	.01729	.01843	.01430	.03146	.04964	.01419	.01614	.02914	.01929	.02001	.01622
27B	Agricultural fertilizers and chemicals	.04315	.08363	.03302	.16772	.00087	.00049	.00054	.00062	.00188	.00189	.00060
28	Plastics and synthetic materials	.00468	.00367	.00565	.00567	.00549	.00441	.00129	.00452	.00868	.00886	.00697
29A	Drugs	.00434	.00023	.00039	.00060	.00012	.00004	.00004	.00008	.00008	.00008	.00006
29B	Cleaning and toilet preparations	.00155	.00072	.00071	.00128	.00054	.00034	.00033	.00084	.00076	.00081	.00044
30	Paints and allied products	.00080	.00065	.00128	.00095	.00117	.00077	.00067	.00076	.00935	.00954	.00110
31	Petroleum refining and related products	.02259	.02388	.04331	.02453	.03407	.02629	.00792	.02937	.02869	.02880	.00739
32	Rubber and miscellaneous plastics products	.01401	.01017	.00738	.01034	.01986	.01660	.00304	.01588	.01937	.01982	.01680
33+34	Footwear, leather, and leather products	.00059	.00014	.00046	.00045	.00009	.00008	.00006	.00010	.00021	.00021	.00015
35	Glass and glass products	.00374	.00096	.00197	.00208	.00134	.00074	.00052	.00114	.00407	.00414	.00125
36	Stone and clay products	.00315	.00375	.00215	.00353	.00776	.00649	.00644	.00923	.05991	.06047	.00498
37	Primary iron and steel manufacturing	.00762	.00569	.00745	.00605	.04067	.01940	.00805	.01587	.04262	.04069	.03645
38	Primary nonferrous metals manufacturing	.00588	.00357	.00524	.00416	.01146	.00765	.00276	.01367	.02822	.02867	.04737
39	Metal containers	.00629	.00089	.00383	.00180	.00054	.00030	.00022	.00040	.00086	.00088	.00035
40	Heating, plumbing, and fabricated structural metal products	.00255	.00232	.00227	.00216	.01045	.00676	.00298	.00818	.05362	.05423	.00247
41	Screw machine products and stampings	.00232	.00142	.00193	.00216	.00904	.00919	.00084	.00454	.00608	.00617	.01124
42	Other fabricated metal products	.00615	.00530	.01025	.00626	.00756	.00837	.00690	.00728	.02217	.02272	.02441
43	Engines and turbines	.00100	.00094	.00333	.00278	.00864	.00841	.00068	.00610	.00072	.00069	.00154
44+45	Farm, construction, and mining machinery	.00792	.00951	.00461	.00582	.02234	.04992	.00339	.02077	.00343	.00275	.00046
46	Materials handling machinery and equipment	.00028	.00029	.00019	.00036	.00608	.00461	.00016	.01216	.00282	.00287	.00019
47	Metalworking machinery and equipment	.00254	.00186	.00109	.00113	.00290	.00186	.00140	.00192	.00262	.00266	.00673
48	Special industry machinery and equipment	.00044	.00034	.00043	.00057	.00041	.00022	.00017	.00032	.00049	.00050	.00041
49	General industrial machinery and equipment	.00234	.00207	.00270	.00194	.01628	.02313	.00282	.01603	.00550	.00543	.01163
50	Miscellaneous machinery, except electrical	.00280	.00290	.00195	.00216	.00502	.00681	.00112	.00379	.00249	.00250	.00759
51	Computer and office equipment	.00043	.00036	.00052	.00068	.00057	.00028	.00022	.00062	.00068	.00069	.00178
52	Service industry machinery	.00055	.00047	.00055	.00068	.00070	.00043	.00054	.00040	.01186	.01209	.00038
53	Electrical industrial equipment and apparatus	.00167	.00144	.00145	.00139	.00734	.00707	.00293	.00765	.00798	.00810	.00428
54	Household appliances	.00015	.00014	.00022	.00021	.00015	.00010	.00016	.00012	.00267	.00272	.00008
55	Electric lighting and wiring equipment	.00143	.00134	.00107	.00143	.00189	.00200	.00111	.00143	.01732	.01767	.00103
56	Audio, video, and communication equipment	.00040	.00032	.00039	.00039	.00035	.00023	.00028	.00027	.00372	.00379	.02739
57	Electronic components and accessories	.00196	.00173	.00197	.00214	.00196	.00126	.00091	.00188	.00355	.00361	.04467
58	Miscellaneous electrical machinery and supplies	.00519	.00604	.00186	.00238	.00212	.00102	.00048	.00134	.00237	.00243	.00190
59A	Motor vehicles (passenger cars and trucks)	.00004	.00003	.00046	.00005	.00006	.00005	.00001	.00003	.00004	.00004	.00004
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00477	.00478	.00436	.00610	.00607	.00250	.00088	.00177	.00337	.00342	.00284
60	Aircraft and parts	.00039	.00035	.00084	.00129	.00052	.00030	.00017	.00049	.00043	.00044	.11675
61	Other transportation equipment	.00061	.00032	.01753	.00094	.00112	.00079	.00012	.00025	.00042	.00042	.00026
62	Scientific and controlling instruments	.00068	.00040	.00214	.00056	.00134	.00048	.00031	.00062	.00313	.00319	.01599
63	Ophthalmic and photographic equipment	.00082	.00066	.00085	.00119	.00078	.00057	.00056	.00070	.00123	.00125	.00134
64	Miscellaneous manufacturing	.00101	.00079	.00082	.00152	.00088	.00058	.00043	.00099	.00235	.00240	.00071
65A	Railroads and related services; passenger ground transportation	.01947	.00802	.00504	.01207	.00989	.03300	.00251	.00694	.00804	.00800	.00385
65B	Motor freight transportation and warehousing	.05508	.03178	.01694	.03423	.01841	.01435	.00609	.02641	.03035	.03067	.01432
65C	Water transportation	.00343	.00179	.00419	.00330	.00272	.00342	.00182	.00217	.00193	.00194	.00084
65D	Air transportation	.00671	.00594	.00715	.02333	.00759	.00353	.00284	.00725	.00636	.00658	.01041
65E	Pipelines, freight forwarders, and related services	.00408	.00309	.00354	.00454	.00346	.00296	.00112	.00329	.00310	.00313	.00177
66	Communications, except radio and TV	.01348	.01010	.00723	.00881	.00756	.00538	.00534	.00752	.01314	.01329	.01117
67	Radio and TV broadcasting	.00013	.00008	.00008	.00014	.00008	.00008	.00014	.00008	.00012	.00012	.00027
68A	Electric services (utilities)	.02775	.01581	.00975	.01761	.11361	.03419	.01991	.05837	.01683	.01697	.01979
68B	Gas production and distribution (utilities)	.01027	.01148	.00654	.01454	.02918	.00682	.01317	.02748	.01047	.01048	.01106
68C	Water and sanitary services	.00534	.00650	.00227	.00355	.00408	.00370	.00227	.01163	.00251	.00252	.00238
69A	Wholesale trade	.11019	.06977	.05566	.10251	.04581	.05087	.01532	.04080	.07547	.07607	.04535
69B	Retail trade	.00619	.00583	.00417	.00728	.00487	.00263	.00232	.00259	.04162	.04242	.00185
70A	Finance	.03145	.02445	.02266	.02178	.02302	.01564	.01092	.02559	.02440	.02482	.01099
70B	Insurance	.02867	.03875	.02395	.01631	.01068	.00579	.00664	.00508	.00949	.00964	.00484
71A	Owner-occupied dwellings	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
71B	Real estate and royalties	.10419	.11364	.03125	.04863	.03306	.04150	.20414	.02818	.02767	.02748	.02102
72A	Hotels and lodging places	.00349	.00268	.00378	.00351	.00373	.00166	.00166	.00984	.00447	.00455	.00380
72B	Personal and repair services (except auto)	.00329	.00294	.00351	.01025	.00210	.00136	.00112	.00305	.00233	.00237	.00189
73A	Computer and data processing services	.00591	.00473	.00820	.00977	.01162	.00394	.00277	.01494	.00874	.00888	.00477
73B	Legal, engineering, accounting, and related services	.01449	.01184	.03944	.02345	.02930	.01667	.01768	.01636	.07446	.07589	.01883
73C	Other business and professional services, except medical	.03171	.02950	.03419	.03432	.02232	.01579	.01309	.02178	.04852	.04930	.02671
73D	Advertising	.01627	.00988	.00980	.01639	.00990	.00934	.01686	.00945	.01454	.01460	.03236
74	Eating and drinking places	.00636	.00520	.00556	.00906	.00507	.00386	.00413	.00504	.00788	.00800	.00639
75	Automotive repair and services	.01253	.01040	.02350	.03384	.03590	.01335	.00560	.00662	.01908	.01942	.00638
76	Amusements	.00368	.00274	.00367	.01752	.00143	.00135	.00204	.00165	.00230	.00232	.00389
77A	Health services	.01156	.00031	.00048	.00091	.00001	(*)	.00001	.00001	.00002	.00002	.00001
77B	Educational and social services, and membership organizations	.00150	.00117	.00369	.00326	.00358	.00278	.00098	.00223	.00192	.00195	.00170
78	Federal Government enterprises	.00303	.00234	.00309	.00457	.00381	.00165	.00128	.00315	.00332	.00337	.00220
79	State and local government enterprises	.00112	.00085	.00119	.00144	.00138	.00050	.00026	.00053	.00078	.00079	.00058
80	Noncomparable imports	.00771	.00410	.00471	.00787	.00871	.00382	.01132	.00392	.00442	.00448	.00482
81	Scrap, used and secondhand goods	.00089	.00075	.00075	.00106	.00224	.00121	.00050	.00135	.00313	.00308	.00360
82	General government industry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
83	Rest of the world adjustment to final uses	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
84	Household industry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
85	Inventory valuation adjustment	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Total commodity output multiplier	**2.83998**	**1.92381**	**1.92452**	**2.17862**	**1.93812**	**1.72605**	**1.55934**	**1.70436**	**2.03525**	**2.04637**	**1.79317**

*Less than .000005.

Total Requirements, 1987 Benchmark

of delivery to final demand, at producers' prices]

Food and kindred products	Tobacco products	Broad and narrow fabrics, yarn and thread mills	Miscel-laneous textile goods and floor coverings	Apparel	Miscel-laneous fabricated textile products	Lumber and wood products	Furniture and fixtures	Paper and allied products, except containers	Paper-board containers and boxes	News-papers and periodicals	Other printing and publishing	Industrial and other chemicals	Agri-cultural fertilizers and chemicals	Plastics and synthetic materials	Drugs	Cleaning and toilet prepar-ations	Paints and allied products	Commodity number
14	15	16	17	18	19	20+21	22+23	24	25	26A	26B	27A	27B	28	29A	29B	30	
0.29427	0.00284	0.01661	0.00570	0.00580	0.00696	0.00436	0.00223	0.00282	0.00179	0.00117	0.00142	0.00270	0.00339	0.00248	0.00515	0.00658	0.00514	1
.17841	.08046	.12293	.03525	.03398	.04147	.00518	.00668	.00394	.00250	.00122	.00178	.00605	.00303	.00928	.00351	.00487	.00506	2
.00864	.00051	.00066	.00089	.00621	.00104	.11541	.01072	.01023	.00484	.00162	.00214	.00158	.00076	.00098	.00060	.00085	.00206	3
.03001	.00659	.01077	.00356	.00409	.00406	.01783	.00261	.00242	.00140	.00080	.00092	.00133	.00113	.00143	.00093	.00116	.00129	4
.00190	.00038	.00163	.00238	.00084	.00116	.00180	.00456	.00174	.00180	.00060	.00120	.01063	.00304	.00511	.00095	.00242	.00859	5+6
.00412	.00220	.00868	.00839	.00436	.00528	.00486	.00543	.01327	.00838	.00300	.00450	.01070	.00772	.01129	.00261	.00379	.00551	7
.01403	.00572	.02155	.02619	.01170	.01431	.01869	.01235	.02386	.02220	.00942	.01245	.08991	.09042	.04428	.00897	.02214	.03369	8
.00296	.00115	.00289	.00283	.00121	.00164	.00249	.00185	.00654	.00360	.00126	.00180	.01055	.08471	.00501	.00115	.00247	.00572	9+10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11
.01970	.00777	.02231	.02038	.01367	.01666	.02244	.02163	.02329	.02072	.01325	.01436	.02496	.02748	.02245	.01150	.01342	.01825	12
.00007	.00002	.00006	.00005	.00006	.00005	.00044	.00012	.00008	.00006	.00008	.00005	.00006	.00008	.00005	.00006	.00005	.00006	13
1.25003	.00197	.00637	.00705	.00539	.00692	.00949	.00539	.00991	.00633	.00433	.00515	.00985	.01313	.00685	.00709	.02459	.02074	14
(*)	1.16115	(*)	(*)	(*)	(*)	(*)	(*)	.00005	.00002	.00001	.00001	.00001	(*)	(*)	(*)	(*)	(*)	15
.00184	.00099	1.36175	.31716	.35141	.35797	.00291	.05678	.01686	.00827	.00292	.00592	.00152	.00134	.00993	.00111	.00268	.00188	16
.00116	.00043	.01410	1.04613	.00687	.07607	.00442	.02924	.00645	.00315	.00125	.00246	.00068	.00070	.00131	.00061	.00183	.00049	17
.00025	.00019	.00108	.00128	1.23173	.01270	.00051	.00073	.00045	.00036	.00023	.00029	.00020	.00028	.00035	.00016	.00021	.00019	18
.00086	.00022	.00058	.00152	.02996	1.03020	.00113	.00205	.00037	.00029	.00027	.00030	.00053	.00043	.00039	.00019	.00035	.00028	19
.00766	.00479	.00497	.00667	.00363	.00900	1.40510	.12839	.10251	.04797	.01545	.02042	.00602	.00543	.00576	.00329	.00571	.00381	20+21
.00007	.00003	.00007	.00007	.00005	.00007	.00148	1.00414	.00018	.00012	.00006	.00007	.00008	.00008	.00007	.00004	.00005	.00006	22+23
.03851	.03927	.01558	.02886	.01467	.02207	.01313	.02028	1.20376	.54557	.16668	.22192	.02265	.02254	.02991	.01859	.03542	.01316	24
.02686	.04390	.00990	.01336	.00848	.01752	.00879	.01940	.01925	1.01252	.00467	.00987	.00884	.00917	.01132	.01212	.03937	.00492	25
.00039	.00033	.00030	.00035	.00029	.00035	.00040	.00038	.00030	.00027	1.01058	.00375	.00032	.00053	.00031	.00024	.00032	.00023	26A
.01407	.02149	.00506	.00635	.00541	.00690	.00626	.00623	.00693	.00578	.11150	1.09425	.00596	.02127	.00583	.01040	.01642	.00722	26B
.02431	.01156	.12349	.18723	.05207	.07704	.03754	.03835	.09110	.07897	.02875	.05733	1.26727	.17960	.41361	.04204	.13962	.30295	27A
.01861	.00662	.01141	.00555	.00368	.00447	.00883	.00189	.00562	.00305	.00117	.00159	.00893	1.22105	.00695	.00304	.00195	.00311	27B
.00912	.00416	.20141	.30257	.08798	.11463	.01521	.03112	.04453	.04706	.00813	.01644	.01978	.00916	1.06491	.00753	.03178	.13322	28
.00475	.00005	.00038	.00050	.00019	.00024	.00015	.00013	.00025	.00021	.00010	.00015	.00231	.00125	.00110	1.11168	.00306	.00068	29A
.00153	.00123	.00535	.00852	.00771	.00324	.00069	.00105	.00687	.00352	.00136	.00168	.00387	.00496	.00687	.00161	1.04548	.00244	29B
.00133	.00049	.00156	.00213	.00086	.00117	.00876	.01222	.00206	.00413	.00069	.00136	.00648	.00210	.00476	.00071	.00349	1.02389	30
.01558	.00692	.01712	.01680	.01098	.01161	.02296	.01287	.02214	.02371	.01143	.01274	.03020	.02583	.02057	.00680	.01941	.02177	31
.02872	.00744	.02218	.02993	.01721	.04200	.02097	.04349	.03925	.02488	.01121	.02936	.02256	.02297	.05126	.02897	.06275	.01425	32
.00025	.00007	.00030	.00024	.00815	.01562	.00038	.00364	.00016	.00027	.00019	.00038	.00014	.00013	.00015	.00012	.00012	.00009	33+34
.01702	.00042	.00919	.00384	.00291	.00409	.00573	.00592	.00178	.00134	.00075	.00105	.00297	.00460	.00258	.00855	.00937	.00217	35
.00288	.00100	.00275	.00282	.00159	.00215	.01184	.00851	.00469	.00332	.00156	.00205	.00400	.00585	.00335	.00151	.00245	.01479	36
.01432	.00321	.00513	.00686	.00345	.00457	.01966	.06400	.00758	.01030	.00304	.00443	.01128	.00907	.00744	.00473	.01169	.01920	37
.01608	.00220	.00343	.00450	.00285	.00359	.01060	.02787	.00643	.00909	.00306	.00734	.00827	.00721	.00535	.00404	.00975	.02192	38
.03404	.00038	.00136	.00181	.00082	.00105	.00134	.00117	.00120	.00112	.00048	.00070	.00728	.00703	.00359	.00506	.01497	.04734	39
.00160	.00063	.00168	.00173	.00104	.00131	.01124	.00260	.00244	.00189	.00106	.00125	.00203	.00245	.00172	.00121	.00148	.00139	40
.00411	.00079	.00134	.00157	.00113	.00141	.02214	.01457	.00331	.00237	.00127	.00167	.00180	.00256	.00165	.00312	.00754	.00199	41
.00876	.01060	.00432	.00546	.00308	.00407	.03589	.04697	.01490	.01416	.00387	.00614	.01282	.00997	.00807	.00488	.01730	.00797	42
.00061	.00021	.00064	.00063	.00037	.00043	.00090	.00057	.00069	.00059	.00030	.00038	.00090	.00118	.00072	.00025	.00038	.00056	43
.00297	.00090	.00184	.00110	.00073	.00089	.00105	.00072	.00113	.00079	.00044	.00048	.00179	.00268	.00124	.00042	.00058	.00093	44+45
.00025	.00014	.00074	.00038	.00032	.00039	.00104	.00039	.00038	.00029	.00019	.00020	.00051	.00125	.00034	.00017	.00021	.00030	46
.00175	.00079	.00157	.00163	.00095	.00139	.00494	.00469	.00189	.00213	.00088	.00114	.00157	.00140	.00164	.00079	.00146	.00128	47
.00104	.00061	.00541	.01673	.00489	.00448	.00215	.00173	.00644	.00719	.00341	.00611	.00564	.00167	.00322	.00066	.00145	.00166	48
.00254	.00089	.00176	.00231	.00117	.00132	.00432	.00469	.00273	.00209	.00109	.00128	.00264	.00457	.00373	.00131	.00317	.00212	49
.00220	.00141	.00287	.00307	.00182	.00227	.00596	.00354	.00345	.00347	.00146	.00200	.00256	.00237	.00300	.00116	.00228	.00174	50
.00040	.00022	.00048	.00050	.00035	.00043	.00042	.00048	.00047	.00042	.00112	.00118	.00052	.00061	.00054	.00087	.00037	.00036	51
.00046	.00020	.00050	.00048	.00035	.00040	.00106	.00059	.00056	.00051	.00038	.00039	.00073	.00062	.00057	.00030	.00036	.00042	52
.00144	.00054	.00153	.00229	.00103	.00120	.00304	.00404	.00192	.00187	.00110	.00140	.00263	.00260	.00194	.00086	.00130	.00170	53
.00013	.00005	.00019	.00016	.00013	.00018	.00295	.00037	.00033	.00020	.00012	.00012	.00012	.00014	.00013	.00008	.00009	.00009	54
.00091	.00038	.00090	.00081	.00060	.00073	.00316	.00119	.00115	.00094	.00065	.00074	.00092	.00107	.00089	.00053	.00062	.00069	55
.00033	.00018	.00032	.00034	.00027	.00031	.00036	.00038	.00033	.00034	.00039	.00035	.00033	.00041	.00034	.00029	.00028	.00029	56
.00188	.00110	.00208	.00223	.00181	.00201	.00200	.00251	.00198	.00176	.00321	.00273	.00223	.00243	.00205	.00235	.00184	.00195	57
.00216	.00078	.00137	.00092	.00071	.00084	.00120	.00084	.00088	.00081	.00178	.00107	.00084	.00109	.00088	.00066	.00061	.00063	58
.00003	.00001	.00002	.00002	.00002	.00002	.00010	.00003	.00004	.00004	.00002	.00002	.00003	.00005	.00003	.00001	.00002	.00003	59A
.00278	.00150	.00228	.00186	.00178	.00169	.00682	.00266	.00355	.00334	.00224	.00277	.00170	.00268	.00184	.00135	.00150	.00154	59B
.00040	.00021	.00034	.00035	.00034	.00038	.00043	.00043	.00055	.00047	.00143	.00054	.00046	.00043	.00041	.00030	.00038	.00031	60
.00060	.00012	.00035	.00043	.00030	.00032	.00256	.00058	.00068	.00065	.00031	.00035	.00053	.00088	.00060	.00019	.00031	.00060	61
.00066	.00046	.00074	.00093	.00061	.00073	.00101	.00102	.00139	.00112	.00173	.00265	.00161	.00141	.00110	.00144	.00087	.00088	62
.00096	.00070	.00098	.00111	.00085	.00101	.00106	.00121	.00092	.00085	.00348	.00765	.00110	.00124	.00109	.00106	.00101	.00082	63
.00077	.00041	.00087	.00089	.00688	.00689	.00151	.00255	.00081	.00077	.00109	.00270	.00068	.00083	.00074	.00065	.00193	.00060	64
.01541	.00319	.01079	.01324	.00528	.00751	.01782	.01134	.01897	.02248	.00800	.01104	.01772	.03225	.02098	.00388	.00935	.02193	65A
.04465	.01286	.02679	.03734	.01785	.02461	.03403	.02652	.04004	.04873	.01800	.02659	.03329	.09354	.03384	.01095	.02629	.04405	65B
.00360	.00063	.00223	.00430	.00124	.00194	.00375	.00200	.00322	.00278	.00099	.00148	.00422	.00643	.00535	.00104	.00258	.00381	65C
.00696	.00377	.00564	.00571	.00592	.00572	.00607	.00691	.00965	.00821	.02680	.00961	.00710	.00711	.00668	.00530	.00658	.00511	65D
.00337	.00119	.00301	.00373	.00196	.00240	.00342	.00251	.00407	.00421	.00325	.00270	.00756	.00669	.00498	.00142	.00309	.00456	65E
.01066	.00517	.00947	.01037	.00810	.00937	.00987	.01036	.00933	.01099	.01159	.00973	.00981	.01354	.01043	.01008	.00912	.01047	66
.00036	.00032	.00017	.00030	.00025	.00021	.00024	.00028	.00019	.00014	.00027	.00020	.00020	.00024	.00021	.00015	.00030	.00015	67
.02600	.00950	.05521	.04539	.02934	.03216	.03105	.02706	.04822	.03833	.01558	.02331	.05091	.04950	.05002	.01627	.02095	.02859	68A
.01606	.00493	.02485	.03320	.01315	.01765	.01778	.01504	.03238	.02378	.00773	.01189	.05469	.07333	.05044	.01308	.01931	.02587	68B
.00478	.00184	.00714	.00628	.00341	.00660	.00526	.00438	.01806	.01008	.00354	.00522	.00658	.01264	.00713	.00233	.00380	.00366	68C
.11075	.03913	.09993	.08389	.08018	.10227	.10121	.09419	.08348	.08815	.04217	.06566	.06867	.09530	.08044	.05894	.07782	.06629	69A
.00408	.00188	.00343	.00325	.00249	.00254	.00470	.00331	.00463	.00467	.00275	.00343	.00332	.00523	.00328	.00181	.00232	.00290	69B
.01941	.01226	.01579	.01640	.01521	.01911	.02111	.02260	.01563	.01350	.01626	.01531	.01598	.03345	.01478	.01315	.01168	.01099	70A
.01460	.00701	.01089	.00920	.00716	.00833	.01208	.00756	.01046	.00967	.00682	.00794	.00822	.01024	.00862	.00435	.00637	.00573	70B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71A
.04816	.01943	.03265	.02854	.02518	.02734	.02555	.02543	.02266	.02407	.03539	.02879	.03893	.04142	.03006	.02130	.02255	.02531	71B
.00326	.00149	.00232	.00253	.00202	.00297	.00271	.00273	.00426	.00295	.00504	.00615	.00287	.00352	.00328	.00265	.00265	.00250	72A
.00293	.00130	.00896	.00722	.00619	.00806	.00260	.00298	.00375	.00298	.00301	.00245	.00212	.00251	.00395	.00267	.00219	.00170	72B
.00533	.00306	.00623	.00643	.00430	.00527	.00572	.00628	.00768	.00695	.02060	.00941	.00705	.00883	.00729	.00662	.00464	.00463	73A
.01445	.00773	.01973	.02368	.01444	.01642	.01843	.02398	.01543	.01507	.02960	.01721	.03496	.02566	.04463	.05838	.01815	.02141	73B
.02883	.01409	.03783	.03250	.02595	.03205	.03060	.04186	.02453	.02689	.06038	.02976	.03384	.05090	.03384	.04945	.02994	.02418	73C
.04306	.03910	.02011	.03663	.02970	.02561	.02898	.03382	.02323	.01666	.03218	.02414	.02460	.02882	.02568	.01795	.03686	.01820	73D
.00642	.00327	.00740	.00772	.00804	.00823	.00893	.00957	.00658	.00727	.00915	.01036	.00700	.00752	.00681	.00542	.00608	.00572	74
.01137	.00867	.01169	.01039	.01221	.00874	.01925	.01349	.01882	.01974	.01420	.01796	.00896	.01345	.01035	.00858	.00847	.00785	75
.00554	.00450	.00285	.00447	.00368	.00337	.00399	.00466	.00300	.00233	.00398	.00325	.00314	.00369	.00329	.00244	.00439	.00239	76
.00266	.00003	.00015	.00005	.00005	.00006	.00006	.00002	.00003	.00002	.00001	.00001	.00003	.00003	.00002	.00005	.00006	.00005	77A
.00171	.00118	.00238	.00225	.00200	.00697	.00500	.00354	.00256	.00194	.00341	.00284	.00195	.00273	.00290	.00640	.00263	.00174	77B
.00322	.00374	.00355	.00422	.00498	.00491	.00368	.00431	.00318	.00320	.01719	.00996	.00328	.00374	.00313	.00277	.00353	.00260	78
.00176	.00066	.00128	.00138	.00082	.00080	.00108	.00100	.00280	.00183	.00083	.00107	.00138	.00128	.00132	.00089	.00114	.00077	79
.02348	.00382	.00617	.01692	.00513	.01044	.00458	.00580	.00603	.00494	.00624	.00736	.01357	.01606	.01156	.02650	.01156	.01179	80
.00180	.00069	.00063	.00130	.00046	.00066	.00152	.00400	.01288	.00642	.00199	.00280	.00116	.00397	.00091	.00062	.00132	.00187	81
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	83
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
2.60871	**1.66836**	**2.50729**	**2.61444**	**2.30848**	**2.35527**	**2.36014**	**2.11025**	**2.19749**	**2.38690**	**1.86221**	**1.95455**	**2.13021**	**2.49770**	**2.29152**	**1.69594**	**1.94358**	**2.14382**	

Table 4.—Commodity-by-Commodity

[Total requirements, direct and indirect, per dollar

Commodity number	Each entry represents the output required, directly and indirectly, of the commodity named at the beginning of the row for each dollar of delivery to final demand of the commodity named at the head of the column	Petroleum refining and related products	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
	Commodity number	31	32	33+34	35	36	37	38	39	40	41	42
1	Livestock and livestock products	0.00078	0.00162	0.05008	0.00092	0.00109	0.00079	0.00091	0.00094	0.00089	0.00081	0.00088
2	Other agricultural products	.00082	.00439	.03194	.00118	.00146	.00087	.00122	.00106	.00092	.00096	.00102
3	Forestry and fishery products	.00050	.00102	.00195	.00265	.00090	.00087	.00099	.00089	.00104	.00070	.00104
4	Agricultural, forestry, and fishery services	.00122	.00099	.00555	.00094	.00077	.00078	.00077	.00075	.00073	.00065	.00070
5+6	Metallic ores mining	.00087	.00259	.00131	.00154	.00260	.04279	.10731	.03790	.01766	.01487	.01158
7	Coal mining	.00404	.00688	.00378	.00620	.01766	.03668	.01184	.01349	.01056	.01242	.00915
8	Crude petroleum and natural gas	.60401	.02311	.01296	.02602	.02302	.02542	.02538	.01967	.01445	.01421	.01452
9+10	Nonmetallic minerals mining	.00518	.00294	.00180	.01616	.09481	.00718	.00251	.00283	.00283	.00274	.00251
11	New construction	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12	Maintenance and repair construction	.03730	.01937	.01573	.02298	.02364	.04090	.02551	.02510	.02939	.02844	.02743
13	Ordnance and accessories	.00005	.00006	.00005	.00008	.00156	.00046	.00009	.00015	.00016	.00016	.00012
14	Food and kindred products	.00275	.00463	.15865	.00324	.00386	.00284	.00312	.00341	.00327	.00288	.00319
15	Tobacco products	.....	(*)	(*)	(*)	(*)	(*)	.....	(*)	.....	.....	(*)
16	Broad and narrow fabrics, yarn and thread mills	.00072	.01993	.05752	.00145	.00491	.00098	.00271	.00151	.00127	.00226	.00171
17	Miscellaneous textile goods and floor coverings	.00070	.01219	.02979	.00070	.00056	.00058	.00072	.00057	.00068	.00081	.00090
18	Apparel	.00021	.00048	.00241	.00041	.00042	.00042	.00034	.00037	.00030	.00038	.00048
19	Miscellaneous fabricated textile products	.00042	.00062	.00078	.00028	.00031	.00030	.00028	.00030	.00043	.00390	.00035
20+21	Lumber and wood products	.00485	.00912	.00913	.02988	.00885	.00898	.01036	.00870	.01104	.00702	.01092
22+23	Furniture and fixtures	.00010	.00008	.00006	.00011	.00008	.00060	.00010	.00020	.00022	.00039	.00017
24	Paper and allied products, except containers	.00648	.03358	.02014	.03510	.02563	.01047	.01003	.01947	.01156	.01120	.01401
25	Paperboard containers and boxes	.00326	.01676	.01598	.04972	.00583	.00391	.00576	.00652	.00895	.00727	.01022
26A	Newspapers and periodicals	.00022	.00034	.00033	.00034	.00057	.00034	.00031	.00041	.00034	.00031	.00033
26B	Other printing and publishing	.00452	.00596	.00677	.00606	.00507	.00610	.00546	.02700	.00515	.00546	.00551
27A	Industrial and other chemicals	.03220	.15131	.07570	.09466	.05344	.04817	.04592	.04028	.02674	.03040	.04287
27B	Agricultural fertilizers and chemicals	.00069	.00233	.00409	.00120	.00091	.00076	.00085	.00076	.00063	.00059	.00071
28	Plastics and synthetic materials	.00359	.20865	.04281	.00904	.01016	.00474	.02811	.01457	.00958	.00820	.01450
29A	Drugs	.00011	.00040	.00085	.00020	.00014	.00012	.00013	.00011	.00009	.00009	.00012
29B	Cleaning and toilet preparations	.00376	.00250	.00597	.00081	.00333	.00065	.00074	.00123	.00092	.00101	.00096
30	Paints and allied products	.00088	.00270	.00110	.00274	.00274	.00158	.00188	.01851	.00713	.00385	.00857
31	Petroleum refining and related products	1.08356	.01590	.01097	.01473	.02240	.01988	.02577	.01832	.01431	.01262	.01334
32	Rubber and miscellaneous plastics products	.00927	1.06401	.04715	.01907	.01090	.01036	.02589	.01453	.01905	.01242	.02759
33+34	Footwear, leather, and leather products	.00013	.00022	1.21914	.00027	.00012	.00016	.00013	.00014	.00014	.00018	.00013
35	Glass and glass products	.00301	.00715	.00342	1.08720	.00300	.00104	.00236	.00131	.00924	.00299	.00391
36	Stone and clay products	.00566	.00595	.00308	.02659	1.13271	.02381	.01119	.01062	.01140	.01128	.01048
37	Primary iron and steel manufacturing	.00774	.01439	.00694	.00777	.01622	1.18362	.03229	.27527	.24540	.30122	.16230
38	Primary nonferrous metals manufacturing	.00375	.00905	.00587	.00673	.00672	.04587	1.44117	.38678	.12140	.06276	.07740
39	Metal containers	.00181	.00150	.00504	.00090	.00078	.00068	.00072	1.01851	.00081	.00076	.00109
40	Heating, plumbing, and fabricated structural metal products	.00267	.00216	.00120	.00194	.00256	.00347	.00307	.00233	1.02505	.00303	.00304
41	Screw machine products and stampings	.00108	.00715	.00306	.00454	.00453	.00751	.00556	.00535	.03223	1.02003	.01961
42	Other fabricated metal products	.00890	.01609	.01049	.00549	.01031	.01931	.01924	.02542	.04394	.02790	1.05936
43	Engines and turbines	.00073	.00075	.00038	.00062	.00133	.00167	.00178	.00105	.00099	.00147	.00154
44+45	Farm, construction, and mining machinery	.00239	.00074	.00088	.00093	.00348	.00307	.00300	.00171	.00122	.00124	.00102
46	Materials handling machinery and equipment	.00027	.00032	.00025	.00039	.00146	.00103	.00114	.00065	.00052	.00046	.00040
47	Metalworking machinery and equipment	.00137	.00339	.00164	.00700	.00176	.00913	.01427	.00793	.01432	.03432	.01215
48	Special industry machinery and equipment	.00035	.00430	.00161	.00172	.00056	.00049	.00054	.00065	.00045	.00047	.00062
49	General industrial machinery and equipment	.00264	.00244	.00126	.00195	.00416	.01912	.01845	.00987	.01151	.00892	.00678
50	Miscellaneous machinery, except electrical	.00154	.00509	.00264	.00496	.00292	.00618	.00569	.00539	.00647	.01613	.00791
51	Computer and office equipment	.00040	.00052	.00038	.00042	.00049	.00068	.00053	.00053	.00049	.00061	.00065
52	Service industry machinery	.00057	.00052	.00039	.00048	.00049	.00077	.00061	.00058	.00165	.00093	.00063
53	Electrical industrial equipment and apparatus	.00235	.00208	.00108	.00398	.00259	.01121	.01198	.00637	.00794	.00692	.00911
54	Household appliances	.00016	.00013	.00021	.00051	.00013	.00018	.00015	.00014	.00016	.00016	.00014
55	Electric lighting and wiring equipment	.00117	.00219	.00072	.00114	.00172	.00145	.00122	.00102	.00117	.00149	.00115
56	Audio, video, and communication equipment	.00036	.00034	.00030	.00042	.00046	.00043	.00040	.00038	.00042	.00053	.00041
57	Electronic components and accessories	.00146	.00292	.00198	.00199	.00208	.00264	.00375	.00258	.00253	.00264	.00342
58	Miscellaneous electrical machinery and supplies	.00074	.00104	.00083	.00076	.00086	.00106	.00118	.00095	.00088	.00145	.00129
59A	Motor vehicles (passenger cars and trucks)	.00002	.00003	.00002	.00003	.00004	.00004	.00004	.00003	.00024	.00021	.00004
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00169	.00218	.00160	.00215	.00253	.00231	.00324	.00266	.00284	.00766	.00309
60	Aircraft and parts	.00029	.00039	.00042	.00048	.00050	.00045	.00048	.00061	.00076	.00047	.00084
61	Other transportation equipment	.00032	.00046	.00031	.00051	.00062	.00087	.00054	.00051	.00044	.00043	.00036
62	Scientific and controlling instruments	.00059	.00121	.00064	.00169	.00091	.00108	.00101	.00091	.00291	.00103	.00110
63	Ophthalmic and photographic equipment	.00077	.00101	.00098	.00092	.00100	.00112	.00103	.00124	.00103	.00105	.00104
64	Miscellaneous manufacturing	.00062	.00087	.01238	.00068	.00155	.00088	.00081	.00085	.00118	.00088	.00101
65A	Railroads and related services; passenger ground transportation	.00455	.01551	.00863	.01843	.02202	.02696	.01531	.01593	.01230	.01296	.01005
65B	Motor freight transportation and warehousing	.01226	.04702	.02961	.02928	.08602	.02959	.06119	.04643	.03510	.03073	.02851
65C	Water transportation	.00893	.00343	.00192	.00208	.00555	.00747	.00312	.00320	.00262	.00289	.00235
65D	Air transportation	.00502	.00605	.00743	.00826	.00542	.00607	.00758	.01029	.00758	.00563	.00782
65E	Pipelines, freight forwarders, and related services	.04465	.00386	.00262	.00327	.00522	.00369	.00451	.00388	.00296	.00264	.00270
66	Communications, except radio and TV	.00912	.01084	.01047	.01588	.01577	.01023	.01117	.01037	.01086	.01086	.01167
67	Radio and TV broadcasting	.00015	.00018	.00027	.00028	.00025	.00037	.00020	.00035	.00020	.00022	.00027
68A	Electric services (utilities)	.03039	.04120	.02422	.04434	.04486	.06561	.08500	.05364	.03502	.03830	.03601
68B	Gas production and distribution (utilities)	.02457	.02648	.01393	.06227	.03763	.05598	.04142	.03518	.02423	.02672	.02339
68C	Water and sanitary services	.00386	.00543	.00367	.00440	.00576	.01048	.00446	.00657	.00422	.00612	.00398
69A	Wholesale trade	.06543	.08549	.08812	.06976	.05476	.09984	.11455	.13234	.10220	.09536	.08911
69B	Retail trade	.00277	.00356	.00253	.00320	.00508	.00399	.00483	.00412	.00404	.00324	.00344
70A	Finance	.02401	.01524	.01792	.01426	.01886	.01617	.01981	.01775	.01601	.01808	.01751
70B	Insurance	.01099	.00834	.00739	.00671	.00823	.00855	.00986	.00931	.00791	.00772	.00731
71A	Owner-occupied dwellings	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
71B	Real estate and royalties	.13747	.02631	.02689	.02460	.02539	.02439	.02708	.02711	.02435	.02285	.02192
72A	Hotels and lodging places	.00236	.00250	.00774	.00274	.00287	.00246	.00332	.00361	.00676	.00277	.00273
72B	Personal and repair services (except auto)	.00188	.00355	.00379	.00233	.00304	.00311	.00412	.00321	.00259	.00328	.00297
73A	Computer and data processing services	.00635	.00857	.00518	.00613	.00827	.00780	.00710	.00700	.00579	.00903	.00757
73B	Legal, engineering, accounting, and related services	.01927	.02407	.01540	.01386	.01484	.01624	.01705	.01561	.01593	.03490	.01644
73C	Other business and professional services, except medical	.02603	.02836	.03113	.02174	.02626	.04107	.03444	.03263	.03224	.03156	.03109
73D	Advertising	.01771	.02136	.03246	.03390	.03001	.04521	.02437	.04245	.02437	.02719	.03238
74	Eating and drinking places	.00581	.00763	.00833	.00652	.00712	.00683	.00748	.00761	.00820	.00716	.00762
75	Automotive repair and services	.00782	.01205	.00880	.01276	.01405	.01106	.01914	.01538	.01448	.01166	.01304
76	Amusements	.00237	.00289	.00402	.00408	.00366	.00532	.00324	.00515	.00327	.00347	.00399
77A	Health services	.00001	.00002	.00045	.00001	.00001	.00001	.00001	.00001	.00001	.00001	.00001
77B	Educational and social services, and membership organizations	.00246	.00503	.00174	.00182	.00232	.00185	.00267	.00261	.00236	.00454	.00233
78	Federal Government enterprises	.00256	.00325	.00649	.00322	.00335	.00386	.00367	.00343	.00346	.00376	.00346
79	State and local government enterprises	.00048	.00106	.00179	.00096	.00079	.00127	.00126	.00140	.00101	.00101	.00121
80	Noncomparable imports	.01256	.01921	.00763	.01055	.00726	.00707	.02417	.01068	.00626	.00575	.00676
81	Scrap, used and secondhand goods	.00058	.00142	.00080	.00573	.00133	.04800	.06204	.02722	.01600	.01473	.01084
82	General government industry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
83	Rest of the world adjustment to final uses	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
84	Household industry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
85	Inventory valuation adjustment	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Total commodity output multiplier	**2.36099**	**2.15093**	**2.28587**	**1.95688**	**2.00218**	**2.20035**	**2.55670**	**2.60633**	**2.18228**	**2.15173**	**2.02586**

*Less than .000005.

Total Requirements, 1987 Benchmark—Continued

of delivery to final demand, at producers' prices]

Engines and turbines	Farm, construc-tion, and mining machinery	Materials handling machinery and equipment	Metal-working machinery and equipment	Special industry machinery and equipment	General industrial machinery and equipment	Miscel-laneous machinery, except electrical	Computer and office equipment	Service industry machinery	Electrical industrial equipment and apparatus	Household appliances	Electric lighting and wiring equipment	Audio, video, and communi-cation equipment	Electronic components and accessories	Miscel-laneous electrical machinery and supplies	Motor vehicles (passenger cars and trucks)	Truck and bus bodies, trailers, and motor vehicles parts	Aircraft and parts	Commodity number
43	44+45	46	47	48	49	50	51	52	53	54	55	56	57	58	59A	59B	60	
0.00068	0.00084	0.00089	0.00083	0.00085	0.00080	0.00076	0.00087	0.00084	0.00088	0.00101	0.00093	0.00076	0.00083	0.00112	0.00124	0.00088	0.00075	1
.00071	.00087	.00086	.00086	.00087	.00097	.00074	.00086	.00092	.00093	.00154	.00118	.00092	.00100	.00129	.00260	.00115	.00101	2
.00050	.00073	.00072	.00058	.00067	.00060	.00047	.00045	.00110	.00069	.00142	.00081	.00062	.00049	.00062	.00090	.00092	.00044	3
.00056	.00066	.00063	.00056	.00059	.00057	.00055	.00061	.00065	.00067	.00076	.00067	.00058	.00061	.00072	.00087	.00071	.00061	4
.01356	.00863	.00802	.00727	.00722	.00883	.00904	.00369	.01040	.00946	.00764	.00837	.00358	.00631	.01314	.00652	.01059	.00758	5+6
.00906	.00834	.00663	.00651	.00556	.00694	.00592	.00294	.00601	.00601	.00688	.00552	.00311	.00433	.00478	.00628	.00717	.00399	7
.01124	.01155	.01078	.01071	.01035	.01044	.00864	.00763	.01062	.01361	.01291	.01190	.00743	.00965	.01264	.01432	.01318	.00851	8
.00213	.00193	.00174	.00240	.00168	.00185	.00187	.00081	.00269	.00215	.00223	.00195	.00086	.00128	.00139	.00203	.00210	.00114	9+10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11
.02236	.02348	.02461	.01835	.01998	.01980	.02089	.02003	.01973	.02129	.01941	.01885	.01519	.02156	.01890	.02169	.02253	.01786	12
.00014	.00013	.00013	.00011	.00010	.00011	.00012	.00006	.00010	.00009	.00011	.00007	.00015	.00006	.00019	.00011	.00011	.00217	13
.00246	.00306	.00332	.00310	.00317	.00288	.00282	.00324	.00303	.00322	.00347	.00335	.00273	.00302	.00414	.00385	.00309	.00262	14
.....	.....	.....	.....	.....	.....	.....	.....	(*)	(*)	(*)	(*)	(*)	.....	(*)	(*)	(*)	.....	15
.00120	.00144	.00125	.00141	.00118	.00300	.00110	.00130	.00161	.00156	.00541	.00244	.00232	.00186	.00228	.01496	.00322	.00416	16
.00073	.00095	.00098	.00059	.00086	.00661	.00138	.00071	.00097	.00090	.00133	.00074	.00119	.00099	.00159	.00703	.00297	.00230	17
.00043	.00032	.00030	.00033	.00027	.00038	.00025	.00028	.00032	.00034	.00039	.00031	.00055	.00052	.00044	.00079	.00037	.00036	18
.00037	.00036	.00037	.00044	.00026	.00029	.00023	.00033	.00034	.00039	.00043	.00041	.00030	.00029	.00040	.02807	.00258	.00282	19
.00487	.00743	.00729	.00560	.00660	.00592	.00433	.00395	.01184	.00677	.01525	.00810	.00605	.00437	.00527	.00879	.00953	.00416	20+21
.00019	.00017	.00025	.00012	.00013	.00012	.00011	.00032	.00015	.00012	.00246	.00011	.01085	.00034	.00026	.01287	.00092	.00065	22+23
.00929	.01101	.01076	.01009	.01012	.01112	.00872	.01108	.01322	.01906	.02451	.01718	.01394	.00969	.01949	.01531	.01226	.00841	24
.00507	.00600	.00432	.00661	.00517	.00663	.00532	.00529	.01006	.00894	.02483	.01841	.00688	.00528	.01085	.00741	.00601	.00241	25
.00028	.00034	.00038	.00033	.00033	.00032	.00032	.00033	.00032	.00039	.00036	.00036	.00032	.00030	.00045	.00039	.00035	.00032	26A
.00488	.00579	.01015	.00490	.00520	.00499	.00480	.00578	.00527	.00624	.00615	.00554	.00730	.00478	.00684	.00696	.00594	.00549	26B
.01796	.01996	.01764	.02435	.02857	.01719	.01380	.01496	.02429	.02098	.04137	.03512	.02376	.04000	.04814	.03990	.02840	.01362	27A
.00044	.00052	.00048	.00050	.00054	.00047	.00042	.00048	.00057	.00058	.00088	.00074	.00053	.00065	.00082	.00089	.00064	.00051	27B
.00777	.01011	.00771	.00927	.00814	.01079	.00724	.01163	.01563	.01429	.04108	.03423	.01706	.01919	.02224	.02926	.02092	.00920	28
.00006	.00007	.00007	.00007	.00008	.00007	.00006	.00006	.00009	.00007	.00013	.00010	.00008	.00011	.00013	.00012	.00009	.00007	29A
.00047	.00051	.00049	.00050	.00048	.00051	.00050	.00047	.00056	.00061	.00083	.00070	.00057	.00057	.00073	.00090	.00078	.00050	29B
.00172	.00411	.00259	.00218	.00123	.00124	.00114	.00127	.00446	.00399	.00888	.00295	.00162	.00116	.00135	.01522	.00549	.00284	30
.01092	.01135	.01160	.01134	.01062	.01074	.00928	.00938	.01089	.01642	.01158	.01149	.00748	.00902	.01279	.01474	.01367	.00993	31
.02138	.03727	.02414	.01478	.02487	.02254	.01155	.03914	.03128	.03108	.05486	.03216	.05516	.06346	.05920	.09034	.04854	.01935	32
.00012	.00024	.00012	.00015	.00011	.00011	.00011	.00015	.00013	.00013	.00018	.00013	.00021	.00013	.00014	.00067	.00019	.00015	33+34
.00114	.00133	.00130	.00115	.00433	.00105	.00112	.00215	.00251	.00167	.01329	.04070	.00389	.01030	.00290	.01323	.00373	.00149	35
.01103	.00881	.00821	.01678	.00833	.01028	.01269	.00319	.01050	.01498	.01048	.00641	.00311	.00458	.00471	.00941	.01182	.00660	36
.19245	.17180	.13879	.10854	.09719	.13169	.10001	.02054	.09643	.07801	.11043	.06985	.01786	.01977	.03236	.07840	.11338	.04013	37
.09502	.03691	.04376	.04591	.05097	.05724	.07609	.03849	.09475	.09038	.04848	.07703	.03680	.07060	.09686	.04540	.08729	.08291	38
.00046	.00062	.00054	.00050	.00052	.00044	.00038	.00047	.00068	.00062	.00100	.00066	.00048	.00054	.00069	.00133	.00074	.00043	39
.01667	.04258	.03133	.01557	.01827	.00974	.01378	.00603	.01191	.00720	.00279	.00194	.00438	.00596	.00660	.00912	.02221	.00496	40
.02383	.02098	.02457	.01227	.01108	.01275	.01286	.00823	.02783	.02135	.02115	.03438	.01265	.01241	.01490	.09226	.04404	.01697	41
.02532	.02685	.04679	.01521	.02101	.01751	.01912	.01671	.02699	.01818	.04617	.02291	.02379	.04423	.03248	.03144	.03257	.02047	42
1.09475	.05206	.01167	.00180	.00484	.00492	.00194	.00050	.00265	.00665	.00127	.00072	.00038	.00048	.00080	.02065	.00323	.00058	43
.00148	1.03745	.00133	.00080	.00071	.00091	.00098	.00041	.00080	.00076	.00080	.00078	.00040	.00055	.00074	.00075	.00087	.00055	44+45
.00041	.00134	1.05200	.00033	.00088	.00046	.00037	.00023	.00038	.00037	.00032	.00029	.00020	.00025	.00031	.00049	.00050	.00023	46
.01163	.00924	.00985	1.04202	.01284	.01010	.01775	.00261	.00979	.00604	.00601	.00647	.00316	.00429	.00531	.01535	.00862	.01984	47
.00036	.00047	.00065	.00055	1.02244	.00069	.00038	.00075	.00053	.00058	.00084	.00065	.00111	.00334	.00099	.00096	.00061	.00044	48
.02212	.03456	.03883	.01025	.02878	1.07202	.01551	.00234	.02419	.00811	.01117	.00337	.00281	.00257	.00557	.01201	.02711	.00529	49
.04019	.03260	.02923	.03200	.03010	.02108	1.05744	.00278	.01541	.00914	.00493	.00521	.00339	.00438	.00653	.02505	.04613	.01406	50
.00073	.00059	.00064	.00060	.00123	.00137	.00085	1.24849	.00074	.00160	.00092	.00068	.00844	.01178	.00560	.00098	.00068	.00201	51
.00061	.00058	.00060	.00048	.00064	.00068	.00055	.00042	1.06088	.00050	.02230	.00060	.00049	.00042	.00053	.02377	.00554	.00037	52
.03961	.01166	.04656	.03016	.06560	.04698	.00885	.03321	.07415	1.04039	.04424	.02708	.00941	.00700	.01377	.00860	.00751	.00531	53
.00012	.00013	.00013	.00010	.00015	.00011	.00010	.00010	.00015	.00012	1.00512	.00013	.00013	.00011	.00011	.00015	.00016	.00009	54
.00128	.00123	.00115	.00114	.00107	.00098	.00183	.00585	.00781	.00392	.01360	1.02786	.00799	.00279	.00816	.00565	.00235	.00096	55
.00055	.00040	.00046	.00037	.00043	.00042	.00040	.02082	.00040	.00063	.00104	.00054	1.03572	.00206	.00183	.01102	.00129	.01727	56
.00513	.00309	.00472	.00349	.00762	.00619	.00555	.10913	.00653	.03266	.02192	.01144	.22582	1.10781	.07267	.01741	.01111	.03101	57
.01324	.00646	.00809	.00134	.00154	.00163	.00154	.00230	.00091	.00214	.00108	.00238	.00550	.00207	1.04470	.03512	.01726	.00200	58
.00007	.00040	.00018	.00004	.00002	.00003	.00003	.00001	.00003	.00003	.00003	.00002	.00002	.00002	.00003	1.01267	.00299	.00002	59A
.00888	.00584	.00271	.00291	.00189	.00257	.00311	.00175	.00215	.00222	.00183	.00234	.00181	.00136	.00429	.33245	1.11512	.00142	59B
.00953	.00112	.00135	.00071	.00150	.00081	.00205	.00129	.00091	.00333	.00079	.00083	.00140	.00074	.00252	.00151	.00070	1.23685	60
.00054	.00052	.00030	.00026	.00026	.00026	.00026	.00017	.00031	.00053	.00033	.00029	.00018	.00021	.00027	.00064	.00056	.00021	61
.00125	.00087	.00119	.00078	.00115	.00148	.00078	.00162	.01909	.00266	.02086	.00100	.00315	.00502	.00207	.01087	.00190	.03461	62
.00096	.00112	.00117	.00102	.00108	.00101	.00109	.00111	.00096	.00117	.00105	.00109	.00108	.00099	.00144	.00122	.00112	.00110	63
.00073	.00110	.00119	.00088	.00074	.00076	.00067	.00113	.00239	.00138	.00756	.00280	.00102	.00079	.00091	.00153	.00094	.00081	64
.00803	.00833	.00709	.00687	.00654	.00684	.00609	.00383	.00739	.00824	.00925	.00784	.00422	.00536	.00714	.01220	.00970	.00437	65A
.02374	.02684	.02224	.01972	.01719	.01833	.01669	.01148	.02230	.02103	.02775	.02274	.01406	.01651	.02274	.04145	.03318	.01376	65B
.00211	.00234	.00175	.00160	.00143	.00172	.00142	.00091	.00178	.00156	.00186	.00145	.00090	.00118	.00156	.00209	.00207	.00108	65C
.00762	.00955	.00811	.00800	.01040	.00991	.00711	.02154	.01085	.01468	.01070	.01328	.01111	.01114	.01677	.01264	.00872	.02183	65D
.00226	.00256	.00224	.00213	.00218	.00218	.00178	.00256	.00243	.00284	.00273	.00269	.00187	.00213	.00299	.00354	.00286	.00264	65E
.01093	.01127	.01257	.01077	.01248	.01186	.01035	.01217	.01165	.01398	.01089	.01178	.01169	.01112	.01270	.01290	.01387	.01286	66
.00022	.00032	.00030	.00023	.00025	.00022	.00022	.00012	.00026	.00038	.00031	.00024	.00026	.00017	.00034	.00037	.00036	.00032	67
.03257	.02920	.02543	.02787	.02513	.02959	.02744	.01930	.02743	.02983	.02873	.02823	.02006	.03050	.02959	.02800	.03188	.02301	68A
.02005	.01982	.01622	.01501	.01423	.01694	.01317	.00776	.01568	.01619	.02037	.01753	.00924	.01233	.01472	.01908	.01944	.01085	68B
.00382	.00377	.00389	.00281	.00299	.00303	.00223	.00240	.00401	.00305	.00397	.00325	.00206	.00230	.00403	.00399	.00349	.00226	68C
.09529	.10658	.10372	.06677	.08968	.08448	.05775	.11785	.11005	.09476	.11509	.09897	.08231	.07558	.10065	.14639	.10303	.04962	69A
.00278	.00299	.00297	.00298	.00259	.00259	.00256	.00247	.00257	.00286	.00266	.00272	.00191	.00227	.00313	.00485	.00474	.00222	69B
.01506	.01487	.01564	.01442	.01719	.01490	.01786	.01942	.01370	.02284	.01909	.02069	.01502	.02028	.02347	.01884	.01524	.02379	70A
.00692	.00764	.00718	.00689	.00646	.00647	.00574	.00611	.00636	.00689	.00685	.00653	.00581	.00594	.00781	.01047	.00877	.00600	70B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71A
.01899	.01994	.02201	.02262	.02318	.02046	.02349	.02683	.01996	.02262	.02069	.02230	.02367	.02314	.02561	.02354	.02181	.02176	71B
.00281	.00332	.00333	.00364	.00409	.00379	.00279	.00975	.00418	.00778	.00459	.00708	.00342	.00536	.00854	.00374	.00297	.01265	72A
.00349	.00329	.00320	.00269	.00269	.00303	.00252	.00238	.00258	.00311	.00364	.00296	.00601	.00244	.00316	.00400	.00377	.00243	72B
.00900	.00858	.00716	.00651	.00625	.00740	.00776	.00603	.00607	.00732	.00677	.00687	.00726	.00679	.00772	.00740	.00684	.00667	73A
.01411	.01775	.01755	.01613	.01693	.01585	.01669	.01902	.01608	.01659	.01528	.01753	.01648	.01713	.02120	.01821	.01588	.01758	73B
.02809	.02934	.03040	.02661	.02814	.02821	.04117	.02913	.02636	.02959	.02942	.02864	.02942	.02936	.03285	.03237	.03035	.03156	73C
.02637	.03885	.03693	.02831	.03057	.02695	.02715	.01500	.03172	.04607	.03696	.02912	.03087	.02040	.04106	.04525	.04334	.03904	73D
.00655	.00795	.00844	.00811	.00806	.00773	.00806	.00934	.00763	.00830	.00776	.00856	.00710	.00764	.01085	.00896	.00789	.00653	74
.01161	.00972	.00990	.01447	.01083	.01053	.01170	.01154	.00943	.01221	.00976	.01161	.00765	.00787	.01534	.02460	.04232	.00730	75
.00347	.00474	.00474	.00349	.00380	.00362	.00341	.00239	.00398	.00547	.00455	.00376	.00401	.00328	.00634	.00581	.00526	.00490	76
.00001	.00001	.00001	.00001	.00001	.00001	.00001	.00001	.00001	.00001	.00001	.00001	.00001	.00001	.00001	.00001	.00001	.00001	77A
.00183	.00174	.00177	.00212	.00171	.00209	.00225	.00215	.00238	.00194	.00334	.00196	.00308	.00407	.00258	.00461	.00306	.00311	77B
.00321	.00397	.00399	.00291	.00384	.00349	.00284	.00249	.00261	.00354	.00559	.00341	.00396	.00275	.00355	.00483	.00514	.00391	78
.00099	.00087	.00063	.00080	.00063	.00075	.00064	.00068	.00080	.00088	.00112	.00089	.00070	.00087	.00109	.00143	.00136	.00071	79
.00804	.01123	.00667	.00745	.00914	.00744	.00658	.02829	.00632	.01178	.00945	.00750	.01134	.01009	.01071	.01341	.01963	.00672	80
.01187	.00904	.00756	.00717	.00616	.00830	.00762	.00262	.00803	.00718	.00674	.00658	.00258	.00409	.01001	.00623	.01095	.00522	81
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2.15344	**2.10733**	**2.06216**	**1.83193**	**1.91775**	**1.93167**	**1.81560**	**2.07653**	**2.07545**	**1.97267**	**2.14598**	**1.97194**	**1.94671**	**1.88130**	**2.07118**	**2.69564**	**2.27529**	**2.02757**	

Table 4.—Commodity-by-Commodity

[Total requirements, direct and indirect, per dollar

Commodity number	Each entry represents the output required, directly and indirectly, of the commodity named at the beginning of the row for each dollar of delivery to final demand of the commodity named at the head of the column	Other transportation equipment	Scientific and controlling instruments	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	Communications, except radio and TV	Radio and TV broadcasting
	Commodity number	61	62	63	64	65A	65B	65C	65D	65E	66	67
1	Livestock and livestock products	0.00089	0.00112	0.00094	0.00238	0.00090	0.00129	0.00193	0.00381	0.00196	0.00063	0.00291
2	Other agricultural products	.00151	.00161	.00118	.00427	.00091	.00140	.00192	.00275	.00170	.00061	.00246
3	Forestry and fishery products	.00291	.00069	.00102	.00312	.00106	.00033	.00065	.00071	.00072	.00055	.00064
4	Agricultural, forestry, and fishery services	.00106	.00066	.00069	.00138	.00128	.00097	.00108	.00114	.00103	.00080	.00435
5+6	Metallic ores mining	.00669	.00445	.00223	.00770	.00131	.00044	.00218	.00071	.00045	.00065	.00054
7	Coal mining	.00541	.00363	.00437	.00443	.00291	.00224	.00532	.00214	.00564	.00120	.00160
8	Crude petroleum and natural gas	.01025	.00785	.01010	.01207	.04734	.03979	.02668	.07337	.01309	.00376	.00498
9+10	Nonmetallic minerals mining	.00186	.00104	.00140	.00226	.00237	.00079	.00097	.00110	.00070	.00098	.00066
11	New construction	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12	Maintenance and repair construction	.03339	.01543	.01475	.01818	.12308	.01601	.02263	.02503	.03320	.05944	.02807
13	Ordnance and accessories	.00011	.00051	.00005	.00007	.00008	.00005	.00014	.00016	.00020	.00004	.00007
14	Food and kindred products	.00281	.00396	.00341	.00783	.00320	.00342	.00713	.01540	.00756	.00222	.00970
15	Tobacco products	.....	(*)	(*)	.00001	.....	.....	.....	.....	.....	.....	.....
16	Broad and narrow fabrics, yarn and thread mills	.00674	.00773	.00273	.01940	.00104	.00076	.00461	.00101	.00244	.00073	.00161
17	Miscellaneous textile goods and floor coverings	.00710	.00543	.00204	.00306	.00093	.00046	.00396	.00046	.00076	.00040	.00045
18	Apparel	.00048	.00068	.00024	.00113	.00059	.00028	.00562	.00044	.00026	.00084	.00114
19	Miscellaneous fabricated textile products	.00891	.00028	.00024	.00454	.00057	.00052	.00439	.00084	.00555	.00019	.00080
20+21	Lumber and wood products	.03404	.00677	.00950	.03490	.01156	.00258	.00412	.00358	.00560	.00560	.00491
22+23	Furniture and fixtures	.00308	.00083	.00009	.00041	.00036	.00006	.00013	.00010	.00010	.00033	.00016
24	Paper and allied products, except containers	.00889	.01526	.08644	.03277	.00640	.00583	.00855	.00885	.01020	.00588	.00865
25	Paperboard containers and boxes	.00466	.00708	.01194	.01717	.00205	.00201	.00275	.00193	.00220	.00132	.00138
26A	Newspapers and periodicals	.00027	.00036	.00040	.00056	.00035	.00042	.00045	.00048	.00062	.00030	.00060
26B	Other printing and publishing	.00454	.00618	.00583	.00950	.00825	.00623	.00931	.00811	.01210	.00884	.00904
27A	Industrial and other chemicals	.02419	.02242	.05084	.04287	.01127	.00771	.01096	.00850	.00593	.00605	.00813
27B	Agricultural fertilizers and chemicals	.00075	.00060	.00099	.00127	.00141	.00125	.00185	.00066	.00053	.00034	.00124
28	Plastics and synthetic materials	.01974	.01793	.01853	.03935	.00417	.00394	.00571	.00232	.00284	.00269	.00285
29A	Drugs	.00008	.00047	.00014	.00015	.00006	.00005	.00009	.00010	.00007	.00048	.00009
29B	Cleaning and toilet preparations	.00058	.00061	.00095	.00097	.00084	.00054	.00078	.00087	.00041	.00028	.00069
30	Paints and allied products	.00827	.00147	.00096	.00518	.00178	.00088	.00284	.00066	.00060	.00162	.00054
31	Petroleum refining and related products	.01116	.00828	.00928	.01259	.08132	.06901	.04374	.12895	.01235	.00501	.00619
32	Rubber and miscellaneous plastics products	.02535	.02968	.03386	.03935	.01227	.01589	.01064	.00587	.00705	.00824	.00806
33+34	Footwear, leather, and leather products	.00027	.00020	.00012	.00432	.00014	.00020	.00028	.00024	.00047	.00015	.00071
35	Glass and glass products	.01279	.00461	.00719	.00235	.00232	.00105	.00118	.00107	.00105	.00084	.00100
36	Stone and clay products	.00874	.00442	.00295	.00817	.00866	.00171	.00320	.00251	.00251	.00393	.00215
37	Primary iron and steel manufacturing	.08437	.03259	.01033	.02926	.01497	.00430	.01474	.00509	.00418	.00549	.00320
38	Primary nonferrous metals manufacturing	.04891	.03833	.01938	.08597	.00924	.00292	.02123	.00617	.00333	.00535	.00467
39	Metal containers	.00081	.00072	.00059	.00096	.00046	.00036	.00064	.00079	.00036	.00023	.00045
40	Heating, plumbing, and fabricated structural metal products	.04123	.00707	.00158	.00178	.00801	.00121	.00269	.00174	.00207	.00346	.00183
41	Screw machine products and stampings	.01667	.01577	.00637	.00688	.00302	.00229	.00251	.00229	.00130	.00391	.00143
42	Other fabricated metal products	.03116	.02420	.01972	.01529	.01256	.00684	.02826	.00455	.00417	.00487	.00370
43	Engines and turbines	.05144	.00047	.00036	.00062	.00401	.00091	.00975	.00041	.00166	.00225	.00027
44+45	Farm, construction, and mining machinery	.00585	.00046	.00047	.00066	.00083	.00049	.00083	.00064	.00052	.00031	.00040
46	Materials handling machinery and equipment	.00042	.00020	.00019	.00029	.00045	.00016	.00028	.00017	.00018	.00021	.00018
47	Metalworking machinery and equipment	.00603	.00435	.00260	.00445	.00299	.00074	.01012	.00170	.00062	.00062	.00072
48	Special industry machinery and equipment	.00055	.00082	.00119	.00097	.00027	.00022	.00045	.00028	.00029	.00024	.00037
49	General industrial machinery and equipment	.02712	.00391	.00232	.00341	.00927	.00198	.03070	.00156	.00641	.00323	.00078
50	Miscellaneous machinery, except electrical	.00916	.00451	.00355	.00588	.00557	.00174	.00993	.00218	.00175	.00084	.00093
51	Computer and office equipment	.00052	.01223	.00209	.00080	.00066	.00057	.00124	.00096	.00159	.00151	.00203
52	Service industry machinery	.00500	.00039	.00034	.00136	.00204	.00080	.00061	.00049	.00056	.00081	.00082
53	Electrical industrial equipment and apparatus	.02237	.01791	.00534	.00426	.01725	.00202	.00425	.00138	.00254	.00338	.00184
54	Household appliances	.00649	.00010	.00009	.00017	.00050	.00009	.00085	.00019	.00016	.00022	.00028
55	Electric lighting and wiring equipment	.00529	.00344	.00250	.00136	.00314	.00137	.00260	.00090	.00103	.00182	.00124
56	Audio, video, and communication equipment	.00130	.00225	.00046	.00051	.00069	.00059	.00053	.00143	.00104	.01800	.00237
57	Electronic components and accessories	.00453	.10494	.09121	.01688	.00288	.00192	.00418	.00525	.00358	.02023	.03382
58	Miscellaneous electrical machinery and supplies	.00826	.00350	.00221	.00110	.00298	.00169	.00301	.00132	.00287	.00234	.00262
59A	Motor vehicles (passenger cars and trucks)	.02575	.00002	.00002	.00003	.00057	.00023	.00045	.00001	.00003	.00001	.00003
59B	Truck and bus bodies, trailers, and motor vehicles parts	.02535	.00197	.00156	.00264	.01018	.00920	.00200	.00157	.00237	.00134	.00133
60	Aircraft and parts	.00320	.00397	.00060	.00054	.00047	.00036	.00071	.05540	.00136	.00027	.00068
61	Other transportation equipment	1.02583	.00020	.00024	.00054	.02146	.00029	.01750	.00028	.00063	.00023	.00081
62	Scientific and controlling instruments	.00429	1.02741	.01057	.00093	.00078	.00032	.00212	.00228	.00055	.00064	.00139
63	Ophthalmic and photographic equipment	.00085	.00115	1.01443	.00148	.00092	.00105	.00158	.00119	.00162	.00109	.00866
64	Miscellaneous manufacturing	.00098	.00113	.00081	1.03943	.00106	.00083	.00318	.00131	.00164	.00124	.00225
65A	Railroads and related services; passenger ground transportation	.00792	.00482	.00624	.00822	1.05477	.00501	.00452	.00353	.00625	.00211	.00363
65B	Motor freight transportation and warehousing	.02365	.01422	.01705	.03228	.01243	1.19695	.01315	.00958	.01042	.00604	.00870
65C	Water transportation	.00170	.00106	.00176	.00205	.00246	.00201	1.11489	.00385	.00197	.00047	.00073
65D	Air transportation	.00747	.00866	.00975	.00708	.00608	.00625	.01001	1.06213	.02490	.00416	.01241
65E	Pipelines, freight forwarders, and related services	.00224	.00176	.00214	.00265	.02173	.04166	.07166	.07503	1.03990	.00086	.00162
66	Communications, except radio and TV	.01180	.01224	.00860	.00977	.00779	.02413	.01683	.02435	.03066	1.26328	.01817
67	Radio and TV broadcasting	.00019	.00029	.00028	.00050	.00008	.00009	.00019	.00029	.00029	.00012	1.01646
68A	Electric services (utilities)	.02463	.02137	.01905	.02590	.02036	.01808	.03879	.01655	.04880	.00833	.01230
68B	Gas production and distribution (utilities)	.01325	.00991	.01135	.01356	.00853	.00537	.00773	.00735	.00773	.00320	.00518
68C	Water and sanitary services	.00335	.00272	.00415	.00584	.00229	.00173	.00643	.00231	.00705	.00969	.00274
69A	Wholesale trade	.09799	.06574	.06309	.08627	.04993	.03319	.04916	.05119	.01963	.01928	.02157
69B	Retail trade	.00354	.00225	.00225	.00340	.01081	.03577	.00240	.00305	.00354	.00339	.00245
70A	Finance	.01256	.01493	.02084	.01930	.01952	.01715	.08471	.04819	.05656	.02284	.02459
70B	Insurance	.00646	.00622	.00743	.00794	.01264	.01986	.00869	.01452	.03438	.00382	.00550
71A	Owner-occupied dwellings	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
71B	Real estate and royalties	.03076	.02358	.01918	.02573	.03026	.04682	.06407	.04753	.05745	.03249	.09613
72A	Hotels and lodging places	.00272	.00314	.00398	.00301	.00343	.00316	.00307	.00299	.00551	.00178	.00429
72B	Personal and repair services (except auto)	.00252	.00264	.00200	.00309	.00230	.00275	.00285	.00734	.00356	.00410	.01568
73A	Computer and data processing services	.00519	.00575	.00577	.00573	.01377	.00873	.02514	.01854	.02789	.01778	.01275
73B	Legal, engineering, accounting, and related services	.01507	.01929	.01564	.02230	.01915	.01459	.01674	.01769	.02856	.01439	.03584
73C	Other business and professional services, except medical	.02769	.02856	.02977	.03114	.03268	.02718	.09212	.03307	.02938	.01889	.05279
73D	Advertising	.02308	.03497	.03445	.06078	.00969	.01135	.02350	.03512	.03470	.01414	.02365
74	Eating and drinking places	.00645	.00769	.00707	.01203	.00834	.01010	.00941	.03649	.02329	.00636	.01499
75	Automotive repair and services	.01273	.01147	.00982	.01538	.01960	.05007	.00873	.01001	.01458	.00746	.00848
76	Amusements	.00362	.00459	.00489	.00737	.00160	.00185	.00315	.00512	.00473	.00857	.40952
77A	Health services	.00001	.00001	.00001	.00002	.00001	.00001	.00002	.00004	.00002	.00001	.00003
77B	Educational and social services, and membership organizations	.00184	.00325	.00706	.00559	.00430	.00176	.00495	.00199	.00571	.00264	.00789
78	Federal Government enterprises	.00280	.00392	.00301	.00531	.00326	.00340	.00456	.00308	.00518	.00350	.00493
79	State and local government enterprises	.00073	.00074	.00076	.00085	.00178	.00178	.00044	.00069	.00062	.00048	.00169
80	Noncomparable imports	.00575	.00866	.01986	.03718	.00753	.00352	.13780	.06192	.00722	.03131	.00537
81	Scrap, used and secondhand goods	.00572	.00318	.00220	.00518	.00115	.00046	.00166	.00059	.00046	.00054	.00045
82	General government industry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
83	Rest of the world adjustment to final uses	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
84	Household industry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
85	Inventory valuation adjustment	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Total commodity output multiplier	**2.08461**	**1.82380**	**1.82594**	**2.03758**	**1.86626**	**1.82834**	**2.20009**	**2.00944**	**1.72924**	**1.72108**	**2.02597**

*Less than .000005.

Total Requirements, 1987 Benchmark—Continued

of delivery to final demand, at producers' prices]

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	Personal and repair services (exc. auto)	Computer and data processing services	Legal, engineering, accounting, and related services	Other business and professional services, except medical	Advertising	Eating and drinking places	Automotive repair and services	Amusements	Commodity number
68A	68B	68C	69A	69B	70A	70B	71A	71B	72A	72B	73A	73B	73C	73D	74	75	76	
0.00045	0.00042	0.00125	0.00149	0.00206	0.00151	0.00219	0.00087	0.00147	0.00212	0.00202	0.00111	0.00110	0.00177	0.00173	0.06932	0.00119	0.00593	1
.00050	.00046	.00151	.00121	.00154	.00121	.00165	.00125	.00161	.00277	.00237	.00098	.00091	.00135	.00164	.04880	.00111	.00513	2
.00065	.00039	.00221	.00083	.00055	.00046	.00049	.00040	.00068	.00075	.00068	.00046	.00037	.00048	.00134	.01039	.00053	.00108	3
.00095	.00109	.00347	.00108	.00116	.00089	.00087	.00873	.00650	.00651	.00128	.00073	.00093	.00102	.00176	.00933	.00095	.01094	4
.00076	.00049	.00184	.00037	.00031	.00032	.00023	.00023	.00038	.00059	.00101	.00076	.00035	.00072	.00084	.00067	.00224	.00052	5+6
.11153	.00225	.00788	.00178	.00340	.00158	.00077	.00031	.00093	.00508	.00364	.00169	.00116	.00176	.00272	.00390	.00329	.00303	7
.04220	.29405	.03692	.00924	.00759	.00573	.00333	.00159	.00403	.01495	.01124	.00584	.00578	.00773	.00831	.00773	.02437	.00720	8
.00162	.00101	.00412	.00051	.00059	.00047	.00035	.00093	.00121	.00185	.00119	.00051	.00041	.00072	.00110	.00121	.00109	.00089	9+10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11
.07791	.04552	.20297	.01537	.02564	.01856	.01378	.05323	.07124	.05314	.02522	.01379	.01318	.01680	.01843	.02227	.02198	.03171	12
.00004	.00003	.00010	.00011	.00004	.00009	.00005	.00002	.00005	.00012	.00008	.00006	.00017	.00109	.00006	.00008	.00008	.00010	13
.00149	.00135	.00384	.00567	.00813	.00578	.00867	.00086	.00397	.00603	.00685	.00422	.00408	.00618	.00615	.28260	.00443	.01827	14
.....	.....	(*)	(*)	(*)	(*)	.....	.....	.....	(*)	(*)	(*)	.....	(*)	(*)	(*)	.....	(*)	15
.00061	.00031	.00147	.00093	.00067	.00082	.00053	.00020	.00049	.00836	.00997	.00108	.00075	.00098	.00262	.00110	.00162	.00372	16
.00051	.00026	.00125	.00050	.00037	.00034	.00023	.00027	.00041	.00193	.00170	.00056	.00032	.00048	.00100	.00078	.00081	.00080	17
.00023	.00015	.00074	.00040	.00024	.00018	.00014	.00004	.00014	.00338	.00677	.00018	.00026	.00066	.00050	.00018	.00189	.00296	18
.00019	.00015	.00052	.00067	.00031	.00083	.00039	.00010	.00024	.01376	.00619	.00021	.00044	.00033	.00057	.00047	.00064	.00190	19
.00722	.00411	.02497	.00757	.00402	.00301	.00216	.00438	.00649	.00694	.00560	.00359	.00276	.00331	.01242	.00488	.00434	.00894	20+21
.00019	.00011	.00051	.00007	.00008	.00006	.00005	.00012	.00017	.00015	.00014	.00009	.00007	.00009	.00009	.00007	.00016	.00025	22+23
.00364	.00309	.01062	.01776	.01720	.01382	.00936	.00140	.00656	.01831	.01803	.02094	.01226	.01418	.10824	.02054	.00987	.01366	24
.00115	.00066	.00256	.01135	.00230	.00119	.00095	.00038	.00086	.00294	.00365	.00215	.00135	.00192	.00381	.01149	.00310	.00185	25
.00018	.00015	.00039	.00045	.00046	.00155	.00050	.00006	.00022	.00114	.00069	.00065	.00045	.00063	.00305	.00029	.00060	.00078	26A
.00370	.00284	.00676	.01403	.00572	.02355	.01756	.00142	.00700	.01497	.01821	.04364	.01676	.01999	.04916	.00846	.00614	.01341	26B
.00946	.01039	.04995	.00577	.00493	.00509	.00362	.00182	.00440	.01355	.01901	.00979	.00525	.01258	.02647	.01053	.01395	.01077	27A
.00041	.00053	.00297	.00058	.00054	.00054	.00049	.00253	.00176	.00797	.00080	.00049	.00068	.00231	.00116	.00542	.00058	.00276	27B
.00208	.00117	.00655	.00276	.00208	.00217	.00144	.00069	.00166	.00861	.01060	.00665	.00248	.00440	.00764	.00493	.00730	.00417	28
.00006	.00003	.00014	.00006	.00006	.00007	.00006	.00002	.00004	.00012	.00015	.00007	.00008	.00037	.00011	.00111	.00007	.00014	29A
.00059	.00037	.00094	.00068	.00052	.00068	.00039	.00011	.00044	.00715	.01519	.00064	.00105	.00416	.00111	.00127	.00091	.00091	29B
.00095	.00064	.00264	.00058	.00054	.00045	.00033	.00053	.00080	.00097	.00096	.00052	.00050	.00128	.00104	.00066	.00752	.00073	30
.05243	.01224	.03595	.01262	.01048	.00849	.00478	.00213	.00536	.01455	.01233	.00783	.00842	.01012	.00969	.00896	.03763	.00809	31
.00588	.00284	.01954	.00702	.00489	.00584	.00379	.00177	.00473	.02659	.02769	.02625	.00759	.01497	.01595	.01661	.02025	.01190	32
.00009	.00007	.00025	.00033	.00021	.00024	.00028	.00003	.00012	.00081	.01332	.00019	.00043	.00023	.00033	.00055	.00034	.00127	33+34
.00086	.00050	.00300	.00117	.00066	.00086	.00063	.00029	.00065	.01388	.00153	.00108	.00117	.00197	.00098	.00598	.00855	.00108	35
.00568	.00488	.01548	.00164	.00191	.00148	.00107	.00323	.00458	.00494	.00670	.00141	.00120	.00199	.00192	.00223	.00396	.00245	36
.00749	.00543	.01635	.00319	.00275	.00234	.00168	.00247	.00365	.00480	.00666	.00393	.00266	.00580	.00387	.00519	.02736	.00375	37
.00558	.00261	.01158	.00276	.00226	.00248	.00172	.00171	.00275	.00393	.00826	.00671	.00269	.00535	.00624	.00538	.01558	.00388	38
.00037	.00019	.00069	.00188	.00037	.00034	.00034	.00009	.00025	.00058	.00069	.00032	.00035	.00154	.00079	.00791	.00076	.00076	39
.00496	.00291	.01196	.00117	.00155	.00120	.00087	.00322	.00407	.00311	.00182	.00136	.00096	.00152	.00135	.00147	.00331	.00201	40
.00261	.00082	.00390	.00141	.00122	.00105	.00086	.00043	.00086	.00178	.00329	.00189	.00138	.00250	.00151	.00173	.03189	.00181	41
.00423	.00438	.01986	.00328	.00384	.00233	.00163	.00140	.00256	.00458	.00834	.00485	.00327	.00481	.00431	.00380	.04533	.00385	42
.00551	.00043	.00092	.00029	.00032	.00029	.00019	.00011	.00017	.00050	.00041	.00029	.00028	.00107	.00032	.00041	.00271	.00045	43
.00536	.00195	.00363	.00043	.00039	.00037	.00022	.00085	.00047	.00079	.00052	.00030	.00045	.00294	.00042	.00109	.00057	.00067	44+45
.00079	.00017	.00072	.00082	.00015	.00017	.00010	.00017	.00025	.00033	.00022	.00014	.00022	.00148	.00018	.00020	.00024	.00024	46
.00134	.00087	.00165	.00078	.00049	.00052	.00031	.00020	.00039	.00091	.00118	.00077	.00071	.00371	.00090	.00077	.00295	.00098	47
.00016	.00013	.00051	.00040	.00031	.00037	.00025	.00006	.00020	.00057	.00065	.00064	.00040	.00179	.00228	.00074	.00047	.00047	48
.00394	.00173	.00321	.00083	.00071	.00106	.00058	.00039	.00075	.00127	.00125	.00085	.00093	.00489	.00103	.00161	.00408	.00106	49
.00193	.00130	.00783	.00147	.00095	.00074	.00053	.00023	.00067	.00133	.00223	.00107	.00120	.00260	.00151	.00160	.01541	.00121	50
.00055	.00131	.00100	.00065	.00072	.00243	.00094	.00013	.00039	.00102	.01002	.03139	.00418	.00369	.00142	.00046	.00080	.00099	51
.00103	.00063	.00296	.00077	.00075	.00043	.00032	.00066	.00096	.00095	.00335	.00034	.00047	.00161	.00074	.00054	.00642	.00156	52
.00364	.00179	.00313	.00082	.00077	.00109	.00062	.00050	.00087	.00145	.00274	.00434	.00116	.00447	.00161	.00094	.00405	.00117	53
.00026	.00021	.00121	.00014	.00018	.00012	.00009	.00016	.00042	.00056	.01033	.00009	.00013	.00025	.00016	.00015	.00027	.00026	54
.00316	.00126	.00502	.00078	.00090	.00089	.00059	.00098	.00160	.00450	.00160	.00108	.00117	.00161	.00104	.00117	.00855	.00206	55
.00043	.00031	.00114	.00055	.00057	.00091	.00082	.00025	.00052	.00081	.00119	.00211	.00076	.00112	.00118	.00038	.00199	.00063	56
.00180	.00128	.00445	.00258	.00233	.00628	.00282	.00050	.00151	.00380	.03244	.04244	.00616	.02175	.01226	.00193	.00419	.00386	57
.00230	.00223	.00330	.00125	.00106	.00281	.00219	.00029	.00096	.00116	.00145	.00880	.00342	.00414	.00185	.00107	.00643	.00161	58
.00003	.00001	.00013	.00002	.00001	.00002	.00001	(*)	.00001	.00002	.00002	.00001	.00002	.00005	.00002	.00002	.00026	.00006	59A
.00157	.00111	.03179	.00350	.00279	.00207	.00176	.00036	.00111	.00299	.00288	.00184	.00352	.00255	.00227	.00167	.08765	.00197	59B
.00032	.00024	.00048	.00076	.00027	.00076	.00041	.00007	.00020	.00035	.00046	.00081	.00084	.00123	.00079	.00028	.00056	.00047	60
.00085	.00018	.00071	.00021	.00020	.00052	.00025	.00005	.00017	.00049	.00024	.00018	.00025	.00152	.00043	.00049	.00056	.00196	61
.00113	.00058	.01569	.00048	.00039	.00046	.00034	.00020	.00036	.00149	.00133	.00126	.00048	.00118	.00162	.00041	.00092	.00070	62
.00066	.00056	.00140	.00140	.00125	.00556	.00315	.00029	.00092	.00189	.01058	.00165	.00562	.00662	.00725	.00092	.00147	.00435	63
.00070	.00050	.00187	.00157	.00163	.00246	.00186	.00026	.00090	.00418	.02367	.00110	.00314	.00233	.00202	.00208	.00142	.00392	64
.03298	.00215	.00797	.00321	.00410	.00461	.00435	.00085	.00278	.00660	.00467	.00345	.00263	.00402	.00679	.00738	.00616	.00438	65A
.01002	.00519	.03638	.00746	.00771	.03192	.00988	.00272	.00664	.01428	.01405	.00918	.00640	.00966	.01579	.02262	.01772	.01013	65B
.00480	.00161	.00322	.00077	.00063	.00059	.00037	.00018	.00041	.00113	.00113	.00057	.00059	.00117	.00107	.00155	.00198	.00134	65C
.00475	.00423	.00701	.01399	.00490	.01398	.00760	.00112	.00345	.00597	.00797	.01460	.01531	.02044	.01444	.00496	.00867	.00841	65D
.00434	.00614	.00720	.00288	.00131	.00254	.00178	.00033	.00115	.00314	.00194	.00184	.00183	.00242	.00228	.00187	.00383	.00157	65E
.00577	.00492	.01693	.02178	.01851	.03472	.03128	.00247	.00947	.02590	.02624	.04029	.02475	.02626	.01785	.01148	.01854	.01988	66
.00005	.00008	.00011	.00022	.00046	.00018	.00019	.00002	.00018	.00021	.00028	.00014	.00009	.00016	.00843	.00030	.00022	.00041	67
1.00898	.01775	.05965	.01313	.02836	.01240	.00559	.00164	.00618	.04032	.02752	.01221	.00850	.01248	.01572	.03090	.02053	.02444	68A
.06034	1.35065	.06835	.00925	.00725	.00358	.00230	.00100	.00368	.02772	.01620	.00467	.00397	.00664	.00753	.00953	.01357	.00978	68B
.00278	.00196	1.02647	.00177	.00263	.00232	.00349	.00034	.00100	.01082	.00384	.00156	.00211	.00154	.00323	.00348	.00235	.00323	68C
.03274	.01682	.05234	1.03595	.01516	.01798	.01195	.00633	.01200	.03396	.04670	.03636	.02001	.03041	.03576	.07873	.06479	.02422	69A
.00443	.00284	.01507	.00397	1.00449	.00308	.00196	.00320	.00416	.00505	.00397	.00242	.00334	.00323	.00297	.00269	.04001	.00329	69B
.02003	.01652	.02752	.02369	.01762	1.20663	.07940	.01105	.02718	.06617	.02590	.02384	.01998	.02250	.01861	.02275	.04991	.02286	70A
.01229	.00608	.06712	.00530	.00606	.02355	1.44319	.04494	.02788	.00797	.00719	.00535	.00727	.00909	.00632	.00711	.03054	.00713	70B
.....	.....	.....	.....	.....	.....	.....	1.00000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71A
.02563	.10177	.03793	.03939	.07629	.05923	.05820	.04582	1.10010	.06065	.08280	.05300	.07473	.04787	.05498	.06732	.06189	.08937	71B
.00157	.00140	.00487	.00858	.00325	.00545	.01030	.00088	.00375	1.00294	.00416	.00372	.02092	.00693	.00599	.00230	.00346	.00602	72A
.00265	.00147	.00704	.00573	.00619	.00318	.00290	.00046	.00302	.01881	1.02406	.00238	.00513	.00281	.00609	.00445	.01605	.00835	72B
.01114	.00741	.01348	.00658	.01071	.06534	.01958	.00210	.00442	.01006	.01408	1.12961	.06367	.03898	.01063	.00620	.00777	.01367	73A
.01549	.01558	.05402	.01991	.04404	.04064	.03369	.01159	.01669	.03055	.05676	.01766	1.10323	.03343	.02948	.02108	.01988	.04751	73B
.01617	.01379	.03853	.06396	.03277	.07190	.03410	.01047	.03178	.08776	.05677	.04522	.11738	1.08236	.04882	.03843	.05228	.08224	73C
.00594	.01000	.01357	.02657	.05546	.02158	.02334	.00271	.02160	.02531	.03411	.01722	.01069	.01882	1.02233	.03673	.02659	.04964	73D
.00379	.00364	.00932	.01736	.01638	.01830	.02763	.00199	.01192	.00628	.01224	.01260	.01165	.01596	.01277	1.00820	.01259	.01378	74
.00846	.00776	.01600	.02610	.02076	.01272	.01085	.00212	.00745	.02008	.02020	.01321	.02198	.01656	.01541	.00871	1.02903	.01359	75
.00096	.00131	.00215	.00634	.00681	.00348	.00374	.00053	.00289	.00378	.00465	.00269	.00260	.00343	.10725	.01027	.00358	1.25892	76
(*)	(*)	.00001	.00001	.00002	.00001	.00002	.00001	.00001	.00002	.00002	.00001	.00001	.00002	.00002	.00063	.00001	.00006	77A
.00331	.00121	.00280	.00276	.00220	.00483	.00180	.00033	.00132	.00518	.01568	.00731	.00741	.00765	.00479	.00272	.00312	.00774	77B
.00374	.00338	.00521	.00419	.00571	.03191	.01057	.00090	.00317	.00842	.00780	.00735	.01095	.00948	.00892	.00346	.00750	.00868	78
.00041	.00034	.00071	.00128	.00136	.00056	.00053	.00010	.00054	.00613	.00238	.00070	.00115	.00095	.00129	.00155	.00342	.00178	79
.00319	.00641	.00512	.00959	.00302	.02057	.00938	.00085	.00220	.00601	.00541	.00867	.00667	.00892	.00537	.00868	.00576	.00619	80
.00061	.00041	.00141	.00048	.00043	.00038	.00027	.00020	.00036	.00067	.00086	.00073	.00041	.00067	.00157	.00071	.00347	.00050	81
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1.70421	**2.04044**	**2.21787**	**1.54095**	**1.54285**	**1.86604**	**1.95677**	**1.26319**	**1.48445**	**1.85696**	**1.90215**	**1.75718**	**1.71483**	**1.67547**	**1.84377**	**2.03397**	**2.00287**	**1.97314**	

Table 4.—Commodity-by-Commodity Total Requirements, 1987 Benchmark—Continued

[Total requirements, direct and indirect, per dollar of delivery to final demand, at producers' prices]

Commodity number	Each entry represents the output required, directly and indirectly, of the commodity named at the beginning of the row for each dollar of delivery to final demand of the commodity named at the head of the column	Health services	Educational and social services, and membership organizations	Federal Government enterprises	State and local government enterprises	Non-comparable imports	Scrap, used, and second-hand goods	General government industry	Rest-of-the-world adjustment to final uses	Household industry	Inventory valuation adjustment
	Commodity number	77A	77B	78	79	80	81	82	83	84	85
1	Livestock and livestock products	0.00400	0.00809	0.00116	0.00116						
2	Other agricultural products	.00326	.00612	.00104	.00155						
3	Forestry and fishery products	.00059	.00145	.00030	.00225						
4	Agricultural, forestry, and fishery services	.00164	.00555	.00048	.00498						
5+6	Metallic ores mining	.00065	.00070	.00030	.00173						
7	Coal mining	.00221	.00305	.00151	.01148						
8	Crude petroleum and natural gas	.00860	.01290	.00836	.03390						
9+10	Nonmetallic minerals mining	.00088	.00149	.00032	.00581						
11	New construction										
12	Maintenance and repair construction	.01946	.06450	.01055	.31153						
13	Ordnance and accessories	.00007	.00011	.00004	.00011						
14	Food and kindred products	.01491	.02938	.00439	.00301						
15	Tobacco products	(*)	(*)								
16	Broad and narrow fabrics, yarn and thread mills	.00236	.00258	.00182	.00134						
17	Miscellaneous textile goods and floor coverings	.00089	.00089	.00052	.00136						
18	Apparel	.00158	.00222	.00017	.00101						
19	Miscellaneous fabricated textile products	.00264	.00093	.00253	.00047						
20+21	Lumber and wood products	.00349	.01063	.00159	.02579						
22+23	Furniture and fixtures	.00008	.00019	.00004	.00072						
24	Paper and allied products, except containers	.01311	.03495	.00511	.00802						
25	Paperboard containers and boxes	.00272	.00369	.00120	.00209						
26A	Newspapers and periodicals	.00072	.00432	.00018	.00032						
26B	Other printing and publishing	.01260	.07527	.01188	.00590						
27A	Industrial and other chemicals	.03403	.01375	.00338	.04060						
27B	Agricultural fertilizers and chemicals	.00101	.00231	.00031	.00439						
28	Plastics and synthetic materials	.00769	.00556	.00174	.00453						
29A	Drugs	.02181	.00110	.00005	.00012						
29B	Cleaning and toilet preparations	.00322	.00206	.00113	.00098						
30	Paints and allied products	.00064	.00131	.00039	.00329						
31	Petroleum refining and related products	.00818	.01641	.01311	.02896						
32	Rubber and miscellaneous plastics products	.03031	.01521	.00383	.01057						
33+34	Footwear, leather, and leather products	.00021	.00050	.00059	.00018						
35	Glass and glass products	.00374	.00318	.00057	.00205						
36	Stone and clay products	.00273	.00452	.00096	.02255						
37	Primary iron and steel manufacturing	.00364	.00578	.00291	.01605						
38	Primary nonferrous metals manufacturing	.00314	.00501	.00229	.01116						
39	Metal containers	.00086	.00112	.00023	.00064						
40	Heating, plumbing, and fabricated structural metal products	.00137	.00377	.00088	.01720						
41	Screw machine products and stampings	.00225	.00279	.00198	.00281						
42	Other fabricated metal products	.00365	.00610	.00242	.00993						
43	Engines and turbines	.00026	.00037	.00028	.00111						
44+45	Farm, construction, and mining machinery	.00039	.00064	.00022	.00611						
46	Materials handling machinery and equipment	.00016	.00031	.00020	.00101						
47	Metalworking machinery and equipment	.00064	.00088	.00049	.00150						
48	Special industry machinery and equipment	.00050	.00080	.00016	.00042						
49	General industrial machinery and equipment	.00079	.00116	.00091	.00287						
50	Miscellaneous machinery, except electrical	.00094	.00135	.00124	.01068						
51	Computer and office equipment	.00121	.00178	.00032	.00081						
52	Service industry machinery	.00045	.00107	.00071	.00405						
53	Electrical industrial equipment and apparatus	.00114	.00144	.00075	.00340						
54	Household appliances	.00015	.00036	.00008	.00191						
55	Electric lighting and wiring equipment	.00169	.00293	.00128	.00618						
56	Audio, video, and communication equipment	.00046	.00154	.00027	.00140						
57	Electronic components and accessories	.00467	.00507	.00110	.00266						
58	Miscellaneous electrical machinery and supplies	.00172	.00217	.00103	.00302						
59A	Motor vehicles (passenger cars and trucks)	.00001	.00002	.00005	.00004						
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00203	.00300	.01107	.00258						
60	Aircraft and parts	.00041	.00122	.00160	.00041						
61	Other transportation equipment	.00019	.00034	.00054	.00102						
62	Scientific and controlling instruments	.02109	.00155	.00033	.00151						
63	Ophthalmic and photographic equipment	.00278	.00480	.00060	.00125						
64	Miscellaneous manufacturing	.00136	.00617	.00188	.00186						
65A	Railroads and related services; passenger ground transportation	.00363	.00547	.01258	.00810						
65B	Motor freight transportation and warehousing	.00918	.01603	.05850	.01850						
65C	Water transportation	.00086	.00115	.00236	.00371						
65D	Air transportation	.00609	.02259	.03042	.00654						
65E	Pipelines, freight forwarders, and related services	.00145	.00321	.00485	.00331						
66	Communications, except radio and TV	.01561	.02215	.00689	.01461						
67	Radio and TV broadcasting	.00009	.00027	.00004	.00010						
68A	Electric services (utilities)	.01622	.02227	.01160	.09514						
68B	Gas production and distribution (utilities)	.01109	.01439	.00440	.07423						
68C	Water and sanitary services	.00198	.00343	.00176	.00684						
69A	Wholesale trade	.03568	.03946	.01354	.04489						
69B	Retail trade	.00282	.00508	.00330	.01423						
70A	Finance	.01285	.02854	.00561	.02434						
70B	Insurance	.00966	.01387	.00479	.02177						
71A	Owner-occupied dwellings										
71B	Real estate and royalties	.08367	.13573	.02468	.03689						
72A	Hotels and lodging places	.00289	.00946	.00124	.00420						
72B	Personal and repair services (except auto)	.00428	.00470	.00116	.00221						
73A	Computer and data processing services	.02018	.01723	.00341	.01203						
73B	Legal, engineering, accounting, and related services	.01568	.02992	.00501	.07539						
73C	Other business and professional services, except medical	.04329	.05568	.01920	.04186						
73D	Advertising	.01046	.03300	.00427	.01153						
74	Eating and drinking places	.00944	.01357	.00424	.00709						
75	Automotive repair and services	.01472	.01614	.02024	.01316						
76	Amusements	.00186	.01207	.00101	.00186						
77A	Health services	1.02042	.00007	.00001	.00001						
77B	Educational and social services, and membership organizations	.00341	1.00395	.00091	.00301						
78	Federal Government enterprises	.00738	.01697	1.00307	.00410						
79	State and local government enterprises	.00103	.00202	.00096	1.00054						
80	Noncomparable imports	.00386	.01091	.01833	.00418	1.00000					
81	Scrap, used and secondhand goods	.00047	.00086	.00033	.00128		1.00000				
82	General government industry							1.00000			
83	Rest of the world adjustment to final uses								1.00000		
84	Household industry									1.00000	
85	Inventory valuation adjustment										1.00000
	Total commodity output multiplier	**1.63818**	**1.95864**	**1.38402**	**2.21193**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**	**1.00000**

*Less than .000005.

Table 5.—Industry-by-Commodity Total Requirements, 1987 Benchmark

[Total requirements, direct and indirect, per dollar of delivery to final demand, at producers' prices]

Industry number	Each entry represents the output required, directly and indirectly, of the industry named at the beginning of the row for each dollar of delivery to final demand of the commodity named at the head of the column	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	Nonmetallic minerals mining	New construction	Maintenance and repair construction
	Commodity number	1	2	3	4	5+6	7	8	9+10	11	12
1	Livestock and livestock products	1.31515	0.03468	0.05975	0.10349	0.00074	0.00049	0.00056	0.00066	0.00181	0.00184
2	Other agricultural products	.39555	1.07001	.23398	.16985	.00120	.00084	.00074	.00099	.00412	.00420
3	Forestry and fishery products	.00167	.00072	.80076	.00164	.00088	.00048	.00029	.00032	.00523	.00533
4	Agricultural, forestry, and fishery services	.08565	.07862	.13957	.95618	.00074	.00057	.00138	.00063	.00639	.00651
5+6	Metallic ores mining	.00089	.00069	.00079	.00089	1.08467	.00136	.00061	.00238	.00378	.00376
7	Coal mining	.00362	.00220	.00151	.00257	.01578	1.12441	.00257	.01181	.00385	.00383
8	Crude petroleum and natural gas	.01953	.02247	.02964	.02818	.03279	.01847	1.04824	.02851	.02152	.02163
9+10	Nonmetallic minerals mining	.00514	.00964	.00318	.01276	.00392	.00287	.00133	.99280	.01391	.01412
11+12	Construction	.02848	.02485	.02041	.02717	.03185	.02190	.03962	.02313	1.01325	1.01322
13	Ordnance and accessories	.00011	.00010	.00313	.00014	.00014	.00011	.00005	.00017	.00031	.00031
14	Food and kindred products	.20984	.00819	.05311	.02258	.00264	.00159	.00162	.00232	.00358	.00365
15	Tobacco products	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
16	Broad and narrow fabrics, yarn and thread mills	.00193	.00234	.00544	.00448	.00120	.00200	.00038	.00128	.00284	.00290
17	Miscellaneous textile goods and floor coverings	.00147	.00122	.00901	.00565	.00062	.00055	.00025	.00052	.00360	.00367
18	Apparel	.00024	.00019	.00031	.00040	.00029	.00059	.00015	.00052	.00048	.00049
19	Miscellaneous fabricated textile products	.00095	.00142	.00385	.00357	.00025	.00019	.00011	.00028	.00066	.00068
20+21	Lumber and wood products	.00703	.00822	.00371	.00513	.01234	.00674	.00375	.00386	.07898	.08064
22+23	Furniture and fixtures	.00016	.00013	.00018	.00015	.00022	.00016	.00013	.00016	.00256	.00261
24	Paper and allied products, except containers	.01522	.01009	.00800	.01415	.00553	.00457	.00392	.00919	.01059	.01075
25	Paperboard containers and boxes	.00865	.00687	.00415	.01202	.00201	.00169	.00074	.00216	.00364	.00369
26A	Newspapers and periodicals	.00549	.00340	.00347	.00554	.00330	.00307	.00530	.00489	.00483	.00485
26B	Other printing and publishing	.01000	.00672	.01097	.01100	.00588	.00497	.00624	.00597	.00780	.00788
27A	Industrial and other chemicals	.01820	.02144	.01514	.03796	.04277	.01275	.01388	.02610	.01799	.01863
27B	Agricultural fertilizers and chemicals	.03862	.07457	.02956	.14947	.00143	.00064	.00069	.00100	.00196	.00199
28	Plastics and synthetic materials	.00523	.00492	.00591	.00826	.00650	.00432	.00168	.00493	.00819	.00837
29A	Drugs	.00461	.00066	.00062	.00144	.00026	.00010	.00009	.00018	.00017	.00018
29B	Cleaning and toilet preparations	.00294	.00311	.00178	.00598	.00128	.00057	.00057	.00126	.00112	.00119
30	Paints and allied products	.00081	.00066	.00127	.00097	.00119	.00078	.00067	.00078	.00914	.00933
31	Petroleum refining and related products	.02288	.02432	.04257	.02590	.03575	.02615	.00861	.04223	.02903	.02918
32	Rubber and miscellaneous plastics products	.01369	.00997	.00734	.01026	.01931	.01610	.00306	.01544	.01921	.01965
33+34	Footwear, leather, and leather products	.00060	.00014	.00046	.00044	.00009	.00008	.00006	.00010	.00021	.00021
35	Glass and glass products	.00366	.00096	.00194	.00205	.00133	.00074	.00052	.00113	.00409	.00417
36	Stone and clay products	.00342	.00419	.00236	.00419	.00784	.00655	.00638	.04435	.05925	.05981
37	Primary iron and steel manufacturing	.00788	.00595	.00783	.00641	.04054	.01963	.00826	.01622	.04325	.04138
38	Primary nonferrous metals manufacturing	.00603	.00365	.00532	.00425	.01175	.00778	.00285	.01368	.02840	.02884
39	Metal containers	.00634	.00092	.00386	.00183	.00056	.00031	.00022	.00042	.00089	.00090
40	Heating, plumbing, and fabricated structural metal products	.00266	.00241	.00240	.00227	.01052	.00701	.00301	.00827	.05228	.05288
41	Screw machine products and stampings	.00238	.00148	.00197	.00217	.00891	.00903	.00089	.00454	.00623	.00632
42	Other fabricated metal products	.00574	.00493	.00934	.00582	.00732	.00806	.00628	.00696	.02059	.02109
43	Engines and turbines	.00097	.00091	.00306	.00255	.00793	.00775	.00066	.00563	.00079	.00077
44+45	Farm, construction, and mining machinery	.00780	.00933	.00477	.00578	.02218	.04889	.00337	.02065	.00374	.00308
46	Materials handling machinery and equipment	.00030	.00030	.00022	.00036	.00575	.00443	.00018	.01138	.00272	.00277
47	Metalworking machinery and equipment	.00243	.00181	.00111	.00115	.00302	.00222	.00136	.00210	.00271	.00274
48	Special industry machinery and equipment	.00050	.00039	.00049	.00061	.00068	.00057	.00022	.00063	.00076	.00077
49	General industrial machinery and equipment	.00234	.00208	.00267	.00196	.01561	.02212	.00272	.01535	.00562	.00555
50	Miscellaneous machinery, except electrical	.00278	.00286	.00200	.00215	.00500	.00666	.00116	.00380	.00276	.00277
51	Computer and office equipment	.00072	.00061	.00085	.00105	.00106	.00050	.00035	.00119	.00113	.00115
52	Service industry machinery	.00064	.00055	.00063	.00077	.00095	.00068	.00058	.00061	.01183	.01206
53	Electrical industrial equipment and apparatus	.00163	.00142	.00142	.00140	.00701	.00678	.00278	.00729	.00773	.00784
54	Household appliances	.00017	.00016	.00023	.00022	.00020	.00015	.00017	.00015	.00274	.00280
55	Electric lighting and wiring equipment	.00147	.00137	.00111	.00145	.00203	.00207	.00112	.00152	.01663	.01697
56	Audio, video, and communication equipment	.00045	.00038	.00044	.00043	.00042	.00029	.00029	.00034	.00372	.00379
57	Electronic components and accessories	.00197	.00174	.00196	.00212	.00203	.00134	.00093	.00194	.00374	.00380
58	Miscellaneous electrical machinery and supplies	.00471	.00544	.00176	.00223	.00207	.00103	.00048	.00134	.00253	.00258
59A	Motor vehicles (passenger cars and trucks)	.00031	.00029	.00070	.00038	.00050	.00033	.00007	.00020	.00030	.00031
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00467	.00468	.00443	.00590	.00642	.00324	.00097	.00236	.00371	.00377
60	Aircraft and parts	.00048	.00043	.00108	.00137	.00093	.00069	.00023	.00083	.00067	.00069
61	Other transportation equipment	.00064	.00036	.01722	.00097	.00128	.00102	.00016	.00040	.00055	.00055
62	Scientific and controlling instruments	.00096	.00066	.00237	.00078	.00162	.00076	.00041	.00092	.00355	.00361
63	Ophthalmic and photographic equipment	.00094	.00077	.00092	.00131	.00096	.00065	.00062	.00082	.00138	.00141
64	Miscellaneous manufacturing	.00136	.00102	.00110	.00188	.00116	.00082	.00077	.00122	.00278	.00283
65A	Railroads and related services; passenger ground transportation	.01749	.00722	.00453	.01085	.00887	.02954	.00226	.00625	.00724	.00720
65B	Motor freight transportation and warehousing	.05475	.03191	.01690	.03405	.01851	.01447	.00621	.02709	.03013	.03045
65C	Water transportation	.00341	.00178	.00417	.00328	.00271	.00340	.00181	.00216	.00192	.00193
65D	Air transportation	.00647	.00573	.00690	.02250	.00732	.00340	.00274	.00700	.00613	.00635
65E	Pipelines, freight forwarders, and related services	.00469	.00346	.00383	.00528	.00380	.00333	.00123	.00365	.00347	.00351
66	Communications, except radio and TV	.01363	.01019	.00732	.00895	.00764	.00546	.00548	.00761	.01327	.01342
67	Radio and TV broadcasting	.00417	.00253	.00251	.00420	.00254	.00240	.00432	.00242	.00373	.00374
68A	Electric services (utilities)	.02348	.01338	.00825	.01490	.09611	.02892	.01684	.04938	.01424	.01435
68B	Gas production and distribution (utilities)	.00846	.00946	.00542	.01200	.02403	.00563	.01172	.02258	.00864	.00865
68C	Water and sanitary services	.00208	.00252	.00089	.00139	.00159	.00143	.00088	.00449	.00098	.00098
69A	Wholesale trade	.11019	.06977	.05566	.10251	.04581	.05087	.01532	.04080	.07547	.07607
69B	Retail trade	.00616	.00580	.00415	.00724	.00484	.00262	.00230	.00258	.04140	.04219
70A	Finance	.03226	.02546	.02341	.02241	.02356	.01588	.01118	.02608	.02483	.02526
70B	Insurance	.02790	.03771	.02331	.01587	.01039	.00563	.00646	.00495	.00923	.00938
71A	Owner-occupied dwellings	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
71B	Real estate and royalties	.10169	.11091	.03050	.04747	.03227	.04050	.19925	.02750	.02700	.02682
72A	Hotels and lodging places	.00374	.00295	.00386	.00362	.00381	.00176	.00215	.00991	.00454	.00461
72B	Personal and repair services (except auto)	.00330	.00294	.00352	.01025	.00211	.00136	.00113	.00305	.00235	.00238
73A	Computer and data processing services	.00556	.00445	.00771	.00919	.01093	.00370	.00260	.01405	.00821	.00835
73B	Legal, engineering, accounting, and related services	.01448	.01183	.03943	.02344	.02929	.01667	.01768	.01636	.07443	.07587
73C	Other business and professional services, except medical	.03303	.03027	.03496	.03567	.02314	.01656	.01450	.02255	.04965	.05043
73D	Advertising	.00236	.00144	.00142	.00238	.00144	.00136	.00245	.00137	.00211	.00212
74	Eating and drinking places	.00631	.00516	.00552	.00899	.00503	.00384	.00410	.00500	.00782	.00793
75	Automotive repair and services	.01250	.01038	.02340	.03368	.03570	.01329	.00558	.00661	.01903	.01937
76	Amusements	.00366	.00272	.00364	.01737	.00142	.00134	.00203	.00164	.00228	.00230
77A	Health services	.01158	.00032	.00050	.00093	.00002	.00001	.00001	.00002	.00004	.00004
77B	Educational and social services, and membership organizations	.00156	.00120	.00373	.00332	.00362	.00282	.00105	.00227	.00198	.00201
78	Federal Government enterprises	.00470	.00352	.00377	.00566	.00922	.00337	.00266	.00597	.00438	.00444
79	State and local government enterprises	.01146	.00956	.00505	.00856	.01880	.01062	.00840	.01531	.00599	.00602
82	General government industry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
83	Rest of the world adjustment to final uses	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
84	Household industry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
85	Inventory valuation adjustment	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Total industry output multiplier	**2.83175**	**1.91916**	**1.91932**	**2.16999**	**1.92761**	**1.72137**	**1.54762**	**1.69939**	**2.02832**	**2.03943**

*Less than .000005.

Table 5.—Industry-by-Commodity

[Total requirements, direct and indirect, per dollar

Industry number	Each entry represents the output required, directly and indirectly, of the industry named at the beginning of the row for each dollar of delivery to final demand of the commodity named at the head of the column	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	Paperboard containers and boxes
	Commodity number	13	14	15	16	17	18	19	20+21	22+23	24	25
1	Livestock and livestock products	0.00070	0.30678	0.00301	0.01691	0.00587	0.00610	0.00713	0.00778	0.00261	0.00323	0.00200
2	Other agricultural products	.00095	.18453	.08093	.12372	.03586	.03547	.04204	.03045	.00924	.00646	.00391
3	Forestry and fishery products	.00037	.00679	.00040	.00052	.00070	.00488	.00082	.09070	.00843	.00804	.00381
4	Agricultural, forestry, and fishery services	.00049	.02815	.00618	.01010	.00334	.00383	.00381	.01673	.00244	.00227	.00132
5+6	Metallic ores mining	.00485	.00190	.00038	.00163	.00238	.00084	.00116	.00180	.00456	.00174	.00180
7	Coal mining	.00355	.00412	.00220	.00868	.00839	.00436	.00528	.00486	.00543	.01327	.00838
8	Crude petroleum and natural gas	.00913	.01686	.00666	.02587	.03180	.01402	.01734	.02202	.01498	.02937	.02649
9+10	Nonmetallic minerals mining	.00121	.00319	.00127	.00451	.00535	.00190	.00266	.00300	.00238	.00755	.00457
11+12	Construction	.01631	.01970	.00777	.02231	.02038	.01367	.01666	.02244	.02163	.02329	.02072
13	Ordnance and accessories	.95565	.00012	.00005	.00010	.00010	.00009	.00009	.00048	.00017	.00013	.00011
14	Food and kindred products	.00243	1.23314	.00203	.00700	.00803	.00571	.00743	.00963	.00560	.01054	.00700
15	Tobacco products	(*)	.00001	1.16027	.00001	.00001	.00001	.00001	(*)	.00001	.00031	.00014
16	Broad and narrow fabrics, yarn and thread mills	.00187	.00227	.00116	1.34605	.34258	.35518	.45718	.00364	.05777	.01847	.01004
17	Miscellaneous textile goods and floor coverings	.00081	.00121	.00047	.02614	.97981	.01007	.07868	.00427	.02801	.00716	.00358
18	Apparel	.00072	.00027	.00020	.00654	.00277	1.22395	.02405	.00056	.00101	.00053	.00040
19	Miscellaneous fabricated textile products	.00052	.00079	.00022	.00319	.00424	.02801	.90323	.00123	.00260	.00060	.00045
20+21	Lumber and wood products	.00460	.00770	.00479	.00500	.00680	.00366	.00944	1.39463	.13191	.10202	.04803
22+23	Furniture and fixtures	.00068	.00025	.00008	.00021	.00029	.00017	.00206	.00423	.98653	.00060	.00038
24	Paper and allied products, except containers	.00779	.03828	.03971	.01677	.04054	.01515	.02511	.01436	.02154	1.17906	.53800
25	Paperboard containers and boxes	.00284	.02686	.04354	.00990	.01337	.00848	.01756	.00887	.01939	.02051	1.00311
26A	Newspapers and periodicals	.01016	.01371	.01266	.00647	.01154	.00937	.00823	.00927	.01072	.00747	.00544
26B	Other printing and publishing	.01067	.02234	.02854	.00895	.01617	.01113	.01297	.01183	.01292	.01997	.01429
27A	Industrial and other chemicals	.01558	.02347	.01074	.12741	.19206	.05419	.07834	.03426	.03635	.08300	.07250
27B	Agricultural fertilizers and chemicals	.00077	.01697	.00605	.01270	.00880	.00439	.00558	.00847	.00232	.00638	.00395
28	Plastics and synthetic materials	.00653	.00899	.00403	.17252	.28064	.07537	.10007	.01438	.02826	.04079	.04225
29A	Drugs	.00017	.00570	.00014	.00091	.00125	.00053	.00056	.00031	.00027	.00068	.00051
29B	Cleaning and toilet preparations	.00071	.00275	.00152	.00731	.01133	.00830	.00591	.00149	.00173	.00802	.00462
30	Paints and allied products	.00110	.00134	.00050	.00215	.00325	.00112	.00152	.00858	.01199	.00220	.00421
31	Petroleum refining and related products	.00810	.01650	.00737	.02388	.02737	.01369	.01579	.02437	.01470	.02684	.02757
32	Rubber and miscellaneous plastics products	.01663	.02800	.00768	.02372	.03619	.01787	.04310	.02204	.04364	.04423	.03319
33+34	Footwear, leather, and leather products	.00034	.00035	.00007	.00036	.00035	.00882	.01624	.00039	.00368	.00018	.00027
35	Glass and glass products	.00124	.01661	.00047	.00897	.00377	.00286	.00418	.00563	.00592	.00178	.00270
36	Stone and clay products	.00507	.00314	.00112	.00321	.00535	.00179	.00262	.01321	.00876	.00659	.00424
37	Primary iron and steel manufacturing	.03740	.01462	.00361	.00533	.00711	.00358	.00475	.02095	.06510	.00819	.01088
38	Primary nonferrous metals manufacturing	.04713	.01655	.00226	.00368	.00482	.00295	.00375	.01092	.02830	.00663	.00923
39	Metal containers	.00037	.03428	.00046	.00140	.00186	.00085	.00110	.00139	.00124	.00126	.00284
40	Heating, plumbing, and fabricated structural metal products	.00297	.00186	.00076	.00185	.00204	.00116	.00158	.01291	.00503	.00281	.00217
41	Screw machine products and stampings	.01136	.00420	.00084	.00200	.00184	.00133	.00169	.02177	.01472	.00338	.00247
42	Other fabricated metal products	.02272	.00822	.00972	.00430	.00632	.00302	.00435	.03307	.04498	.01610	.01626
43	Engines and turbines	.00236	.00061	.00021	.00062	.00063	.00037	.00043	.00091	.00064	.00068	.00059
44+45	Farm, construction, and mining machinery	.00122	.00301	.00093	.00191	.00122	.00079	.00096	.00137	.00108	.00125	.00091
46	Materials handling machinery and equipment	.00028	.00027	.00015	.00072	.00044	.00033	.00040	.00108	.00092	.00041	.00032
47	Metalworking machinery and equipment	.00656	.00173	.00079	.00164	.00190	.00100	.00144	.00483	.00464	.00198	.00217
48	Special industry machinery and equipment	.00068	.00106	.00063	.00514	.01591	.00462	.00427	.00226	.00197	.00640	.00694
49	General industrial machinery and equipment	.01130	.00252	.00092	.00186	.00251	.00124	.00147	.00439	.00483	.00290	.00233
50	Miscellaneous machinery, except electrical	.00785	.00221	.00143	.00279	.00301	.00179	.00251	.00603	.00389	.00344	.00345
51	Computer and office equipment	.00334	.00065	.00037	.00077	.00084	.00056	.00068	.00072	.00086	.00086	.00076
52	Service industry machinery	.00058	.00056	.00025	.00057	.00058	.00041	.00064	.00136	.00211	.00074	.00063
53	Electrical industrial equipment and apparatus	.00432	.00141	.00054	.00153	.00228	.00102	.00120	.00297	.00399	.00191	.00184
54	Household appliances	.00017	.00016	.00006	.00027	.00021	.00017	.00029	.00298	.00082	.00036	.00023
55	Electric lighting and wiring equipment	.00132	.00102	.00042	.00098	.00093	.00065	.00087	.00334	.00157	.00141	.00111
56	Audio, video, and communication equipment	.02627	.00037	.00020	.00036	.00038	.00058	.00053	.00047	.00082	.00038	.00037
57	Electronic components and accessories	.04268	.00189	.00110	.00210	.00238	.00181	.00209	.00211	.00262	.00204	.00183
58	Miscellaneous electrical machinery and supplies	.00259	.00206	.00074	.00139	.00105	.00074	.00087	.00131	.00099	.00092	.00086
59A	Motor vehicles (passenger cars and trucks)	.00173	.00023	.00010	.00015	.00014	.00012	.00013	.00074	.00037	.00026	.00023
59B	Truck and bus bodies, trailers, and motor vehicles parts	.01504	.00282	.00153	.00229	.00193	.00178	.00230	.00687	.00344	.00366	.00338
60	Aircraft and parts	.13445	.00047	.00026	.00050	.00053	.00042	.00064	.00063	.00071	.00067	.00058
61	Other transportation equipment	.00093	.00062	.00014	.00037	.00045	.00035	.00075	.00260	.00090	.00071	.00071
62	Scientific and controlling instruments	.05339	.00097	.00061	.00125	.00405	.00339	.00170	.00144	.00309	.00329	.00206
63	Ophthalmic and photographic equipment	.00149	.00112	.00080	.00136	.00174	.00103	.00129	.00127	.00149	.00270	.00178
64	Miscellaneous manufacturing	.00149	.00168	.00120	.00156	.00193	.00819	.00960	.00276	.00473	.00173	.00175
65A	Railroads and related services; passenger ground transportation	.00346	.01385	.00287	.00969	.01190	.00475	.00676	.01599	.01018	.01703	.02018
65B	Motor freight transportation and warehousing	.01432	.04443	.01284	.02704	.03736	.01790	.02485	.03401	.02653	.04110	.04893
65C	Water transportation	.00083	.00358	.00062	.00222	.00427	.00124	.00193	.00373	.00199	.00320	.00276
65D	Air transportation	.01004	.00671	.00364	.00544	.00550	.00571	.00552	.00586	.00666	.00931	.00792
65E	Pipelines, freight forwarders, and related services	.00208	.00389	.00136	.00336	.00418	.00222	.00272	.00388	.00288	.00464	.00483
66	Communications, except radio and TV	.01146	.01104	.00551	.00965	.01069	.00836	.00960	.01013	.01065	.00954	.01114
67	Radio and TV broadcasting	.00830	.01104	.01002	.00516	.00939	.00761	.00657	.00743	.00867	.00596	.00427
68A	Electric services (utilities)	.01674	.02199	.00804	.04671	.03840	.02482	.02721	.02627	.02290	.04081	.03243
68B	Gas production and distribution (utilities)	.00910	.01321	.00407	.02066	.02766	.01090	.01465	.01466	.01241	.02674	.01967
68C	Water and sanitary services	.00093	.00187	.00072	.00277	.00244	.00133	.00255	.00204	.00170	.00700	.00391
69A	Wholesale trade	.04535	.11075	.03913	.09993	.08389	.08018	.10227	.10121	.09419	.08348	.08815
69B	Retail trade	.00184	.00406	.00187	.00341	.00323	.00247	.00252	.00468	.00329	.00460	.00465
70A	Finance	.01122	.01988	.01250	.01620	.01678	.01549	.01943	.02153	.02293	.01606	.01390
70B	Insurance	.00471	.01421	.00682	.01060	.00896	.00697	.00811	.01176	.00735	.01018	.00941
71A	Owner-occupied dwellings	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
71B	Real estate and royalties	.02051	.04701	.01896	.03187	.02786	.02458	.02669	.02493	.02482	.02211	.02349
72A	Hotels and lodging places	.00385	.00337	.00153	.00240	.00260	.00208	.00303	.00277	.00279	.00432	.00300
72B	Personal and repair services (except auto)	.00190	.00294	.00130	.00897	.00723	.00620	.00807	.00261	.00299	.00375	.00299
73A	Computer and data processing services	.00449	.00502	.00288	.00586	.00605	.00404	.00495	.00538	.00591	.00723	.00653
73B	Legal, engineering, accounting, and related services	.01883	.01445	.00773	.01972	.02367	.01444	.01642	.01842	.02397	.01542	.01507
73C	Other business and professional services, except medical	.02941	.03244	.01740	.03946	.03556	.02843	.03416	.03300	.04465	.02647	.02826
73D	Advertising	.00470	.00625	.00568	.00292	.00532	.00431	.00372	.00421	.00491	.00337	.00242
74	Eating and drinking places	.00634	.00637	.00324	.00734	.00766	.00798	.00817	.00886	.00949	.00653	.00721
75	Automotive repair and services	.00638	.01134	.00864	.01167	.01037	.01217	.00873	.01918	.01347	.01873	.01966
76	Amusements	.00387	.00551	.00448	.00283	.00444	.00366	.00335	.00397	.00463	.00299	.00231
77A	Health services	.00002	.00268	.00003	.00017	.00007	.00007	.00008	.00008	.00005	.00004	.00003
77B	Educational and social services, and membership organizations	.00182	.00187	.00133	.00246	.00238	.00211	.00706	.00511	.00366	.00265	.00200
78	Federal Government enterprises	.00324	.00465	.00428	.00628	.00649	.00649	.00656	.00531	.00574	.00556	.00513
79	State and local government enterprises	.00539	.01032	.00366	.01375	.01281	.00744	.00980	.01033	.00860	.02120	.01505
82	General government industry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
83	Rest of the world adjustment to final uses	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
84	Household industry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
85	Inventory valuation adjustment	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Total industry output multiplier	**1.78562**	**2.58463**	**1.66430**	**2.50089**	**2.59678**	**2.30313**	**2.34455**	**2.35666**	**2.10133**	**2.18030**	**2.38394**

*Less than .000005.

Total Requirements, 1987 Benchmark—Continued

of delivery to final demand, at producers' prices]

News-papers and periodicals	Other printing and publishing	Industrial and other chemicals	Agri-cultural fertilizers and chemicals	Plastics and synthetic materials	Drugs	Cleaning and toilet prepar-ations	Paints and allied products	Petroleum refining and related products	Rubber and miscel-laneous 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, plumbing, and fabri-cated structural metal products	Screw machine products and stampings	Industry number
26A	26B	27A	27B	28	29A	29B	30	31	32	33+34	35	36	37	38	39	40	41	
0.00127	0.00154	0.00286	0.00356	0.00261	0.00526	0.00686	0.00541	0.00085	0.00171	0.05173	0.00104	0.00117	0.00086	0.00098	0.00101	0.00097	0.00087	1
.00173	.00246	.00667	.00392	.00979	.00376	.00533	.00587	.00107	.00498	.03314	.00199	.00229	.00131	.00190	.00161	.00142	.00136	2
.00127	.00168	.00124	.00060	.00077	.00047	.00067	.00162	.00040	.00080	.00154	.00208	.00070	.00068	.00077	.00070	.00082	.00055	3
.00075	.00086	.00125	.00106	.00134	.00087	.00109	.00121	.00114	.00093	.00521	.00088	.00072	.00073	.00072	.00070	.00069	.00061	4
.00060	.00120	.01063	.00308	.00511	.00095	.00242	.00859	.00087	.00259	.00131	.00155	.00266	.04278	.10727	.03788	.01765	.01487	5+6
.00300	.00450	.01070	.00775	.01129	.00261	.00379	.00551	.00404	.00688	.00378	.00620	.01770	.03668	.01184	.01349	.01056	.01242	7
.01093	.01465	.10073	.10210	.05287	.01114	.02574	.03857	.63987	.02766	.01543	.03566	.02925	.03423	.03243	.02545	.01846	.01853	8
.00162	.00254	.02785	.08327	.01060	.00170	.00434	.00981	.00599	.00497	.00280	.01691	.09889	.00777	.00327	.00340	.00318	.00315	9+10
.01325	.01436	.02496	.02748	.02245	.01150	.01342	.01825	.03730	.01937	.01573	.02298	.02364	.04090	.02551	.02510	.02939	.02844	11+12
.00017	.00012	.00012	.00013	.00010	.00010	.00009	.00010	.00008	.00011	.00009	.00013	.00149	.00052	.00041	.00028	.00057	.00044	13
.00447	.00546	.01676	.01495	.00909	.01148	.02633	.02231	.00293	.00587	.16857	.00375	.00412	.00309	.00343	.00390	.00340	.00303	14
.00004	.00006	.00004	.00001	.00002	.00001	.00001	.00001	(*)	.00001	.00001	.00001	.00001	(*)	(*)	.00001	(*)	(*)	15
.00324	.00655	.00232	.00173	.05064	.00141	.00393	.00699	.00090	.02805	.05880	.00182	.00533	.00120	.00379	.00209	.00168	.00293	16
.00135	.00260	.00099	.00086	.00419	.00066	.00197	.00090	.00070	.01376	.02859	.00076	.00067	.00060	.00083	.00064	.00073	.00086	17
.00025	.00036	.00021	.00029	.00040	.00017	.00026	.00020	.00021	.00077	.00845	.00042	.00044	.00043	.00036	.00038	.00031	.00043	18
.00029	.00045	.00051	.00040	.00040	.00019	.00040	.00026	.00038	.00084	.00224	.00030	.00033	.00030	.00030	.00035	.00054	.00350	19
.01539	.02036	.00606	.00557	.00580	.00333	.00578	.00383	.00485	.01004	.00922	.03259	.00958	.00900	.01038	.00871	.01277	.00710	20+21
.00014	.00022	.00016	.00018	.00017	.00014	.00022	.00014	.00016	.00111	.00066	.00599	.00021	.00093	.00024	.00087	.00210	.00072	22+23
.16380	.22155	.02510	.02286	.03088	.01869	.03977	.01454	.00661	.04396	.02099	.03500	.02556	.01060	.01033	.01955	.01183	.01136	24
.00488	.01052	.00888	.00921	.01142	.01213	.03927	.00509	.00328	.02004	.01603	.04933	.00584	.00393	.00580	.00996	.00895	.00729	25
.97933	.03990	.00787	.00975	.00818	.00591	.01184	.00590	.00566	.00693	.01028	.01070	.00972	.01410	.00778	.01389	.00780	.00863	26A
.15861	1.06242	.01110	.02633	.01094	.01367	.02340	.01095	.00783	.01060	.01636	.01276	.01096	.01463	.01007	.04073	.00986	.01079	26B
.02540	.05052	1.06763	.22956	.46762	.05175	.14593	.28191	.03495	.15451	.06914	.08169	.05000	.04187	.04416	.03664	.02488	.02733	27A
.00145	.00222	.02402	1.08740	.01663	.00888	.00621	.00724	.00107	.00503	.00483	.00231	.00158	.00131	.00147	.00126	.00095	.00095	27B
.00791	.01601	.06151	.03033	.90090	.01022	.03422	.12428	.00425	.18759	.03936	.01105	.01049	.00575	.02524	.01373	.00911	.00803	28
.00022	.00041	.00533	.00711	.00261	1.06797	.02619	.00150	.00027	.00115	.00129	.00046	.00038	.00026	.00027	.00025	.00019	.00020	29A
.00180	.00297	.02220	.03851	.01362	.01111	.98262	.00998	.00437	.00554	.00781	.00220	.00421	.00136	.00145	.00186	.00133	.00145	29B
.00072	.00142	.00723	.00220	.00775	.00074	.00424	.99498	.00094	.00337	.00126	.00277	.00305	.00159	.00194	.01805	.00698	.00378	30
.01273	.01569	.10473	.03866	.04454	.00907	.02759	.03944	1.04317	.02437	.01509	.02014	.02845	.02211	.02756	.02008	.01541	.01400	31
.01176	.02981	.02451	.02275	.05567	.02816	.06112	.01691	.00908	1.01398	.04904	.02170	.01199	.01054	.02696	.01615	.02159	.01550	32
.00020	.00052	.00014	.00013	.00015	.00012	.00015	.00009	.00013	.00032	1.18812	.00026	.00013	.00016	.00013	.00014	.00014	.00019	33+34
.00074	.00105	.00292	.00451	.00254	.00835	.00919	.00214	.00295	.00722	.00337	1.05830	.00392	.00105	.00234	.00131	.01027	.00299	35
.00187	.00252	.00540	.01019	.00402	.00199	.00436	.01513	.00669	.00741	.00335	.02999	1.10951	.02382	.01121	.01066	.01243	.01168	36
.00320	.00472	.01215	.01042	.00788	.00492	.01233	.01956	.00805	.01506	.00734	.00811	.01689	1.16568	.04265	.27469	.24607	.29902	37
.00311	.00740	.01007	.00751	.00599	.00416	.01004	.02222	.00388	.00994	.00609	.01126	.00789	.05416	1.41533	.38202	.12326	.06612	38
.00050	.00075	.00734	.00709	.00365	.00512	.01515	.04760	.00183	.00209	.00512	.00100	.00080	.00070	.00075	1.02369	.00096	.00109	39
.00116	.00147	.00249	.00281	.00220	.00136	.00191	.00168	.00275	.00523	.00148	.00332	.00369	.00525	.00395	.00444	.98889	.00924	40
.00129	.00177	.00192	.00261	.00177	.00311	.00750	.00222	.00115	.00827	.00357	.00587	.00454	.00782	.00620	.00828	.03429	.98177	41
.00417	.00749	.01237	.00929	.00786	.00464	.01609	.00759	.00813	.01767	.01137	.00584	.01059	.01970	.02014	.02433	.04568	.03114	42
.00031	.00038	.00087	.00112	.00070	.00025	.00039	.00055	.00070	.00074	.00038	.00064	.00126	.00196	.00262	.00134	.00124	.00167	43
.00051	.00056	.00198	.00277	.00136	.00049	.00071	.00104	.00242	.00104	.00096	.00111	.00367	.00514	.00328	.00232	.00338	.00437	44+45
.00020	.00022	.00052	.00120	.00035	.00018	.00023	.00031	.00028	.00040	.00026	.00040	.00141	.00110	.00118	.00073	.00151	.00066	46
.00090	.00122	.00239	.00153	.00191	.00081	.00160	.00151	.00135	.00399	.00166	.00652	.00286	.00909	.01375	.00767	.01390	.03390	47
.00327	.00595	.00546	.00169	.00317	.00067	.00157	.00180	.00041	.00456	.00160	.00179	.00081	.00103	.00094	.00092	.00183	.00103	48
.00113	.00139	.00284	.00445	.00371	.00134	.00320	.00235	.00258	.00320	.00134	.00201	.00435	.01859	.01794	.00968	.01419	.00976	49
.00145	.00199	.00259	.00238	.00296	.00117	.00236	.00176	.00158	.00538	.00263	.00479	.00300	.00703	.00603	.00568	.00794	.01674	50
.00187	.00166	.00096	.00099	.00088	.00113	.00060	.00070	.00066	.00095	.00062	.00070	.00087	.00136	.00093	.00094	.00089	.00114	51
.00043	.00049	.00082	.00072	.00068	.00036	.00089	.00050	.00063	.00144	.00048	.00059	.00069	.00110	.00129	.00109	.00575	.00308	52
.00108	.00137	.00256	.00279	.00211	.00085	.00129	.00167	.00230	.00224	.00107	.00379	.00300	.01061	.01139	.00607	.00776	.00734	53
.00013	.00014	.00020	.00017	.00017	.00010	.00013	.00014	.00017	.00026	.00025	.00060	.00015	.00023	.00032	.00077	.00090	.00136	54
.00071	.00084	.00107	.00114	.00114	.00059	.00077	.00307	.00122	.00313	.00081	.00289	.00197	.00398	.00198	.00188	.00215	.00294	55
.00045	.00041	.00038	.00046	.00038	.00033	.00032	.00033	.00038	.00045	.00034	.00047	.00072	.00051	.00087	.00054	.00066	.00070	56
.00327	.00274	.00249	.00244	.00215	.00231	.00190	.00200	.00147	.00373	.00200	.00209	.00221	.00278	.00515	.00299	.00292	.00348	57
.00166	.00107	.00088	.00109	.00138	.00066	.00075	.00078	.00073	.00125	.00085	.00078	.00090	.00127	.00774	.00270	.00155	.00200	58
.00015	.00018	.00014	.00022	.00014	.00012	.00020	.00013	.00012	.00024	.00015	.00020	.00023	.00027	.00029	.00025	.00102	.01467	59A
.00220	.00274	.00193	.00276	.00201	.00138	.00172	.00218	.00185	.00344	.00172	.00230	.00291	.00305	.00465	.00330	.00478	.01116	59B
.00142	.00062	.00075	.00056	.00063	.00035	.00048	.00042	.00037	.00072	.00050	.00057	.00067	.00070	.00069	.00077	.00219	.00126	60
.00032	.00037	.00056	.00090	.00062	.00020	.00033	.00061	.00034	.00051	.00033	.00054	.00065	.00096	.00063	.00056	.00171	.00058	61
.00207	.00324	.00207	.00164	.00151	.00791	.00385	.00109	.00073	.00311	.00131	.00453	.00149	.00142	.00158	.00126	.00381	.00175	62
.00379	.00844	.00434	.00176	.00223	.00210	.00157	.00655	.00088	.00242	.00125	.00131	.00124	.00128	.00120	.00148	.00123	.00125	63
.00189	.00473	.00202	.00165	.00157	.00108	.00382	.00133	.00101	.00278	.01466	.00340	.00271	.00193	.00152	.00189	.00215	.00211	64
.00719	.00992	.01590	.02899	.01882	.00349	.00840	.01968	.00409	.01394	.00777	.01653	.01982	.02416	.01378	.01432	.01106	.01164	65A
.01806	.02668	.03340	.09331	.03399	.01100	.02625	.04373	.01243	.04682	.02951	.02925	.08528	.03011	.06070	.04634	.03497	.03084	65B
.00098	.00147	.00419	.00639	.00532	.00103	.00257	.00379	.00887	.00341	.00190	.00206	.00552	.00742	.00310	.00318	.00260	.00288	65C
.02585	.00927	.00685	.00686	.00645	.00511	.00634	.00493	.00484	.00583	.00716	.00797	.00523	.00586	.00731	.00992	.00731	.00543	65D
.00392	.00312	.00803	.00765	.00547	.00162	.00345	.00509	.04489	.00438	.00301	.00373	.00603	.00419	.00515	.00448	.00342	.00304	65E
.01188	.00994	.01002	.01379	.01066	.01024	.00944	.01063	.00927	.01102	.01076	.01618	.01604	.01063	.01139	.01074	.01107	.01110	66
.00825	.00619	.00631	.00739	.00659	.00460	.00945	.00467	.00454	.00548	.00832	.00869	.00769	.01159	.00625	.01088	.00625	.00697	67
.01319	.01973	.04307	.04188	.04232	.01376	.01773	.02419	.02571	.03485	.02049	.03751	.03795	.05551	.07190	.04538	.02963	.03240	68A
.00640	.00988	.04796	.06053	.04234	.01081	.01617	.02195	.02087	.02206	.01160	.05122	.03095	.04595	.03403	.02891	.01991	.02195	68B
.00138	.00203	.00256	.00489	.00277	.00091	.00148	.00142	.00149	.00211	.00144	.00171	.00223	.00406	.00174	.00255	.00164	.00237	68C
.04217	.06566	.06867	.09530	.08044	.05894	.07782	.06629	.06543	.08549	.08812	.06976	.05476	.09984	.11455	.13234	.10220	.09536	69A
.00273	.00341	.00330	.00520	.00326	.00181	.00230	.00288	.00275	.00354	.00252	.00319	.00506	.00397	.00480	.00409	.00402	.00322	69B
.01694	.01573	.01635	.03390	.01516	.01342	.01194	.01123	.02444	.01565	.01821	.01457	.01925	.01656	.02021	.01814	.01634	.01848	70A
.00664	.00773	.00800	.00997	.00839	.00424	.00620	.00558	.01069	.00812	.00719	.00653	.00800	.00832	.00959	.00906	.00769	.00751	70B
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.03454	.02810	.03799	.04042	.02933	.02079	.02201	.02470	.13417	.02568	.02625	.02401	.02478	.02380	.02643	.02646	.02376	.02230	71B
.00512	.00622	.00296	.00362	.00335	.00270	.00270	.00256	.00269	.00256	.00780	.00280	.00294	.00252	.00338	.00368	.00682	.00283	72A
.00303	.00245	.00213	.00253	.00396	.00268	.00220	.00171	.00189	.00356	.00380	.00233	.00304	.00312	.00413	.00322	.00260	.00329	72B
.01937	.00885	.00663	.00831	.00685	.00622	.00436	.00436	.00597	.00806	.00487	.00577	.00778	.00733	.00668	.00658	.00544	.00850	73A
.02960	.01721	.03495	.02565	.04461	.05836	.01815	.02140	.01927	.02406	.01540	.01386	.01483	.01624	.01704	.01560	.01592	.03489	73B
.06300	.03176	.03586	.05324	.03595	.05086	.03302	.02568	.02748	.03013	.03383	.02459	.02877	.04483	.03645	.03618	.03425	.03382	73C
.00467	.00351	.00357	.00418	.00373	.00261	.00535	.00264	.00257	.00310	.00471	.00492	.00436	.00656	.00354	.00616	.00354	.00395	73D
.00908	.01028	.00695	.00746	.00675	.00538	.00603	.00567	.00577	.00757	.00826	.00647	.00706	.00678	.00742	.00755	.00814	.00710	74
.01420	.01788	.00895	.01344	.01033	.00860	.00846	.00784	.00781	.01202	.00879	.01271	.01400	.01105	.01907	.01533	.01444	.01163	75
.00396	.00323	.00313	.00367	.00327	.00243	.00437	.00238	.00235	.00288	.00400	.00406	.00364	.00530	.00322	.00512	.00325	.00346	76
.00005	.00003	.00004	.00006	.00004	.00007	.00008	.00006	.00002	.00003	.00047	.00002	.00003	.00003	.00003	.00003	.00003	.00003	77A
.00353	.00293	.00204	.00284	.00300	.00646	.00277	.00181	.00252	.00511	.00186	.00195	.00243	.00202	.00276	.00277	.00245	.00464	77B
.01810	.01122	.00581	.00623	.00560	.00363	.00463	.00405	.00433	.00532	.00777	.00541	.00558	.00704	.00777	.00608	.00524	.00568	78
.00668	.00869	.01498	.02010	.01511	.00528	.00762	.00953	.00996	.01154	.00840	.01284	.01374	.01921	.01657	.01429	.00980	.01122	79
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1.85432	**1.94490**	**2.11738**	**2.47840**	**2.28005**	**1.66921**	**1.93174**	**2.13181**	**2.34805**	**2.13098**	**2.27791**	**1.94175**	**1.99392**	**2.14775**	**2.47511**	**2.59246**	**2.16328**	**2.14177**	

Table 5.—Industry-by-Commodity

[Total requirements, direct and indirect, per dollar

Industry number	Each entry represents the output required, directly and indirectly, of the industry named at the beginning of the row for each dollar of delivery to final demand of the commodity named at the head of the column	Other fabricated metal products	Engines and turbines	Farm, construc-tion, and mining machinery	Materials handling machinery and equipment	Metal-working machinery and equipment	Special industry machinery and equipment	General industrial machinery and equipment	Miscel-laneous machinery, except electrical	Computer and office equipment	Service industry machinery	Electrical industrial equipment and apparatus
	Commodity number	42	43	44+45	46	47	48	49	50	51	52	53
1	Livestock and livestock products	0.00095	0.00073	0.00090	0.00096	0.00089	0.00091	0.00086	0.00081	0.00092	0.00091	0.00094
2	Other agricultural products	.00148	.00102	.00125	.00121	.00115	.00116	.00126	.00099	.00107	.00135	.00127
3	Forestry and fishery products	.00082	.00039	.00058	.00057	.00046	.00053	.00047	.00037	.00036	.00086	.00055
4	Agricultural, forestry, and fishery services	.00066	.00052	.00062	.00059	.00053	.00055	.00054	.00051	.00057	.00061	.00063
5+6	Metallic ores mining	.01158	.01356	.00863	.00802	.00727	.00722	.00883	.00904	.00369	.01040	.00946
7	Coal mining	.00915	.00906	.00834	.00663	.00651	.00556	.00694	.00592	.00294	.00601	.00601
8	Crude petroleum and natural gas	.01840	.01452	.01480	.01352	.01328	.01279	.01325	.01088	.00907	.01327	.01650
9+10	Nonmetallic minerals mining	.00309	.00239	.00220	.00198	.00276	.00208	.00209	.00208	.00102	.00300	.00247
11+12	Construction	.02743	.02236	.02348	.02461	.01835	.01998	.01980	.02089	.02003	.01973	.02129
13	Ordnance and accessories	.00038	.00099	.00069	.00065	.00050	.00068	.00102	.00063	.00025	.00058	.00033
14	Food and kindred products	.00341	.00255	.00319	.00340	.00321	.00335	.00295	.00287	.00330	.00327	.00332
15	Tobacco products	.00001	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	.00001
16	Broad and narrow fabrics, yarn and thread mills	.00237	.00154	.00187	.00159	.00180	.00158	.00352	.00141	.00178	.00225	.00220
17	Miscellaneous textile goods and floor coverings	.00122	.00076	.00104	.00100	.00063	.00089	.00627	.00135	.00078	.00104	.00097
18	Apparel	.00054	.00044	.00042	.00031	.00034	.00028	.00040	.00026	.00030	.00034	.00035
19	Miscellaneous fabricated textile products	.00087	.00037	.00038	.00054	.00103	.00027	.00061	.00024	.00034	.00039	.00038
20+21	Lumber and wood products	.01141	.00492	.00757	.00736	.00569	.00675	.00595	.00437	.00401	.01187	.00680
22+23	Furniture and fixtures	.00189	.00036	.00053	.00196	.00034	.00041	.00026	.00035	.00055	.00102	.00056
24	Paper and allied products, except containers	.01809	.00970	.01146	.01119	.01021	.01093	.01152	.00888	.01183	.01368	.01920
25	Paperboard containers and boxes	.01031	.00511	.00608	.00438	.00667	.00534	.00675	.00532	.00538	.01009	.00898
26A	Newspapers and periodicals	.01021	.00834	.01218	.01176	.00897	.00966	.00855	.00861	.00499	.01000	.01441
26B	Other printing and publishing	.01368	.00988	.01317	.01704	.01035	.01127	.01073	.00994	.00968	.01134	.01503
27A	Industrial and other chemicals	.03829	.01651	.01841	.01612	.02237	.02679	.01621	.01282	.01422	.02283	.01987
27B	Agricultural fertilizers and chemicals	.00125	.00066	.00080	.00069	.00080	.00088	.00069	.00059	.00068	.00090	.00085
28	Plastics and synthetic materials	.01391	.00729	.00945	.00727	.00871	.00801	.00991	.00664	.01054	.01419	.01291
29A	Drugs	.00028	.00013	.00015	.00014	.00016	.00018	.00017	.00011	.00013	.00030	.00016
29B	Cleaning and toilet preparations	.00161	.00075	.00084	.00077	.00094	.00092	.00083	.00071	.00073	.00141	.00095
30	Paints and allied products	.00844	.00171	.00404	.00256	.00217	.00125	.00125	.00114	.00128	.00440	.00394
31	Petroleum refining and related products	.01544	.01162	.01217	.01225	.01242	.01196	.01143	.00979	.00992	.01202	.01711
32	Rubber and miscellaneous plastics products	.03069	.02116	.03691	.02401	.03009	.02584	.02335	.01218	.03788	.03232	.03158
33+34	Footwear, leather, and leather products	.00017	.00012	.00024	.00013	.00018	.00015	.00011	.00011	.00015	.00013	.00013
35	Glass and glass products	.00384	.00115	.00138	.00133	.00120	.00426	.00106	.00113	.00213	.00250	.00167
36	Stone and clay products	.01084	.01105	.00932	.00841	.01950	.00865	.01059	.01267	.00345	.01081	.01516
37	Primary iron and steel manufacturing	.20138	.19121	.17180	.13906	.11609	.09713	.13313	.10012	.02214	.09684	.07837
38	Primary nonferrous metals manufacturing	.08138	.09507	.03790	.04444	.05456	.05137	.05790	.07589	.03830	.09476	.08963
39	Metal containers	.00118	.00049	.00066	.00058	.00057	.00055	.00047	.00040	.00051	.00072	.00066
40	Heating, plumbing, and fabricated structural metal products	.01273	.01729	.04474	.03635	.01877	.02037	.01465	.01631	.00630	.01606	.00784
41	Screw machine products and stampings	.02299	.02357	.02113	.02460	.04151	.01273	.01464	.01495	.00826	.02753	.02109
42	Other fabricated metal products	.94446	.02405	.02787	.04569	.02143	.02203	.02412	.02632	.01565	.02712	.01980
43	Engines and turbines	.00168	.98256	.04830	.01118	.00408	.00550	.00666	.00538	.00087	.00333	.01628
44+45	Farm, construction, and mining machinery	.00330	.01765	1.00820	.02172	.00639	.00329	.00632	.00636	.00061	.00304	.00209
46	Materials handling machinery and equipment	.00095	.00061	.00285	.97644	.00131	.00454	.00305	.00149	.00032	.00118	.00133
47	Metalworking machinery and equipment	.01424	.01139	.01381	.01311	.93896	.02298	.01599	.02400	.00281	.00991	.00889
48	Special industry machinery and equipment	.00282	.00112	.00237	.01040	.00608	.95573	.00954	.00337	.00105	.00629	.00094
49	General industrial machinery and equipment	.01007	.02950	.03920	.04481	.01278	.04057	1.00047	.02446	.00256	.02943	.01079
50	Miscellaneous machinery, except electrical	.01672	.03899	.03186	.03139	.03542	.03083	.02351	.98897	.00331	.01594	.01518
51	Computer and office equipment	.00159	.00147	.00116	.00129	.00165	.00477	.00329	.00285	1.18959	.00142	.00458
52	Service industry machinery	.00212	.00108	.00141	.00346	.00097	.00308	.00726	.00193	.00071	1.02208	.00115
53	Electrical industrial equipment and apparatus	.00939	.04025	.01143	.04477	.02867	.06296	.04828	.00911	.03207	.07022	.97115
54	Household appliances	.00054	.00022	.00027	.00036	.00022	.00108	.00098	.00033	.00015	.01111	.00039
55	Electric lighting and wiring equipment	.00409	.00229	.00194	.00245	.00220	.00245	.00183	.00576	.00650	.00842	.01236
56	Audio, video, and communication equipment	.00078	.00081	.00067	.00157	.00053	.00076	.00063	.00067	.02350	.00095	.00358
57	Electronic components and accessories	.00562	.00552	.00333	.00514	.00425	.01381	.00656	.00582	.14252	.00723	.03982
58	Miscellaneous electrical machinery and supplies	.00185	.01244	.00610	.00761	.00182	.00217	.00221	.00267	.00525	.00185	.00543
59A	Motor vehicles (passenger cars and trucks)	.00047	.00154	.00151	.00080	.00172	.00029	.00038	.00039	.00022	.00053	.00045
59B	Truck and bus bodies, trailers, and motor vehicles parts	.01170	.05590	.01194	.01250	.00443	.00335	.01027	.01592	.00215	.00606	.00414
60	Aircraft and parts	.00346	.04306	.00306	.00887	.00193	.00583	.00198	.00453	.00182	.00163	.00782
61	Other transportation equipment	.00063	.00616	.00400	.00109	.00061	.00078	.00057	.00107	.00039	.00111	.00612
62	Scientific and controlling instruments	.00539	.00482	.00177	.00579	.00185	.00621	.00581	.00280	.00939	.01930	.00756
63	Ophthalmic and photographic equipment	.00130	.00114	.00129	.00133	.00121	.00380	.00149	.00124	.00819	.00133	.00143
64	Miscellaneous manufacturing	.00405	.00138	.00201	.00207	.00179	.00177	.00171	.00146	.00153	.00321	.00243
65A	Railroads and related services; passenger ground transportation	.00904	.00721	.00749	.00638	.00617	.00587	.00615	.00547	.00344	.00664	.00740
65B	Motor freight transportation and warehousing	.02846	.02374	.02679	.02227	.01968	.01721	.01834	.01665	.01153	.02234	.02100
65C	Water transportation	.00233	.00209	.00233	.00174	.00159	.00142	.00171	.00141	.00090	.00177	.00155
65D	Air transportation	.00755	.00735	.00921	.00782	.00771	.01003	.00956	.00686	.02078	.01047	.01416
65E	Pipelines, freight forwarders, and related services	.00310	.00262	.00297	.00258	.00245	.00253	.00253	.00207	.00306	.00282	.00331
66	Communications, except radio and TV	.01195	.01116	.01161	.01290	.01102	.01274	.01209	.01059	.01231	.01193	.01438
67	Radio and TV broadcasting	.00830	.00676	.00996	.00947	.00726	.00784	.00691	.00696	.00385	.00813	.01181
68A	Electric services (utilities)	.03046	.02756	.02470	.02152	.02358	.02126	.02504	.02321	.01633	.02320	.02523
68B	Gas production and distribution (utilities)	.01926	.01646	.01628	.01333	.01236	.01173	.01392	.01082	.00639	.01290	.01331
68C	Water and sanitary services	.00155	.00149	.00147	.00151	.00110	.00116	.00118	.00087	.00094	.00156	.00119
69A	Wholesale trade	.08911	.09529	.10658	.10372	.06677	.08968	.08448	.05775	.11785	.11005	.09476
69B	Retail trade	.00342	.00277	.00298	.00295	.00296	.00257	.00258	.00254	.00246	.00256	.00285
70A	Finance	.01786	.01544	.01526	.01599	.01474	.01749	.01523	.01818	.01971	.01400	.02318
70B	Insurance	.00711	.00674	.00743	.00699	.00670	.00628	.00630	.00559	.00594	.00619	.00670
71A	Owner-occupied dwellings	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
71B	Real estate and royalties	.02140	.01854	.01946	.02148	.02208	.02263	.01997	.02293	.02619	.01948	.02208
72A	Hotels and lodging places	.00279	.00286	.00337	.00338	.00369	.00415	.00384	.00284	.00982	.00423	.00784
72B	Personal and repair services (except auto)	.00297	.00350	.00330	.00321	.00270	.00270	.00303	.00253	.00239	.00259	.00312
73A	Computer and data processing services	.00712	.00847	.00807	.00673	.00612	.00587	.00695	.00730	.00567	.00570	.00688
73B	Legal, engineering, accounting, and related services	.01644	.01410	.01775	.01755	.01613	.01692	.01584	.01669	.01902	.01607	.01658
73C	Other business and professional services, except medical	.03379	.03028	.03259	.03348	.02897	.03069	.03045	.04339	.03035	.02901	.03345
73D	Advertising	.00470	.00383	.00564	.00536	.00411	.00444	.00391	.00394	.00218	.00461	.00669
74	Eating and drinking places	.00756	.00650	.00789	.00837	.00805	.00800	.00767	.00800	.00927	.00757	.00823
75	Automotive repair and services	.01301	.01157	.00970	.00988	.01442	.01080	.01050	.01169	.01151	.00941	.01218
76	Amusements	.00396	.00345	.00471	.00471	.00347	.00378	.00360	.00339	.00238	.00395	.00544
77A	Health services	.00003	.00002	.00002	.00003	.00002	.00002	.00002	.00003	.00002	.00002	.00003
77B	Educational and social services, and membership organizations	.00245	.00193	.00189	.00191	.00223	.00183	.00219	.00235	.00221	.00250	.00211
78	Federal Government enterprises	.00527	.00485	.00547	.00533	.00435	.00515	.00500	.00426	.00355	.00402	.00507
79	State and local government enterprises	.00968	.00862	.00817	.00735	.00719	.00679	.00747	.00651	.00565	.00781	.00790
82	General government industry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
83	Rest of the world adjustment to final uses	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
84	Household industry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
85	Inventory valuation adjustment	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Total industry output multiplier	**2.01018**	**2.13840**	**2.08876**	**2.04968**	**1.81882**	**1.90336**	**1.91831**	**1.80296**	**2.04630**	**2.06395**	**1.95570**

*Less than .000005.

Total Requirements, 1987 Benchmark—Continued

of delivery to final demand, at producers' prices]

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	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	Communications, except radio and TV	Industry number
54	55	56	57	58	59A	59B	60	61	62	63	64	65A	65B	65C	65D	65E	66	
0.00110	0.00100	0.00082	0.00089	0.00120	0.00132	0.00095	0.00080	0.00101	0.00120	0.00102	0.00257	0.00099	0.00135	0.00204	0.00400	0.00207	0.00068	1
.00208	.00155	.00118	.00125	.00162	.00313	.00161	.00124	.00233	.00189	.00155	.00523	.00128	.00991	.00221	.00304	.00198	.00081	2
.00111	.00064	.00048	.00039	.00048	.00071	.00072	.00035	.00229	.00054	.00080	.00245	.00083	.00026	.00051	.00056	.00057	.00043	3
.00072	.00063	.00054	.00057	.00067	.00082	.00067	.00057	.00100	.00062	.00064	.00130	.00120	.00091	.00102	.00107	.00097	.00075	4
.00764	.00837	.00358	.00631	.01313	.00652	.01059	.00757	.00669	.00445	.00223	.00770	.00131	.00044	.00218	.00071	.00045	.00065	5+6
.00688	.00552	.00311	.00433	.00478	.00628	.00717	.00399	.00541	.00363	.00437	.00443	.00291	.00224	.00532	.00214	.00564	.00120	7
.01628	.01486	.00903	.01178	.01525	.01760	.01647	.01041	.01256	.00957	.01211	.01450	.05101	.04263	.02912	.07829	.01459	.00439	8
.00279	.00241	.00119	.00182	.00205	.00257	.00251	.00134	.00218	.00135	.00207	.00283	.00252	.00091	.00113	.00125	.00078	.00105	9+10
.01941	.01885	.01519	.02156	.01890	.02169	.02253	.01786	.03339	.01543	.01475	.01818	.12308	.01601	.02263	.02503	.03320	.05944	11+12
.00055	.00017	.00387	.00042	.00380	.00063	.00057	.05833	.00049	.01572	.00027	.00021	.00014	.00008	.00025	.00270	.00028	.00014	13
.00373	.00353	.00285	.00323	.00439	.00407	.00324	.00268	.00293	.00405	.00368	.00810	.00323	.00343	.00710	.01525	.00750	.00224	14
.00001	.00001	(*)	(*)	.00001	.00001	(*)	(*)	(*)	.00001	.00002	.00009	(*)	(*)	(*)	(*)	(*)	(*)	15
.00697	.00378	.00300	.00262	.00317	.01869	.00428	.00476	.00838	.00843	.00346	.02138	.00126	.00097	.00527	.00117	.00306	.00085	16
.00154	.00092	.00129	.00111	.00169	.00705	.00296	.00229	.00683	.00614	.00211	.00342	.00092	.00048	.00381	.00046	.00078	.00041	17
.00044	.00033	.00057	.00054	.00047	.00114	.00042	.00041	.00060	.00079	.00027	.00207	.00060	.00029	.00564	.00046	.00033	.00084	18
.00045	.00042	.00031	.00033	.00040	.02470	.00233	.00252	.00789	.00037	.00026	.00541	.00052	.00047	.00391	.00075	.00488	.00018	19
.01531	.00850	.00623	.00447	.00536	.00897	.00960	.00420	.03423	.00687	.00952	.03515	.01153	.00259	.00414	.00358	.00558	.00559	20+21
.00544	.00126	.01095	.00102	.00050	.01301	.00116	.00079	.00348	.00165	.00032	.00151	.00045	.00010	.00022	.00014	.00015	.00038	22+23
.02503	.01745	.01451	.01047	.03643	.01687	.01304	.00872	.00943	.01819	.08910	.03626	.00657	.00597	.00878	.00884	.01022	.00596	24
.02481	.01836	.00701	.00545	.01096	.00766	.00614	.00247	.00472	.00714	.01203	.01806	.00209	.00205	.00278	.00195	.00222	.00134	25
.01163	.00926	.00980	.00656	.01298	.01418	.01354	.01221	.00733	.01104	.01091	.01929	.00347	.00399	.00776	.01125	.01137	.00478	26A
.01336	.01113	.01320	.00871	.01475	.01563	.01419	.01286	.00900	.01285	.01407	.02596	.00992	.00826	.01365	.01460	.01839	.01130	26B
.04000	.03387	.02227	.03627	.04416	.03769	.02685	.01288	.02307	.02127	.04590	.04126	.01072	.00756	.01042	.00839	.00549	.00553	27A
.00151	.00127	.00086	.00118	.00145	.00144	.00103	.00067	.00108	.00091	.00161	.00203	.00142	.00123	.00181	.00071	.00056	.00040	27B
.03613	.03000	.01557	.01791	.02076	.02667	.01888	.00835	.01766	.01608	.01754	.03465	.00401	.00371	.00534	.00230	.00265	.00254	28
.00034	.00023	.00018	.00026	.00029	.00031	.00020	.00024	.00018	.00390	.00033	.00037	.00011	.00009	.00016	.00016	.00010	.00049	29A
.00160	.00125	.00129	.00121	.00148	.00166	.00125	.00075	.00100	.00160	.00171	.00285	.00104	.00070	.00100	.00102	.00052	.00039	29B
.00878	.00299	.00164	.00121	.00142	.01490	.00542	.00280	.00811	.00150	.00102	.00549	.00176	.00087	.00279	.00066	.00060	.00159	30
.01365	.01318	.00876	.01108	.01519	.01661	.01489	.01038	.01222	.00932	.01198	.01472	.07886	.06679	.04271	.12443	.01224	.00520	31
.05663	.03535	.05320	.06151	.05799	.08865	.05177	.01919	.02532	.02977	.03376	.04259	.01204	.01532	.01066	.00578	.00690	.00802	32
.00019	.00013	.00021	.00014	.00015	.00069	.00019	.00016	.00028	.00030	.00012	.00444	.00015	.00019	.00028	.00024	.00046	.00015	33+34
.01301	.04013	.00383	.01006	.00299	.01296	.00372	.00148	.01256	.00469	.00703	.00251	.00228	.00103	.00116	.00105	.00103	.00083	35
.01062	.00694	.00354	.00538	.00560	.00969	.01199	.00691	.00888	.00511	.00677	.00895	.00871	.00181	.00331	.00267	.00254	.00394	36
.11100	.07517	.01906	.02272	.03398	.07921	.11438	.04112	.08486	.03442	.01122	.03011	.01539	.00455	.01593	.00527	.00434	.00569	37
.04891	.07869	.03872	.07125	.09667	.04592	.08723	.08223	.04911	.03845	.01946	.08488	.00934	.00297	.02122	.00618	.00336	.00542	38
.00109	.00072	.00053	.00059	.00074	.00143	.00080	.00046	.00084	.00076	.00064	.00102	.00048	.00037	.00065	.00080	.00037	.00024	39
.00721	.00285	.00486	.00671	.00790	.01039	.02283	.00553	.04164	.00845	.00209	.00243	.00803	.00133	.00315	.00180	.00213	.00348	40
.02489	.03407	.01251	.01253	.01482	.08957	.04321	.01707	.01688	.01583	.00636	.00733	.00312	.00229	.00292	.00229	.00132	.00383	41
.04277	.02525	.02189	.04020	.03012	.03001	.03187	.01969	.02988	.02415	.01812	.01569	.01160	.00626	.02576	.00424	.00391	.00452	42
.00168	.00102	.00050	.00059	.00213	.01974	.00634	.00796	.04733	.00071	.00048	.00070	.00386	.00088	.00893	.00073	.00155	.00207	43
.00356	.00319	.00060	.00079	.00109	.00203	.00256	.00097	.01594	.00073	.00061	.00092	.00126	.00057	.00148	.00071	.00062	.00041	44+45
.00043	.00034	.00031	.00031	.00038	.00067	.00089	.00029	.00091	.00028	.00021	.00035	.00049	.00017	.00038	.00018	.00019	.00022	46
.01335	.00627	.00331	.00427	.00658	.01477	.00911	.01838	.00624	.00476	.00271	.00461	.00295	.00076	.00952	.00161	.00066	.00065	47
.00170	.00080	.00136	.00402	.00135	.00147	.00124	.00104	.00104	.00128	.00134	.00128	.00043	.00027	.00083	.00033	.00036	.00030	48
.01188	.00384	.00303	.00329	.00604	.01239	.02691	.00555	.02641	.00467	.00242	.00366	.00891	.00194	.02898	.00155	.00606	.00311	49
.00559	.00559	.00362	.00480	.01472	.02527	.04696	.01413	.01038	.00488	.00365	.00590	.00557	.00176	.00977	.00215	.00175	.00090	50
.00183	.00127	.02236	.03822	.01678	.00214	.00148	.00330	.00100	.01515	.00455	.00177	.00125	.00091	.00221	.00169	.00256	.00269	51
.02726	.00291	.00071	.00067	.00130	.02638	.01582	.00057	.00560	.00086	.00046	.00172	.00221	.00090	.00088	.00053	.00064	.00086	52
.04179	.03430	.00979	.00948	.01595	.00868	.00794	.00586	.02134	.01891	.00532	.00417	.01623	.00195	.00421	.00137	.00244	.00327	53
.95536	.00082	.00047	.00019	.00064	.00057	.00034	.00016	.00632	.00029	.00020	.00140	.00053	.00011	.00087	.00019	.00017	.00024	54
.01399	.96772	.00954	.00398	.01303	.00707	.00610	.00129	.00566	.00410	.00436	.00189	.00325	.00140	.00268	.00092	.00106	.00185	55
.01915	.00360	.97001	.01204	.00858	.01090	.00152	.01694	.00159	.01681	.00145	.00133	.00077	.00060	.00065	.00144	.00106	.01706	56
.02145	.01882	.22148	1.04277	.07712	.01721	.01097	.02998	.00477	.10356	.08661	.01666	.00299	.00190	.00417	.00506	.00351	.01931	57
.00205	.01206	.01268	.01141	.92407	.03498	.02713	.00275	.00799	.00796	.00291	.00203	.00290	.00164	.00289	.00129	.00264	.00241	58
.00042	.00062	.00028	.00026	.00045	1.00532	.05817	.00035	.02677	.00035	.00018	.00053	.00111	.00071	.00059	.00013	.00016	.00014	59A
.00302	.00557	.00704	.00195	.02247	.33205	1.02206	.00288	.02920	.00404	.00183	.00291	.00992	.00863	.00298	.00164	.00243	.00157	59B
.00134	.00130	.00254	.00183	.00671	.00265	.00137	1.16681	.00712	.01208	.00097	.00109	.00078	.00042	.00119	.05232	.00139	.00042	60
.00061	.00066	.00025	.00029	.00040	.00113	.00158	.00062	1.00504	.00036	.00028	.00105	.02116	.00031	.01724	.00031	.00065	.00027	61
.02120	.00637	.03490	.01432	.02866	.01215	.00291	.03840	.00574	.95889	.01389	.00212	.00114	.00049	.00253	.00258	.00080	.00147	62
.00137	.00161	.00208	.00130	.00795	.00176	.00140	.00131	.00107	.00421	.99892	.00214	.00100	.00110	.00167	.00124	.00167	.00115	63
.01025	.00472	.00201	.00142	.00208	.00279	.00209	.00166	.00352	.00304	.00245	1.01047	.00134	.00107	.00369	.00196	.00228	.00152	64
.00831	.00704	.00380	.00482	.00642	.01098	.00873	.00393	.00712	.00433	.00561	.00740	.94368	.00616	.00406	.00317	.00561	.00189	65A
.02770	.02271	.01404	.01647	.02277	.04120	.03301	.01377	.02360	.01426	.01718	.03234	.01246	1.17942	.01354	.00965	.01091	.00684	65B
.00185	.00144	.00090	.00117	.00155	.00207	.00206	.00107	.00169	.00105	.00175	.00203	.00244	.00200	1.10822	.00383	.00195	.00047	65C
.01032	.01281	.01071	.01074	.01617	.01219	.00841	.02106	.00720	.00835	.00940	.00683	.00586	.00602	.00966	1.02442	.02402	.00401	65D
.00317	.00313	.00219	.00248	.00350	.00412	.00330	.00317	.00258	.00204	.00248	.00304	.02851	.04943	.07693	.09481	1.04047	.00099	65E
.01122	.01204	.01196	.01130	.01306	.01330	.01426	.01320	.01200	.01255	.00890	.01030	.00787	.02423	.01704	.02466	.03097	1.26341	66
.00947	.00747	.00792	.00523	.01053	.01160	.01111	.01001	.00592	.00897	.00883	.01558	.00249	.00291	.00603	.00901	.00890	.00363	67
.02431	.02388	.01697	.02580	.02503	.02369	.02697	.01947	.02083	.01808	.01611	.02191	.01722	.01529	.03282	.01400	.04128	.00706	68A
.01678	.01445	.00763	.01020	.01218	.01572	.01599	.00892	.01091	.00817	.00943	.01121	.00706	.00446	.00638	.00611	.00636	.00263	68B
.00155	.00127	.00080	.00090	.00157	.00156	.00137	.00088	.00130	.00106	.00161	.00226	.00091	.00069	.00248	.00090	.00273	.00374	68C
.11509	.09897	.08231	.07558	.10065	.14639	.10303	.04962	.09799	.06574	.06309	.08627	.04993	.03319	.04916	.05119	.01963	.01928	69A
.00265	.00270	.00190	.00225	.00312	.00482	.00471	.00220	.00352	.00224	.00224	.00338	.01075	.03558	.00239	.00303	.00352	.00337	69B
.01942	.02101	.01534	.02058	.02384	.01926	.01562	.02410	.01284	.01521	.02116	.01963	.02015	.01783	.08554	.04898	.05804	.02338	70A
.00667	.00635	.00565	.00578	.00760	.01018	.00853	.00584	.00629	.00605	.00723	.00773	.01230	.01933	.00846	.01413	.03345	.00372	70B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71A
.02020	.02177	.02310	.02258	.02500	.02298	.02129	.02123	.03002	.02301	.01872	.02512	.02954	.04570	.06254	.04639	.05607	.03171	71B
.00464	.00714	.00347	.00542	.00860	.00379	.00302	.01270	.00279	.00319	.00403	.00307	.00350	.00327	.00322	.00311	.00565	.00186	72A
.00365	.00297	.00601	.00245	.00317	.00401	.00378	.00244	.00252	.00265	.00201	.00310	.00231	.00276	.00287	.00734	.00357	.00411	72B
.00636	.00646	.00683	.00638	.00726	.00696	.00643	.00628	.00488	.00541	.00542	.00538	.01294	.00821	.02364	.01743	.02623	.01672	73A
.01528	.01753	.01647	.01713	.02119	.01820	.01587	.01757	.01507	.01929	.01564	.02229	.01914	.01459	.01673	.01768	.02855	.01439	73B
.03251	.03107	.03199	.03103	.03628	.03617	.03400	.03482	.02960	.03148	.03264	.03626	.03345	.02812	.09391	.03601	.03231	.02007	73C
.00537	.00423	.00448	.00296	.00596	.00657	.00629	.00567	.00335	.00508	.00500	.00882	.00141	.00165	.00341	.00510	.00504	.00205	73D
.00770	.00850	.00705	.00758	.01077	.00889	.00783	.00648	.00640	.00763	.00702	.01194	.00828	.01002	.00934	.03621	.02311	.00632	74
.00974	.01158	.00764	.00786	.01529	.02449	.04210	.00730	.01269	.01144	.00980	.01532	.01953	.04979	.00881	.00999	.01453	.00744	75
.00452	.00373	.00398	.00326	.00630	.00578	.00523	.00487	.00360	.00456	.00486	.00733	.00159	.00184	.00313	.00509	.00471	.00850	76
.00003	.00003	.00002	.00002	.00003	.00003	.00003	.00002	.00002	.00003	.00003	.00004	.00003	.00003	.00007	.00005	.00003	.00002	77A
.00348	.00207	.00320	.00415	.00273	.00478	.00322	.00326	.00192	.00338	.00719	.00581	.00434	.00181	.00504	.00212	.00584	.00269	77B
.00707	.00486	.00503	.00430	.00511	.00631	.00677	.00511	.00410	.00505	.00403	.00671	.00441	.00460	.00660	.00432	.00790	.00403	78
.00862	.00780	.00541	.00705	.00853	.00929	.00913	.00607	.00722	.00600	.00664	.00876	.11140	.00670	.01193	.02335	.01214	.00756	79
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	83
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
2.13254	**1.95934**	**1.93327**	**1.86771**	**2.05131**	**2.67846**	**2.24813**	**2.01852**	**2.07465**	**1.81260**	**1.80504**	**1.99597**	**1.85843**	**1.82450**	**2.06097**	**1.94720**	**1.72170**	**1.68937**	

Table 5.—Industry-by-Commodity

[Total requirements, direct and indirect, per dollar

Industry number	Each entry represents the output required, directly and indirectly, of the industry named at the beginning of the row for each dollar of delivery to final demand of the commodity named at the head of the column	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	Hotels and lodging places
	Commodity number	67	68A	68B	68C	69A	69B	70A	70B	71A	71B	72A
1	Livestock and livestock products	0.00344	0.00050	0.00047	0.00142	0.00159	0.00218	0.00160	0.00231	0.00107	0.00166	0.00234
2	Other agricultural products	.00331	.00075	.00062	.00238	.00150	.00178	.00158	.00188	.00172	.00208	.00331
3	Forestry and fishery products	.00050	.00051	.00031	.00174	.00065	.00044	.00036	.00039	.00031	.00054	.00059
4	Agricultural, forestry, and fishery services	.00408	.00089	.00103	.00326	.00101	.00109	.00084	.00082	.00819	.00610	.00611
5+6	Metallic ores mining	.00054	.00076	.00049	.00184	.00037	.00031	.00032	.00023	.00023	.00038	.00059
7	Coal mining	.00160	.11151	.00225	.00788	.00178	.00340	.00158	.00077	.00031	.00093	.00508
8	Crude petroleum and natural gas	.00593	.05256	.49087	.04801	.01097	.00896	.00651	.00381	.00180	.00474	.01944
9+10	Nonmetallic minerals mining	.00076	.00176	.00115	.00475	.00058	.00065	.00054	.00039	.00093	.00125	.00199
11+12	Construction	.02807	.07791	.04552	.20297	.01537	.02564	.01856	.01378	.05323	.07124	.05314
13	Ordnance and accessories	.00014	.00009	.00006	.00038	.00016	.00007	.00014	.00008	.00003	.00007	.00016
14	Food and kindred products	.00963	.00153	.00139	.00408	.00564	.00805	.00574	.00858	.00086	.00395	.00606
15	Tobacco products	(*)	(*)	(*)	(*)	.00001	.00001	(*)	(*)	.....	(*)	.00001
16	Broad and narrow fabrics, yarn and thread mills	.00178	.00071	.00037	.00178	.00110	.00078	.00098	.00061	.00024	.00057	.00993
17	Miscellaneous textile goods and floor coverings	.00047	.00051	.00026	.00127	.00051	.00038	.00036	.00024	.00026	.00041	.00201
18	Apparel	.00115	.00023	.00015	.00075	.00041	.00024	.00019	.00015	.00004	.00014	.00353
19	Miscellaneous fabricated textile products	.00072	.00018	.00014	.00049	.00061	.00028	.00074	.00035	.00009	.00022	.01210
20+21	Lumber and wood products	.00489	.00719	.00409	.02486	.00753	.00400	.00300	.00216	.00436	.00646	.00697
22+23	Furniture and fixtures	.00021	.00023	.00014	.00067	.00011	.00011	.00010	.00007	.00014	.00021	.00032
24	Paper and allied products, except containers	.00871	.00373	.00315	.01094	.01761	.01697	.01377	.00933	.00142	.00655	.01841
25	Paperboard containers and boxes	.00141	.00116	.00067	.00262	.01129	.00232	.00122	.00097	.00039	.00088	.00303
26A	Newspapers and periodicals	.00793	.00205	.00323	.00464	.00881	.01730	.00861	.00798	.00091	.00690	.00911
26B	Other printing and publishing	.01334	.00476	.00469	.00928	.01877	.01620	.02702	.02148	.00191	.01092	.01950
27A	Industrial and other chemicals	.00736	.00865	.00904	.04333	.00535	.00454	.00468	.00332	.00181	.00410	.01327
27B	Agricultural fertilizers and chemicals	.00122	.00050	.00061	.00331	.00061	.00055	.00056	.00049	.00228	.00163	.00731
28	Plastics and synthetic materials	.00275	.00213	.00137	.00744	.00258	.00196	.00205	.00137	.00070	.00161	.00802
29A	Drugs	.00014	.00010	.00007	.00035	.00010	.00009	.00011	.00009	.00004	.00007	.00036
29B	Cleaning and toilet preparations	.00082	.00073	.00052	.00174	.00076	.00059	.00075	.00045	.00020	.00053	.00717
30	Paints and allied products	.00054	.00094	.00063	.00263	.00058	.00053	.00045	.00033	.00052	.00079	.00098
31	Petroleum refining and related products	.00645	.05098	.01241	.03761	.01248	.01038	.00847	.00481	.00218	.00544	.01484
32	Rubber and miscellaneous plastics products	.00786	.00577	.00283	.01920	.00695	.00485	.00573	.00372	.00174	.00463	.02567
33+34	Footwear, leather, and leather products	.00070	.00009	.00007	.00025	.00032	.00021	.00024	.00028	.00003	.00012	.00081
35	Glass and glass products	.00099	.00085	.00050	.00296	.00116	.00065	.00085	.00062	.00029	.00064	.01354
36	Stone and clay products	.00223	.00570	.00484	.01546	.00170	.00195	.00153	.00110	.00321	.00456	.00506
37	Primary iron and steel manufacturing	.00338	.00766	.00599	.01710	.00332	.00290	.00243	.00175	.00252	.00374	.00500
38	Primary nonferrous metals manufacturing	.00472	.00561	.00267	.01175	.00279	.00229	.00250	.00173	.00172	.00278	.00404
39	Metal containers	.00046	.00038	.00019	.00071	.00192	.00038	.00034	.00035	.00010	.00025	.00061
40	Heating, plumbing, and fabricated structural metal products	.00187	.00493	.00290	.01195	.00122	.00157	.00123	.00089	.00314	.00399	.00319
41	Screw machine products and stampings	.00144	.00260	.00085	.00398	.00142	.00122	.00105	.00086	.00044	.00087	.00183
42	Other fabricated metal products	.00343	.00397	.00401	.01818	.00310	.00354	.00221	.00155	.00131	.00240	.00435
43	Engines and turbines	.00028	.00501	.00043	.00100	.00029	.00031	.00029	.00019	.00011	.00017	.00049
44+45	Farm, construction, and mining machinery	.00047	.00539	.00196	.00378	.00051	.00044	.00043	.00025	.00085	.00051	.00088
46	Materials handling machinery and equipment	.00018	.00076	.00018	.00072	.00077	.00015	.00017	.00010	.00016	.00024	.00032
47	Metalworking machinery and equipment	.00071	.00133	.00085	.00177	.00076	.00049	.00052	.00032	.00020	.00040	.00091
48	Special industry machinery and equipment	.00040	.00023	.00017	.00064	.00042	.00033	.00039	.00026	.00008	.00022	.00060
49	General industrial machinery and equipment	.00080	.00384	.00169	.00331	.00084	.00072	.00104	.00058	.00040	.00076	.00129
50	Miscellaneous machinery, except electrical	.00097	.00193	.00131	.00769	.00144	.00096	.00077	.00055	.00024	.00068	.00135
51	Computer and office equipment	.00322	.00097	.00155	.00159	.00092	.00111	.00461	.00163	.00022	.00057	.00142
52	Service industry machinery	.00084	.00108	.00066	.00330	.00080	.00077	.00047	.00034	.00066	.00097	.00102
53	Electrical industrial equipment and apparatus	.00184	.00349	.00171	.00310	.00080	.00075	.00106	.00061	.00049	.00085	.00144
54	Household appliances	.00029	.00027	.00022	.00122	.00015	.00019	.00013	.00010	.00016	.00042	.00056
55	Electric lighting and wiring equipment	.00128	.00307	.00125	.00502	.00080	.00091	.00091	.00061	.00094	.00155	.00435
56	Audio, video, and communication equipment	.00272	.00048	.00034	.00140	.00057	.00058	.00096	.00082	.00025	.00053	.00086
57	Electronic components and accessories	.03198	.00182	.00131	.00447	.00250	.00226	.00605	.00273	.00050	.00148	.00372
58	Miscellaneous electrical machinery and supplies	.00267	.00214	.00203	.00346	.00119	.00102	.00259	.00200	.00029	.00091	.00117
59A	Motor vehicles (passenger cars and trucks)	.00011	.00015	.00008	.00174	.00021	.00017	.00014	.00011	.00003	.00008	.00020
59B	Truck and bus bodies, trailers, and motor vehicles parts	.00137	.00188	.00117	.02960	.00332	.00266	.00202	.00170	.00038	.00110	.00292
60	Aircraft and parts	.00073	.00055	.00029	.00075	.00077	.00030	.00077	.00043	.00008	.00022	.00041
61	Other transportation equipment	.00081	.00091	.00020	.00078	.00022	.00021	.00052	.00026	.00006	.00018	.00051
62	Scientific and controlling instruments	.00184	.00127	.00069	.01505	.00062	.00052	.00074	.00051	.00024	.00046	.00171
63	Ophthalmic and photographic equipment	.00861	.00071	.00061	.00163	.00144	.00128	.00555	.00316	.00030	.00095	.00198
64	Miscellaneous manufacturing	.00267	.00084	.00071	.00224	.00206	.00262	.00284	.00227	.00032	.00130	.00468
65A	Railroads and related services; passenger ground transportation	.00326	.02952	.00193	.00718	.00288	.00368	.00417	.00391	.00076	.00250	.00593
65B	Motor freight transportation and warehousing	.00882	.01013	.00530	.12971	.00751	.00784	.03166	.01005	.00271	.00663	.01506
65C	Water transportation	.00073	.00477	.00160	.00320	.00077	.00062	.00059	.00036	.00018	.00041	.00112
65D	Air transportation	.01197	.00458	.00408	.00676	.01349	.00473	.01348	.00733	.00108	.00333	.00576
65E	Pipelines, freight forwarders, and related services	.00193	.00472	.00627	.00762	.00321	.00148	.00304	.00201	.00038	.00127	.00338
66	Communications, except radio and TV	.01838	.00582	.00501	.01705	.02202	.01900	.03491	.03148	.00249	.00966	.02612
67	Radio and TV broadcasting	1.02233	.00152	.00256	.00348	.00681	.01422	.00553	.00598	.00070	.00554	.00649
68A	Electric services (utilities)	.01040	.85344	.01501	.05175	.01111	.02400	.01049	.00473	.00138	.00523	.03412
68B	Gas production and distribution (utilities)	.00427	.04944	1.10553	.05609	.00759	.00595	.00295	.00189	.00082	.00302	.02273
68C	Water and sanitary services	.00108	.00108	.00076	.39558	.00070	.00104	.00090	.00135	.00013	.00039	.00427
69A	Wholesale trade	.02157	.03274	.01682	.05234	1.03595	.01516	.01798	.01195	.00633	.01200	.03396
69B	Retail trade	.00244	.00441	.00282	.01499	.00395	.99910	.00306	.00195	.00318	.00414	.00503
70A	Finance	.02505	.02059	.01686	.02938	.02398	.01804	1.20851	.11255	.01213	.02814	.06660
70B	Insurance	.00535	.01196	.00592	.06532	.00516	.00590	.02292	1.40442	.04374	.02713	.00776
71A	Owner-occupied dwellings	.....	.....	.....	.....	.....	.....	.....	.....	1.00000	.....	.....
71B	Real estate and royalties	.09383	.02502	.09933	.03702	.03845	.07446	.05781	.05680	.04472	1.07371	.05920
72A	Hotels and lodging places	.00452	.00163	.00165	.00496	.00868	.00343	.00560	.01044	.00099	.00638	1.00308
72B	Personal and repair services (except auto)	.01569	.00265	.00147	.00705	.00574	.00620	.00320	.00291	.00047	.00303	.01883
73A	Computer and data processing services	.01199	.01047	.00696	.01268	.00619	.01007	.06143	.01841	.00198	.00416	.00946
73B	Legal, engineering, accounting, and related services	.03583	.01549	.01558	.05401	.01990	.04402	.04063	.03368	.01158	.01669	.03054
73C	Other business and professional services, except medical	.05481	.01665	.01462	.03961	.06608	.03744	.07363	.03603	.01068	.03354	.08971
73D	Advertising	.00343	.00086	.00145	.00197	.00386	.00805	.00313	.00339	.00039	.00314	.00367
74	Eating and drinking places	.01487	.00376	.00361	.00925	.01722	.01625	.01815	.02742	.00197	.01183	.00624
75	Automotive repair and services	.00851	.00843	.00774	.01595	.02602	.02068	.01274	.01083	.00212	.00745	.02008
76	Amusements	.40593	.00096	.00130	.00214	.00629	.00678	.00346	.00371	.00053	.00288	.00376
77A	Health services	.00006	.00001	.00001	.00003	.00005	.00004	.00005	.00004	.00002	.00003	.00007
77B	Educational and social services, and membership organizations	.00798	.00333	.00124	.00285	.00286	.00241	.00491	.00188	.00034	.00140	.00527
78	Federal Government enterprises	.00623	.05042	.00446	.00845	.00506	.01043	.03286	.01730	.00128	.00577	.01050
79	State and local government enterprises	.00928	.11696	.05390	.54715	.00546	.01046	.00551	.00483	.00152	.02372	.01915
82	General government industry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
83	Rest of the world adjustment to final uses	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
84	Household industry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
85	Inventory valuation adjustment	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Total industry output multiplier	**2.02027**	**1.70058**	**2.03370**	**2.21174**	**1.53111**	**1.53953**	**1.84520**	**1.94722**	**1.26218**	**1.48199**	**1.85045**

*Less than .000005.

Total Requirements, 1987 Benchmark—Continued

of delivery to final demand, at producers' prices]

Personal and repair services (exc. auto)	Computer and data processing services	Legal, engineering, accounting, and related services	Other business and professional services, except medical	Advertising	Eating and drinking places	Automotive repair and services	Amusements	Health services	Educational and social services, and membership organizations	Federal Government enterprises	State and local government enterprises	Noncomparable imports	Scrap, used and second-hand goods	General government industry	Rest-of-the-world adjustment to final uses	Household industry	Inventory valuation adjustment	Industry number
72B	73A	73B	73C	73D	74	75	76	77A	77B	78	79	80	81	82	83	84	85	
0.00213	0.00118	0.00117	0.00186	0.00194	0.07242	0.00127	0.00737	0.00419	0.00852	0.00122	0.00135	.....	.....	.....	.....	.....	.....	1
.00268	.00118	.00108	.00157	.00224	.05198	.00140	.00733	.00355	.00684	.00154	.00236	.....	.....	.....	.....	.....	.....	2
.00054	.00037	.00029	.00038	.00105	.00816	.00042	.00085	.00047	.00114	.00023	.00177	.....	.....	.....	.....	.....	.....	3
.00120	.00069	.00087	.00095	.00166	.00875	.00089	.01027	.00154	.00521	.00045	.00467	.....	.....	.....	.....	.....	.....	4
.00101	.00076	.00035	.00072	.00084	.00068	.00224	.00052	.00065	.00070	.00030	.00173	.....	.....	.....	.....	.....	.....	5+6
.00364	.00169	.00116	.00176	.00272	.00390	.00329	.00303	.00221	.00305	.00151	.01148	.....	.....	.....	.....	.....	.....	7
.01400	.00677	.00662	.00901	.00973	.00940	.02749	.00888	.01051	.01550	.00940	.04562	.....	.....	.....	.....	.....	.....	8
.00145	.00063	.00048	.00088	.00144	.00132	.00129	.00102	.00134	.00166	.00036	.00628	.....	.....	.....	.....	.....	.....	9+10
.02522	.01379	.01318	.01680	.01843	.02227	.02198	.03171	.01946	.06450	.01055	.31153	.....	.....	.....	.....	.....	.....	11+12
.00014	.00016	.00022	.00112	.00014	.00011	.00019	.00014	.00040	.00020	.00012	.00018	.....	.....	.....	.....	.....	.....	13
.00702	.00424	.00407	.00618	.00625	.27883	.00447	.01811	.01500	.02909	.00436	.00321	.....	.....	.....	.....	.....	.....	14
.00001	.00001	(*)	(*)	.00003	.00001	(*)	(*)	(*)	.00001	(*)	(*)	.....	.....	.....	.....	.....	.....	15
.01086	.00135	.00088	.00118	.00295	.00133	.00196	.00403	.00290	.00287	.00211	.00157	.....	.....	.....	.....	.....	.....	16
.00179	.00061	.00033	.00050	.00109	.00079	.00085	.00083	.00096	.00093	.00052	.00133	.....	.....	.....	.....	.....	.....	17
.00690	.00019	.00027	.00067	.00052	.00020	.00189	.00298	.00161	.00223	.00020	.00101	.....	.....	.....	.....	.....	.....	18
.00551	.00021	.00040	.00031	.00054	.00043	.00060	.00169	.00233	.00085	.00223	.00044	.....	.....	.....	.....	.....	.....	19
.00562	.00360	.00276	.00331	.01237	.00489	.00439	.00891	.00351	.01059	.00159	.02567	.....	.....	.....	.....	.....	.....	20+21
.00029	.00017	.00011	.00015	.00017	.00015	.00034	.00031	.00017	.00027	.00007	.00084	.....	.....	.....	.....	.....	.....	22+23
.01831	.02112	.01226	.01427	.10644	.02042	.01023	.01366	.01339	.03479	.00514	.00821	.....	.....	.....	.....	.....	.....	24
.00375	.00225	.00139	.00198	.00397	.01148	.00316	.00190	.00281	.00378	.00122	.00212	.....	.....	.....	.....	.....	.....	25
.01142	.00697	.00409	.00680	.31207	.01156	.00875	.01605	.00417	.01607	.00178	.00393	.....	.....	.....	.....	.....	.....	26A
.02442	.04562	.01835	.02305	.24215	.01539	.01119	.02253	.01433	.07941	.01234	.00801	.....	.....	.....	.....	.....	.....	26B
.01782	.00920	.00487	.01149	.02341	.01004	.01308	.00986	.03008	.01263	.00321	.03530	.....	.....	.....	.....	.....	.....	27A
.00104	.00059	.00069	.00225	.00141	.00500	.00073	.00261	.00149	.00226	.00033	.00445	.....	.....	.....	.....	.....	.....	27B
.00979	.00611	.00233	.00428	.00746	.00470	.00677	.00400	.00792	.00530	.00161	.00538	.....	.....	.....	.....	.....	.....	28
.00054	.00013	.00012	.00050	.00021	.00137	.00014	.00021	.02120	.00118	.00009	.00026	.....	.....	.....	.....	.....	.....	29A
.01464	.00081	.00110	.00419	.00150	.00161	.00113	.00112	.00377	.00228	.00114	.00166	.....	.....	.....	.....	.....	.....	29B
.00100	.00053	.00050	.00127	.00106	.00066	.00734	.00073	.00067	.00130	.00038	.00324	.....	.....	.....	.....	.....	.....	30
.01302	.00812	.00841	.01049	.01091	.00927	.03702	.00843	.00991	.01662	.01280	.03038	.....	.....	.....	.....	.....	.....	31
.02688	.02526	.00741	.01455	.01596	.01613	.02020	.01157	.02914	.01490	.00380	.01048	.....	.....	.....	.....	.....	.....	32
.01301	.00020	.00042	.00023	.00033	.00056	.00034	.00125	.00021	.00050	.00058	.00018	.....	.....	.....	.....	.....	.....	33+34
.00152	.00106	.00115	.00192	.00096	.00584	.00835	.00106	.00366	.00312	.00056	.00204	.....	.....	.....	.....	.....	.....	35
.00679	.00153	.00127	.00211	.00216	.00233	.00409	.00252	.00284	.00462	.00099	.02239	.....	.....	.....	.....	.....	.....	36
.00701	.00419	.00280	.00602	.00407	.00533	.02897	.00390	.00381	.00601	.00300	.01640	.....	.....	.....	.....	.....	.....	37
.00832	.00675	.00272	.00543	.00626	.00551	.01588	.00391	.00324	.00508	.00231	.01128	.....	.....	.....	.....	.....	.....	38
.00072	.00034	.00035	.00156	.00082	.00798	.00080	.00077	.00089	.00114	.00024	.00065	.....	.....	.....	.....	.....	.....	39
.00203	.00148	.00101	.00166	.00145	.00156	.00400	.00206	.00150	.00380	.00092	.01688	.....	.....	.....	.....	.....	.....	40
.00335	.00191	.00138	.00258	.00154	.00176	.03101	.00182	.00225	.00279	.00194	.00289	.....	.....	.....	.....	.....	.....	41
.00777	.00459	.00306	.00456	.00428	.00360	.04107	.00361	.00351	.00578	.00227	.00929	.....	.....	.....	.....	.....	.....	42
.00042	.00033	.00029	.00106	.00033	.00040	.00280	.00044	.00026	.00037	.00031	.00111	.....	.....	.....	.....	.....	.....	43
.00064	.00037	.00053	.00348	.00049	.00114	.00103	.00076	.00045	.00072	.00027	.00617	.....	.....	.....	.....	.....	.....	44+45
.00023	.00015	.00021	.00141	.00019	.00021	.00031	.00024	.00016	.00030	.00020	.00100	.....	.....	.....	.....	.....	.....	46
.00127	.00079	.00070	.00349	.00092	.00077	.00311	.00096	.00068	.00089	.00049	.00162	.....	.....	.....	.....	.....	.....	47
.00073	.00068	.00042	.00181	.00222	.00074	.00069	.00049	.00052	.00082	.00019	.00055	.....	.....	.....	.....	.....	.....	48
.00133	.00090	.00093	.00473	.00107	.00159	.00432	.00107	.00083	.00119	.00090	.00299	.....	.....	.....	.....	.....	.....	49
.00224	.00118	.00122	.00260	.00151	.00157	.01520	.00122	.00097	.00138	.00124	.01019	.....	.....	.....	.....	.....	.....	50
.01082	.06736	.00622	.00537	.00205	.00071	.00126	.00151	.00196	.00243	.00046	.00130	.....	.....	.....	.....	.....	.....	51
.00340	.00040	.00052	.00166	.00078	.00059	.00719	.00157	.00051	.00113	.00081	.00408	.....	.....	.....	.....	.....	.....	52
.00270	.00423	.00113	.00430	.00158	.00092	.00404	.00114	.00116	.00142	.00073	.00330	.....	.....	.....	.....	.....	.....	53
.00989	.00011	.00014	.00028	.00018	.00016	.00039	.00028	.00017	.00038	.00010	.00189	.....	.....	.....	.....	.....	.....	54
.00169	.00121	.00118	.00168	.00110	.00118	.00866	.00202	.00169	.00287	.00127	.00601	.....	.....	.....	.....	.....	.....	55
.00167	.00274	.00083	.00132	.00130	.00041	.00201	.00111	.00078	.00156	.00028	.00145	.....	.....	.....	.....	.....	.....	56
.03097	.04109	.00600	.02072	.01168	.00190	.00429	.00374	.00460	.00494	.00108	.00271	.....	.....	.....	.....	.....	.....	57
.00169	.00826	.00315	.00394	.00182	.00103	.00681	.00153	.00170	.00207	.00106	.00287	.....	.....	.....	.....	.....	.....	58
.00021	.00013	.00021	.00022	.00015	.00013	.00499	.00018	.00015	.00021	.00062	.00022	.....	.....	.....	.....	.....	.....	59A
.00287	.00197	.00338	.00265	.00224	.00168	.08122	.00196	.00204	.00294	.01023	.00282	.....	.....	.....	.....	.....	.....	59B
.00056	.00090	.00085	.00134	.00083	.00033	.00086	.00051	.00061	.00123	.00155	.00056	.....	.....	.....	.....	.....	.....	60
.00028	.00021	.00026	.00154	.00044	.00050	.00069	.00194	.00020	.00036	.00055	.00107	.....	.....	.....	.....	.....	.....	61
.00193	.00299	.00110	.00170	.00199	.00059	.00152	.00090	.02005	.00182	.00042	.00178	.....	.....	.....	.....	.....	.....	62
.01061	.00195	.00563	.00665	.00741	.00100	.00161	.00437	.00297	.00489	.00062	.00141	.....	.....	.....	.....	.....	.....	63
.02379	.00151	.00330	.00270	.02035	.00275	.00208	.00477	.00165	.00677	.00195	.00215	.....	.....	.....	.....	.....	.....	64
.00420	.00310	.00236	.00361	.00609	.00664	.00553	.00394	.00326	.00492	.01134	.00727	.....	.....	.....	.....	.....	.....	65A
.01419	.00918	.00650	.00966	.01585	.02261	.01767	.01027	.00923	.01611	.05780	.01885	.....	.....	.....	.....	.....	.....	65B
.00112	.00057	.00059	.00116	.00107	.00154	.00197	.00134	.00085	.00114	.00234	.00368	.....	.....	.....	.....	.....	.....	65C
.00768	.01408	.01477	.01971	.01393	.00478	.00836	.00811	.00587	.02179	.02934	.00630	.....	.....	.....	.....	.....	.....	65D
.00221	.00220	.00217	.00289	.00270	.00216	.00415	.00182	.00165	.00377	.00587	.00362	.....	.....	.....	.....	.....	.....	65E
.02654	.04044	.02485	.02643	.02685	.01180	.01878	.02032	.01570	.02244	.00693	.01471	.....	.....	.....	.....	.....	.....	66
.00875	.00441	.00274	.00483	.26210	.00942	.00682	.01273	.00268	.00846	.00109	.00296	.....	.....	.....	.....	.....	.....	67
.02328	.01033	.00719	.01055	.01330	.02614	.01737	.02068	.01372	.01884	.00981	.08048	.....	.....	.....	.....	.....	.....	68A
.01331	.00385	.00326	.00548	.00623	.00783	.01116	.00804	.00917	.01182	.00362	.06088	.....	.....	.....	.....	.....	.....	68B
.00152	.00061	.00083	.00061	.00127	.00137	.00096	.00127	.00078	.00135	.00069	.01793	.....	.....	.....	.....	.....	.....	68C
.04670	.03636	.02001	.03041	.03576	.07873	.06479	.02422	.03568	.03946	.01354	.04489	.....	.....	.....	.....	.....	.....	69A
.00394	.00241	.00332	.00322	.00295	.00268	.03979	.00328	.00281	.00505	.00329	.01415	.....	.....	.....	.....	.....	.....	69B
.02643	.05260	.02177	.02370	.01903	.02307	.05079	.02338	.01359	.02931	.00580	.02514	.....	.....	.....	.....	.....	.....	70A
.00700	.00521	.00708	.00884	.00615	.00692	.02972	.00694	.00940	.01350	.00466	.02119	.....	.....	.....	.....	.....	.....	70B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71A
.08081	.05173	.07294	.04672	.05366	.06570	.06041	.08723	.08167	.13247	.02408	.03600	.....	.....	.....	.....	.....	.....	71B
.00436	.00385	.02110	.00704	.00612	.00246	.00361	.00624	.00309	.00978	.00130	.00429	.....	.....	.....	.....	.....	.....	72A
1.02349	.00239	.00516	.00316	.00611	.00446	.01605	.00837	.00429	.00472	.00117	.00223	.....	.....	.....	.....	.....	.....	72B
.01324	1.06210	.05986	.03665	.01000	.00583	.00731	.01285	.01898	.01620	.00321	.01131	.....	.....	.....	.....	.....	.....	73A
.05674	.01765	1.10292	.03342	.02947	.02108	.01987	.04750	.01567	.02991	.00501	.07536	.....	.....	.....	.....	.....	.....	73B
.06010	.04796	.11806	1.08100	.13595	.04147	.05514	.08663	.04410	.05838	.01953	.04276	.....	.....	.....	.....	.....	.....	73C
.00495	.00250	.00155	.00273	.14842	.00533	.00386	.00721	.00152	.00479	.00062	.00167	.....	.....	.....	.....	.....	.....	73D
.01214	.01250	.01156	.01584	.01267	1.00043	.01250	.01368	.00936	.01347	.00420	.00703	.....	.....	.....	.....	.....	.....	74
.02015	.01319	.02202	.01806	.01538	.00871	1.02255	.01362	.01469	.01612	.02014	.01314	.....	.....	.....	.....	.....	.....	75
.00462	.00268	.00258	.00341	.10673	.01019	.00355	1.24788	.00185	.01198	.00100	.00185	.....	.....	.....	.....	.....	.....	76
.00005	.00004	.00008	.00062	.00004	.00065	.00004	.00011	1.02045	.00011	.00002	.00004	.....	.....	.....	.....	.....	.....	77A
.01581	.00737	.00745	.00772	.00861	.00286	.00322	.00793	.00345	1.00407	.00093	.00305	.....	.....	.....	.....	.....	.....	77B
.00942	.00816	.01162	.01033	.01000	.01387	.00893	.01134	.00842	.01845	1.00372	.00876	.....	.....	.....	.....	.....	.....	78
.01028	.00472	.00543	.00513	.00758	.00927	.01522	.01548	.00640	.01046	.00566	1.00352	.....	.....	.....	.....	.....	.....	79
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.00000	.....	.....	.....	82
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	83
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.00000	.....	84
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.00000	85
1.89612	**1.74795**	**1.70786**	**1.66608**	**1.83713**	**2.02599**	**1.99440**	**1.96660**	**1.63403**	**1.94709**	**1.36547**	**2.20678**	.....	.....	**1.00000**	.....	**1.00000**	**1.00000**	

Text continues from page 63.

put multiplier is 2.14598 (the sum of all the entries in the column). The total dollar change in all commodity output that is required for an additional $1,000,000 of household appliances delivered to final users is $2,145,980 ($1,000,000 × 2.14598).

The industry-by-commodity total requirements table

The industry-by-commodity total requirements table (table 5) shows the input requirements coefficients for the output from each industry that is directly and indirectly required to deliver a dollar of a commodity to final users. The head of each column names the commodity delivered to final users, and each row shows the total production that is required from an industry. The coefficients in this table are referred to as "industry-by-commodity total requirements coefficients." The table is also derived from both the make and use tables.[5]

The calculations made using this table are similar to those for the commodity-by-commodity total requirements table. For example, to provide final users with an additional $1 million of household appliances, the household appliances industry (row 54) is required to produce $955,360 ($1,000,000 × 0.95536) of industry output; the paperboard containers and boxes industry (row 25) is required to produce $24,810 ($1,000,000 × 0.02481) of industry output, the plastics and synthetic materials industry (row 28) is required to produce $36,130 ($1,000,000 × 0.03613) of industry output, and so on.

5. See footnote 4.

The total at the bottom of each column in table 5 is the sum of all the changes in industry outputs that are required to deliver a dollar of a commodity to final users. Because each total change is a dollar multiple of the initial dollar spent for the output of the given industry, the total change in output is often called the total industry output multiplier.

The total industry output multipliers can be used to estimate the impact of changes in the final uses of commodities on total industry output. For example, the total industry output multiplier for the household appliances commodity (column 54) is 2.13254 (the sum of all the entries in the column). The total dollar change in the output of all industries that is required for an additional $1,000,000 of household appliances delivered to final uses is $2,132,540 ($1,000,000 × 2.13254).

Total multipliers

The total multipliers in tables 4 and 5 are similar but not identical. The main reason for the difference is that the commodity multiplier includes "noncomparable imports," which by definition do not have a domestic-industry counterpart and are not included in the column total industry multiplier in the commodity-by-industry total requirements table.

When using the two total requirements tables, one should be aware that the amount of output required to deliver a dollar of commodity to final users includes both imported and domestically supplied commodities. However, both the total commodity output multiplier and the total industry output multiplier represent the output required as if all of the commodity were domestically supplied. Therefore, if a portion of the commodity is imported, the impact on domestic output would be lower than that implied by the multiplier.