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2002 Commodity Flow Survey



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BUREAU OF TRANSPORTATION STATISTICS

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Economics and Statistics Administration
U.S. CENSUS BUREAU



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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

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

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

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

BASIS OF REPORTING

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

AVAILABILITY OF ADDITIONAL DATA

All results of the 2002 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on compact discs and digital versatile discs (CD-ROMs and DVD-ROMs) for sale by the Census Bureau. The American FactFinder system at the Web site allows selective retrieval and downloading of the data. For more information, including a description of reports being issued, see the Web site, write to the U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-763-4636.

HISTORICAL INFORMATION

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

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

Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

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

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

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

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the Guide to the 2002 Economic Census at www.census.gov/epcd/ec02/guide.html. More information on the methodology, procedures, and history of the censuses will be published in the History of the 2002 Economic Census at www.census.gov/econ/www/history.html.

2002 Commodity Flow Survey

GENERAL

The 2002 Commodity Flow Survey (CFS) is undertaken through a partnership between the U.S. Census Bureau, U.S. Department of Commerce, and the Bureau of Transportation Statistics (BTS), U.S. Department of Transportation. This survey produces data on the movement of goods in the United States. It provides information on commodities shipped, their value, weight, and mode of transportation, as well as the origin and destination of shipments of manufacturing, mining, wholesale, and select retail establishments. The data from the CFS are used by public policy analysts and for transportation planning and decision making to assess the demand for transportation facilities and services, energy use, and safety risk and environmental concerns. The CFS was last conducted in 1997.

This report contains background information on the 2002 Commodity Flow Survey and then presents detailed tabular results on shipment characteristics by mode of transportation, commodity, distance shipped, and shipment weight. In Appendix A, key characteristics of the 2002 CFS are compared to those of the 1993 and 1997 surveys. Appendix B focuses on the reliability of the estimates and discusses sampling and nonsampling errors. Tables containing estimates of sampling variability corresponding to each table on shipment characteristics are also included in Appendix B.

This report presents the final United States summary data. It contains more detail than the preliminary United States report issued in December 2003 and reflects all revisions based on the geographic level analyses conducted since then. Additional reports will include data for census regions, divisions, states, and selected metropolitan areas, as well as selected data on exports and hazardous material shipments.

INDUSTRY COVERAGE

The 2002 CFS covers business establishments with paid employees that are located in the United States and are classified using the 1997 North American Industry Classification System (NAICS) in mining, manufacturing, wholesale trade, and select retail trade industries, namely, electronic shopping and mail-order houses. Establishments classified in services, transportation, construction, and most retail industries are excluded from the survey. Farms, fisheries, foreign establishments, and most government-owned establishments are also excluded.

The survey also covers auxiliary establishments (i.e., warehouses and managing offices) of multi-establishment companies, which have nonauxiliary establishments that are in-scope to the CFS or are classified in retail trade. The coverage of managing offices has been expanded in the 2002 CFS, compared to the 1997 CFS. For the 1997 CFS, the number of in-scope managing offices was reduced to a large extent based on the results of the 1992 Economic Census. A managing office was considered in-scope to the 1997 CFS only if it had sales or end-of-year inventories in the 1992 Census. However, research conducted prior to the 2002 CFS showed that not all managing offices with shipping activity in the 1997 CFS indicated sales or inventories in the 1997 Economic Census. Therefore, the 1997 Economic Census results were not used in the determination of scope for managing offices in the 2002 CFS.

For the 1993 CFS and the 1997 CFS, establishments were classified based on the 1987 Standard Industrial Classification System (SIC). Though an attempt was made to maintain similar coverage between the 1997 CFS and the 2002 CFS, there were some changes in industry coverage due to the conversion from SIC to NAICS. Most notably, coverage of the logging industry changed from an in-scope Manufacturing SIC code (SIC 2411) to an out-of-scope Agriculture, Forestry, Fishing,

and Hunting NAICS code (NAICS 1133). Also, coverage of the publishing industry changed from in-scope Manufacturing SIC codes (SIC 2711, 2721, 2731, 2741, and part of 2771) to out-of-scope Information NAICS codes (NAICS 5111 and 51223).

See Appendix A for a comparison between the 2002, 1997, and 1993 surveys. Also see Appendix C for a more detailed discussion on industry coverage and the sample design.

The NAICS industries covered in the 2002 CFS are listed in the following table:

NAICS code	Description
212	Mining (Except Oil and Gas)
311	Food Manufacturing
312	Beverage and Tobacco Product Manufacturing
313	Textile Mills
314	Textile Product Mills
315	Apparel Manufacturing
316	Leather and Allied Product Manufacturing
321	Wood Product Manufacturing
322	Paper Manufacturing
323	Printing and Related Support Activities
324	Petroleum and Coal Products Manufacturing
325	Chemical Manufacturing
326	Plastics and Rubber Products Manufacturing
327	Nonmetallic Mineral Product Manufacturing
331	Primary Metal Manufacturing
332	Fabricated Metal Product Manufacturing
333	Machinery Manufacturing
334	Computer and Electronic Product Manufacturing
335	Electrical Equipment, Appliance, and Component Manufacturing
336	Transportation Equipment Manufacturing
337	Furniture and Related Product Manufacturing
339	Miscellaneous Manufacturing
421	Wholesale Trade, Durable Goods
422	Wholesale Trade, Nondurable Goods
4541	Electronic Shopping and Mail-Order Houses
49310	Warehousing and Storage
551114	Corporate, Subsidiary, and Regional Managing Offices

SHIPMENT COVERAGE

The CFS captures data on shipments originating from select types of business establishments located in the 50 states and the District of Columbia. The data do not cover shipments originating from business establishments located in Puerto Rico and other U.S. possessions and territories. Shipments traversing the U.S. from a foreign location to another foreign location (e.g., from Canada to Mexico) are not included, nor are shipments from a foreign location to a U.S. location. Imported products are included in the CFS at the point that they left the importer's domestic location for shipment to another location. Shipments that are shipped through a foreign territory with both the origin and destination in the U.S. are included in the CFS data. The mileages calculated for these shipments exclude the international segments (e.g., shipments from New York to Michigan through Canada do not include any mileages for Canada). Export shipments are included, with the domestic destination defined as the U.S. port, airport, or border crossing of exit from the U.S.

The "Industry Coverage" section of the text lists the NAICS groups covered by the CFS. Other industry areas that are not covered, but may have significant shipping activity, include agriculture and government. For agriculture, specifically, this means that the CFS does not cover shipments of agricultural products from the farm site to the processing centers or terminal elevators (most likely short-distance local movements), but does cover the shipments of these products from the initial processing centers or terminal elevators onward.

MILEAGE CALCULATIONS

To estimate the distance traveled by each freight shipment sampled for the 2002 Commodity Flow Survey, the BTS Mileage Calculation Team used routing algorithms and an integrated, intermodal transportation network developed and updated expressly for this purpose by the Oak Ridge National Laboratory (ORNL). The BTS Team worked at a secure data site within the Census Bureau. Each record contained the ZIP Code shipment origin and destination, and the mode or modal sequence required by the routing algorithm for distance estimation. Each record also contained information on type of commodity moved, its weight, dollar value, and hazardous materials status. For export shipments, data on the U.S. port of exit were also identified, along with foreign destination city and country. Processing of shipment records began in the fall of 2002, with completion in October 2003.

One essential exercise was editing and imputing both absent and invalid geographic data elements, specifically origin and destination ZIP Codes, prior to estimating the distance traveled for each freight shipment. For this purpose, the BTS Mileage Calculation Team developed and maintained databases of domestic city/state names and foreign city/country names. The missing data elements, along with other related data problems found by the BTS Team, were either: (1) imputed because of high probability of accurate correction by the BTS Team, such as imputing a missing destination ZIP Code, given a destination city and state; or (2) reported back to the Census Bureau, allowing for call-backs to shippers for clarification/correction.

For a domestic shipment, the mileage is calculated between the center of the geographic area (centroid) of the U.S. origin ZIP Code and the centroid of the destination ZIP Code. The mileage for the shipments within a ZIP Code is calculated by means of a formula that approximates the longest distance within the boundaries of that ZIP Code. The mileage for an export shipment is calculated between a shipment's centroid of U.S. origin ZIP Code and its foreign destination country (city in the case of Canada and Mexico), via a U.S. port of exit (POE), be it seaport, airport, or border crossing. However, only the portion of mileage that falls within the U.S. is included in the CFS estimates. That is to say, once the export reaches the POE, the POE is considered the final domestic destination, the domestic route is finished, and any following mileage is not counted from the POE. These mileages are computed using routing algorithms that find the minimum impedance path over mathematical representations of the U.S. and North American highway, railway and waterway networks, and a transglobal representation of U.S. originating air freight and deep-sea transport networks. Shipment mileages were estimated for each record by summing over the distances of links contained within each minimum impedance path. Impedance was computed as a weighted combination of distance, time, and cost factors.

The ORNL multimodal network database is composed of mode-specific subnetworks representing each of the major transportation modes, such as highway, railway, waterway, and airway (pipeline network was not available due to security reasons). The links of these networks represent line-haul transportation facilities. Network nodes represent intersections and interchanges, along with the access points to the transportation network. To simulate local access, test links are created from each five-digit ZIP Code centroid to nearby nodes on the network. For the truck network, local access is assumed to exist everywhere. For the other modes this is not true. Before any test links are created for these modes, a search procedure is used to determine if and where such networks are most likely to provide access to the ZIP Code. For shipments involving more than one mode, such as truck-rail or rail-water shipments, intermodal transfer links are added to the network database to connect the individual modal networks together for routing purposes. An intermodal terminals database and a number of terminal transfer models were developed at ORNL to identify likely transfer points for different classes of freight. A measure of link impedance was calculated for each access, line-haul, and intermodal transfer link traversed by a shipment. These impedances were mode specific and are based on various link characteristics. For example, the set of links characterizing the highway network included speed impacting factors, such as the presence of a divided or undivided roadway, the degree of access control, the rural or urban setting, the number of lanes, the degree of urban congestion, and the length of the link. Link impedance measures were also assigned to the local access links. Intermodal transfer link impedances are estimated in terms of the time it takes to move goods through a transfer facility. In the case of

rail and air freight, intercarrier transfer penalties were also considered to obtain proper route selections. A shortest path algorithm is used to find the minimum impedance path between a shipment's origin ZIP Code centroid and destination ZIP Code centroid. The cumulative length of the local access plus line-haul links on this path provides the estimated distances used in CFS mileage computations. When rail and air freight were involved, these shipment distances were often averaged over more than one path between an origin-destination pair.

Mileage Data for Pipeline Shipments

For pipeline shipments, ton-miles and average miles per shipment are not shown in the tables. For most of these shipments, the respondents reported the shipment destination as a pipeline facility on the main pipeline network. Therefore, for the majority of these shipments, the resulting mileage represented only the access distance through feeder pipelines to the main pipeline network, and not the actual distance through the main pipeline network. Pipeline shipments are included in the U.S. totals for ton-miles and average miles per shipment.

For security purposes, there is no pipeline network available in the public domain with which to route petroleum-based products. Hence, any modal distance, either single or multi, involving pipeline was considered as solely pipeline mileage from origin ZIP to destination ZIP and calculated to equal great circle distance (GCD). Note: Great circle distance is defined as the shortest distance between two points on the earth's surface, taking into account the earth's curvature.

EXPLANATION OF TERMS

Value of shipments. The dollar value of the entire shipment. This was defined as the net selling value, f.o.b. plant, exclusive of freight charges and excise taxes. The value data are displayed in millions of dollars.

The total value of shipments, as measured by the CFS, and the U.S. gross domestic product (GDP) while similar in size provide different measures of economic activity in the United States and are not directly comparable. GDP is the value of all goods produced and services performed by labor and capital located in the United States. In 2002, the U.S. GDP was estimated at \$10.4 trillion (measured in current U.S. dollars). The value of shipments, as measured by the CFS, is the market value of goods shipped from manufacturing, mining, wholesale, and mail order retail establishments, as well as warehouses and managing offices of multiunit establishments.

Three important differences can be identified between GDP and value of shipments:

1. GDP captures goods produced by all establishments located in the United States, while the CFS measures goods shipped from a subset of all goods-producing establishments.
2. GDP measures the value of goods produced and of services performed. CFS measures the value of goods shipped.
3. GDP counts only the value-added at each step in the production of a product. CFS captures the value of shipments of materials used to produce or manufacture a product, as well as the value of shipments of the finished product itself. This means that the value of the materials used to produce a particular product contributes multiple times to the value.

Commodity. Products that an establishment produces, sells, or distributes. This does not include items that are considered as excess or byproducts of the establishment's operation. Respondents reported the description and the five-digit Standard Classification of Transported Goods (SCTG) code for the major commodity contained in the shipment, defined as the commodity with the greatest weight in the total shipment.

Average miles per shipment. For the 1993 CFS, we excluded shipments of Standard Transportation Commodity Classification (STCC) 27, Printed Matter, from our calculation of average miles per shipment. We made this decision after determining that respondents in the 1993 CFS shipping newspapers, magazines, catalogs, etc., had used widely varying definitions of the term "shipment."

For the 1997 and 2002 CFS, we made numerous efforts throughout our data collection and editing to produce consistent results from establishments shipping SCTG 29, Printed Products. As a result, we have included printed products in the average miles per shipment estimates for 1997 and 2002.

Distance shipped. In Table 3, shipment data are presented for various “distance shipped” intervals. Shipments were categorized into these “distance shipped” intervals based on the great circle distance between their origin and destination ZIP Code centroids. All other distance-related data in this and other tables (i.e., ton-miles and average miles per shipment) are based on the mileage calculations. (See the “Mileage Calculations” section for more details.)

Great circle distance. The shortest distance between two points on the surface of a sphere over the surface of that sphere.

Mode of transportation. The type of transportation used for moving the shipment to its domestic destination. For exports, the domestic destination was the port of exit.

Mode Definitions

In the instructions to the respondent, we defined the possible modes as follows:

1. **Parcel delivery/courier/U.S. Postal Service.** Delivery services that carry letters, parcels, packages, and other small shipments that typically weigh less than 100 pounds. Includes bus parcel delivery service.
2. **Private truck.** Trucks operated by a temporary or permanent employee of an establishment or the buyer/receiver of the shipment.
3. **For-hire truck.** Trucks that carry freight for a fee collected from the shipper, recipient of the shipment, or an arranger of the transportation.
4. **Railroad.** Any common carrier or private railroad.
5. **Shallow draft vessels.** Barges, ships, or ferries operating primarily on rivers and canals; in harbors, the Great Lakes, the Saint Lawrence Seaway; the Intra-coastal Waterway, the Inside Passage to Alaska, major bays and inlets; or in the ocean close to the shoreline.
6. **Deep draft vessel.** Barges, ships, or ferries operating primarily in the open ocean. Shipping on the Great Lakes and the Saint Lawrence Seaway is classified with shallow draft vessels.
7. **Pipeline.** Movements of oil, petroleum, gas, slurry, etc., through pipelines that extend to other establishments or locations beyond the shipper’s establishment. Aqueducts for the movement of water are not included.
8. **Air.** Commercial or private aircraft, and all air service for shipments that typically weigh more than 100 pounds. Includes air freight and air express.
9. **Other mode.** Any mode not listed above.
10. **Unknown.** The shipment was not carried by a parcel delivery/courier/U.S. Postal Service, and the respondent could not determine what mode of transportation was used.

In the tables, we have used additional terms for mode, which we define as follows:

1. **Air (includes truck and air).** Shipments that used air or a combination of truck and air.
2. **Single modes.** Shipments using only one of the above-listed modes, except parcel or other and unknown.
3. **Multiple modes.** Shipments for which two or more of the following modes of transportation were used:
 - Private truck
 - For-hire truck
 - Rail

Shallow draft vessel
Deep draft vessel
Pipeline

In addition, Parcel, U.S. Postal Service, or Courier shipments are considered multiple modes because this category includes all parcel shipments whether on the ground or via air tendered to a parcel or express carrier. In defining this mode, we did not combine these shipments with any other reported mode because by their nature, Parcel, U.S. Postal Service or Courier are already multimodal. For example, if the respondent reported a shipment's mode of transportation as "parcel" and "air," we treated the shipment as parcel only. Also in the CFS reports, the "Truck and Rail" and "Rail and Water" combinations included under "Multiple Modes" may not reflect all the movement of trailers or containers by rail and at least one other mode of transportation. Since the shipper may not always know the modal combinations used to transport the goods, some shipments moving by more than one mode may be reported as a single mode shipment. This may result in underestimation of multimodal shipments in the CFS.

4. **Other multiple modes.** Shipments using any other mode combinations not specifically listed in the tables.
5. **Other and unknown modes.** Shipments for which modes were not reported, or were reported by the respondent as "Other" or "Unknown."
6. **Truck.** Shipments using for-hire truck only, private truck only, or a combination of for-hire truck and private truck.
7. **Water.** Shipments using shallow draft vessel only, deep draft vessel only, or Great Lakes vessel only. Combinations of these modes, such as shallow draft vessel and Great Lakes vessel are included as "Other multiple modes." (Note: By definition, "shallow draft," "Great Lakes," and "deep draft" are mutually exclusive.)
8. **Great Lakes.** In the tables in this publication, "Great Lakes" appears as a single mode. ORNL's transportation network and mileage calculation system allowed for separate mileage calculations for Great Lakes between the origin and destination ZIP Codes.

Other Definitions and Terms

Shipment. A shipment is a single movement of goods, commodities, or products from an establishment to a single customer or to another establishment owned or operated by the same company as the originating establishment (e.g., a warehouse, distribution center, or retail or wholesale outlet). Full or partial truckloads are counted as a single shipment only if all commodities on the truck are destined for the same location. If a truck makes multiple deliveries on a route, the goods delivered at each stop are counted as one shipment. Interoffice memos, payroll checks, or business correspondence are not considered shipments. Shipments such as refuse, scrap paper, waste, or recyclable materials are not considered shipments unless the establishment is in the business of selling or providing these materials.

Standard Classification of Transported Goods (SCTG). The commodities shown in this report are classified using the SCTG coding system. The SCTG coding system was developed jointly by agencies of the United States and Canadian governments based on the Harmonized Commodity Description and Coding System (Harmonized System) to address statistical needs in regard to products transported. See Appendix D for more details.

Ton-miles. The shipment weight multiplied by the mileage traveled by the shipment. The respondents reported shipment weight in pounds. Aggregated pound-miles were converted to ton-miles. Mileage was calculated as the distance between the shipment origin and destination ZIP Codes. For shipments by truck, rail, or shallow draft vessels, the mileage excludes international segments. For example, mileages from Alaska to the continental United States exclude any mileages through Canada (see the "Mileage Calculations" section for more details). For trucks making multiple stops, the ton-miles are calculated for each delivery, and each drop-off point is treated as a final destination. Ton-miles estimates are displayed in millions.

Tons shipped. The total weight of the entire shipment. Respondents reported the weight in pounds. Aggregated pounds were converted to short-tons (2,000 pounds). For freight shipped to distribution centers for subsequent reshipment, the tonnage is counted each time the goods are transported.

Total modal activity (Table 2 only). The overall activity (e.g., ton-miles) of a specific mode of transportation, whether used in a single-mode shipment, or as part of a multiple-mode shipment. For example, the total modal activity for private truck is the total ton-miles carried by private truck in single-mode shipments, combined with the total ton-miles carried by private truck in all multiple-mode shipments that include private truck (private truck and for-hire truck, private truck and rail, private truck and air, etc.)

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in the tables for this publication:

–	Represents an estimate equal to zero or less than 1 unit of measure.
D	Denotes estimates withheld to avoid disclosing data of individual companies.
S	Estimate does not meet publication standards because of high sampling variability or poor response quality.
CFS	Commodity Flow Survey.
lb	Pounds.
n.e.c.	Not elsewhere classified.
NA	Not applicable.

OTHER TRANSPORTATION DATA

Users of transportation data may be especially interested in the following reports:

Vehicle Inventory and Use Survey covers state and U.S. level statistics on the physical and operational characteristics of the nation's truck, van, minivan, and sport utility vehicle population. Some of the types of data collected include number of vehicles, major use, body type, annual miles, model year, vehicle size, fuel type, operator classification, engine size, range of operation, weeks operated, products carried, and hazardous materials carried. This survey shows comparative statistics reflecting percent changes in number of vehicles between 2002 and 1997 for most characteristics.

Service Annual Survey covers firms with paid employees that provide commercial motor freight transportation and public warehousing services. Data collected include operating revenue and operating revenue by source, percentage of motor carrier freight revenue by commodity type, size of shipments handled, length of haul, and vehicle fleet inventory.

For more information on any Census Bureau product, including a description of electronic and printed reports being issued, see the Web site or call Customer Services at 301-763-INFO (4636).

Table 1a. Shipment Characteristics by Mode of Transportation for the United States: 2002

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

Mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent of total	2002 (thousands)	Percent of total	2002 (millions)	Percent of total	
Total	8 397 210	100.0	11 667 919	100.0	3 137 898	100.0	546
Single modes	7 049 383	83.9	11 086 660	95.0	2 867 938	91.4	240
Truck ²	6 235 001	74.3	7 842 836	67.2	1 255 908	40.0	173
For-hire truck	3 757 114	44.7	3 657 333	31.3	959 610	30.6	523
Private truck	2 445 288	29.1	4 149 658	35.6	291 114	9.3	64
Rail	310 884	3.7	1 873 884	16.1	1 261 612	40.2	807
Water	89 344	1.1	681 227	5.8	282 659	9.0	568
Shallow draft	57 467	.7	458 577	3.9	211 501	6.7	450
Great Lakes	843	—	38 041	.3	13 808	.4	339
Deep draft	31 034	.4	184 610	1.6	57 350	1.8	664
Air (includes truck and air)	264 959	3.2	3 760	—	5 835	.2	1 919
Pipeline ³	149 195	1.8	684 953	5.9	S	S	S
Multiple modes	1 079 185	12.9	216 686	1.9	225 715	7.2	895
Parcel, U.S. Postal Service or courier	987 746	11.8	25 513	.2	19 004	.6	894
Truck and rail	69 929	.8	42 984	.4	45 525	1.5	1 413
Truck and water	14 359	.2	23 299	.2	32 413	1.0	1 950
Rail and water	3 329	—	105 107	.9	114 986	3.7	957
Other multiple modes	3 822	—	19 782	.2	13 788	.4	S
Other and unknown modes	268 642	3.2	364 573	3.1	44 245	1.4	130

— Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

²"Truck" as a single mode includes shipments that were made by only private truck, only for-hire truck, or a combination of private truck and for-hire truck.

³Estimates for pipeline exclude shipments of crude petroleum.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 1b. Shipment Characteristics by Mode of Transportation for the United States: Percent of Total for 2002, 1997, and 1993

[Estimates are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

Mode of transportation	Value (percent)			Tons (percent)			Ton-miles ¹ (percent)		
	2002	1997	1993	2002	1997	1993	2002	1997	1993
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Single modes	83.9	82.7	84.5	95.0	94.0	92.1	91.4	89.4	88.3
Truck ²	74.3	72.0	75.3	67.2	69.0	65.9	40.0	38.5	35.9
For-hire truck	44.7	42.2	44.9	31.3	30.8	29.0	30.6	28.2	26.0
Private truck	29.1	29.2	30.0	35.6	36.8	36.6	9.3	9.8	9.7
Rail	3.7	4.6	4.2	16.1	14.6	15.9	40.2	39.4	38.9
Water	1.1	1.1	1.1	5.8	5.1	5.2	9.0	9.3	11.2
Shallow draft .....	.7	.8	.7	3.9	3.8	3.7	6.7	7.0	6.8
Great Lakes	—	—	S	.3	.4	.3	.4	.5	.5
Deep draft .....	.4	.3	.3	1.6	.9	1.1	1.8	1.8	3.9
Air (includes truck and air)	3.2	3.3	2.4	—	—	—	.2	.2	.2
Pipeline ³	1.8	1.7	1.5	5.9	5.2	5.0	S	S	S
Multiple modes	12.9	13.3	11.3	1.9	2.0	2.3	7.2	7.8	7.9
Parcel, U.S. Postal Service or courier	11.8	12.0	9.6	.2	.2	.2	.6	.6	.5
Truck and rail .....	.8	1.1	1.4	.4	.5	.4	1.5	2.1	1.6
Truck and water .....	.2	.1	.2	.2	.3	.7	1.0	1.3	1.7
Rail and water	—	—	—	.9	.8	.8	3.7	3.0	2.9
Other multiple modes	—	—	—	.2	.2	.2	.4	.7	S
Other and unknown modes	3.2	4.0	4.1	3.1	4.0	5.6	1.4	2.8	3.8

— Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.
²"Truck" as a single mode includes shipments that were made by only private truck, only for-hire truck, or a combination of private truck and for-hire truck.
³Estimates for pipeline exclude shipments of crude petroleum.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 2a. Shipment Characteristics by Total Modal Activity for the United States: 2002

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

Mode of transportation ¹	Ton-miles ²		2002 Average miles per shipment
	2002 (millions)	Percent of total	
Total	3 137 902	100.0	536
Truck	1 261 813	40.2	168
Rail	1 360 760	43.4	893
Shallow draft	258 386	8.2	459
Great Lakes	49 330	1.6	354
Deep draft	75 544	2.4	1 498
Air	5 659	.2	1 866
Parcel, U.S. Postal Service or courier	19 004	.6	894
Pipeline ³	S	S	S
Other and unknown modes	44 253	1.4	130

– Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Estimates represent activity for a given mode across single and multiple mode shipments. For example, "Truck" ton-miles includes total ton-miles for shipments moving only by truck plus ton-miles for truck segments of multiple mode shipments.

²Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

³Estimates exclude shipments of crude petroleum (SCTG 16).

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 2b. Shipment Characteristics by Total Modal Activity for the United States: 2002 and 1997

[Estimates are based on data from the 2002 and 1997 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

Mode of transportation ¹	Ton-miles ²		Percent change	Average miles per shipment		Percent change
	2002 (millions)	1997 (millions)		2002	1997	
Total	3 137 902	2 592 590	21.0	536	477	12.3
Truck	1 261 813	1 003 611	25.7	168	154	9.3
Rail	1 360 760	1 113 674	22.2	893	893	–
Shallow draft	258 386	219 157	17.9	459	254	80.5
Great Lakes	49 330	38 290	28.8	354	386	–8.3
Deep draft	75 544	70 357	7.4	1 498	1 331	12.5
Air	5 659	5 802	–2.5	1 866	1 312	42.2
Parcel, U.S. Postal Service or courier	19 004	16 729	13.6	894	821	8.8
Pipeline ³	S	S	S	S	S	S
Other and unknown modes	44 253	72 976	–39.4	130	123	6.0

– Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Estimates represent activity for a given mode across single and multiple mode shipments. For example, "Truck" ton-miles includes total ton-miles for shipments moving only by truck plus ton-miles for truck segments of multiple mode shipments.

²Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

³Estimates exclude shipments of crude petroleum (SCTG 16).

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 2c. Shipment Characteristics by Total Modal Activity for the United States: 2002 and 1993

[Estimates are based on data from the 2002 and 1993 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

Mode of transportation ¹	Ton-miles ²		Percent change	Average miles per shipment		Percent change
	2002 (millions)	1993 (millions)		2002	1993	
Total	3 137 902	2 420 915	29.6	536	424	26.5
Truck.....	1 261 813	880 890	43.2	168	140	20.3
Rail	1 360 760	1 003 552	35.6	893	932	-4.2
Shallow draft	258 386	255 057	1.3	459	394	16.4
Great Lakes	49 330	34 619	42.5	354	507	-30.1
Deep draft	75 544	87 564	-13.7	1 498	1 676	-10.6
Air	5 659	3 781	49.7	1 866	1 354	37.8
Parcel, U.S. Postal Service or courier	19 004	13 151	44.5	894	734	21.7
Pipeline ³	S	S	S	S	S	S
Other and unknown modes	44 253	92 581	-52.2	130	229	-43.2

– Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Estimates represent activity for a given mode across single and multiple mode shipments. For example, "Truck" ton-miles includes total ton-miles for shipments moving only by truck plus ton-miles for truck segments of multiple mode shipments.

²Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

³Estimates exclude shipments of crude petroleum (SCTG 16).

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 2d. Shipment Characteristics by Total Modal Activity for the United States: Annualized Growth Rate for 1997 to 2002 and 1993 to 2002

[Estimates are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys]

Mode of transportation ¹	Ton-miles ² (percent)		Average miles per shipment (percent)	
	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002
Total	3.9	2.9	2.4	2.6
Truck.....	4.7	4.1	1.8	2.1
Rail	4.1	3.4	–	–5
Shallow draft	3.3	.1	12.5	1.7
Great Lakes	5.2	4.0	–1.7	–3.9
Deep draft	1.4	–1.6	2.4	–1.2
Air	–5	4.6	7.3	3.6
Parcel, U.S. Postal Service or courier	2.6	4.2	1.7	2.2
Pipeline ³	S	S	S	S
Other and unknown modes	–9.5	–7.9	1.2	–6.1

– Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Estimates represent activity for a given mode across single and multiple mode shipments. For example, "Truck" ton-miles includes total ton-miles for shipments moving only by truck plus ton-miles for truck segments of multiple mode shipments.

²Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

³Estimates exclude shipments of crude petroleum (SCTG 16).

Note: Annualized growth rate measures the annual rate of change between estimates from any 2 years by assuming a constant yearly rate of change. See Appendix C for additional information about this rate.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 2e. Shipment Characteristics by Total Modal Activity for the United States: Percent of Total for 2002, 1997, and 1993

[Estimates are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

Mode of transportation ¹	Ton-miles ² (percent)		
	2002	1997	1993
Total	100.0	100.0	100.0
Truck	40.2	38.7	36.4
Rail	43.4	43.0	41.5
Shallow draft	8.2	8.5	10.5
Great Lakes	1.6	1.5	1.4
Deep draft	2.4	2.7	3.6
Air .....	.2	.2	.2
Parcel, U.S. Postal Service or courier .....	.6	.6	.5
Pipeline ³	S	S	S
Other and unknown modes	1.4	2.8	3.8

– Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Estimates represent activity for a given mode across single and multiple mode shipments. For example, "Truck" ton-miles includes total ton-miles for shipments moving only by truck plus ton-miles for truck segments of multiple mode shipments.

²Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

³Estimates exclude shipments of crude petroleum (SCTG 16).

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 3a. Shipment Characteristics by Distance Shipped for the United States: 2002

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

Distance shipped ¹ (Based on Great Circle Distance)	Value		Tons		Ton-miles ²	
	2002 (million dollars)	Percent of total	2002 (thousands)	Percent of total	2002 (millions)	Percent of total
Total	8 397 210	100.0	11 667 919	100.0	3 137 898	100.0
Less than 50 miles	2 503 895	29.8	6 309 437	54.1	127 277	4.1
50 to 99 miles	757 601	9.0	1 183 817	10.1	111 297	3.5
100 to 249 miles	1 329 245	15.8	1 480 571	12.7	329 721	10.5
250 to 499 miles	1 221 437	14.5	1 082 136	9.3	534 562	17.0
500 to 749 miles	844 880	10.1	604 036	5.2	504 193	16.1
750 to 999 miles	548 768	6.5	437 418	3.7	510 469	16.3
1,000 to 1,499 miles	501 419	6.0	419 584	3.6	660 359	21.0
1,500 to 1,999 miles	353 663	4.2	99 991	.9	217 826	6.9
2,000 miles or more	336 302	4.0	50 929	.4	142 193	4.5

– Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Shipments are grouped into distance categories based on Great Circle Distance (GCD). GCD is the shortest distance between 2 points on the surface of a sphere over the surface of that sphere.

²Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 3b. Shipment Characteristics by Distance Shipped for the United States: 2002 and 1997

[Estimates are based on data from the 2002 and 1997 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

Distance shipped ¹ (Based on Great Circle Distance)	Value			Tons			Ton-miles ²		
	2002 (million dollars)	1997 (million dollars)	Percent change	2002 (thousands)	1997 (thousands)	Percent change	2002 (millions)	1997 (millions)	Percent change
Total	8 397 210	6 859 805	22.4	11 667 919	10 566 330	10.4	3 137 898	2 592 590	21.0
Less than 50 miles	2 503 895	2 117 121	18.3	6 309 437	6 105 911	3.3	127 277	128 030	-6
50 to 99 miles	757 601	592 866	27.8	1 183 817	978 074	21.0	111 297	94 172	18.2
100 to 249 miles	1 329 245	1 060 559	25.3	1 480 571	1 285 220	15.2	329 721	291 079	13.3
250 to 499 miles	1 221 437	971 687	25.7	1 082 136	890 495	21.5	534 562	431 766	23.8
500 to 749 miles	844 880	651 960	29.6	604 036	528 191	14.4	504 193	456 253	10.5
750 to 999 miles	548 768	431 862	27.1	437 418	363 078	20.5	510 469	422 571	20.8
1,000 to 1,499 miles	501 419	464 312	8.0	419 584	295 548	42.0	660 359	478 158	38.1
1,500 to 1,999 miles	353 663	287 869	22.9	99 991	76 339	31.0	217 826	168 010	29.7
2,000 miles or more	336 302	281 569	19.4	50 929	43 474	17.1	142 193	122 553	16.0

- Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Shipments are grouped into distance categories based on Great Circle Distance (GCD). GCD is the shortest distance between 2 points on the surface of a sphere over the surface of that sphere.
²Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 3c. Shipment Characteristics by Distance Shipped for the United States: 2002 and 1993

[Estimates are based on data from the 2002 and 1993 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

Distance shipped ¹ (Based on Great Circle Distance)	Value			Tons			Ton-miles ²		
	2002 (million dollars)	1993 (million dollars)	Percent change	2002 (thousands)	1993 (thousands)	Percent change	2002 (millions)	1993 (millions)	Percent change
Total	8 397 210	5 846 334	43.6	11 667 919	9 688 493	20.4	3 137 898	2 420 915	29.6
Less than 50 miles	2 503 895	1 770 189	41.4	6 309 437	5 423 012	16.3	127 277	119 533	6.5
50 to 99 miles	757 601	536 987	41.1	1 183 817	1 066 691	11.0	111 297	106 447	4.6
100 to 249 miles	1 329 245	927 911	43.3	1 480 571	1 149 069	28.8	329 721	262 494	25.6
250 to 499 miles	1 221 437	851 303	43.5	1 082 136	858 891	26.0	534 562	421 432	26.8
500 to 749 miles	844 880	570 804	48.0	604 036	535 424	12.8	504 193	466 413	8.1
750 to 999 miles	548 768	371 685	47.6	437 418	289 304	51.2	510 469	341 582	49.4
1,000 to 1,499 miles	501 419	348 451	43.9	419 584	241 219	73.9	660 359	391 113	68.8
1,500 to 1,999 miles	353 663	226 380	56.2	99 991	76 413	30.9	217 826	171 072	27.3
2,000 miles or more	336 302	242 625	38.6	50 929	48 470	5.1	142 193	140 830	1.0

- Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Shipments are grouped into distance categories based on Great Circle Distance (GCD). GCD is the shortest distance between 2 points on the surface of a sphere over the surface of that sphere.
²Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 3d. Shipment Characteristics by Distance Shipped for the United States: Annualized Growth Rate for 1997 to 2002 and 1993 to 2002

[Estimates are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys]

Distance shipped ¹ (Based on Great Circle Distance)	Value (percent)		Tons (percent)		Ton-miles ² (percent)	
	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002
Total	4.1	4.1	2.0	2.1	3.9	2.9
Less than 50 miles	3.4	3.9	.7	1.7	-.1	.7
50 to 99 miles	5.0	3.9	3.9	1.2	3.4	.5
100 to 249 miles	4.6	4.1	2.9	2.9	2.5	2.6
250 to 499 miles	4.7	4.1	4.0	2.6	4.4	2.7
500 to 749 miles	5.3	4.5	2.7	1.3	2.0	.9
750 to 999 miles	4.9	4.4	3.8	4.7	3.9	4.6
1,000 to 1,499 miles	1.5	4.1	7.3	6.3	6.7	6.0
1,500 to 1,999 miles	4.2	5.1	5.5	3.0	5.3	2.7
2,000 miles or more	3.6	3.7	3.2	.6	3.0	.1

– Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Shipments are grouped into distance categories based on Great Circle Distance (GCD). GCD is the shortest distance between 2 points on the surface of a sphere over the surface of that sphere.

²Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

Note: Annualized growth rate measures the annual rate of change between estimates from any 2 years by assuming a constant yearly rate of change. See Appendix C for additional information about this rate.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 3e. Shipment Characteristics by Distance Shipped for the United States: Percent of Total for 2002, 1997, and 1993

[Estimates are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

Distance shipped ¹ (Based on Great Circle Distance)	Value (percent)			Tons (percent)			Ton-miles ² (percent)		
	2002	1997	1993	2002	1997	1993	2002	1997	1993
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 50 miles	29.8	30.9	30.3	54.1	57.8	56.0	4.1	4.9	4.9
50 to 99 miles	9.0	8.6	9.2	10.1	9.3	11.0	3.5	3.6	4.4
100 to 249 miles	15.8	15.5	15.9	12.7	12.2	11.9	10.5	11.2	10.8
250 to 499 miles	14.5	14.2	14.6	9.3	8.4	8.9	17.0	16.7	17.4
500 to 749 miles	10.1	9.5	9.8	5.2	5.0	5.5	16.1	17.6	19.3
750 to 999 miles	6.5	6.3	6.4	3.7	3.4	3.0	16.3	16.3	14.1
1,000 to 1,499 miles	6.0	6.8	6.0	3.6	2.8	2.5	21.0	18.4	16.2
1,500 to 1,999 miles	4.2	4.2	3.9	.9	.7	.8	6.9	6.5	7.1
2,000 miles or more	4.0	4.1	4.2	.4	.4	.5	4.5	4.7	5.8

– Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Shipments are grouped into distance categories based on Great Circle Distance (GCD). GCD is the shortest distance between 2 points on the surface of a sphere over the surface of that sphere.

²Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 4a. Shipment Characteristics by Shipment Weight for the United States: 2002

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

Shipment weight	Value		Tons		Ton-miles ¹		2002 Average miles per shipment
	2002 (million dollars)	Percent of total	2002 (thousands)	Percent of total	2002 (millions)	Percent of total	
Total	8 397 210	100.0	11 667 919	100.0	3 137 898	100.0	546
Less than 50 lb	991 839	11.8	18 543	.2	9 911	.3	696
50 to 99 lb	295 607	3.5	14 432	.1	5 072	.2	358
100 to 499 lb	811 133	9.7	85 224	.7	21 920	.7	263
500 to 749 lb	246 872	2.9	40 816	.3	9 473	.3	232
750 to 999 lb	182 832	2.2	35 892	.3	7 799	.2	216
1,000 to 9,999 lb	1 781 947	21.2	614 243	5.3	154 986	4.9	245
10,000 to 49,999 lb	3 075 335	36.6	4 453 871	38.2	882 900	28.1	202
50,000 to 99,999 lb	390 050	4.6	2 129 556	18.3	189 129	6.0	87
100,000 lb or more	621 594	7.4	4 275 342	36.6	1 856 708	59.2	477

– Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 4b. Shipment Characteristics by Shipment Weight for the United States: 2002 and 1997

[Estimates are based on data from the 2002 and 1997 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

Shipment weight	Value			Tons			Ton-miles ¹			Average miles per shipment		
	2002 (million dollars)	1997 (million dollars)	Percent change	2002 (thousands)	1997 (thousands)	Percent change	2002 (millions)	1997 (millions)	Percent change	2002	1997	Percent change
Total	8 397 210	6 859 805	22.4	11 667 919	10 566 330	10.4	3 137 898	2 592 590	21.0	546	486	12.5
Less than 50 lb	991 839	825 092	20.2	18 543	18 810	-1.4	9 911	9 333	6.2	696	603	15.5
50 to 99 lb	295 607	245 926	20.2	14 432	13 226	9.1	5 072	4 323	17.3	358	325	10.2
100 to 499 lb	811 133	718 343	12.9	85 224	78 822	8.1	21 920	19 103	14.7	263	247	6.2
500 to 749 lb	246 872	217 595	13.5	40 816	37 921	7.6	9 473	8 626	9.8	232	226	3.0
750 to 999 lb	182 832	154 316	18.5	35 892	31 721	13.1	7 799	7 241	7.7	216	227	-4.7
1,000 to 9,999 lb	1 781 947	1 518 750	17.3	614 243	561 391	9.4	154 986	129 234	19.9	245	227	7.5
10,000 to 49,999 lb	3 075 335	2 274 401	35.2	4 453 871	3 983 596	11.8	882 900	730 063	20.9	202	186	8.5
50,000 to 99,999 lb	390 050	351 707	10.9	2 129 556	1 983 840	7.3	189 129	171 526	10.3	87	85	2.5
100,000 lb or more	621 594	553 674	12.3	4 275 342	3 857 002	10.8	1 856 708	1 513 142	22.7	477	429	11.0

– Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 4c. Shipment Characteristics by Shipment Weight for the United States: 2002 and 1993

[Estimates are based on data from the 2002 and 1993 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

Shipment weight	Value			Tons			Ton-miles ¹			Average miles per shipment
	2002 (million dollars)	1993 (million dollars)	Percent change	2002 (thousands)	1993 (thousands)	Percent change	2002 (millions)	1993 (millions)	Percent change	
Total	8 397 210	5 846 334	43.6	11 667 919	9 688 493	20.4	3 137 898	2 420 915	29.6	546
Less than 50 lb	991 839	591 779	67.6	18 543	21 783	-14.9	9 911	8 647	14.6	696
50 to 99 lb	295 607	186 656	58.4	14 432	12 764	13.1	5 072	3 559	42.5	358
100 to 499 lb	811 133	589 693	37.6	85 224	74 922	13.8	21 920	16 423	33.5	263
500 to 749 lb	246 872	178 173	38.6	40 816	35 059	16.4	9 473	7 586	24.9	232
750 to 999 lb	182 832	140 468	30.2	35 892	29 517	21.6	7 799	5 910	32.0	216
1,000 to 9,999 lb	1 781 947	1 372 352	29.8	614 243	533 447	15.1	154 986	115 024	34.7	245
10,000 to 49,999 lb	3 075 335	2 038 193	50.9	4 453 871	3 296 465	35.1	882 900	612 622	44.1	202
50,000 to 99,999 lb	390 050	281 045	38.8	2 129 556	2 050 860	3.8	189 129	160 096	18.1	87
100,000 lb or more	621 594	467 975	32.8	4 275 342	3 633 676	17.7	1 856 708	1 491 048	24.5	477

– Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 4d. Shipment Characteristics by Shipment Weight for the United States: Annualized Growth Rate for 1997 to 2002 and 1993 to 2002

[Estimates are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys]

Shipment weight	Value (percent)		Tons (percent)		Ton-miles ¹ (percent)		Average miles per shipment (percent)	
	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002
Total	4.1	4.1	2.0	2.1	3.9	2.9	2.4	2.9
Less than 50 lb	3.7	5.9	–3	–1.8	1.2	1.5	2.9	2.9
50 to 99 lb	3.7	5.2	1.8	1.4	3.2	4.0	2.0	2.2
100 to 499 lb	2.5	3.6	1.6	1.4	2.8	3.3	1.2	1.8
500 to 749 lb	2.6	3.7	1.5	1.7	1.9	2.5	.6	1.3
750 to 999 lb	3.4	3.0	2.5	2.2	1.5	3.1	–1.0	1.1
1,000 to 9,999 lb	3.2	2.9	1.8	1.6	3.7	3.4	1.5	1.5
10,000 to 49,999 lb	6.2	4.7	2.3	3.4	3.9	4.1	1.6	1.0
50,000 to 99,999 lb	2.1	3.7	1.4	.4	2.0	1.9	.5	1.4
100,000 lb or more	2.3	3.2	2.1	1.8	4.2	2.5	2.1	–1

– Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

Note: Annualized growth rate measures the annual rate of change between estimates from any 2 years by assuming a constant yearly rate of change. See Appendix C for additional information about this rate.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 4e. **Shipment Characteristics by Shipment Weight for the United States: Percent of Total for 2002, 1997, and 1993**

[Estimates are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

Shipment weight	Value (percent)			Tons (percent)			Ton-miles ¹ (percent)		
	2002	1997	1993	2002	1997	1993	2002	1997	1993
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 50 lb	11.8	12.0	10.1	.2	.2	.2	.3	.4	.4
50 to 99 lb	3.5	3.6	3.2	.1	.1	.1	.2	.2	.1
100 to 499 lb	9.7	10.5	10.1	.7	.7	.8	.7	.7	.7
500 to 749 lb	2.9	3.2	3.0	.3	.4	.4	.3	.3	.3
750 to 999 lb	2.2	2.2	2.4	.3	.3	.3	.2	.3	.2
1,000 to 9,999 lb	21.2	22.1	23.5	5.3	5.3	5.5	4.9	5.0	4.8
10,000 to 49,999 lb	36.6	33.2	34.9	38.2	37.7	34.0	28.1	28.2	25.3
50,000 to 99,999 lb	4.6	5.1	4.8	18.3	18.8	21.2	6.0	6.6	6.6
100,000 lb or more	7.4	8.1	8.0	36.6	36.5	37.5	59.2	58.4	61.6

– Represents data cell equal to zero or less than 1 unit of measure.

S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 5a. Shipment Characteristics by Two-Digit Commodity for the United States: 2002

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code	Commodity description	Value		Tons		Ton-miles ¹		Average miles per shipment
		2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
	Total²	8 397 210	100.0	11 667 919	100.0	3 137 898	100.0	546
01	Live animals and live fish	7 410	—	6 118	—	1 586	—	530
02	Cereal grains	53 835	.6	561 089	4.8	264 239	8.4	138
03	Other agricultural products	129 471	1.5	259 178	2.2	109 362	3.5	481
04	Animal feed and products of animal origin, n.e.c.	52 142	.6	227 991	2.0	51 158	1.6	167
05	Meat, fish, seafood, and their preparations	201 304	2.4	84 506	.7	41 352	1.3	162
06	Milled grain products and preparations, and bakery products	113 379	1.4	109 311	.9	49 001	1.6	189
07	Other prepared foodstuffs and fats and oils	355 561	4.2	448 924	3.8	161 565	5.1	179
08	Alcoholic beverages	108 991	1.3	89 434	.8	25 735	.8	55
09	Tobacco products	69 868	.8	4 370	—	983	—	334
10	Monumental or building stone	3 039	—	22 451	.2	1 571	—	170
11	Natural sands	3 644	—	472 975	4.1	29 990	1.0	45
12	Gravel and crushed stone	12 850	.2	1 866 487	16.0	105 826	3.4	30
13	Nonmetallic minerals n.e.c.	10 066	.1	184 632	1.6	56 630	1.8	185
14	Metallic ores and concentrates	14 027	.2	98 267	.8	63 028	2.0	474
15	Coal	22 875	.3	1 239 862	10.6	686 279	21.9	120
17	Gasoline and aviation turbine fuel	279 407	3.3	1 063 569	9.1	117 219	3.7	52
18	Fuel oils	116 119	1.4	549 007	4.7	55 464	1.8	32
19	Coal and petroleum products, n.e.c.	82 130	1.0	447 975	3.8	93 001	3.0	102
20	Basic chemicals	153 656	1.8	347 670	3.0	115 961	3.7	417
21	Pharmaceutical products	479 117	5.7	24 270	.2	11 337	.4	693
22	Fertilizers	34 049	.4	264 319	2.3	87 605	2.8	157
23	Chemical products and preparations, n.e.c.	226 598	2.7	105 962	.9	53 657	1.7	385
24	Plastics and rubber	325 673	3.9	139 973	1.2	80 827	2.6	424
25	Logs and other wood in the rough	5 756	—	S	S	7 790	.2	S
26	Wood products	158 586	1.9	345 940	3.0	120 151	3.8	242
27	Pulp, newsprint, paper, and paperboard	102 495	1.2	137 053	1.2	78 160	2.5	206
28	Paper or paperboard articles	103 713	1.2	69 211	.6	23 360	.7	282
29	Printed products	134 452	1.6	34 015	.3	17 037	.5	816
30	Textiles, leather, and articles of textiles or leather	466 429	5.6	51 232	.4	31 787	1.0	940
31	Nonmetallic mineral products	149 951	1.8	967 978	8.3	135 937	4.3	357
32	Base metal in primary or semifinished forms and in finished basic shapes	259 834	3.1	328 053	2.8	121 330	3.9	270
33	Articles of base metal	234 571	2.8	116 447	1.0	42 680	1.4	392
34	Machinery	484 152	5.8	63 390	.5	34 535	1.1	377
35	Electronic and other electrical equipment and components and office equipment	890 803	10.6	49 592	.4	30 269	1.0	713
36	Motorized and other vehicles (including parts)	748 550	8.9	133 088	1.1	59 029	1.9	395
37	Transportation equipment, n.e.c.	155 013	1.8	18 352	.2	10 649	.3	1 074
38	Precision instruments and apparatus	225 070	2.7	18 352	.2	3 912	.1	922
39	Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	139 727	1.7	32 546	.3	13 705	.4	515
40	Miscellaneous manufactured products	387 426	4.6	79 208	.7	34 467	1.1	995
41	Waste and scrap	37 896	.5	217 234	1.9	48 009	1.5	166
43	Mixed freight	840 346	10.0	299 926	2.6	52 823	1.7	329
--	Commodity unknown	17 229	.2	24 266	.2	8 889	.3	485

— Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.
²Estimates exclude shipments of crude petroleum (SCTG 16).

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 5b. Shipment Characteristics by Two-Digit Commodity for the United States: Percent of Total for 2002 and 1997

[Estimates are based on data from the 2002 and 1997 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

SCTG code	Commodity description	Value (percent)		Tons (percent)		Ton-miles ¹ (percent)	
		2002	1997	2002	1997	2002	1997
	Total²	100.0	100.0	100.0	100.0	100.0	100.0
01	Live animals and live fish	—	—	—	—	—	—
02	Cereal grains .....	.6	.9	4.8	4.6	8.4	7.7
03	Other agricultural products	1.5	1.5	2.2	1.9	3.5	3.1
04	Animal feed and products of animal origin, n.e.c. ....	.6	1.0	2.0	2.1	1.6	1.8
05	Meat, fish, seafood, and their preparations	2.4	2.7	.7	.8	1.3	1.4
06	Milled grain products and preparations, and bakery products	1.4	1.6	.9	1.0	1.6	1.9
07	Other prepared foodstuffs and fats and oils	4.2	5.0	3.8	3.8	5.1	4.8
08	Alcoholic beverages	1.3	1.3	.8	.8	.8	1.1
09	Tobacco products .....	.8	.8	—	—	—	—
10	Monumental or building stone	—	—	.2	.2	—	—
11	Natural sands	—	—	4.1	4.2	1.0	1.0
12	Gravel and crushed stone .....	.2	.2	16.0	17.2	3.4	3.6
13	Nonmetallic minerals n.e.c. ....	.1	.2	1.6	2.2	1.8	2.0
14	Metallic ores and concentrates .....	.2	.2	.8	.9	2.0	1.8
15	Coal .....	.3	.4	10.6	11.5	21.9	20.9
17	Gasoline and aviation turbine fuel	3.3	3.2	9.1	8.3	3.7	3.9
18	Fuel oils	1.4	1.4	4.7	4.5	1.8	1.9
19	Coal and petroleum products, n.e.c.	1.0	1.1	3.8	4.5	3.0	3.2
20	Basic chemicals	1.8	2.3	3.0	2.8	3.7	5.3
21	Pharmaceutical products	5.7	3.3	.2	—	.4	.2
22	Fertilizers .....	.4	.4	2.3	1.7	2.8	1.7
23	Chemical products and preparations, n.e.c.	2.7	3.1	.9	.9	1.7	1.7
24	Plastics and rubber	3.9	4.1	1.2	1.2	2.6	2.7
25	Logs and other wood in the rough	—	—	S	.5	.2	.4
26	Wood products	1.9	1.8	3.0	2.7	3.8	3.6
27	Pulp, newsprint, paper, and paperboard	1.2	1.5	1.2	1.3	2.5	3.2
28	Paper or paperboard articles	1.2	1.4	.6	.7	.7	.8
29	Printed products	1.6	2.9	.3	.4	.5	.8
30	Textiles, leather, and articles of textiles or leather	5.6	5.5	.4	.4	1.0	1.0
31	Nonmetallic mineral products	1.8	1.6	8.3	8.6	4.3	3.5
32	Base metal in primary or semifinished forms and in finished basic shapes	3.1	4.2	2.8	3.2	3.9	4.5
33	Articles of base metal	2.8	3.3	1.0	1.0	1.4	1.9
34	Machinery	5.8	6.1	.5	.5	1.1	1.0
35	Electronic and other electrical equipment and components and office equipment	10.6	12.6	.4	.4	1.0	1.0
36	Motorized and other vehicles (including parts)	8.9	8.3	1.1	.9	1.9	1.8
37	Transportation equipment, n.e.c.	1.8	1.9	.2	—	.3	.1
38	Precision instruments and apparatus	2.7	2.3	.2	—	.1	—
39	Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	1.7	1.4	.3	.2	.4	.4
40	Miscellaneous manufactured products	4.6	6.1	.7	1.1	1.1	1.5
41	Waste and scrap .....	.5	.5	1.9	1.7	1.5	1.5
43	Mixed freight	10.0	3.4	2.6	1.0	1.7	.7
--	Commodity unknown .....	.2	.5	.2	.3	.3	.3

— Represents data cell equal to zero or less than 1 unit of measure.

S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

²Estimates exclude shipments of crude petroleum (SCTG 16).

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 6. Shipment Characteristics by Three-Digit Commodity for the United States: 2002

[For explanation of terms and meaning of abbreviations and symbols, see introductory text. Detail may not add to total because of rounding]

SCTG code	Commodity description	Value		Tons		Ton-miles ¹		Average miles per shipment
		2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
	Total²	8 397 210	100.0	11 667 919	100.0	3 137 898	100.0	546
010	Live animals and live fish	7 410	—	6 118	—	1 586	—	530
021	Wheat	13 103	.2	110 165	.9	46 334	1.5	213
022	Corn, except sweet	33 465	.4	389 568	3.3	191 932	6.1	104
029	Other cereal grains	7 267	—	61 356	.5	25 972	.8	178
031	Fresh or chilled potatoes (Irish potatoes), except sweet	5 547	—	9 411	—	7 676	.2	111
032	Fresh or chilled edible vegetables, except potatoes (Irish potatoes), and dried vegetables	33 998	.4	39 720	.3	16 461	.5	104
033	Fresh, chilled, or dried edible fruit and nuts	32 608	.4	28 765	.2	16 562	.5	1 168
034	Soya beans	27 923	.3	157 527	1.4	54 615	1.7	102
035	Oil seeds and nuts, except olives and soya beans	5 062	—	7 566	—	4 535	.1	505
036	Bulbs, live plants, and seeds for sowing, n.e.c.	5 602	—	2 574	—	1 166	—	1 139
039	Fresh-cut flowers, plants, and parts of plants, and other agricultural products, except forage products and cereal straw or husks	18 730	.2	13 615	.1	8 346	.3	S
041	Cereal straw or husks, forage products, residues and waste from the food industries used in animal feeding, and eggs and other products of animal origin, n.e.c.	14 827	.2	74 790	.6	26 215	.8	S
042	Animal feed preparations	37 315	.4	153 201	1.3	24 943	.8	207
051	Meat including poultry, except preparations	173 911	2.1	77 692	.7	37 417	1.2	169
052	Fish, except live, and seafood, except preparations	24 148	.3	4 207	—	2 204	—	135
053	Preparations, extracts, and juices of meat, fish, or seafood	3 245	—	2 608	—	S	S	382
061	Wheat flour, groats, and meal	7 840	—	27 967	.2	7 085	.2	469
062	Malt, starches, inulin, wheat gluten, and milled or otherwise worked grains, except wheat flour, groats, and meal	7 667	—	21 519	.2	15 401	.5	407
063	Food preparations of cereals, flour, starch, or milk	40 772	.5	29 771	.3	15 289	.5	307
064	Bakery products	57 100	.7	30 054	.3	11 225	.4	145
071	Dairy products, except chocolate milk, eggnog, and food preparations of milk	92 759	1.1	97 020	.8	20 607	.7	90
072	Processed or prepared vegetables, fruit, or nuts, except dried or milled, and juices	65 597	.8	60 688	.5	40 384	1.3	219
073	Coffee, tea, and spices, except unprocessed coffee and unfermented tea	15 079	.2	4 408	—	2 873	—	353
074	Animal or vegetable fats and oils and their cleavage products, prepared edible fats, animal or vegetable waxes, and flours and meals	20 756	.2	55 675	.5	24 994	.8	241
075	Cane, beet, and other sugars in solid form, sugar syrups not containing added flavoring or coloring matter, and molasses	11 502	.1	37 603	.3	24 863	.8	296
076	Confectionery, cocoa, and cocoa preparations	20 234	.2	6 083	—	3 851	.1	897
077	Edible preparations, n.e.c. and vinegar	57 168	.7	39 116	.3	23 149	.7	577
078	Nonalcoholic beverages, n.e.c. and ice	72 468	.9	148 332	1.3	20 845	.7	45
081	Malt Beer	64 250	.8	68 395	.6	14 862	.5	38
082	Wine and other fermented beverages	21 974	.3	8 686	—	5 725	.2	114
083	Spirituos beverages and ethyl alcohol	22 767	.3	12 352	.1	5 148	.2	58
090	Tobacco products	69 868	.8	4 370	—	983	—	334
100	Monumental or building stone, except dolomite	3 039	—	22 451	.2	1 571	—	170
110	Natural sands, except metal-bearing	3 644	—	472 975	4.1	29 990	1.0	45
120	Gravel and crushed stone, except dolomite and slate	12 850	.2	1 866 487	16.0	105 826	3.4	30
131	Salt	2 394	—	30 786	.3	11 584	.4	227
132	Natural calcium phosphates, natural aluminum-calcium phosphates, and phosphatic chalk	334	—	7 865	—	578	—	215
133	Dolomite	551	—	82 923	.7	19 247	.6	51
139	Other nonmetallic minerals	6 788	—	63 057	.5	25 221	.8	273
141	Iron ores and concentrates	2 937	—	86 701	.7	58 699	1.9	510
149	Other metallic ores and concentrates	11 090	.1	11 566	.1	4 329	.1	460
151	Nonagglomerated bituminous coal	21 637	.3	1 131 130	9.7	678 647	21.6	128
159	Other coal	1 238	—	108 732	.9	7 632	.2	S
171	Gasoline	263 181	3.1	986 959	8.5	107 483	3.4	51
172	Aviation turbine fuel (types A and B)	16 226	.2	76 610	.7	9 736	.3	96
180	Fuel oils	116 119	1.4	549 007	4.7	55 464	1.8	32
191	Lubricating oils and greases	26 342	.3	29 013	.2	9 235	.3	136
192	Refined petroleum oils and oils obtained from bituminous minerals, n.e.c.	13 002	.2	64 612	.6	14 160	.5	77
193	Gaseous hydrocarbons	19 832	.2	80 540	.7	14 359	.5	59
199	Other products of petroleum refining, and coal products	22 954	.3	273 810	2.3	55 247	1.8	81
201	Sodium hydroxide (caustic soda) and potassium hydroxide (caustic potash)	3 760	—	23 732	.2	9 870	.3	168
202	Inorganic chemicals, n.e.c.	43 965	.5	156 956	1.3	43 880	1.4	209
203	Cyclic hydrocarbons	9 729	.1	21 293	.2	4 732	.2	303
204	Phenols, phenol-alcohols, aldehydes, cyclic polymers of aldehydes, paraformaldehyde, ketones, quinones, organic acids, and acyclic alcohols	13 890	.2	26 267	.2	8 616	.3	943
205	Organic chemicals, n.e.c.	82 312	1.0	119 424	1.0	48 863	1.6	702
210	Pharmaceutical products	479 117	5.7	24 270	.2	11 337	.4	693
220	Fertilizers and fertilizer materials	34 049	.4	264 319	2.3	87 605	2.8	157
231	Paints and varnishes, tanning or dyeing extracts, tannins and their derivatives, dyes, putty and other mastics, inks, and coloring matter, except pigments and synthetic organic dyes, lakes, and toners	51 662	.6	21 040	.2	10 526	.3	285
232	Essential oils and resinoids, and perfumery, cosmetic, or toilet preparations	43 207	.5	11 478	.1	5 954	.2	591
233	Soap, organic surface-active agents, cleaning preparations, polishes and creams, and scouring preparations	35 932	.4	24 943	.2	15 173	.5	349
234	Photographic film, plates, paper, paperboard, or textiles, and chemical preparations for photographic use	27 386	.3	3 074	—	1 688	—	266
235	Insecticides, rodenticides, fungicides, herbicides, antisprouting products, plant-growth regulators, disinfectants, and similar products, in packages for retail sale or as preparations or articles	22 567	.3	7 136	—	2 334	—	361
239	Other chemical products and preparations	45 844	.5	38 292	.3	17 982	.6	421
241	Plastics in primary forms, rubber in primary forms or sheets, and unvulcanized compounded rubber	64 685	.8	54 046	.5	35 650	1.1	385
242	Manmade fibers and plastics basic shapes and articles	183 854	2.2	66 136	.6	33 731	1.1	470

See footnotes at end of table.

Table 6. Shipment Characteristics by Three-Digit Commodity for the United States: 2002—Con.

[For explanation of terms and meaning of abbreviations and symbols, see introductory text. Detail may not add to total because of rounding]

SCTG code	Commodity description	Value		Tons		Ton-miles ¹		Average miles per shipment
		2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
	Total²—Con.							
243	Rubber articles	77 134	.9	19 791	.2	11 446	.4	324
250	Logs and other wood in the rough	5 756	—	S	S	7 790	.2	S
261	Wood chips or particles	2 543	—	81 728	.7	8 286	.3	86
262	Lumber, wood continuously shaped along any of its edges or faces, and shingles and shakes	68 276	.8	160 915	1.4	61 212	2.0	178
263	Veneer sheets and sheets for plywood, particle board, fiberboard, plywood, veneered panels, and similar boards of ligneous material or laminated wood	32 206	.4	67 983	.6	41 125	1.3	268
264	Builders' joinery and carpentry of wood, except shingles and shakes	42 441	.5	13 945	.1	3 739	.1	261
269	Other wood products	13 120	.2	21 369	.2	5 789	.2	386
271	Pulp of fibrous cellulosic materials	6 479	—	15 889	.1	9 571	.3	353
272	Newsprint in large rolls or sheets	3 588	—	6 960	—	4 426	.1	344
273	Uncoated paper and paperboard in large rolls or sheets	54 830	.7	77 079	.7	42 396	1.4	164
274	Coated, impregnated, treated, or worked paper and paperboard, in large rolls or sheets	37 598	.4	37 126	.3	21 767	.7	288
280	Paper or paperboard articles	103 713	1.2	69 211	.6	23 360	.7	282
291	Printed books, brochures, leaflets, and similar printed products	62 199	.7	10 347	—	5 340	.2	886
292	Newspapers, journals, and periodicals	7 781	—	3 413	—	1 131	—	684
293	Advertising material, commercial or trade catalogues, and similar printed products	24 160	.3	12 418	.1	6 282	.2	688
299	Other printed products	40 312	.5	7 837	—	4 284	.1	794
301	Textile fibers, yarns, and broadwoven or knitted fabrics, except coated or treated	67 485	.8	14 524	.1	5 320	.2	844
302	Textile clothing and accessories, and headgear, except safety	247 605	2.9	12 597	.1	11 960	.4	966
303	Textiles and textile articles, n.e.c.	100 520	1.2	20 779	.2	11 483	.4	849
304	Footwear	40 140	.5	1 883	—	1 657	—	1 075
305	Leather and articles, luggage of related materials, and dressed furskins and articles	10 680	.1	S	S	S	S	1 068
311	Hydraulic cements	8 099	.1	116 523	1.0	14 089	.4	91
312	Ceramic products	30 368	.4	48 246	.4	30 462	1.0	803
313	Glass and glass products	46 715	.6	61 168	.5	19 348	.6	407
319	Other nonmetallic mineral products	64 769	.8	742 041	6.4	72 037	2.3	72
321	Iron and steel in primary forms, in semifinished forms, or in powders or granules, and ferroalloys	21 857	.3	23 096	.2	8 113	.3	499
322	Flat-rolled products of iron or steel	93 905	1.1	177 550	1.5	57 855	1.8	208
323	Bars, rods, angles, shapes, sections, and wire, of iron or steel	51 538	.6	74 320	.6	27 966	.9	234
324	Nonferrous metal, except precious, in unwrought forms, in finished basic shapes, or in powders or granules	92 535	1.1	53 087	.5	27 396	.9	319
331	Pipes, tubes, and fittings	59 279	.7	44 753	.4	14 156	.5	201
332	Structures and parts, except prefabricated buildings	54 964	.7	27 407	.2	10 620	.3	341
333	Handtools, cutlery, except of precious metals, interchangeable tools for hand- or machine-tools, hardware, and industrial fasteners	72 214	.9	12 980	.1	6 354	.2	455
339	Other articles of metal	48 114	.6	31 307	.3	11 551	.4	501
341	Internal-combustion piston engines	84 943	1.0	10 473	—	4 169	.1	324
342	Turbines, boilers, nuclear reactors, and nonelectric engines and motors, except internal-combustion piston engines	26 170	.3	1 097	—	914	—	647
343	Pumps, compressors, and fans, and ventilating or recycling hoods incorporating a fan	42 503	.5	4 685	—	3 465	.1	388
344	Air-conditioning, refrigerating, or freezing equipment	41 171	.5	6 973	—	4 932	.2	248
345	Materials-handling, excavating, boring, and related machinery and equipment	49 999	.6	11 741	.1	4 045	.1	417
349	Other machinery	239 366	2.9	28 422	.2	17 010	.5	399
351	Electric motors, generators, generating sets, rotary converters, transformers, static converters, and inductors	38 310	.5	4 928	—	3 079	.1	455
352	Electric cooking appliances and other electrothermic or electromechanical domestic appliances	20 880	.2	4 082	—	3 726	.1	858
353	Line telephone or telegraph apparatus	54 845	.7	932	—	761	—	874
354	Electronic entertainment products, except parts	60 165	.7	3 630	—	2 363	—	798
355	Computer and office equipment	205 378	2.4	3 920	—	3 330	.1	971
356	Prepared unrecorded or prerecorded media	49 662	.6	1 256	—	795	—	992
357	Transmission apparatus for radio or television broadcasting, radio transmission and reception apparatus, radar apparatus, radio navigational-aid apparatus, and radio remote-control apparatus, except radio broadcast receivers and parts	26 350	.3	294	—	295	—	863
358	Electronic components and parts	173 300	2.1	2 396	—	2 272	—	1 017
359	Other electronic and electrical equipment	261 914	3.1	28 155	.2	13 649	.4	366
361	Motor vehicles for the transport of less than 10 people, except motorcycles, armored fighting vehicles, snowmobiles, golf carts and similar vehicles, and parts	257 320	3.1	24 742	.2	14 581	.5	1 504
362	Motor vehicles for the transport of goods and road tractors for semitrailers, except parts	27 148	.3	5 331	—	2 669	—	178
363	Other vehicles	84 596	1.0	15 714	.1	7 422	.2	356
364	Parts and accessories for motor vehicles, except motorcycles and armored fighting vehicles	379 486	4.5	87 301	.7	34 357	1.1	343
371	Locomotives and rolling stock, railway track fixtures and fittings, mechanical or electromechanical traffic-signalling equipment, and intermodal containers	12 125	.1	17 110	.1	9 634	.3	686
372	Aircraft and spacecraft	134 093	1.6	598	—	546	—	1 172
373	Ships, boats, and floating structures	8 794	.1	644	—	468	—	852
381	Optical elements, instruments, and apparatus, except photographic and photocopying equipment and optical instruments and apparatus for measuring or checking	21 132	.3	253	—	206	—	887
382	Photographic and photocopying machines	25 775	.3	838	—	600	—	952
383	Surveying, hydrographic, oceanographic, hydrological, geophysical, drawing, or length-measuring instruments and appliances, and navigational and meteorological instruments and appliances, except radar and other radio-type apparatus	10 650	.1	41	—	33	—	725
384	Instruments, apparatus, and appliances for medical, surgical, dental, or veterinary sciences, or for similar purposes	124 230	1.5	16 542	.1	2 494	—	1 029
385	Meters and other instruments and apparatus for measuring, checking, testing, or controlling	43 282	.5	678	—	579	—	778

See footnotes at end of table.

Table 6. Shipment Characteristics by Three-Digit Commodity for the United States: 2002—Con.

[For explanation of terms and meaning of abbreviations and symbols, see introductory text. Detail may not add to total because of rounding]

SCTG code	Commodity description	Value		Tons		Ton-miles ¹		Average miles per shipment
		2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
	Total²—Con.							
390	Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	139 727	1.7	32 546	.3	13 705	.4	515
401	Arms and ammunition	8 527	.1	668	—	488	—	970
402	Toys, games, and sporting equipment	70 700	.8	6 183	—	4 787	.2	1 156
409	Miscellaneous manufactured products	308 199	3.7	72 358	.6	29 192	.9	963
411	Metallic waste and scrap	35 507	.4	192 646	1.7	39 807	1.3	142
412	Nonmetallic waste and scrap, except from food processing	2 389	—	24 588	.2	8 201	.3	268
439	Mixed freight	840 346	10.0	299 926	2.6	52 823	1.7	329
—	Commodity unknown	17 229	.2	24 266	.2	8 889	.3	485

— Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.
²Estimates exclude shipments of crude petroleum (SCTG 16).

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 7. Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
ALL COMMODITIES							
Total²	8 397 210	100.0	11 667 919	100.0	3 137 898	100.0	546
Single modes	7 049 383	83.9	11 086 660	95.0	2 867 938	91.4	240
Truck ³	6 235 001	74.3	7 842 836	67.2	1 255 908	40.0	173
For-hire truck	3 757 114	44.7	3 657 333	31.3	959 610	30.6	523
Private truck	2 445 288	29.1	4 149 658	35.6	291 114	9.3	64
Rail	310 884	3.7	1 873 884	16.1	1 261 612	40.2	807
Water	89 344	1.1	681 227	5.8	282 659	9.0	568
Shallow draft	57 467	.7	458 577	3.9	211 501	6.7	450
Great Lakes	843	—	38 041	.3	13 808	.4	339
Deep draft	31 034	.4	184 610	1.6	57 350	1.8	664
Air (includes truck and air)	264 959	3.2	3 760	—	5 835	.2	1 919
Pipeline ⁴	149 195	1.8	684 953	5.9	S	S	S
Multiple modes	1 079 185	12.9	216 686	1.9	225 715	7.2	895
Parcel, U.S. Postal Service or courier	987 746	11.8	25 513	.2	19 004	.6	894
Truck and rail	69 929	.8	42 984	.4	45 525	1.5	1 413
Truck and water	14 359	.2	23 299	.2	32 413	1.0	1 950
Rail and water	3 329	—	105 107	.9	114 986	3.7	957
Other multiple modes	3 822	—	19 782	.2	13 788	.4	S
Other and unknown modes	268 642	3.2	364 573	3.1	44 245	1.4	130
SCTG 01, LIVE ANIMALS AND LIVE FISH							
Total	7 410	100.0	6 118	100.0	1 586	100.0	530
Single modes	7 063	95.3	5 840	95.5	1 483	93.5	142
Truck ³	7 039	95.0	5 838	95.4	1 479	93.2	133
For-hire truck	2 564	34.6	1 880	30.7	773	48.8	442
Private truck	4 474	60.4	3 957	64.7	706	44.5	120
Rail	—	—	—	—	—	—	—
Water	S	S	S	S	S	S	269
Shallow draft	—	—	—	—	—	—	—
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	269
Air (includes truck and air)	23	.3	1	—	4	.2	2 115
Pipeline ⁴	—	—	—	—	—	S	S
Multiple modes	S	S	S	S	S	S	1 752
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	1 752
Truck and rail	—	—	—	—	—	—	—
Truck and water	—	—	—	—	—	—	—
Rail and water	—	—	—	—	—	—	—
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	S	S	S	S	S	S	184
SCTG 02, CEREAL GRAINS							
Total	53 835	100.0	561 089	100.0	264 239	100.0	138
Single modes	51 775	96.2	538 192	95.9	248 732	94.1	140
Truck ³	20 983	39.0	209 833	37.4	22 336	8.5	99
For-hire truck	14 316	26.6	138 563	24.7	17 543	6.6	128
Private truck	6 645	12.3	71 091	12.7	4 754	1.8	61
Rail	15 905	29.5	172 066	30.7	141 825	53.7	724
Water	14 872	27.6	156 076	27.8	84 356	31.9	1 172
Shallow draft	7 772	14.4	80 488	14.3	81 260	30.8	1 233
Great Lakes	S	S	S	S	S	S	1
Deep draft	6 911	12.8	73 466	13.1	3 094	1.2	332
Air (includes truck and air)	S	S	S	S	S	S	940
Pipeline ⁴	—	—	—	—	—	S	S
Multiple modes	1 074	2.0	12 174	2.2	13 353	5.1	502
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	394
Truck and rail	S	S	S	S	S	S	393
Truck and water	380	.7	5 191	.9	7 281	2.8	1 480
Rail and water	S	S	S	S	S	S	1 709
Other multiple modes	S	S	S	S	S	S	1 329
Other and unknown modes	S	S	S	S	2 154	.8	S

See footnotes at end of table.

Table 7. Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
SCTG 03, OTHER AGRICULTURAL PRODUCTS							
Total	129 471	100.0	259 178	100.0	109 362	100.0	481
Single modes	122 638	94.7	251 580	97.1	102 817	94.0	141
Truck ³	105 660	81.6	166 943	64.4	46 511	42.5	127
For-hire truck	52 773	40.8	94 246	36.4	38 718	35.4	624
Private truck	52 797	40.8	72 340	27.9	7 758	7.1	55
Rail	6 600	5.1	30 016	11.6	25 019	22.9	847
Water	9 575	7.4	54 558	21.1	31 182	28.5	608
Shallow draft	4 675	3.6	27 261	10.5	30 177	27.6	1 172
Great Lakes	—	—	—	—	—	—	—
Deep draft	4 901	3.8	27 297	10.5	1 005	.9	99
Air (includes truck and air)	S	S	63	—	105	.1	2 393
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	4 643	3.6	4 776	1.8	6 141	5.6	1 796
Parcel, U.S. Postal Service or courier	2 121	1.6	159	—	246	.2	1 801
Truck and rail	2 061	1.6	2 370	.9	2 979	2.7	2 063
Truck and water	320	.2	S	S	S	S	928
Rail and water	S	S	S	S	S	S	936
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	2 189	1.7	2 821	1.1	404	.4	S
SCTG 04, ANIMAL FEED AND PRODUCTS OF ANIMAL ORIGIN, N.E.C.							
Total	52 142	100.0	227 991	100.0	51 158	100.0	167
Single modes	49 368	94.7	221 945	97.3	43 579	85.2	84
Truck ³	45 463	87.2	196 395	86.1	26 531	51.9	78
For-hire truck	21 214	40.7	88 961	39.0	18 357	35.9	231
Private truck	24 229	46.5	107 306	47.1	8 157	15.9	47
Rail	3 689	7.1	23 586	10.3	15 550	30.4	860
Water	214	.4	1 960	.9	1 497	2.9	312
Shallow draft	141	.3	1 534	.7	1 489	2.9	1 020
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	87
Air (includes truck and air)	S	S	S	S	S	S	965
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	S	S	3 337	1.5	S	S	843
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	804
Truck and rail	135	.3	S	S	S	S	1 333
Truck and water	S	S	S	S	S	S	2 456
Rail and water	S	S	S	S	S	S	841
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	759	1.5	2 709	1.2	498	1.0	52
SCTG 05, MEAT, FISH, SEAFOOD, AND THEIR PREPARATIONS							
Total	201 304	100.0	84 506	100.0	41 352	100.0	162
Single modes	197 558	98.1	82 704	97.9	40 788	98.6	128
Truck ³	196 441	97.6	81 976	97.0	39 757	96.1	119
For-hire truck	111 055	55.2	47 665	56.4	32 333	78.2	629
Private truck	84 106	41.8	33 663	39.8	7 150	17.3	59
Rail	489	.2	434	.5	617	1.5	1 112
Water	250	.1	S	S	S	S	2 133
Shallow draft	S	S	S	S	S	S	283
Great Lakes	—	—	—	—	—	—	—
Deep draft	182	—	S	S	S	S	2 237
Air (includes truck and air)	379	.2	61	—	147	.4	2 337
Pipeline ⁴	—	—	—	—	S	S	S
Multiple modes	901	.4	238	.3	263	.6	897
Parcel, U.S. Postal Service or courier	287	.1	28	—	27	—	897
Truck and rail	113	—	S	S	S	S	1 540
Truck and water	471	.2	149	.2	176	.4	1 665
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	11
Other and unknown modes	2 845	1.4	1 564	1.9	302	.7	S

See footnotes at end of table.

Table 7. Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
SCTG 06, MILLED GRAIN PRODUCTS AND PREPARATIONS, AND BAKERY PRODUCTS							
Total	113 379	100.0	109 311	100.0	49 001	100.0	189
Single modes	109 986	97.0	106 270	97.2	45 622	93.1	113
Truck ³	106 430	93.9	93 038	85.1	32 800	66.9	110
For-hire truck	62 070	54.7	62 293	57.0	27 304	55.7	437
Private truck	44 196	39.0	30 201	27.6	5 407	11.0	56
Rail	3 312	2.9	12 086	11.1	12 008	24.5	1 121
Water	S	S	S	S	S	S	561
Shallow draft	S	S	S	S	S	S	744
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	460
Air (includes truck and air)	S	S	S	S	S	S	2 511
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	2 530	2.2	1 775	1.6	2 974	6.1	767
Parcel, U.S. Postal Service or courier	995	.9	156	.1	130	.3	765
Truck and rail	1 500	1.3	1 591	1.5	2 766	5.6	1 626
Truck and water	36	—	28	—	78	.2	S
Rail and water	—	—	—	—	—	—	—
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	862	.8	1 266	1.2	405	.8	S
SCTG 07, OTHER PREPARED FOODSTUFFS AND FATS AND OILS							
Total	355 561	100.0	448 924	100.0	161 565	100.0	179
Single modes	342 560	96.3	436 405	97.2	152 783	94.6	84
Truck ³	327 079	92.0	388 784	86.6	109 424	67.7	82
For-hire truck	169 393	47.6	177 348	39.5	84 955	52.6	375
Private truck	155 841	43.8	209 345	46.6	23 754	14.7	50
Rail	14 295	4.0	43 485	9.7	40 611	25.1	978
Water	910	.3	3 829	.9	2 683	1.7	472
Shallow draft	674	.2	3 521	.8	2 514	1.6	S
Great Lakes	—	—	—	—	—	—	—
Deep draft	236	—	307	—	168	.1	557
Air (includes truck and air)	120	—	S	S	S	S	1 422
Pipeline ⁴	157	—	S	S	S	S	S
Multiple modes	7 492	2.1	4 160	.9	7 278	4.5	961
Parcel, U.S. Postal Service or courier	3 874	1.1	294	—	211	.1	953
Truck and rail	3 298	.9	3 565	.8	6 318	3.9	1 976
Truck and water	301	—	259	—	735	.5	1 580
Rail and water	S	S	S	S	S	S	313
Other multiple modes	S	S	S	S	S	S	389
Other and unknown modes	5 509	1.5	8 359	1.9	1 505	.9	S
SCTG 08, ALCOHOLIC BEVERAGES							
Total	108 991	100.0	89 434	100.0	25 735	100.0	55
Single modes	105 874	97.1	87 707	98.1	24 210	94.1	49
Truck ³	101 467	93.1	80 426	89.9	17 226	66.9	48
For-hire truck	30 377	27.9	30 525	34.1	14 560	56.6	259
Private truck	70 746	64.9	49 685	55.6	2 634	10.2	32
Rail	4 131	3.8	6 653	7.4	6 534	25.4	933
Water	265	.2	620	.7	445	1.7	731
Shallow draft	S	S	S	S	S	S	695
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	43	—	33	.1	732
Air (includes truck and air)	S	S	S	S	S	S	861
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	1 626	1.5	720	.8	1 327	5.2	631
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	568
Truck and rail	1 008	.9	493	.6	914	3.6	1 863
Truck and water	305	.3	198	.2	398	1.5	757
Rail and water	S	S	S	S	S	S	7 742
Other multiple modes	S	S	S	S	S	S	4
Other and unknown modes	1 491	1.4	1 006	1.1	198	.8	S

See footnotes at end of table.

Table 7. Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
SCTG 09, TOBACCO PRODUCTS							
Total	69 868	100.0	4 370	100.0	983	100.0	334
Single modes	67 446	96.5	4 215	96.4	657	66.8	84
Truck ³	67 399	96.5	4 213	96.4	655	66.6	72
For-hire truck	29 333	42.0	3 098	70.9	556	56.5	384
Private truck	37 703	54.0	1 099	25.2	92	9.4	52
Rail	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—
Shallow draft	—	—	—	—	—	—	—
Great Lakes	—	—	—	—	—	—	—
Deep draft	—	—	—	—	—	—	—
Air (includes truck and air)	S	S	S	S	2	2	1 551
Pipeline ⁴	—	—	—	—	S	S	S
Multiple modes	1 645	2.4	S	S	S	S	1 082
Parcel, U.S. Postal Service or courier	985	1.4	16	.4	15	1.5	1 080
Truck and rail	S	S	S	S	S	S	3 058
Truck and water	S	S	S	S	S	S	1 487
Rail and water	—	—	—	—	—	—	—
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	S	S	38	.9	1	.1	61
SCTG 10, MONUMENTAL OR BUILDING STONE							
Total	3 039	100.0	22 451	100.0	1 571	100.0	170
Single modes	2 908	95.7	22 242	99.1	1 456	92.7	80
Truck ³	2 906	95.6	21 979	97.9	1 440	91.7	79
For-hire truck	776	25.5	11 322	50.4	851	54.2	142
Private truck	2 129	70.1	10 657	47.5	589	37.5	49
Rail	S	S	S	S	S	S	2 069
Water	S	S	S	S	S	S	35
Shallow draft	—	—	—	—	—	—	—
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	35
Air (includes truck and air)	—	—	—	—	—	—	—
Pipeline ⁴	—	—	—	—	S	S	S
Multiple modes	S	S	S	S	S	S	815
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	510
Truck and rail	S	S	S	S	S	S	2 612
Truck and water	S	S	S	S	S	S	1 487
Rail and water	—	—	—	—	—	—	—
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	44	1.5	157	.7	S	S	S
SCTG 11, NATURAL SANDS							
Total	3 644	100.0	472 975	100.0	29 990	100.0	45
Single modes	3 504	96.2	457 351	96.7	28 434	94.8	41
Truck ³	3 170	87.0	420 190	88.8	21 056	70.2	38
For-hire truck	1 351	37.1	180 130	38.1	12 735	42.5	61
Private truck	1 813	49.7	238 929	50.5	8 289	27.6	23
Rail	288	7.9	22 975	4.9	6 847	22.8	262
Water	S	S	S	S	S	S	34
Shallow draft	S	S	S	S	S	S	34
Great Lakes	S	S	S	S	S	S	236
Deep draft	—	—	—	—	—	—	—
Air (includes truck and air)	S	S	S	S	S	S	2 083
Pipeline ⁴	—	—	—	—	S	S	S
Multiple modes	S	S	382	—	393	1.3	684
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	347
Truck and rail	8	.2	236	.8	228	.8	1 036
Truck and water	S	S	145	—	S	S	1 353
Rail and water	—	—	—	—	—	—	—
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	95	2.6	15 242	3.2	1 163	3.9	112

See footnotes at end of table.

Table 7. Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
SCTG 12, GRAVEL AND CRUSHED STONE							
Total	12 850	100.0	1 866 487	100.0	105 826	100.0	30
Single modes	12 501	97.3	1 814 560	97.2	100 846	95.3	29
Truck ³	11 496	89.5	1 642 182	88.0	50 714	47.9	27
For-hire truck	4 762	37.1	642 183	34.4	22 319	21.1	31
Private truck	6 637	51.6	986 995	52.9	27 872	26.3	25
Rail	621	4.8	85 290	4.6	28 768	27.2	349
Water	384	3.0	87 088	4.7	21 363	20.2	134
Shallow draft	292	2.3	64 263	3.4	15 614	14.8	132
Great Lakes	67	.5	18 533	1.0	5 379	5.1	236
Deep draft	S	S	S	S	371	.4	65
Air (includes truck and air)	—	—	—	—	—	—	—
Pipeline ⁴	—	—	—	—	S	S	S
Multiple modes	36	.3	5 833	.3	S	S	S
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	1 342
Truck and rail	S	S	S	S	S	S	183
Truck and water	13	.1	1 146	—	600	.6	848
Rail and water	S	S	S	S	S	S	719
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	314	2.4	46 094	2.5	1 542	1.5	S
SCTG 13, NONMETALLIC MINERALS N.E.C.							
Total	10 066	100.0	184 632	100.0	56 630	100.0	185
Single modes	9 789	97.2	182 309	98.7	55 551	98.1	152
Truck ³	7 684	76.3	139 546	75.6	26 079	46.1	128
For-hire truck	5 448	54.1	93 193	50.5	22 310	39.4	186
Private truck	2 206	21.9	44 699	24.2	3 572	6.3	60
Rail	1 920	19.1	34 177	18.5	27 371	48.3	695
Water	71	.7	6 686	3.6	1 976	3.5	633
Shallow draft	S	S	S	S	S	S	788
Great Lakes	S	S	S	S	S	S	241
Deep draft	—	—	—	—	—	—	—
Air (includes truck and air)	S	S	S	S	S	S	1 111
Pipeline ⁴	111	1.1	1 892	1.0	S	S	S
Multiple modes	155	1.5	627	.3	627	1.1	653
Parcel, U.S. Postal Service or courier	82	.8	4	—	2	—	641
Truck and rail	69	.7	414	.2	467	.8	1 176
Truck and water	S	S	S	S	S	S	1 026
Rail and water	S	S	S	S	S	S	1 188
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	122	1.2	1 695	.9	452	.8	144
SCTG 14, METALLIC ORES AND CONCENTRATES							
Total	14 027	100.0	98 267	100.0	63 028	100.0	474
Single modes	11 556	82.4	50 659	51.6	18 313	29.1	456
Truck ³	9 649	68.8	8 478	8.6	2 854	4.5	445
For-hire truck	5 875	41.9	6 774	6.9	2 380	3.8	474
Private truck	3 738	26.6	1 680	1.7	463	.7	386
Rail	1 647	11.7	36 997	37.6	13 083	20.8	606
Water	S	S	S	S	S	S	341
Shallow draft	S	S	S	S	S	S	331
Great Lakes	S	S	S	S	S	S	780
Deep draft	—	—	—	—	—	—	—
Air (includes truck and air)	S	S	S	S	S	S	1 599
Pipeline ⁴	—	—	—	—	S	S	S
Multiple modes	1 974	14.1	46 924	47.8	44 538	70.7	628
Parcel, U.S. Postal Service or courier	43	.3	S	S	S	S	525
Truck and rail	S	S	S	S	S	S	1 369
Truck and water	S	S	S	S	S	S	783
Rail and water	1 277	9.1	45 896	46.7	43 642	69.2	783
Other multiple modes	S	S	S	S	S	S	1 689
Other and unknown modes	497	3.5	S	S	S	S	S

See footnotes at end of table.

Table 7. Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
SCTG 15, COAL							
Total	22 875	100.0	1 239 862	100.0	686 279	100.0	120
Single modes	19 779	86.5	1 034 689	83.5	615 833	89.7	112
Truck ³	3 408	14.9	149 778	12.1	11 670	1.7	88
For-hire truck	2 413	10.5	101 463	8.2	8 622	1.3	78
Private truck	990	4.3	48 131	3.9	S	S	135
Rail	15 308	66.9	839 514	67.7	590 376	86.0	379
Water	936	4.1	39 738	3.2	11 788	1.7	327
Shallow draft	936	4.1	39 738	3.2	11 788	1.7	327
Great Lakes	—	—	—	—	—	—	—
Deep draft	—	—	—	—	—	—	—
Air (includes truck and air)	S	S	S	S	S	S	1 084
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	1 048	4.6	58 339	4.7	S	S	387
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	314
Truck and rail	115	.5	4 880	.4	3 223	.5	562
Truck and water	S	S	S	S	508	—	S
Rail and water	811	3.5	48 741	3.9	S	S	557
Other multiple modes	S	S	S	S	S	S	279
Other and unknown modes	2 048	9.0	146 833	11.8	5 835	.9	S
SCTG 17, GASOLINE AND AVIATION TURBINE FUEL							
Total	279 407	100.0	1 063 569	100.0	117 219	100.0	52
Single modes	276 621	99.0	1 054 356	99.1	113 578	96.9	51
Truck ³	171 999	61.6	604 113	56.8	36 561	31.2	50
For-hire truck	62 840	22.5	221 265	20.8	17 477	14.9	82
Private truck	106 424	38.1	375 843	35.3	18 467	15.8	37
Rail	1 495	.5	7 226	.7	3 600	3.1	392
Water	14 361	5.1	70 707	6.6	33 165	28.3	S
Shallow draft	6 523	2.3	33 226	3.1	5 974	5.1	102
Great Lakes	—	—	—	—	—	—	—
Deep draft	7 838	2.8	37 482	3.5	27 191	23.2	691
Air (includes truck and air)	S	S	S	S	S	S	1 743
Pipeline ⁴	88 767	31.8	372 310	35.0	S	S	S
Multiple modes	S	S	S	S	1 908	1.6	1 164
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	358
Truck and rail	S	S	S	S	S	S	2 404
Truck and water	74	—	234	—	S	S	1 795
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	2 148	.8	6 828	.6	S	S	56
SCTG 18, FUEL OILS							
Total	116 119	100.0	549 007	100.0	55 464	100.0	32
Single modes	113 484	97.7	536 263	97.7	50 961	91.9	31
Truck ³	63 853	55.0	275 702	50.2	19 408	35.0	31
For-hire truck	19 432	16.7	86 417	15.7	8 421	15.2	84
Private truck	44 264	38.1	188 806	34.4	10 880	19.6	24
Rail	929	.8	5 775	1.1	3 489	6.3	692
Water	13 967	12.0	78 274	14.3	15 555	28.0	S
Shallow draft	11 637	10.0	64 321	11.7	9 228	16.6	S
Great Lakes	—	—	—	—	—	—	—
Deep draft	2 330	2.0	13 952	2.5	6 327	11.4	424
Air (includes truck and air)	—	—	—	—	—	—	—
Pipeline ⁴	34 735	29.9	176 511	32.2	S	S	S
Multiple modes	S	S	S	S	4 416	8.0	485
Parcel, U.S. Postal Service or courier	1	—	S	S	S	S	108
Truck and rail	—	—	—	—	—	—	—
Truck and water	S	S	S	S	S	S	1 805
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	948	.8	4 320	.8	87	.2	16

See footnotes at end of table.

Table 7. Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
SCTG 19, COAL AND PETROLEUM PRODUCTS, N.E.C.							
Total	82 130	100.0	447 975	100.0	93 001	100.0	102
Single modes	79 713	97.1	432 704	96.6	86 842	93.4	82
Truck ³	50 474	61.5	251 467	56.1	21 190	22.8	76
For-hire truck	20 430	24.9	98 509	22.0	13 144	14.1	313
Private truck	29 786	36.3	152 709	34.1	7 911	8.5	35
Rail	11 410	13.9	77 622	17.3	36 531	39.3	708
Water	9 133	11.1	62 089	13.9	26 718	28.7	358
Shallow draft	6 765	8.2	46 733	10.4	11 619	12.5	203
Great Lakes	S	S	S	S	S	S	323
Deep draft	2 199	2.7	14 053	3.1	S	S	875
Air (includes truck and air)	18	—	S	S	8	—	1 096
Pipeline ⁴	8 679	10.6	41 518	9.3	S	S	S
Multiple modes	1 317	1.6	6 714	1.5	5 591	6.0	473
Parcel, U.S. Postal Service or courier	485	.6	84	—	46	—	468
Truck and rail	S	S	S	S	1 011	1.1	424
Truck and water	205	.2	S	S	S	S	2 602
Rail and water	S	S	S	S	S	S	1 052
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	1 100	1.3	8 557	1.9	S	S	62
SCTG 20, BASIC CHEMICALS							
Total	153 656	100.0	347 670	100.0	115 961	100.0	417
Single modes	143 047	93.1	340 082	97.8	108 268	93.4	328
Truck ³	85 324	55.5	137 682	39.6	31 816	27.4	177
For-hire truck	64 667	42.1	74 039	21.3	24 119	20.8	491
Private truck	20 595	13.4	63 418	18.2	7 469	6.4	70
Rail	26 533	17.3	73 783	21.2	57 167	49.3	724
Water	14 426	9.4	46 869	13.5	15 034	13.0	357
Shallow draft	11 432	7.4	39 321	11.3	13 364	11.5	349
Great Lakes	—	—	—	—	—	—	—
Deep draft	2 994	1.9	7 549	2.2	1 670	1.4	379
Air (includes truck and air)	958	.6	S	S	S	S	2 000
Pipeline ⁴	15 806	10.3	81 468	23.4	S	S	S
Multiple modes	7 279	4.7	4 603	1.3	5 165	4.5	734
Parcel, U.S. Postal Service or courier	3 516	2.3	176	—	120	.1	722
Truck and rail	1 125	.7	810	.2	796	.7	1 010
Truck and water	S	S	2 007	.6	S	S	1 596
Rail and water	S	S	S	S	S	S	982
Other multiple modes	328	.2	S	S	S	S	S
Other and unknown modes	3 330	2.2	2 985	.9	S	S	255
SCTG 21, PHARMACEUTICAL PRODUCTS							
Total	479 117	100.0	24 270	100.0	11 337	100.0	693
Single modes	350 309	73.1	17 839	73.5	7 837	69.1	402
Truck ³	330 819	69.0	17 256	71.1	6 964	61.4	219
For-hire truck	281 281	58.7	12 662	52.2	6 342	55.9	339
Private truck	48 947	10.2	4 572	18.8	618	5.5	72
Rail	184	—	S	S	S	S	1 626
Water	S	S	S	S	S	S	151
Shallow draft	—	—	—	—	—	—	—
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	151
Air (includes truck and air)	19 304	4.0	110	.5	115	1.0	1 910
Pipeline ⁴	—	—	—	—	S	S	S
Multiple modes	119 610	25.0	1 059	4.4	608	5.4	814
Parcel, U.S. Postal Service or courier	119 389	24.9	1 050	4.3	602	5.3	813
Truck and rail	S	S	S	S	S	S	1 042
Truck and water	S	S	S	S	S	S	3 936
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	11
Other and unknown modes	9 198	1.9	S	S	S	S	482

See footnotes at end of table.

Table 7. Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
SCTG 22, FERTILIZERS							
Total	34 049	100.0	264 319	100.0	87 605	100.0	157
Single modes	33 397	98.1	261 179	98.8	86 155	98.3	157
Truck ³	23 711	69.6	151 159	57.2	43 421	49.6	144
For-hire truck	10 964	32.2	82 323	31.1	S	S	456
Private truck	12 723	37.4	68 663	26.0	4 793	5.5	45
Rail	8 064	23.7	95 874	36.3	35 175	40.2	S
Water	1 151	3.4	10 599	4.0	6 540	7.5	655
Shallow draft	920	2.7	8 735	3.3	4 872	5.6	648
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	985
Air (includes truck and air)	S	S	S	S	S	S	775
Pipeline ⁴	460	1.4	3 547	1.3	S	S	S
Multiple modes	S	S	S	S	S	S	446
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	380
Truck and rail	S	S	S	S	S	S	994
Truck and water	S	S	S	S	S	S	362
Rail and water	S	S	S	S	S	S	981
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	283	.8	1 644	.6	S	S	S
SCTG 23, CHEMICAL PRODUCTS AND PREPARATIONS, N.E.C.							
Total	226 598	100.0	105 962	100.0	53 657	100.0	385
Single modes	201 700	89.0	101 634	95.9	50 049	93.3	255
Truck ³	194 165	85.7	94 234	88.9	42 943	80.0	245
For-hire truck	144 147	63.6	68 551	64.7	38 327	71.4	646
Private truck	49 915	22.0	25 618	24.2	4 583	8.5	68
Rail	6 018	2.7	6 145	5.8	6 835	12.7	696
Water	S	S	495	.5	115	.2	S
Shallow draft	S	S	157	.1	S	S	S
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	S
Air (includes truck and air)	774	.3	S	S	S	S	1 646
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	20 552	9.1	2 972	2.8	3 116	5.8	589
Parcel, U.S. Postal Service or courier	17 022	7.5	1 202	1.1	537	1.0	586
Truck and rail	3 425	1.5	1 743	1.6	2 518	4.7	1 524
Truck and water	105	—	28	—	61	.1	1 806
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	1
Other and unknown modes	4 345	1.9	1 357	1.3	492	.9	50
SCTG 24, PLASTICS AND RUBBER							
Total	325 673	100.0	139 973	100.0	80 827	100.0	424
Single modes	292 972	90.0	135 246	96.6	77 003	95.3	277
Truck ³	270 445	83.0	104 462	74.6	52 685	65.2	244
For-hire truck	196 855	60.4	77 125	55.1	46 923	58.1	584
Private truck	72 454	22.2	26 733	19.1	5 322	6.6	75
Rail	20 340	6.2	30 475	21.8	24 190	29.9	928
Water	S	S	S	S	S	S	S
Shallow draft	S	S	S	S	S	S	9
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	S
Air (includes truck and air)	2 082	.6	89	—	121	.1	1 758
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	24 848	7.6	2 070	1.5	2 422	3.0	769
Parcel, U.S. Postal Service or courier	23 050	7.1	1 283	.9	969	1.2	768
Truck and rail	1 564	.5	726	.5	1 276	1.6	1 773
Truck and water	195	—	50	—	172	.2	1 739
Rail and water	S	S	S	S	S	S	4 993
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	7 853	2.4	2 658	1.9	1 402	1.7	67

See footnotes at end of table.

Table 7. Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
SCTG 25, LOGS AND OTHER WOOD IN THE ROUGH							
Total	5 756	100.0	S	S	7 790	100.0	S
Single modes	5 180	90.0	S	S	7 040	90.4	S
Truck ³	4 797	83.3	S	S	6 202	79.6	S
For-hire truck	3 079	53.5	S	S	3 525	45.2	173
Private truck	1 718	29.9	S	S	S	S	70
Rail	281	4.9	S	S	818	10.5	738
Water	S	S	S	S	S	S	22
Shallow draft	—	—	—	—	—	—	—
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	22
Air (includes truck and air)	S	S	S	S	S	S	1 138
Pipeline ⁴	—	—	—	—	S	S	S
Multiple modes	146	2.5	S	S	436	5.6	793
Parcel, U.S. Postal Service or courier	3	—	S	S	S	S	626
Truck and rail	129	2.2	S	S	377	4.8	1 701
Truck and water	S	S	S	S	S	S	3 045
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	431	7.5	1 463	2.3	314	4.0	183
SCTG 26, WOOD PRODUCTS							
Total	158 586	100.0	345 940	100.0	120 151	100.0	242
Single modes	152 346	96.1	333 532	96.4	114 890	95.6	164
Truck ³	140 992	88.9	284 649	82.3	64 060	53.3	149
For-hire truck	65 314	41.2	156 913	45.4	48 189	40.1	399
Private truck	75 508	47.6	127 446	36.8	15 793	13.1	78
Rail	10 971	6.9	48 487	14.0	50 455	42.0	1 007
Water	214	.1	386	.1	S	S	590
Shallow draft	S	S	S	S	S	S	175
Great Lakes	—	—	—	—	—	—	—
Deep draft	199	.1	327	—	S	S	603
Air (includes truck and air)	S	S	10	—	25	—	2 479
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	2 909	1.8	2 552	.7	4 128	3.4	890
Parcel, U.S. Postal Service or courier	1 595	1.0	147	—	130	.1	883
Truck and rail	916	.6	1 665	.5	2 188	1.8	1 634
Truck and water	387	.2	724	.2	S	S	1 504
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	5
Other and unknown modes	3 331	2.1	9 856	2.8	1 134	.9	70
SCTG 27, PULP, NEWSPRINT, PAPER, AND PAPERBOARD							
Total	102 495	100.0	137 053	100.0	78 160	100.0	206
Single modes	99 023	96.6	133 373	97.3	75 239	96.3	172
Truck ³	80 125	78.2	95 402	69.6	43 560	55.7	156
For-hire truck	58 002	56.6	75 315	55.0	40 456	51.8	426
Private truck	22 063	21.5	20 035	14.6	3 091	4.0	52
Rail	18 631	18.2	37 461	27.3	31 399	40.2	857
Water	S	S	S	S	S	S	279
Shallow draft	S	S	S	S	S	S	143
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	285
Air (includes truck and air)	44	—	11	—	9	—	1 471
Pipeline ⁴	—	—	—	—	S	S	S
Multiple modes	1 901	1.9	1 748	1.3	2 020	2.6	526
Parcel, U.S. Postal Service or courier	998	1.0	158	.1	61	—	517
Truck and rail	768	.7	1 402	1.0	1 749	2.2	1 325
Truck and water	106	.1	144	.1	172	.2	939
Rail and water	S	S	S	S	S	S	1 498
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	1 570	1.5	1 932	1.4	901	1.2	55

See footnotes at end of table.

Table 7. Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
SCTG 28, PAPER OR PAPERBOARD ARTICLES							
Total	103 713	100.0	69 211	100.0	23 360	100.0	282
Single modes	95 653	92.2	66 636	96.3	21 606	92.5	125
Truck ³	94 616	91.2	65 422	94.5	20 546	88.0	113
For-hire truck	65 153	62.8	44 234	63.9	17 917	76.7	371
Private truck	29 147	28.1	20 122	29.1	2 095	9.0	44
Rail	631	.6	1 052	1.5	1 018	4.4	1 075
Water	S	S	S	S	15	—	421
Shallow draft	S	S	S	S	S	S	95
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	4	—	—	S	475
Air (includes truck and air)	150	.1	21	—	27	.1	1 663
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	5 297	5.1	1 242	1.8	1 435	6.1	616
Parcel, U.S. Postal Service or courier	4 125	4.0	564	.8	244	1.0	613
Truck and rail	1 071	1.0	614	.9	1 048	4.5	1 702
Truck and water	89	—	S	S	S	S	2 005
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	1 261
Other and unknown modes	2 763	2.7	1 333	1.9	319	1.4	55
SCTG 29, PRINTED PRODUCTS							
Total	134 452	100.0	34 015	100.0	17 037	100.0	816
Single modes	90 084	67.0	28 537	83.9	13 897	81.6	455
Truck ³	87 135	64.8	27 915	82.1	13 017	76.4	296
For-hire truck	54 908	40.8	20 815	61.2	11 889	69.8	671
Private truck	32 015	23.8	7 058	20.8	1 117	6.6	130
Rail	248	.2	S	S	S	S	1 275
Water	S	S	S	S	S	S	1 151
Shallow draft	S	S	S	S	S	S	101
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	1 613
Air (includes truck and air)	2 649	2.0	205	.6	301	1.8	1 611
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	36 619	27.2	2 527	7.4	2 236	13.1	919
Parcel, U.S. Postal Service or courier	36 302	27.0	2 210	6.5	1 729	10.1	918
Truck and rail	132	.1	S	S	S	S	1 405
Truck and water	S	S	S	S	S	S	3 068
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	7 749	5.8	2 952	8.7	904	5.3	109
SCTG 30, TEXTILES, LEATHER, AND ARTICLES OF TEXTILES OR LEATHER							
Total	466 429	100.0	51 232	100.0	31 787	100.0	940
Single modes	360 326	77.3	44 276	86.4	24 630	77.5	856
Truck ³	356 971	76.5	43 882	85.7	23 952	75.4	825
For-hire truck	265 863	57.0	28 357	55.4	20 846	65.6	1 070
Private truck	90 182	19.3	15 402	30.1	3 060	9.6	300
Rail	689	.1	S	S	410	1.3	1 383
Water	46	—	5	—	S	S	887
Shallow draft	S	S	S	S	S	S	S
Great Lakes	—	—	—	—	—	—	—
Deep draft	45	—	5	—	S	S	1 249
Air (includes truck and air)	2 619	.6	153	.3	S	S	1 607
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	85 233	18.3	4 237	8.3	S	S	970
Parcel, U.S. Postal Service or courier	81 233	17.4	2 909	5.7	2 634	8.3	969
Truck and rail	422	—	S	S	S	S	1 851
Truck and water	S	S	S	S	S	S	3 117
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	5
Other and unknown modes	20 870	4.5	2 719	5.3	911	2.9	234

See footnotes at end of table.

Table 7. Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
SCTG 31, NONMETALLIC MINERAL PRODUCTS							
Total	149 951	100.0	967 978	100.0	135 937	100.0	357
Single modes	140 692	93.8	938 361	96.9	130 061	95.7	176
Truck ³	133 999	89.4	892 506	92.2	101 599	74.7	169
For-hire truck	76 176	50.8	284 703	29.4	70 199	51.6	369
Private truck	57 630	38.4	607 228	62.7	31 285	23.0	100
Rail	5 548	3.7	36 208	3.7	25 426	18.7	772
Water	550	.4	9 590	1.0	2 948	2.2	S
Shallow draft	328	.2	5 574	.6	1 955	1.4	296
Great Lakes	S	S	S	S	S	S	241
Deep draft	S	S	S	S	S	S	S
Air (includes truck and air)	595	.4	58	—	S	S	1 919
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	5 849	3.9	4 287	.4	3 015	2.2	968
Parcel, U.S. Postal Service or courier	5 260	3.5	404	—	409	.3	968
Truck and rail	356	.2	2 567	.3	1 816	1.3	892
Truck and water	215	.1	S	S	717	.5	1 024
Rail and water	S	S	S	S	S	S	4 733
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	3 410	2.3	25 330	2.6	2 860	2.1	150
SCTG 32, BASE METAL IN PRIMARY OR SEMIFINISHED FORMS AND IN FINISHED BASIC SHAPES							
Total	259 834	100.0	328 053	100.0	121 330	100.0	270
Single modes	245 004	94.3	314 733	95.9	113 301	93.4	188
Truck ³	224 018	86.2	260 903	79.5	74 080	61.1	180
For-hire truck	146 069	56.2	168 623	51.4	58 820	48.5	449
Private truck	77 452	29.8	91 633	27.9	15 097	12.4	73
Rail	19 107	7.4	44 447	13.5	30 813	25.4	713
Water	1 085	.4	9 174	2.8	8 129	6.7	840
Shallow draft	904	.3	3 256	1.0	S	S	672
Great Lakes	166	—	5 911	1.8	4 670	3.8	797
Deep draft	S	S	S	S	S	S	1 619
Air (includes truck and air)	790	.3	207	—	279	.2	1 391
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	7 605	2.9	4 726	1.4	5 723	4.7	615
Parcel, U.S. Postal Service or courier	5 995	2.3	498	.2	259	.2	614
Truck and rail	567	.2	633	.2	1 154	1.0	1 849
Truck and water	S	S	S	S	S	S	744
Rail and water	S	S	S	S	S	S	1 752
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	7 225	2.8	8 594	2.6	2 305	1.9	87
SCTG 33, ARTICLES OF BASE METAL							
Total	234 571	100.0	116 447	100.0	42 680	100.0	392
Single modes	188 256	80.3	112 238	96.4	40 144	94.1	204
Truck ³	182 005	77.6	105 938	91.0	33 663	78.9	182
For-hire truck	115 724	49.3	71 573	61.5	28 437	66.6	513
Private truck	65 656	28.0	34 129	29.3	5 158	12.1	59
Rail	2 908	1.2	5 200	4.5	5 368	12.6	762
Water	S	S	349	.3	333	.8	1 291
Shallow draft	S	S	321	.3	281	.7	704
Great Lakes	S	S	—	—	—	—	—
Deep draft	S	S	S	S	S	S	1 299
Air (includes truck and air)	2 555	1.1	135	.1	193	.5	1 348
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	37 332	15.9	1 442	1.2	1 258	2.9	686
Parcel, U.S. Postal Service or courier	36 833	15.7	1 192	1.0	853	2.0	684
Truck and rail	371	.2	169	.1	248	.6	1 052
Truck and water	127	—	S	S	158	.4	2 801
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	8
Other and unknown modes	8 983	3.8	2 767	2.4	1 277	3.0	64

See footnotes at end of table.

Table 7. Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
SCTG 34, MACHINERY							
Total	484 152	100.0	63 390	100.0	34 535	100.0	377
Single modes	406 871	84.0	58 114	91.7	30 867	89.4	235
Truck ³	388 902	80.3	56 149	88.6	28 782	83.3	189
For-hire truck	290 301	60.0	39 987	63.1	25 643	74.3	577
Private truck	98 104	20.3	15 981	25.2	3 086	8.9	49
Rail	8 204	1.7	1 733	2.7	1 755	5.1	1 078
Water	46	—	S	S	S	S	859
Shallow draft	S	S	S	S	S	S	207
Great Lakes	—	—	—	—	—	—	—
Deep draft	23	—	2	—	S	S	893
Air (includes truck and air)	9 705	2.0	227	.4	324	.9	1 459
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	58 530	12.1	2 234	3.5	2 569	7.4	631
Parcel, U.S. Postal Service or courier	53 509	11.1	1 318	2.1	972	2.8	629
Truck and rail	3 701	.8	746	1.2	1 283	3.7	1 782
Truck and water	S	S	168	.3	313	.9	2 894
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	8
Other and unknown modes	18 750	3.9	3 042	4.8	1 098	3.2	82
SCTG 35, ELECTRONIC AND OTHER ELECTRICAL EQUIPMENT AND COMPONENTS AND OFFICE EQUIPMENT							
Total	890 803	100.0	49 592	100.0	30 269	100.0	713
Single modes	567 247	63.7	43 600	87.9	25 212	83.3	381
Truck ³	464 811	52.2	42 448	85.6	23 869	78.9	217
For-hire truck	343 630	38.6	29 385	59.3	21 637	71.5	686
Private truck	109 515	12.3	13 017	26.2	2 147	7.1	53
Rail	3 047	.3	S	S	488	1.6	1 376
Water	S	S	S	S	5	—	S
Shallow draft	S	S	S	S	S	S	484
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	5	—	S
Air (includes truck and air)	99 024	11.1	531	1.1	850	2.8	1 831
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	285 992	32.1	3 927	7.9	3 860	12.8	927
Parcel, U.S. Postal Service or courier	283 702	31.8	3 469	7.0	2 859	9.4	927
Truck and rail	1 659	.2	428	.9	888	2.9	2 080
Truck and water	S	S	27	—	110	.4	3 210
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	37 564	4.2	2 066	4.2	1 196	4.0	206
SCTG 36, MOTORIZED AND OTHER VEHICLES (INCLUDING PARTS)							
Total	748 550	100.0	133 088	100.0	59 029	100.0	395
Single modes	619 395	82.7	116 768	87.7	51 962	88.0	319
Truck ³	536 126	71.6	103 125	77.5	39 665	67.2	147
For-hire truck	390 715	52.2	72 143	54.2	34 046	57.7	470
Private truck	144 536	19.3	30 801	23.1	5 583	9.5	60
Rail	79 362	10.6	13 426	10.1	12 095	20.5	1 193
Water	S	S	S	S	S	S	146
Shallow draft	S	S	S	S	S	S	210
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	144
Air (includes truck and air)	3 100	.4	144	.1	189	.3	1 944
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	59 589	8.0	4 306	3.2	4 795	8.1	650
Parcel, U.S. Postal Service or courier	23 733	3.2	1 175	.9	772	1.3	642
Truck and rail	35 618	4.8	3 100	2.3	3 967	6.7	1 275
Truck and water	173	—	24	—	56	—	2 591
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	16
Other and unknown modes	69 566	9.3	12 014	9.0	2 272	3.8	68

See footnotes at end of table.

Table 7. Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
SCTG 37, TRANSPORTATION EQUIPMENT, N.E.C.							
Total	155 013	100.0	18 352	100.0	10 649	100.0	1 074
Single modes	136 455	88.0	18 097	98.6	10 508	98.7	1 058
Truck ³	58 655	37.8	10 800	58.8	4 757	44.7	547
For-hire truck	31 639	20.4	5 558	30.3	2 650	24.9	799
Private truck	26 568	17.1	S	S	S	S	250
Rail	6 000	3.9	S	S	S	S	555
Water	S	S	S	S	S	S	1 605
Shallow draft	S	S	S	S	S	S	1 606
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	791
Air (includes truck and air)	71 409	46.1	221	1.2	S	S	1 787
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	17 394	11.2	69	.4	74	.7	1 109
Parcel, U.S. Postal Service or courier	17 138	11.1	57	.3	60	.6	1 108
Truck and rail	S	S	S	S	S	S	1 931
Truck and water	S	S	S	S	S	S	932
Rail and water	—	—	—	—	—	—	—
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	1 164	.8	185	1.0	S	S	400
SCTG 38, PRECISION INSTRUMENTS AND APPARATUS							
Total	225 070	100.0	18 352	100.0	3 912	100.0	922
Single modes	112 630	50.0	17 486	95.3	3 122	79.8	1 115
Truck ³	77 996	34.7	17 383	94.7	2 954	75.5	283
For-hire truck	56 964	25.3	3 701	20.2	1 896	48.5	819
Private truck	20 938	9.3	13 663	74.5	1 054	27.0	50
Rail	S	S	S	S	S	S	1 818
Water	S	S	S	S	S	S	2 193
Shallow draft	S	S	S	S	S	S	2
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	3 007
Air (includes truck and air)	34 596	15.4	102	.6	167	4.3	2 422
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	107 399	47.7	744	4.1	702	18.0	872
Parcel, U.S. Postal Service or courier	107 308	47.7	737	4.0	693	17.7	872
Truck and rail	S	S	4	—	7	.2	1 512
Truck and water	S	S	S	S	S	S	S
Rail and water	—	—	—	—	—	—	—
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	5 040	2.2	122	.7	88	2.2	746
SCTG 39, FURNITURE, MATTRESSES AND MATTRESS SUPPORTS, LAMPS, LIGHTING FITTINGS, AND ILLUMINATED SIGNS							
Total	139 727	100.0	32 546	100.0	13 705	100.0	515
Single modes	130 076	93.1	31 171	95.8	12 891	94.1	369
Truck ³	129 364	92.6	30 945	95.1	12 693	92.6	350
For-hire truck	70 004	50.1	15 327	47.1	10 070	73.5	696
Private truck	57 386	41.1	15 452	47.5	2 602	19.0	131
Rail	304	.2	S	S	170	1.2	1 050
Water	S	S	S	S	S	S	2 260
Shallow draft	—	—	—	—	—	—	—
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	2 260
Air (includes truck and air)	400	.3	16	—	25	.2	1 603
Pipeline ⁴	—	—	—	—	S	S	S
Multiple modes	5 838	4.2	494	1.5	630	4.6	932
Parcel, U.S. Postal Service or courier	5 321	3.8	350	1.1	316	2.3	926
Truck and rail	406	.3	125	.4	273	2.0	1 815
Truck and water	110	—	19	—	41	.3	2 266
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	2
Other and unknown modes	3 813	2.7	S	S	185	1.3	128

See footnotes at end of table.

Table 7. Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
SCTG 40, MISCELLANEOUS MANUFACTURED PRODUCTS							
Total	387 426	100.0	79 208	100.0	34 467	100.0	995
Single modes	257 583	66.5	70 560	89.1	29 954	86.9	470
Truck ³	246 220	63.6	67 612	85.4	27 887	80.9	346
For-hire truck	168 946	43.6	40 823	51.5	24 051	69.8	765
Private truck	76 666	19.8	26 740	33.8	3 819	11.1	82
Rail	1 092	.3	474	.6	609	1.8	1 960
Water	S	S	S	S	S	S	S
Shallow draft	S	S	S	S	S	S	188
Great Lakes	S	S	S	S	S	S	557
Deep draft	28	—	5	—	S	S	S
Air (includes truck and air)	10 019	2.6	175	.2	354	1.0	1 930
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	114 478	29.5	3 238	4.1	3 230	9.4	1 126
Parcel, U.S. Postal Service or courier	113 269	29.2	2 987	3.8	2 783	8.1	1 126
Truck and rail	756	.2	143	.2	293	.9	2 171
Truck and water	S	S	S	S	S	S	3 990
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	151
Other and unknown modes	15 365	4.0	5 410	6.8	1 284	3.7	252
SCTG 41, WASTE AND SCRAP							
Total	37 896	100.0	217 234	100.0	48 009	100.0	166
Single modes	34 321	90.6	207 843	95.7	43 578	90.8	141
Truck ³	26 272	69.3	129 505	59.6	17 119	35.7	125
For-hire truck	19 980	52.7	93 890	43.2	14 794	30.8	163
Private truck	6 274	16.6	35 378	16.3	2 311	4.8	56
Rail	6 513	17.2	66 942	30.8	16 044	33.4	251
Water	S	S	S	S	S	S	615
Shallow draft	S	S	S	S	S	S	866
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	S
Air (includes truck and air)	S	S	S	S	S	S	1 905
Pipeline ⁴	—	—	—	—	S	S	S
Multiple modes	S	S	S	S	3 807	7.9	1 010
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	987
Truck and rail	S	S	S	S	3 060	6.4	1 026
Truck and water	S	S	260	.1	129	.3	1 320
Rail and water	S	S	S	S	S	S	836
Other multiple modes	S	S	S	S	S	S	1 245
Other and unknown modes	430	1.1	3 806	1.8	S	S	S
SCTG 43, MIXED FREIGHT							
Total	840 346	100.0	299 926	100.0	52 823	100.0	329
Single modes	788 943	93.9	290 727	96.9	48 687	92.2	117
Truck ³	783 600	93.2	289 468	96.5	47 078	89.1	108
For-hire truck	214 509	25.5	75 699	25.2	22 470	42.5	378
Private truck	565 124	67.2	210 866	70.3	24 279	46.0	72
Rail	3 227	.4	859	.3	1 451	2.7	1 642
Water	S	S	97	—	S	S	866
Shallow draft	S	S	S	S	S	S	447
Great Lakes	S	S	S	S	S	S	1
Deep draft	S	S	93	—	S	S	989
Air (includes truck and air)	1 603	.2	S	S	99	.2	1 588
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	39 505	4.7	3 704	1.2	2 541	4.8	654
Parcel, U.S. Postal Service or courier	35 323	4.2	2 619	.9	1 139	2.2	654
Truck and rail	2 925	.3	508	.2	658	1.2	1 182
Truck and water	915	.1	S	S	615	1.2	1 394
Rail and water	S	S	S	S	S	S	4 105
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	11 897	1.4	5 496	1.8	1 595	3.0	62

See footnotes at end of table.

Table 7. Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles ¹		Average miles per shipment
	2002 (million dollars)	Percent	2002 (thousands)	Percent	2002 (millions)	Percent	
COMMODITY UNKNOWN							
Total	17 229	100.0	24 266	100.0	8 889	100.0	485
Single modes	13 746	79.8	22 701	93.6	8 550	96.2	218
Truck ³	11 332	65.8	13 279	54.7	S	S	145
For-hire truck	5 801	33.7	7 475	30.8	S	S	536
Private truck	5 448	31.6	5 771	23.8	478	5.4	68
Rail	939	5.4	4 532	18.7	2 933	33.0	1 066
Water	S	S	S	S	696	7.8	S
Shallow draft	S	S	S	S	695	7.8	S
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	1
Air (includes truck and air)	367	2.1	5	—	9	.1	2 017
Pipeline ⁴	S	S	S	S	S	S	S
Multiple modes	2 812	16.3	146	.6	161	1.8	845
Parcel, U.S. Postal Service or courier	2 425	14.1	46	.2	38	.4	845
Truck and rail	S	S	85	.4	112	1.3	1 766
Truck and water	S	S	S	S	S	S	1 781
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	1
Other and unknown modes	671	3.9	S	S	178	2.0	90

— Represents data cell equal to zero or less than 1 unit of measure.

S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

²Estimates exclude shipments of crude petroleum (SCTG 16).

³"Truck" as a single mode includes shipments that were made by only private truck, only for-hire truck, or a combination of private truck and for-hire truck.

⁴Estimates for pipeline exclude shipments of crude petroleum.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 8. Shipment Characteristics by Two-Digit Commodity and Distance Shipped for the United States: 2002

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and distance shipped ¹ (based on Great Circle Distance)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
Total³	8 397 210	11 667 919	3 137 898
Less than 50 miles	2 503 895	6 309 437	127 277
50 to 99 miles	757 601	1 183 817	111 297
100 to 249 miles	1 329 245	1 480 571	329 721
250 to 499 miles	1 221 437	1 082 136	534 562
500 to 749 miles	844 880	604 036	504 193
750 to 999 miles	548 768	437 418	510 469
1,000 to 1,499 miles	501 419	419 584	660 359
1,500 to 1,999 miles	353 663	99 991	217 826
2,000 miles or more	336 302	50 929	142 193
SCTG 01, Live animals and live fish	7 410	6 118	1 586
Less than 50 miles	1 465	1 638	S
50 to 99 miles	S	S	S
100 to 249 miles	1 597	1 555	346
250 to 499 miles	1 213	878	362
500 to 749 miles	676	405	294
750 to 999 miles	560	342	360
1,000 to 1,499 miles	S	S	S
1,500 to 1,999 miles	S	S	S
2,000 miles or more	S	S	S
SCTG 02, Cereal grains	53 835	561 089	264 239
Less than 50 miles	23 230	243 351	6 251
50 to 99 miles	5 515	59 047	5 727
100 to 249 miles	4 322	40 928	8 857
250 to 499 miles	6 985	77 507	43 433
500 to 749 miles	4 092	38 764	37 196
750 to 999 miles	4 180	45 686	59 314
1,000 to 1,499 miles	5 119	52 638	95 725
1,500 to 1,999 miles	S	S	S
2,000 miles or more	S	S	S
SCTG 03, Other agricultural products	129 471	259 178	109 362
Less than 50 miles	54 833	123 890	3 374
50 to 99 miles	16 685	36 187	3 156
100 to 249 miles	14 323	20 883	4 397
250 to 499 miles	9 465	17 954	10 021
500 to 749 miles	6 317	16 608	16 213
750 to 999 miles	6 592	19 035	24 137
1,000 to 1,499 miles	8 350	13 687	21 463
1,500 to 1,999 miles	5 693	5 706	12 108
2,000 miles or more	7 212	5 230	14 493
SCTG 04, Animal feed and products of animal origin, n.e.c.	52 142	227 991	51 158
Less than 50 miles	20 933	121 715	2 911
50 to 99 miles	6 026	26 159	2 484
100 to 249 miles	9 376	38 241	7 643
250 to 499 miles	7 620	17 880	8 273
500 to 749 miles	3 341	10 796	8 893
750 to 999 miles	2 163	5 679	6 391
1,000 to 1,499 miles	2 015	4 723	7 293
1,500 to 1,999 miles	374	S	S
2,000 miles or more	S	S	S
SCTG 05, Meat, fish, seafood, and their preparations	201 304	84 506	41 352
Less than 50 miles	56 331	21 374	472
50 to 99 miles	18 686	8 931	837
100 to 249 miles	31 351	14 828	3 104
250 to 499 miles	30 165	13 374	5 899
500 to 749 miles	22 271	9 573	7 032
750 to 999 miles	14 930	6 030	6 264
1,000 to 1,499 miles	16 714	6 807	9 794
1,500 to 1,999 miles	7 384	2 663	5 371
2,000 miles or more	3 472	926	2 581
SCTG 06, Milled grain products and preparations, and bakery products	113 379	109 311	49 001
Less than 50 miles	31 022	28 712	618
50 to 99 miles	10 589	10 943	1 023
100 to 249 miles	21 740	24 050	4 843
250 to 499 miles	18 504	17 409	7 870
500 to 749 miles	12 441	11 358	8 742
750 to 999 miles	7 229	6 865	7 631
1,000 to 1,499 miles	6 212	5 857	8 687
1,500 to 1,999 miles	3 795	3 093	6 728
2,000 miles or more	1 848	1 025	2 858
SCTG 07, Other prepared foodstuffs and fats and oils	355 561	448 924	161 565
Less than 50 miles	116 363	167 900	3 903
50 to 99 miles	37 357	53 268	4 806
100 to 249 miles	63 373	83 918	17 234
250 to 499 miles	48 170	58 084	27 285
500 to 749 miles	36 026	35 183	27 005
750 to 999 miles	20 325	20 347	22 088
1,000 to 1,499 miles	15 587	15 627	24 054
1,500 to 1,999 miles	11 163	8 830	18 909
2,000 miles or more	7 197	5 768	16 280

See footnotes at end of table.

Table 8. Shipment Characteristics by Two-Digit Commodity and Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and distance shipped ¹ (based on Great Circle Distance)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 08, Alcoholic beverages	108 991	89 434	25 735
Less than 50 miles	69 161	49 656	959
50 to 99 miles	8 152	5 912	537
100 to 249 miles	11 024	11 468	2 371
250 to 499 miles	8 322	10 915	4 834
500 to 749 miles	3 249	3 692	2 792
750 to 999 miles	2 497	2 398	2 698
1,000 to 1,499 miles	1 756	2 043	3 059
1,500 to 1,999 miles	1 813	1 375	2 883
2,000 miles or more	3 016	1 973	5 602
SCTG 09, Tobacco products	69 868	4 370	983
Less than 50 miles	46 371	2 946	66
50 to 99 miles	6 156	S	S
100 to 249 miles	6 394	460	96
250 to 499 miles	3 974	245	115
500 to 749 miles	3 240	181	140
750 to 999 miles	1 158	60	62
1,000 to 1,499 miles	918	41	58
1,500 to 1,999 miles	456	S	S
2,000 miles or more	S	S	S
SCTG 10, Monumental or building stone	3 039	22 451	1 571
Less than 50 miles	2 043	17 870	364
50 to 99 miles	273	1 870	159
100 to 249 miles	361	1 810	362
250 to 499 miles	S	497	237
500 to 749 miles	97	204	146
750 to 999 miles	S	S	S
1,000 to 1,499 miles	S	109	174
1,500 to 1,999 miles	S	S	S
2,000 miles or more	S	S	S
SCTG 11, Natural sands	3 644	472 975	29 990
Less than 50 miles	2 502	385 413	8 710
50 to 99 miles	309	44 019	3 844
100 to 249 miles	333	28 577	5 480
250 to 499 miles	182	6 360	2 854
500 to 749 miles	114	4 849	3 363
750 to 999 miles	53	875	953
1,000 to 1,499 miles	115	1 812	2 471
1,500 to 1,999 miles	S	831	1 710
2,000 miles or more	12	S	S
SCTG 12, Gravel and crushed stone	12 850	1 866 487	105 826
Less than 50 miles	10 432	1 568 239	26 591
50 to 99 miles	800	124 365	11 851
100 to 249 miles	784	107 416	23 407
250 to 499 miles	504	47 813	23 951
500 to 749 miles	131	10 482	8 677
750 to 999 miles	142	6 157	7 340
1,000 to 1,499 miles	27	646	899
1,500 to 1,999 miles	27	1 092	S
2,000 miles or more	5	278	754
SCTG 13, Nonmetallic minerals n.e.c.	10 066	184 632	56 630
Less than 50 miles	2 753	100 689	2 406
50 to 99 miles	958	14 266	1 265
100 to 249 miles	2 313	27 153	5 836
250 to 499 miles	1 422	14 495	6 620
500 to 749 miles	947	6 922	5 683
750 to 999 miles	716	5 905	6 761
1,000 to 1,499 miles	488	10 194	16 404
1,500 to 1,999 miles	343	4 489	10 260
2,000 miles or more	124	518	1 397
SCTG 14, Metallic ores and concentrates	14 027	98 267	63 028
Less than 50 miles	1 195	14 519	625
50 to 99 miles	969	14 129	1 515
100 to 249 miles	2 210	7 886	1 986
250 to 499 miles	2 320	28 564	23 225
500 to 749 miles	3 474	19 826	17 167
750 to 999 miles	1 494	9 703	12 828
1,000 to 1,499 miles	809	3 153	4 545
1,500 to 1,999 miles	690	S	S
2,000 miles or more	867	64	168
SCTG 15, Coal	22 875	1 239 862	686 279
Less than 50 miles	6 339	345 343	9 595
50 to 99 miles	2 154	98 409	12 699
100 to 249 miles	5 378	215 071	67 004
250 to 499 miles	4 841	187 061	104 644
500 to 749 miles	1 744	125 352	117 051
750 to 999 miles	1 144	131 366	159 127
1,000 to 1,499 miles	1 239	136 105	213 230
1,500 to 1,999 miles	S	S	S
2,000 miles or more	—	—	—

See footnotes at end of table.

Table 8. Shipment Characteristics by Two-Digit Commodity and Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and distance shipped ¹ (based on Great Circle Distance)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 17, Gasoline and aviation turbine fuel	279 407	1 063 569	117 219
Less than 50 miles	200 731	736 840	12 534
50 to 99 miles	31 886	127 811	9 962
100 to 249 miles	23 872	102 132	18 038
250 to 499 miles	11 088	44 090	17 817
500 to 749 miles	5 156	24 633	18 675
750 to 999 miles	2 184	9 315	8 487
1,000 to 1,499 miles	3 336	14 175	20 152
1,500 to 1,999 miles	1 002	3 935	9 820
2,000 miles or more	150	S	S
SCTG 18, Fuel oils	116 119	549 007	55 464
Less than 50 miles	85 799	392 610	6 415
50 to 99 miles	11 583	57 448	4 939
100 to 249 miles	10 780	54 495	10 493
250 to 499 miles	4 369	23 752	10 199
500 to 749 miles	2 066	11 717	9 620
750 to 999 miles	1 075	6 250	7 754
1,000 to 1,499 miles	123	S	S
1,500 to 1,999 miles	S	S	S
2,000 miles or more	S	S	S
SCTG 19, Coal and petroleum products, n.e.c.	82 130	447 975	93 001
Less than 50 miles	38 631	244 027	3 938
50 to 99 miles	10 496	69 898	5 955
100 to 249 miles	11 604	51 275	11 847
250 to 499 miles	11 334	46 096	22 836
500 to 749 miles	3 852	12 739	10 328
750 to 999 miles	2 867	11 315	13 770
1,000 to 1,499 miles	2 410	11 330	21 337
1,500 to 1,999 miles	497	941	2 045
2,000 miles or more	439	354	945
SCTG 20, Basic chemicals	153 656	347 670	115 961
Less than 50 miles	48 226	157 637	2 846
50 to 99 miles	15 279	37 008	3 199
100 to 249 miles	19 497	55 152	11 502
250 to 499 miles	22 492	36 343	17 487
500 to 749 miles	14 504	19 925	16 483
750 to 999 miles	12 759	17 058	20 246
1,000 to 1,499 miles	11 577	18 625	29 996
1,500 to 1,999 miles	4 416	3 741	8 057
2,000 miles or more	4 907	2 181	6 145
SCTG 21, Pharmaceutical products	479 117	24 270	11 337
Less than 50 miles	93 377	5 217	131
50 to 99 miles	45 403	2 490	236
100 to 249 miles	93 484	5 711	1 205
250 to 499 miles	63 473	4 891	2 063
500 to 749 miles	61 786	2 219	1 644
750 to 999 miles	38 521	1 035	1 059
1,000 to 1,499 miles	27 763	1 282	1 744
1,500 to 1,999 miles	23 252	964	2 044
2,000 miles or more	32 058	461	1 211
SCTG 22, Fertilizers	34 049	264 319	87 605
Less than 50 miles	15 468	S	3 404
50 to 99 miles	2 305	14 363	1 475
100 to 249 miles	4 016	21 465	4 988
250 to 499 miles	4 787	31 671	13 646
500 to 749 miles	2 986	15 317	13 092
750 to 999 miles	2 296	11 907	13 083
1,000 to 1,499 miles	1 471	S	S
1,500 to 1,999 miles	595	3 020	6 889
2,000 miles or more	125	S	S
SCTG 23, Chemical products and preparations, n.e.c.	226 598	105 962	53 657
Less than 50 miles	58 857	27 969	635
50 to 99 miles	15 876	8 184	736
100 to 249 miles	36 703	17 492	3 685
250 to 499 miles	36 481	18 430	8 217
500 to 749 miles	29 060	14 098	10 497
750 to 999 miles	20 173	8 709	9 262
1,000 to 1,499 miles	12 594	5 638	8 085
1,500 to 1,999 miles	8 309	3 777	8 008
2,000 miles or more	8 544	1 666	4 535
SCTG 24, Plastics and rubber	325 673	139 973	80 827
Less than 50 miles	69 902	28 421	710
50 to 99 miles	28 639	11 484	1 103
100 to 249 miles	54 830	23 152	5 091
250 to 499 miles	59 706	28 122	13 106
500 to 749 miles	40 971	17 938	13 791
750 to 999 miles	24 570	12 248	13 064
1,000 to 1,499 miles	23 708	10 932	16 160
1,500 to 1,999 miles	13 442	5 060	10 662
2,000 miles or more	9 906	2 616	7 142

See footnotes at end of table.

Table 8. Shipment Characteristics by Two-Digit Commodity and Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and distance shipped ¹ (based on Great Circle Distance)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 25, Logs and other wood in the rough	5 756	S	7 790
Less than 50 miles	1 613	S	S
50 to 99 miles	528	S	S
100 to 249 miles	1 505	S	S
250 to 499 miles	619	1 493	593
500 to 749 miles	S	682	567
750 to 999 miles	58	154	162
1,000 to 1,499 miles	S	S	S
1,500 to 1,999 miles	S	S	S
2,000 miles or more	85	138	404
SCTG 26, Wood products	158 586	345 940	120 151
Less than 50 miles	54 111	120 223	3 286
50 to 99 miles	22 399	71 791	7 563
100 to 249 miles	28 692	61 816	12 887
250 to 499 miles	18 484	36 096	16 403
500 to 749 miles	12 388	20 055	16 212
750 to 999 miles	7 312	11 082	12 539
1,000 to 1,499 miles	7 050	12 338	19 322
1,500 to 1,999 miles	4 601	7 239	16 367
2,000 miles or more	3 549	5 300	15 572
SCTG 27, Pulp, newsprint, paper, and paperboard	102 495	137 053	78 160
Less than 50 miles	23 783	25 617	555
50 to 99 miles	7 757	9 920	997
100 to 249 miles	16 544	24 507	5 471
250 to 499 miles	19 743	27 504	13 408
500 to 749 miles	14 837	21 806	17 649
750 to 999 miles	9 438	13 160	14 376
1,000 to 1,499 miles	6 330	9 592	14 135
1,500 to 1,999 miles	2 643	3 355	7 152
2,000 miles or more	1 420	1 591	4 417
SCTG 28, Paper or paperboard articles	103 713	69 211	23 360
Less than 50 miles	36 480	27 024	641
50 to 99 miles	9 716	7 423	690
100 to 249 miles	16 922	12 047	2 407
250 to 499 miles	16 133	9 476	4 229
500 to 749 miles	10 364	6 095	4 656
750 to 999 miles	6 762	3 512	3 719
1,000 to 1,499 miles	3 380	1 637	2 351
1,500 to 1,999 miles	2 781	1 415	3 050
2,000 miles or more	1 177	581	1 618
SCTG 29, Printed products	134 452	34 015	17 037
Less than 50 miles	36 181	8 083	174
50 to 99 miles	8 735	3 616	373
100 to 249 miles	18 175	6 060	1 298
250 to 499 miles	24 141	6 287	2 834
500 to 749 miles	17 617	3 850	3 007
750 to 999 miles	9 524	2 569	2 650
1,000 to 1,499 miles	9 554	1 823	2 626
1,500 to 1,999 miles	5 880	1 010	2 134
2,000 miles or more	4 644	719	1 939
SCTG 30, Textiles, leather, and articles of textiles or leather	466 429	51 232	31 787
Less than 50 miles	75 943	11 890	225
50 to 99 miles	28 702	4 144	397
100 to 249 miles	70 569	9 121	1 913
250 to 499 miles	87 609	7 773	3 439
500 to 749 miles	59 750	5 909	4 452
750 to 999 miles	42 678	4 229	4 353
1,000 to 1,499 miles	38 954	3 938	5 355
1,500 to 1,999 miles	28 594	1 885	3 937
2,000 miles or more	33 630	2 343	7 716
SCTG 31, Nonmetallic mineral products	149 951	967 978	135 937
Less than 50 miles	56 473	660 581	11 586
50 to 99 miles	13 379	79 642	7 220
100 to 249 miles	23 298	115 162	24 926
250 to 499 miles	21 991	57 833	25 202
500 to 749 miles	11 838	22 741	18 010
750 to 999 miles	7 870	10 892	11 793
1,000 to 1,499 miles	7 760	13 441	20 601
1,500 to 1,999 miles	4 214	5 847	11 702
2,000 miles or more	3 128	1 838	4 898
SCTG 32, Base metal in primary or semifinished forms and in finished basic shapes	259 834	328 053	121 330
Less than 50 miles	66 357	87 101	2 100
50 to 99 miles	24 296	34 111	3 265
100 to 249 miles	56 922	77 801	16 367
250 to 499 miles	52 742	66 957	30 545
500 to 749 miles	26 263	34 713	27 004
750 to 999 miles	12 505	12 246	13 539
1,000 to 1,499 miles	11 194	8 848	13 683
1,500 to 1,999 miles	5 695	4 392	9 807
2,000 miles or more	3 862	1 887	5 019

See footnotes at end of table.

Table 8. Shipment Characteristics by Two-Digit Commodity and Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and distance shipped ¹ (based on Great Circle Distance)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 33, Articles of base metal	234 571	116 447	42 680
Less than 50 miles	65 873	44 535	924
50 to 99 miles	20 374	10 396	944
100 to 249 miles	37 812	18 923	3 952
250 to 499 miles	40 242	18 300	8 179
500 to 749 miles	26 352	10 179	7 637
750 to 999 miles	15 916	5 408	5 685
1,000 to 1,499 miles	13 952	5 456	8 045
1,500 to 1,999 miles	7 762	2 167	4 434
2,000 miles or more	6 287	1 084	2 881
SCTG 34, Machinery	484 152	63 390	34 535
Less than 50 miles	106 633	16 470	369
50 to 99 miles	32 561	4 588	437
100 to 249 miles	66 379	9 019	1 931
250 to 499 miles	87 085	12 159	5 580
500 to 749 miles	64 656	8 252	6 170
750 to 999 miles	46 115	5 326	5 545
1,000 to 1,499 miles	36 819	3 578	5 184
1,500 to 1,999 miles	24 393	2 770	5 954
2,000 miles or more	19 512	1 228	3 364
SCTG 35, Electronic and other electrical equipment and components and office equipment	890 803	49 592	30 269
Less than 50 miles	188 396	14 959	311
50 to 99 miles	38 560	2 172	208
100 to 249 miles	94 674	5 345	1 152
250 to 499 miles	125 777	8 772	3 981
500 to 749 miles	104 919	6 392	4 928
750 to 999 miles	74 793	3 506	3 662
1,000 to 1,499 miles	95 359	4 408	6 454
1,500 to 1,999 miles	75 669	2 494	5 309
2,000 miles or more	92 656	1 544	4 264
SCTG 36, Motorized and other vehicles (including parts)	748 550	133 088	59 029
Less than 50 miles	196 107	36 609	814
50 to 99 miles	60 313	14 137	1 293
100 to 249 miles	127 687	24 664	5 193
250 to 499 miles	136 095	23 525	10 665
500 to 749 miles	93 157	13 399	9 890
750 to 999 miles	56 021	8 852	9 707
1,000 to 1,499 miles	41 829	7 347	10 880
1,500 to 1,999 miles	25 498	2 906	6 397
2,000 miles or more	11 843	1 649	4 191
SCTG 37, Transportation equipment, n.e.c.	155 013	18 352	10 649
Less than 50 miles	S	S	S
50 to 99 miles	6 027	S	S
100 to 249 miles	9 108	3 766	S
250 to 499 miles	12 697	2 857	1 374
500 to 749 miles	19 553	S	4 316
750 to 999 miles	12 959	S	S
1,000 to 1,499 miles	11 901	348	566
1,500 to 1,999 miles	10 168	158	332
2,000 miles or more	8 005	143	397
SCTG 38, Precision instruments and apparatus	225 070	18 352	3 912
Less than 50 miles	35 993	8 395	234
50 to 99 miles	13 155	3 369	287
100 to 249 miles	24 348	3 862	746
250 to 499 miles	30 909	S	528
500 to 749 miles	23 911	347	274
750 to 999 miles	18 283	207	223
1,000 to 1,499 miles	23 977	280	423
1,500 to 1,999 miles	27 020	189	393
2,000 miles or more	27 473	301	804
SCTG 39, Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	139 727	32 546	13 705
Less than 50 miles	50 811	10 945	227
50 to 99 miles	10 207	S	S
100 to 249 miles	18 423	4 046	844
250 to 499 miles	17 721	3 852	1 724
500 to 749 miles	17 423	3 285	2 414
750 to 999 miles	9 268	1 995	2 054
1,000 to 1,499 miles	7 355	1 715	2 385
1,500 to 1,999 miles	5 008	947	1 977
2,000 miles or more	3 510	608	1 614
SCTG 40, Miscellaneous manufactured products	387 426	79 208	34 467
Less than 50 miles	79 295	26 324	607
50 to 99 miles	25 896	8 002	714
100 to 249 miles	52 226	13 090	2 831
250 to 499 miles	72 126	12 754	5 674
500 to 749 miles	43 341	7 373	5 653
750 to 999 miles	29 948	4 228	4 354
1,000 to 1,499 miles	30 524	3 069	4 396
1,500 to 1,999 miles	26 898	2 436	4 997
2,000 miles or more	27 172	1 933	5 241

See footnotes at end of table.

Table 8. Shipment Characteristics by Two-Digit Commodity and Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and distance shipped ¹ (based on Great Circle Distance)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 41, Waste and scrap	37 896	217 234	48 009
Less than 50 miles	14 223	99 449	2 142
50 to 99 miles	3 815	29 072	2 586
100 to 249 miles	7 450	46 496	9 750
250 to 499 miles	5 754	25 528	13 723
500 to 749 miles	3 866	11 203	S
750 to 999 miles	614	1 867	S
1,000 to 1,499 miles	535	1 750	2 818
1,500 to 1,999 miles	1 097	1 176	2 606
2,000 miles or more	S	S	1 867
SCTG 43, Mixed freight	840 346	299 926	52 823
Less than 50 miles	289 029	125 279	3 534
50 to 99 miles	151 946	55 892	5 171
100 to 249 miles	226 545	77 538	14 991
250 to 499 miles	91 842	25 234	10 430
500 to 749 miles	33 685	7 313	5 388
750 to 999 miles	20 072	3 919	4 074
1,000 to 1,499 miles	11 065	2 177	3 182
1,500 to 1,999 miles	10 192	1 722	3 585
2,000 miles or more	5 969	853	2 470
Commodity unknown	17 229	24 266	8 889
Less than 50 miles	6 035	12 309	S
50 to 99 miles	1 329	1 692	157
100 to 249 miles	2 302	2 076	542
250 to 499 miles	2 206	1 899	1 055
500 to 749 miles	1 903	S	1 511
750 to 999 miles	964	S	S
1,000 to 1,499 miles	1 252	341	530
1,500 to 1,999 miles	821	211	459
2,000 miles or more	417	62	176

– Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Shipments are grouped into distance categories based on Great Circle Distance (GCD). GCD is the shortest distance between 2 points on the surface of a sphere over the surface of that sphere.

²Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

³Estimates exclude shipments of crude petroleum (SCTG 16).

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 9. Shipment Characteristics by Two-Digit Commodity and Shipment Weight for the United States: 2002

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and shipment weight	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ¹ (millions)
Total²	8 397 210	11 667 919	3 137 898
Less than 50 lb	991 839	18 543	9 911
50 to 99 lb	295 607	14 432	5 072
100 to 499 lb	811 133	85 224	21 920
500 to 749 lb	246 872	40 816	9 473
750 to 999 lb	182 832	35 892	7 799
1,000 to 9,999 lb	1 781 947	614 243	154 986
10,000 to 49,999 lb	3 075 335	4 453 871	882 900
50,000 to 99,999 lb	390 050	2 129 556	189 129
100,000 lb or more	621 594	4 275 342	1 856 708
SCTG 01, Live animals and live fish	7 410	6 118	1 586
Less than 50 lb	S	S	S
50 to 99 lb	S	S	S
100 to 499 lb	176	20	4
500 to 749 lb	S	S	S
750 to 999 lb	S	1	S
1,000 to 9,999 lb	S	S	S
10,000 to 49,999 lb	3 342	3 310	994
50,000 to 99,999 lb	1 180	1 202	331
100,000 lb or more	791	548	102
SCTG 02, Cereal grains	53 835	561 089	264 239
Less than 50 lb	6	1	-
50 to 99 lb	S	5	S
100 to 499 lb	77	S	S
500 to 749 lb	47	33	1
750 to 999 lb	13	30	S
1,000 to 9,999 lb	393	1 037	88
10,000 to 49,999 lb	3 354	23 771	4 149
50,000 to 99,999 lb	14 293	154 628	15 870
100,000 lb or more	35 642	381 509	244 125
SCTG 03, Other agricultural products	129 471	259 178	109 362
Less than 50 lb	4 205	376	S
50 to 99 lb	1 672	274	65
100 to 499 lb	6 889	2 556	313
500 to 749 lb	3 040	1 948	148
750 to 999 lb	2 718	1 851	215
1,000 to 9,999 lb	30 527	24 809	6 933
10,000 to 49,999 lb	45 987	65 218	36 664
50,000 to 99,999 lb	11 483	61 770	5 724
100,000 lb or more	22 951	100 377	59 073
SCTG 04, Animal feed and products of animal origin, n.e.c.	52 142	227 991	51 158
Less than 50 lb	257	S	13
50 to 99 lb	188	124	7
100 to 499 lb	881	688	78
500 to 749 lb	226	342	27
750 to 999 lb	S	266	S
1,000 to 9,999 lb	4 810	10 867	1 132
10,000 to 49,999 lb	29 234	102 371	21 827
50,000 to 99,999 lb	10 048	76 327	7 360
100,000 lb or more	5 290	36 891	20 639
SCTG 05, Meat, fish, seafood, and their preparations	201 304	84 506	41 352
Less than 50 lb	2 181	236	33
50 to 99 lb	3 284	443	29
100 to 499 lb	15 421	3 349	294
500 to 749 lb	5 433	1 546	164
750 to 999 lb	3 298	1 113	133
1,000 to 9,999 lb	43 575	15 355	4 960
10,000 to 49,999 lb	123 519	58 501	32 988
50,000 to 99,999 lb	2 808	2 173	1 504
100,000 lb or more	1 786	1 791	1 246
SCTG 06, Milled grain products and preparations, and bakery products	113 379	109 311	49 001
Less than 50 lb	1 812	309	36
50 to 99 lb	1 218	274	23
100 to 499 lb	5 004	1 398	208
500 to 749 lb	2 063	702	90
750 to 999 lb	1 440	553	103
1,000 to 9,999 lb	19 401	11 539	3 047
10,000 to 49,999 lb	75 467	67 641	30 135
50,000 to 99,999 lb	3 462	10 817	2 158
100,000 lb or more	3 512	16 079	13 200
SCTG 07, Other prepared foodstuffs and fats and oils	355 561	448 924	161 565
Less than 50 lb	5 116	670	114
50 to 99 lb	3 482	1 304	80
100 to 499 lb	16 297	11 255	749
500 to 749 lb	7 191	5 397	382
750 to 999 lb	6 472	5 169	362
1,000 to 9,999 lb	62 481	53 187	8 665
10,000 to 49,999 lb	218 080	262 616	94 384
50,000 to 99,999 lb	16 663	46 459	6 860
100,000 lb or more	19 779	62 870	49 970

See footnotes at end of table.

Table 9. Shipment Characteristics by Two-Digit Commodity and Shipment Weight for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and shipment weight	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ¹ (millions)
SCTG 08, Alcoholic beverages	108 991	89 434	25 735
Less than 50 lb	1 318	160	12
50 to 99 lb	1 897	387	18
100 to 499 lb	14 194	5 499	215
500 to 749 lb	5 626	2 951	117
750 to 999 lb	4 681	2 867	112
1,000 to 9,999 lb	39 949	28 843	1 844
10,000 to 49,999 lb	33 213	35 120	14 484
50,000 to 99,999 lb	4 157	6 429	1 466
100,000 lb or more	3 955	7 178	7 467
SCTG 09, Tobacco products	69 868	4 370	983
Less than 50 lb	5 715	80	16
50 to 99 lb	4 378	62	5
100 to 499 lb	9 425	188	27
500 to 749 lb	2 655	74	12
750 to 999 lb	1 280	60	10
1,000 to 9,999 lb	6 939	457	75
10,000 to 49,999 lb	38 169	3 236	527
50,000 to 99,999 lb	S	S	S
100,000 lb or more	S	S	S
SCTG 10, Monumental or building stone	3 039	22 451	1 571
Less than 50 lb	S	S	S
50 to 99 lb	8	S	S
100 to 499 lb	S	S	S
500 to 749 lb	72	24	1
750 to 999 lb	S	S	S
1,000 to 9,999 lb	1 205	818	135
10,000 to 49,999 lb	1 244	12 493	950
50,000 to 99,999 lb	210	8 305	362
100,000 lb or more	34	S	97
SCTG 11, Natural sands	3 644	472 975	29 990
Less than 50 lb	S	S	S
50 to 99 lb	S	S	S
100 to 499 lb	7	10	S
500 to 749 lb	17	25	4
750 to 999 lb	S	10	S
1,000 to 9,999 lb	168	3 368	128
10,000 to 49,999 lb	1 845	228 843	8 682
50,000 to 99,999 lb	853	148 634	6 463
100,000 lb or more	747	92 084	14 710
SCTG 12, Gravel and crushed stone	12 850	1 866 487	105 826
Less than 50 lb	S	S	S
50 to 99 lb	S	S	S
100 to 499 lb	S	16	—
500 to 749 lb	—	15	S
750 to 999 lb	S	22	1
1,000 to 9,999 lb	147	7 084	107
10,000 to 49,999 lb	7 172	996 109	27 230
50,000 to 99,999 lb	3 130	462 321	15 508
100,000 lb or more	2 396	400 919	62 979
SCTG 13, Nonmetallic minerals n.e.c.	10 066	184 632	56 630
Less than 50 lb	88	4	1
50 to 99 lb	21	7	1
100 to 499 lb	118	59	7
500 to 749 lb	41	21	3
750 to 999 lb	22	21	3
1,000 to 9,999 lb	964	1 988	274
10,000 to 49,999 lb	5 024	98 599	15 625
50,000 to 99,999 lb	1 006	28 029	3 126
100,000 lb or more	2 783	55 906	37 590
SCTG 14, Metallic ores and concentrates	14 027	98 267	63 028
Less than 50 lb	27	—	—
50 to 99 lb	S	—	—
100 to 499 lb	109	5	2
500 to 749 lb	43	5	S
750 to 999 lb	S	4	S
1,000 to 9,999 lb	1 273	247	111
10,000 to 49,999 lb	6 328	4 437	2 080
50,000 to 99,999 lb	678	1 365	593
100,000 lb or more	5 505	92 203	60 236
SCTG 15, Coal	22 875	1 239 862	686 279
Less than 50 lb	—	—	—
50 to 99 lb	S	S	S
100 to 499 lb	S	S	S
500 to 749 lb	S	S	S
750 to 999 lb	S	S	S
1,000 to 9,999 lb	S	53	S
10,000 to 49,999 lb	619	25 339	1 637
50,000 to 99,999 lb	1 386	58 567	7 519
100,000 lb or more	20 837	1 155 897	677 120

See footnotes at end of table.

Table 9. Shipment Characteristics by Two-Digit Commodity and Shipment Weight for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and shipment weight	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ¹ (millions)
SCTG 17, Gasoline and aviation turbine fuel	279 407	1 063 569	117 219
Less than 50 lb	3	7	—
50 to 99 lb	35	88	S
100 to 499 lb	121	276	3
500 to 749 lb	106	161	6
750 to 999 lb	95	245	5
1,000 to 9,999 lb	5 231	15 334	602
10,000 to 49,999 lb	46 752	159 501	12 934
50,000 to 99,999 lb	113 719	394 749	21 738
100,000 lb or more	113 345	493 209	81 929
SCTG 18, Fuel oils	116 119	549 007	55 464
Less than 50 lb	9	6	—
50 to 99 lb	14	23	1
100 to 499 lb	272	669	12
500 to 749 lb	375	1 011	16
750 to 999 lb	494	1 483	21
1,000 to 9,999 lb	9 993	34 846	812
10,000 to 49,999 lb	19 099	80 620	4 003
50,000 to 99,999 lb	30 256	136 203	12 086
100,000 lb or more	55 605	294 147	38 514
SCTG 19, Coal and petroleum products, n.e.c.	82 130	447 975	93 001
Less than 50 lb	457	103	7
50 to 99 lb	430	134	S
100 to 499 lb	2 802	1 640	177
500 to 749 lb	909	777	51
750 to 999 lb	1 625	1 435	116
1,000 to 9,999 lb	10 642	13 980	1 224
10,000 to 49,999 lb	25 226	157 933	14 709
50,000 to 99,999 lb	7 599	56 530	5 553
100,000 lb or more	32 439	215 443	71 153
SCTG 20, Basic chemicals	153 656	347 670	115 961
Less than 50 lb	4 786	112	53
50 to 99 lb	932	116	24
100 to 499 lb	5 856	1 549	325
500 to 749 lb	2 935	852	141
750 to 999 lb	1 627	513	87
1,000 to 9,999 lb	21 835	10 753	2 979
10,000 to 49,999 lb	53 910	101 486	24 671
50,000 to 99,999 lb	2 651	16 172	4 866
100,000 lb or more	59 125	216 117	82 815
SCTG 21, Pharmaceutical products	479 117	24 270	11 337
Less than 50 lb	130 983	673	339
50 to 99 lb	37 257	366	93
100 to 499 lb	70 758	1 326	447
500 to 749 lb	14 055	492	223
750 to 999 lb	12 532	355	137
1,000 to 9,999 lb	73 471	9 706	S
10,000 to 49,999 lb	137 991	9 032	4 679
50,000 to 99,999 lb	S	S	S
100,000 lb or more	S	1 662	1 270
SCTG 22, Fertilizers	34 049	264 319	87 605
Less than 50 lb	32	S	S
50 to 99 lb	S	10	S
100 to 499 lb	129	108	S
500 to 749 lb	62	89	S
750 to 999 lb	35	42	2
1,000 to 9,999 lb	3 534	12 565	823
10,000 to 49,999 lb	13 063	58 163	12 462
50,000 to 99,999 lb	4 519	32 056	6 385
100,000 lb or more	12 664	161 284	67 904
SCTG 23, Chemical products and preparations, n.e.c.	226 598	105 962	53 657
Less than 50 lb	15 737	685	259
50 to 99 lb	6 765	471	140
100 to 499 lb	22 122	2 904	849
500 to 749 lb	7 575	1 221	442
750 to 999 lb	4 841	850	331
1,000 to 9,999 lb	50 156	15 136	6 425
10,000 to 49,999 lb	111 796	72 141	37 978
50,000 to 99,999 lb	2 766	4 522	1 631
100,000 lb or more	4 839	8 033	5 603
SCTG 24, Plastics and rubber	325 673	139 973	80 827
Less than 50 lb	20 154	796	357
50 to 99 lb	8 705	781	267
100 to 499 lb	34 526	4 924	1 588
500 to 749 lb	12 269	1 971	793
750 to 999 lb	8 370	1 673	644
1,000 to 9,999 lb	95 940	29 676	13 295
10,000 to 49,999 lb	122 481	65 445	38 326
50,000 to 99,999 lb	2 029	2 067	812
100,000 lb or more	21 199	32 640	24 745

See footnotes at end of table.

Table 9. Shipment Characteristics by Two-Digit Commodity and Shipment Weight for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and shipment weight	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ¹ (millions)
SCTG 25, Logs and other wood in the rough	5 756	S	7 790
Less than 50 lb	2	S	S
50 to 99 lb	3	1	S
100 to 499 lb	20	12	1
500 to 749 lb	15	12	S
750 to 999 lb	15	14	—
1,000 to 9,999 lb	287	S	S
10,000 to 49,999 lb	3 171	25 110	3 145
50,000 to 99,999 lb	1 144	S	S
100,000 lb or more	1 100	5 856	S
SCTG 26, Wood products	158 586	345 940	120 151
Less than 50 lb	2 059	159	59
50 to 99 lb	1 804	245	55
100 to 499 lb	10 005	1 894	297
500 to 749 lb	4 876	1 223	183
750 to 999 lb	3 318	1 031	160
1,000 to 9,999 lb	39 076	26 484	3 656
10,000 to 49,999 lb	70 872	159 736	47 599
50,000 to 99,999 lb	14 099	87 556	14 166
100,000 lb or more	12 478	67 610	53 977
SCTG 27, Pulp, newsprint, paper, and paperboard	102 495	137 053	78 160
Less than 50 lb	1 168	114	25
50 to 99 lb	792	154	22
100 to 499 lb	3 920	1 270	153
500 to 749 lb	1 378	627	83
750 to 999 lb	1 104	508	72
1,000 to 9,999 lb	16 032	10 531	2 091
10,000 to 49,999 lb	53 148	71 878	37 407
50,000 to 99,999 lb	3 332	7 475	2 482
100,000 lb or more	21 619	44 496	35 825
SCTG 28, Paper or paperboard articles	103 713	69 211	23 360
Less than 50 lb	3 946	391	110
50 to 99 lb	2 184	376	59
100 to 499 lb	7 315	2 146	279
500 to 749 lb	2 506	956	154
750 to 999 lb	1 752	707	130
1,000 to 9,999 lb	24 204	14 445	2 651
10,000 to 49,999 lb	60 140	47 117	18 265
50,000 to 99,999 lb	1 040	1 512	714
100,000 lb or more	627	1 560	999
SCTG 29, Printed products	134 452	34 015	17 037
Less than 50 lb	27 236	1 053	770
50 to 99 lb	8 708	681	S
100 to 499 lb	20 629	1 643	840
500 to 749 lb	5 925	677	364
750 to 999 lb	4 319	530	261
1,000 to 9,999 lb	37 103	8 404	4 063
10,000 to 49,999 lb	28 406	17 922	9 218
50,000 to 99,999 lb	1 771	1 715	465
100,000 lb or more	355	S	S
SCTG 30, Textiles, leather, and articles of textiles or leather	466 429	51 232	31 787
Less than 50 lb	61 198	1 730	1 637
50 to 99 lb	16 349	755	636
100 to 499 lb	50 020	2 844	2 076
500 to 749 lb	15 963	1 079	730
750 to 999 lb	12 342	909	580
1,000 to 9,999 lb	122 942	11 551	6 848
10,000 to 49,999 lb	184 777	31 000	18 887
50,000 to 99,999 lb	1 652	431	147
100,000 lb or more	1 187	934	246
SCTG 31, Nonmetallic mineral products	149 951	967 978	135 937
Less than 50 lb	5 597	328	164
50 to 99 lb	2 273	300	132
100 to 499 lb	8 117	1 917	691
500 to 749 lb	2 114	667	176
750 to 999 lb	1 638	701	222
1,000 to 9,999 lb	20 124	33 051	6 899
10,000 to 49,999 lb	86 100	651 855	71 973
50,000 to 99,999 lb	15 489	185 884	16 950
100,000 lb or more	8 498	93 274	38 730
SCTG 32, Base metal in primary or semifinished forms and in finished basic shapes	259 834	328 053	121 330
Less than 50 lb	5 428	292	88
50 to 99 lb	3 458	415	94
100 to 499 lb	13 981	2 868	554
500 to 749 lb	5 003	1 654	325
750 to 999 lb	3 623	1 217	239
1,000 to 9,999 lb	50 426	28 651	7 055
10,000 to 49,999 lb	139 618	193 439	62 431
50,000 to 99,999 lb	14 127	29 705	5 918
100,000 lb or more	24 170	69 812	44 626

See footnotes at end of table.

Table 9. Shipment Characteristics by Two-Digit Commodity and Shipment Weight for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and shipment weight	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ¹ (millions)
SCTG 33, Articles of base metal	234 571	116 447	42 680
Less than 50 lb	36 337	850	352
50 to 99 lb	10 723	662	265
100 to 499 lb	27 940	3 512	1 256
500 to 749 lb	8 259	1 586	495
750 to 999 lb	5 673	1 298	403
1,000 to 9,999 lb	64 098	24 484	8 021
10,000 to 49,999 lb	72 806	64 288	24 517
50,000 to 99,999 lb	3 436	3 819	1 117
100,000 lb or more	5 298	S	6 255
SCTG 34, Machinery	484 152	63 390	34 535
Less than 50 lb	55 558	1 064	416
50 to 99 lb	18 310	649	276
100 to 499 lb	58 081	3 496	1 392
500 to 749 lb	19 050	1 480	774
750 to 999 lb	13 533	1 030	539
1,000 to 9,999 lb	128 445	14 652	8 538
10,000 to 49,999 lb	169 474	35 153	19 912
50,000 to 99,999 lb	12 104	3 907	1 280
100,000 lb or more	9 597	1 960	1 408
SCTG 35, Electronic and other electrical equipment and components and office equipment	890 803	49 592	30 269
Less than 50 lb	275 819	2 436	1 568
50 to 99 lb	88 684	1 335	740
100 to 499 lb	178 478	5 535	2 744
500 to 749 lb	44 559	1 995	945
750 to 999 lb	27 916	1 732	892
1,000 to 9,999 lb	166 449	12 311	7 187
10,000 to 49,999 lb	100 630	19 993	13 242
50,000 to 99,999 lb	3 407	902	766
100,000 lb or more	4 860	3 354	2 185
SCTG 36, Motorized and other vehicles (including parts)	748 550	133 088	59 029
Less than 50 lb	32 303	1 346	447
50 to 99 lb	11 096	749	251
100 to 499 lb	36 139	3 132	1 086
500 to 749 lb	12 152	1 151	414
750 to 999 lb	9 134	1 029	311
1,000 to 9,999 lb	231 951	29 259	13 067
10,000 to 49,999 lb	327 406	76 708	31 195
50,000 to 99,999 lb	54 431	11 896	5 985
100,000 lb or more	33 939	7 819	6 274
SCTG 37, Transportation equipment, n.e.c.	155 013	18 352	10 649
Less than 50 lb	27 134	50	52
50 to 99 lb	7 356	27	29
100 to 499 lb	22 750	111	99
500 to 749 lb	5 384	59	42
750 to 999 lb	1 571	46	30
1,000 to 9,999 lb	22 914	885	669
10,000 to 49,999 lb	14 765	10 300	5 841
50,000 to 99,999 lb	S	S	S
100,000 lb or more	S	1 510	1 166
SCTG 38, Precision instruments and apparatus	225 070	18 352	3 912
Less than 50 lb	109 108	490	467
50 to 99 lb	14 634	153	113
100 to 499 lb	40 457	625	468
500 to 749 lb	10 814	202	125
750 to 999 lb	13 129	193	129
1,000 to 9,999 lb	24 930	1 587	848
10,000 to 49,999 lb	10 444	4 276	856
50,000 to 99,999 lb	332	S	105
100,000 lb or more	1 224	8 828	801
SCTG 39, Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	139 727	32 546	13 705
Less than 50 lb	5 477	245	161
50 to 99 lb	4 495	333	171
100 to 499 lb	23 225	2 301	912
500 to 749 lb	8 149	975	401
750 to 999 lb	6 384	748	295
1,000 to 9,999 lb	49 692	9 954	4 751
10,000 to 49,999 lb	40 404	14 734	6 659
50,000 to 99,999 lb	S	S	195
100,000 lb or more	561	S	S
SCTG 40, Miscellaneous manufactured products	387 426	79 208	34 467
Less than 50 lb	103 727	1 697	1 471
50 to 99 lb	18 298	847	649
100 to 499 lb	48 550	3 589	2 249
500 to 749 lb	13 594	1 423	874
750 to 999 lb	9 573	1 062	563
1,000 to 9,999 lb	96 770	16 054	9 133
10,000 to 49,999 lb	89 931	41 187	15 989
50,000 to 99,999 lb	4 999	4 757	1 246
100,000 lb or more	1 983	8 593	2 293

See footnotes at end of table.

Table 9. Shipment Characteristics by Two-Digit Commodity and Shipment Weight for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, and shipment weight	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ¹ (millions)
SCTG 41, Waste and scrap	37 896	217 234	48 009
Less than 50 lb	37	1	S
50 to 99 lb	S	S	S
100 to 499 lb	93	12	2
500 to 749 lb	21	17	S
750 to 999 lb	S	S	S
1,000 to 9,999 lb	888	1 126	86
10,000 to 49,999 lb	24 851	104 434	17 501
50,000 to 99,999 lb	1 823	18 083	1 915
100,000 lb or more	10 140	93 544	28 500
SCTG 43, Mixed freight	840 346	299 926	52 823
Less than 50 lb	43 830	1 883	616
50 to 99 lb	15 474	1 834	297
100 to 499 lb	54 429	9 637	1 450
500 to 749 lb	21 889	5 301	736
750 to 999 lb	16 584	4 406	587
1,000 to 9,999 lb	198 290	66 198	11 223
10,000 to 49,999 lb	469 479	186 337	34 689
50,000 to 99,999 lb	15 793	S	1 944
100,000 lb or more	4 578	6 402	1 282
Commodity unknown	17 229	24 266	8 889
Less than 50 lb	2 718	53	28
50 to 99 lb	398	23	7
100 to 499 lb	1 726	141	43
500 to 749 lb	478	73	10
750 to 999 lb	195	100	S
1,000 to 9,999 lb	3 238	1 313	278
10,000 to 49,999 lb	6 000	6 482	1 457
50,000 to 99,999 lb	643	2 521	220
100,000 lb or more	S	13 560	S

— Represents data cell equal to zero or less than 1 unit of measure.

S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

²Estimates exclude shipments of crude petroleum (SCTG 16).

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	Total, all mileages				Less than 50 miles ¹			50 to 99 miles ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	Average miles per shipment	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
Total³	8 397 210	11 667 919	3 137 898	546	2 503 895	6 309 437	127 277	757 601	1 183 817	111 297
Less than 50 lb	991 839	18 543	9 911	696	236 389	7 442	140	64 548	1 369	132
50 to 99 lb	295 607	14 432	5 072	358	89 725	7 758	148	20 314	1 205	110
100 to 499 lb	811 133	85 224	21 920	263	270 153	50 518	1 064	67 103	8 549	770
500 to 749 lb	246 872	40 816	9 473	232	85 364	24 108	515	22 324	4 567	419
750 to 999 lb	182 832	35 892	7 799	216	58 150	21 742	462	17 629	3 675	334
1,000 to 9,999 lb	1 781 947	614 243	154 986	245	535 812	331 931	6 839	166 337	64 115	5 832
10,000 to 49,999 lb	3 075 335	4 453 871	882 900	202	755 693	2 656 318	49 230	301 083	421 913	37 993
50,000 to 99,999 lb	390 050	2 129 556	189 129	87	208 000	1 486 072	33 391	52 356	305 952	27 000
100,000 lb or more	621 594	4 275 342	1 856 708	477	264 609	1 723 549	35 488	45 907	372 472	38 708
SCTG 01, Live animals and live fish	7 410	6 118	1 586	530	1 465	1 638	S	S	S	S
Less than 50 lb	S	S	S	763	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	176	20	4	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	942	S	S	S	-	-	-
750 to 999 lb	S	1	S	386	S	1	S	S	S	S
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	3 342	3 310	994	260	418	S	S	S	S	S
50,000 to 99,999 lb	1 180	1 202	331	268	183	S	S	327	238	24
100,000 lb or more	791	548	102	212	151	108	S	S	S	S
SCTG 02, Cereal grains	53 835	561 089	264 239	138	23 230	243 351	6 251	5 515	59 047	5 727
Less than 50 lb	6	1	-	S	3	S	S	S	S	S
50 to 99 lb	S	5	S	29	S	5	S	S	S	S
100 to 499 lb	77	S	S	54	30	29	-	S	S	S
500 to 749 lb	47	33	1	32	15	26	-	S	S	S
750 to 999 lb	13	30	S	S	6	27	S	S	S	S
1,000 to 9,999 lb	393	1 037	88	S	242	862	11	31	54	5
10,000 to 49,999 lb	3 354	23 771	4 149	156	1 361	13 527	219	439	3 692	316
50,000 to 99,999 lb	14 293	154 628	15 870	102	7 619	84 593	2 013	3 385	37 402	3 285
100,000 lb or more	35 642	381 509	244 125	575	13 946	144 282	4 008	1 634	17 857	S
SCTG 03, Other agricultural products	129 471	259 178	109 362	481	54 833	123 890	3 374	16 685	36 187	3 156
Less than 50 lb	4 205	376	S	784	2 199	221	4	122	16	2
50 to 99 lb	1 672	274	65	245	749	205	4	217	29	3
100 to 499 lb	6 889	2 556	313	124	4 074	2 005	45	678	290	27
500 to 749 lb	3 040	1 948	148	76	2 245	1 507	32	278	S	S
750 to 999 lb	2 718	1 851	215	117	1 845	1 475	33	200	125	12
1,000 to 9,999 lb	30 527	24 809	6 933	223	15 309	14 735	374	2 841	2 825	248
10,000 to 49,999 lb	45 987	65 218	36 664	485	13 948	24 168	553	5 146	7 954	719
50,000 to 99,999 lb	11 483	61 770	5 724	92	5 306	31 772	975	4 360	22 601	1 900
100,000 lb or more	22 951	100 377	59 073	827	9 157	47 801	1 353	S	S	S
SCTG 04, Animal feed and products of animal origin, n.e.c.	52 142	227 991	51 158	167	20 933	121 715	2 911	6 026	26 159	2 484
Less than 50 lb	257	S	13	337	S	S	S	S	S	S
50 to 99 lb	188	124	7	63	135	S	S	S	S	S
100 to 499 lb	881	688	78	S	535	553	11	S	46	4
500 to 749 lb	226	342	27	S	152	295	5	36	19	2
750 to 999 lb	S	266	S	261	87	117	3	40	20	2
1,000 to 9,999 lb	4 810	10 867	1 132	99	2 193	6 750	131	888	1 661	144
10,000 to 49,999 lb	29 234	102 371	21 827	173	9 796	51 972	1 324	3 152	12 611	1 196
50,000 to 99,999 lb	10 048	76 327	7 360	96	6 536	48 339	1 244	1 296	9 610	903
100,000 lb or more	5 290	36 891	20 639	693	1 382	13 487	190	456	2 174	232
SCTG 05, Meat, fish, seafood, and their preparations	201 304	84 506	41 352	162	56 331	21 374	472	18 686	8 931	837
Less than 50 lb	2 181	236	33	224	1 694	187	3	142	16	1
50 to 99 lb	3 284	443	29	66	2 553	359	7	239	37	3
100 to 499 lb	15 421	3 349	294	84	11 244	2 534	51	1 387	331	29
500 to 749 lb	5 433	1 546	164	107	3 369	1 062	20	611	200	18
750 to 999 lb	3 298	1 113	133	119	1 869	700	14	495	190	17
1,000 to 9,999 lb	43 575	15 355	4 960	254	15 021	6 088	130	4 487	1 680	157
10,000 to 49,999 lb	123 519	58 501	32 988	547	20 008	9 791	234	10 973	6 184	582
50,000 to 99,999 lb	2 808	2 173	1 504	683	393	237	3	S	S	S
100,000 lb or more	1 786	1 791	1 246	906	S	S	S	S	S	S
SCTG 06, Milled grain products and preparations, and bakery products	113 379	109 311	49 001	189	31 022	28 712	618	10 589	10 943	1 023
Less than 50 lb	1 812	309	36	188	1 221	233	4	S	34	3
50 to 99 lb	1 218	274	23	85	844	224	5	50	19	2
100 to 499 lb	5 004	1 398	208	137	3 643	1 005	20	313	109	10
500 to 749 lb	2 063	702	90	128	1 405	484	9	246	79	7
750 to 999 lb	1 440	553	103	189	839	381	7	197	71	6
1,000 to 9,999 lb	19 401	11 539	3 047	253	6 334	4 705	110	2 660	1 450	135
10,000 to 49,999 lb	75 467	67 641	30 135	411	15 001	16 192	360	6 511	6 837	620
50,000 to 99,999 lb	3 462	10 817	2 158	189	1 318	3 802	71	415	1 948	177
100,000 lb or more	3 512	16 079	13 200	891	417	1 765	31	66	397	S

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	Total, all mileages				Less than 50 miles ¹			50 to 99 miles ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	Average miles per shipment	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 07, Other prepared foodstuffs and fats and oils	355 561	448 924	161 565	179	116 363	167 900	3 903	37 357	53 268	4 806
Less than 50 lb	5 116	670	114	414	2 641	495	9	394	47	4
50 to 99 lb	3 482	1 304	80	62	2 388	1 102	23	392	97	9
100 to 499 lb	16 297	11 255	749	64	10 981	9 234	204	1 738	1 006	87
500 to 749 lb	7 191	5 397	382	71	4 356	4 050	90	900	765	68
750 to 999 lb	6 472	5 169	362	70	4 074	4 120	102	636	482	43
1,000 to 9,999 lb	62 481	53 187	8 665	148	28 435	34 273	789	7 360	6 648	601
10,000 to 49,999 lb	218 080	262 616	94 384	334	49 958	81 279	1 859	23 139	35 133	3 160
50,000 to 99,999 lb	16 663	46 459	6 860	141	9 791	25 942	682	2 042	7 252	643
100,000 lb or more	19 779	62 870	49 970	837	3 739	7 405	145	756	1 838	192
SCTG 08, Alcoholic beverages	108 991	89 434	25 735	55	69 161	49 656	959	8 152	5 912	537
Less than 50 lb	1 318	160	12	80	945	122	2	152	19	2
50 to 99 lb	1 897	387	18	47	1 444	320	6	242	38	3
100 to 499 lb	14 194	5 499	215	40	11 574	4 831	93	1 482	390	33
500 to 749 lb	5 626	2 951	117	40	4 815	2 686	54	440	165	15
750 to 999 lb	4 681	2 867	112	39	4 078	2 660	50	334	121	10
1,000 to 9,999 lb	39 949	28 843	1 844	52	34 442	26 428	486	2 058	880	77
10,000 to 49,999 lb	33 213	35 120	14 484	358	10 011	9 955	211	2 849	3 098	280
50,000 to 99,999 lb	4 157	6 429	1 466	206	1 634	2 426	55	572	1 177	114
100,000 lb or more	3 955	7 178	7 467	1 016	216	227	3	S	S	S
SCTG 09, Tobacco products	69 868	4 370	983	334	46 371	2 946	66	6 156	S	S
Less than 50 lb	5 715	80	16	417	4 117	53	1	709	S	S
50 to 99 lb	4 378	62	5	84	3 346	45	1	420	7	1
100 to 499 lb	9 425	188	27	131	5 733	103	2	1 761	40	4
500 to 749 lb	2 655	74	12	158	1 573	35	1	418	17	1
750 to 999 lb	1 280	60	10	162	494	20	S	242	14	1
1,000 to 9,999 lb	6 939	457	75	176	1 175	182	S	S	S	S
10,000 to 49,999 lb	38 169	3 236	527	S	29 933	2 508	S	160	30	2
50,000 to 99,999 lb	S	S	S	1 825	—	—	—	S	S	S
100,000 lb or more	S	S	S	1 910	—	—	—	S	S	S
SCTG 10, Monumental or building stone	3 039	22 451	1 571	170	2 043	17 870	364	273	1 870	159
Less than 50 lb	S	S	S	425	S	S	S	S	S	S
50 to 99 lb	8	S	S	324	3	1	S	S	S	S
100 to 499 lb	S	S	S	360	33	12	—	S	1	—
500 to 749 lb	72	24	1	50	51	18	—	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	1 205	818	135	160	937	614	10	104	57	5
10,000 to 49,999 lb	1 244	12 493	950	78	S	9 758	S	69	823	71
50,000 to 99,999 lb	210	8 305	362	S	77	6 933	S	S	941	79
100,000 lb or more	34	S	97	182	15	S	S	S	S	S
SCTG 11, Natural sands	3 644	472 975	29 990	45	2 502	385 413	8 710	309	44 019	3 844
Less than 50 lb	S	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	7	10	S	162	2	7	—	S	S	S
500 to 749 lb	17	25	4	148	S	20	S	S	S	S
750 to 999 lb	S	10	S	202	S	9	—	—	—	—
1,000 to 9,999 lb	168	3 368	128	42	100	3 116	28	S	23	2
10,000 to 49,999 lb	1 845	228 843	8 682	37	1 400	197 949	3 777	144	21 788	1 838
50,000 to 99,999 lb	853	148 634	6 463	44	631	125 441	3 287	94	15 192	1 292
100,000 lb or more	747	92 084	14 710	172	352	58 871	1 616	65	7 014	712
SCTG 12, Gravel and crushed stone	12 850	1 866 487	105 826	30	10 432	1 568 239	26 591	800	124 365	11 851
Less than 50 lb	S	S	S	S	S	S	S	—	—	—
50 to 99 lb	S	S	S	S	S	S	S	—	—	—
100 to 499 lb	S	16	—	S	S	15	—	—	—	—
500 to 749 lb	—	15	—	S	—	14	—	—	—	—
750 to 999 lb	S	22	1	26	S	19	—	S	S	S
1,000 to 9,999 lb	147	7 084	107	14	134	6 857	64	S	S	8
10,000 to 49,999 lb	7 172	996 109	27 230	26	6 311	920 414	13 821	297	38 722	3 424
50,000 to 99,999 lb	3 130	462 321	15 508	34	2 640	407 784	7 597	258	32 507	2 818
100,000 lb or more	2 396	400 919	62 979	123	1 344	233 136	5 109	239	53 050	5 601
SCTG 13, Nonmetallic minerals n.e.c.	10 066	184 632	56 630	185	2 753	100 689	2 406	958	14 266	1 265
Less than 50 lb	88	4	1	365	26	2	—	S	S	S
50 to 99 lb	21	7	1	S	15	6	—	S	S	S
100 to 499 lb	118	59	7	96	55	45	1	6	S	S
500 to 749 lb	41	21	3	141	19	12	—	S	S	S
750 to 999 lb	22	21	3	S	1	S	S	S	S	S
1,000 to 9,999 lb	964	1 988	274	141	267	1 457	25	87	139	13
10,000 to 49,999 lb	5 024	98 599	15 625	154	1 106	67 097	1 474	285	5 867	470
50,000 to 99,999 lb	1 006	28 029	3 126	106	441	17 546	411	139	4 287	367
100,000 lb or more	2 783	55 906	37 590	651	S	14 511	495	414	3 957	414

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	Total, all mileages				Less than 50 miles ¹			50 to 99 miles ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	Average miles per shipment	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 14, Metallic ores and concentrates	14 027	98 267	63 028	474	1 195	14 519	625	969	14 129	1 515
Less than 50 lb	27	—	—	581	4	—	—	—	—	—
50 to 99 lb	S	—	—	488	S	S	S	S	S	S
100 to 499 lb	109	5	2	371	S	1	S	S	S	S
500 to 749 lb	43	5	S	473	S	S	S	S	S	S
750 to 999 lb	S	4	S	544	S	S	S	S	S	S
1,000 to 9,999 lb	1 273	247	111	435	58	S	—	S	S	S
10,000 to 49,999 lb	6 328	4 437	2 080	480	411	907	17	243	633	64
50,000 to 99,999 lb	678	1 365	593	375	34	428	7	19	142	14
100,000 lb or more	5 505	92 203	60 236	591	650	13 146	600	565	13 285	1 430
SCTG 15, Coal	22 875	1 239 862	686 279	120	6 339	345 343	9 595	2 154	98 409	12 699
Less than 50 lb	—	—	—	—	—	—	—	—	—	—
50 to 99 lb	S	S	S	314	—	—	—	—	—	—
100 to 499 lb	S	S	S	55	S	S	S	S	S	S
500 to 749 lb	S	S	S	12	S	S	S	S	S	S
750 to 999 lb	S	S	S	13	S	S	S	—	—	—
1,000 to 9,999 lb	S	53	S	46	S	30	1	S	S	S
10,000 to 49,999 lb	619	25 339	1 637	64	408	16 440	395	110	4 154	375
50,000 to 99,999 lb	1 386	58 567	7 519	119	815	34 712	1 124	141	5 874	587
100,000 lb or more	20 837	1 155 897	677 120	263	5 105	294 156	8 075	1 886	88 360	11 734
SCTG 17, Gasoline and aviation turbine fuel	279 407	1 063 569	117 219	52	200 731	736 840	12 534	31 886	127 811	9 962
Less than 50 lb	3	7	—	S	3	7	—	S	S	S
50 to 99 lb	35	88	S	19	34	S	1	S	S	S
100 to 499 lb	121	276	3	10	117	275	3	S	1	—
500 to 749 lb	106	161	6	S	68	144	2	S	S	S
750 to 999 lb	95	245	5	20	84	230	3	S	S	S
1,000 to 9,999 lb	5 231	15 334	602	31	4 569	13 106	212	243	750	65
10,000 to 49,999 lb	46 752	159 501	12 934	79	35 566	119 938	2 458	4 492	15 714	1 374
50,000 to 99,999 lb	113 719	394 749	21 738	56	94 635	326 249	6 852	11 547	41 233	3 494
100,000 lb or more	113 345	493 209	81 929	146	65 654	276 805	3 003	15 588	70 085	5 027
SCTG 18, Fuel oils	116 119	549 007	55 464	32	85 799	392 610	6 415	11 583	57 448	4 939
Less than 50 lb	9	6	—	18	8	6	—	S	S	S
50 to 99 lb	14	23	1	30	13	21	—	S	S	S
100 to 499 lb	272	669	12	18	259	654	7	S	6	—
500 to 749 lb	375	1 011	16	16	363	989	12	S	S	S
750 to 999 lb	494	1 483	21	14	489	1 469	19	S	14	1
1,000 to 9,999 lb	9 993	34 846	812	20	9 489	33 098	453	313	1 073	94
10,000 to 49,999 lb	19 099	80 620	4 003	45	16 066	67 731	1 127	1 486	6 478	594
50,000 to 99,999 lb	30 256	136 203	12 086	89	22 441	99 495	2 066	4 376	19 820	1 703
100,000 lb or more	55 605	294 147	38 514	206	36 671	189 147	2 731	5 394	30 042	2 545
SCTG 19, Coal and petroleum products, n.e.c.	82 130	447 975	93 001	102	38 631	244 027	3 938	10 496	69 898	5 955
Less than 50 lb	457	103	7	102	324	90	1	28	S	—
50 to 99 lb	430	134	S	107	311	116	1	19	6	—
100 to 499 lb	2 802	1 640	177	125	1 881	1 372	24	237	110	9
500 to 749 lb	909	777	51	68	656	678	11	88	39	4
750 to 999 lb	1 625	1 435	116	S	1 139	1 166	22	164	147	S
1,000 to 9,999 lb	10 642	13 980	1 224	79	6 979	11 279	221	1 159	1 260	111
10,000 to 49,999 lb	25 226	157 933	14 709	86	9 758	103 988	1 867	3 821	26 511	2 331
50,000 to 99,999 lb	7 599	56 530	5 553	94	3 485	31 160	538	1 440	10 121	900
100,000 lb or more	32 439	215 443	71 153	538	14 098	94 179	1 251	3 540	31 699	2 587
SCTG 20, Basic chemicals	153 656	347 670	115 961	417	48 226	157 637	2 846	15 279	37 008	3 199
Less than 50 lb	4 786	112	53	699	1 581	60	1	314	8	1
50 to 99 lb	932	116	24	214	310	79	2	77	8	1
100 to 499 lb	5 856	1 549	325	188	1 946	1 084	22	590	132	12
500 to 749 lb	2 935	852	141	166	1 040	609	13	S	85	8
750 to 999 lb	1 627	513	87	169	539	356	9	127	59	5
1,000 to 9,999 lb	21 835	10 753	2 979	246	6 425	5 649	134	3 015	1 521	132
10,000 to 49,999 lb	53 910	101 486	24 671	257	12 023	44 319	1 108	4 860	15 060	1 370
50,000 to 99,999 lb	2 651	16 172	4 866	283	748	7 230	186	257	1 793	159
100,000 lb or more	59 125	216 117	82 815	610	23 612	98 250	1 371	5 685	18 343	1 511
SCTG 21, Pharmaceutical products	479 117	24 270	11 337	693	93 377	5 217	131	45 403	2 490	236
Less than 50 lb	130 983	673	339	753	26 173	158	4	14 935	96	9
50 to 99 lb	37 257	366	93	261	10 658	154	4	5 592	63	6
100 to 499 lb	70 758	1 326	447	324	15 351	488	13	8 721	180	17
500 to 749 lb	14 055	492	223	466	1 967	160	5	2 483	93	8
750 to 999 lb	12 532	355	137	396	1 588	92	S	2 328	57	7
1,000 to 9,999 lb	73 471	9 706	S	422	17 537	1 902	50	7 095	1 236	124
10,000 to 49,999 lb	137 991	9 032	4 679	455	19 916	2 034	46	4 057	678	59
50,000 to 99,999 lb	S	S	S	256	S	S	S	S	S	S
100,000 lb or more	S	1 662	1 270	962	S	S	S	—	—	—

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	Total, all mileages				Less than 50 miles ¹			50 to 99 miles ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	Average miles per shipment	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 22, Fertilizers	34 049	264 319	87 605	157	15 468	S	3 404	2 305	14 363	1 475
Less than 50 lb	32	S	S	595	S	1	S	S	S	S
50 to 99 lb	S	10	S	191	6	7	—	S	S	S
100 to 499 lb	129	108	S	128	84	84	1	S	5	—
500 to 749 lb	62	89	S	144	37	65	1	S	2	S
750 to 999 lb	35	42	2	S	30	39	1	1	1	S
1,000 to 9,999 lb	3 534	12 565	823	S	2 743	11 363	163	153	359	35
10,000 to 49,999 lb	13 063	58 163	12 462	180	6 449	33 914	642	892	4 954	462
50,000 to 99,999 lb	4 519	32 056	6 385	196	1 956	13 042	415	919	6 950	615
100,000 lb or more	12 664	161 284	67 904	593	4 146	S	S	332	2 092	362
SCTG 23, Chemical products and preparations, n.e.c.	226 598	105 962	53 657	385	58 857	27 969	635	15 876	8 184	736
Less than 50 lb	15 737	685	259	411	6 110	302	6	1 185	56	5
50 to 99 lb	6 765	471	140	298	2 627	237	5	561	48	4
100 to 499 lb	22 122	2 904	849	293	9 681	1 489	33	1 884	351	31
500 to 749 lb	7 575	1 221	442	354	2 360	571	13	740	117	10
750 to 999 lb	4 841	850	331	390	1 032	318	7	409	80	7
1,000 to 9,999 lb	50 156	15 136	6 425	416	11 845	4 990	125	3 876	1 341	125
10,000 to 49,999 lb	111 796	72 141	37 978	519	23 709	16 706	391	7 032	5 620	501
50,000 to 99,999 lb	2 766	4 522	1 631	348	624	1 499	29	153	482	44
100,000 lb or more	4 839	8 033	5 603	766	871	1 859	26	35	87	9
SCTG 24, Plastics and rubber	325 673	139 973	80 827	424	69 902	28 421	710	28 639	11 484	1 103
Less than 50 lb	20 154	796	357	472	7 457	356	7	1 482	61	6
50 to 99 lb	8 705	781	267	335	2 898	385	7	697	74	7
100 to 499 lb	34 526	4 924	1 588	321	12 546	2 370	54	2 949	590	53
500 to 749 lb	12 269	1 971	793	400	3 916	758	17	984	215	19
750 to 999 lb	8 370	1 673	644	380	2 573	671	13	888	226	21
1,000 to 9,999 lb	95 940	29 676	13 295	427	20 325	7 410	190	10 409	3 242	301
10,000 to 49,999 lb	122 481	65 445	38 326	569	15 973	10 095	206	9 795	5 288	489
50,000 to 99,999 lb	2 029	2 067	812	384	642	608	13	311	278	25
100,000 lb or more	21 199	32 640	24 745	781	3 572	5 768	202	1 124	1 510	183
SCTG 25, Logs and other wood in the rough	5 756	S	7 790	S	1 613	S	S	528	S	S
Less than 50 lb	2	S	S	460	1	—	—	S	—	S
50 to 99 lb	3	1	S	179	1	—	—	S	S	S
100 to 499 lb	20	12	1	134	12	8	—	S	1	—
500 to 749 lb	15	12	S	333	5	7	—	S	—	—
750 to 999 lb	15	14	—	S	13	14	—	S	S	S
1,000 to 9,999 lb	287	S	S	141	169	S	S	30	S	S
10,000 to 49,999 lb	3 171	25 110	3 145	S	843	S	S	294	S	181
50,000 to 99,999 lb	1 144	S	S	S	S	S	S	S	S	S
100,000 lb or more	1 100	5 856	S	451	S	S	S	21	S	S
SCTG 26, Wood products ..	158 586	345 940	120 151	242	54 111	120 223	3 286	22 399	71 791	7 563
Less than 50 lb	2 059	159	59	419	892	79	2	203	16	2
50 to 99 lb	1 804	245	55	220	946	146	4	264	33	3
100 to 499 lb	10 005	1 894	297	167	5 576	1 202	27	1 452	253	23
500 to 749 lb	4 876	1 223	183	146	2 507	764	20	632	154	14
750 to 999 lb	3 318	1 031	160	155	1 440	571	13	627	218	20
1,000 to 9,999 lb	39 076	26 484	3 656	137	19 545	15 473	400	6 349	4 690	432
10,000 to 49,999 lb	70 872	159 736	47 599	269	17 927	52 328	1 513	9 851	26 962	2 546
50,000 to 99,999 lb	14 099	87 556	14 166	161	4 065	37 934	1 098	2 466	24 309	2 256
100,000 lb or more	12 478	67 610	53 977	882	1 213	11 728	211	S	S	S
SCTG 27, Pulp, newsprint, paper, and paperboard	102 495	137 053	78 160	206	23 783	25 617	555	7 757	9 920	997
Less than 50 lb	1 168	114	25	219	644	66	1	168	15	1
50 to 99 lb	792	154	22	138	458	104	2	76	16	1
100 to 499 lb	3 920	1 270	153	122	2 529	902	19	413	135	12
500 to 749 lb	1 378	627	83	131	793	400	8	182	96	8
750 to 999 lb	1 104	508	72	137	576	348	7	101	51	5
1,000 to 9,999 lb	16 032	10 531	2 091	181	7 535	5 407	125	1 908	1 455	135
10,000 to 49,999 lb	53 148	71 878	37 407	467	8 493	11 861	271	3 435	4 906	462
50,000 to 99,999 lb	3 332	7 475	2 482	288	S	S	S	404	988	90
100,000 lb or more	21 619	44 496	35 825	828	1 550	3 522	84	1 069	2 260	281
SCTG 28, Paper or paperboard articles	103 713	69 211	23 360	282	36 480	27 024	641	9 716	7 423	690
Less than 50 lb	3 946	391	110	404	1 734	206	4	342	42	4
50 to 99 lb	2 184	376	59	148	1 366	252	4	147	31	3
100 to 499 lb	7 315	2 146	279	128	4 690	1 535	30	794	237	21
500 to 749 lb	2 506	956	154	156	1 566	655	15	277	114	10
750 to 999 lb	1 752	707	130	181	881	421	8	273	107	10
1,000 to 9,999 lb	24 204	14 445	2 651	182	11 406	8 384	190	2 873	1 919	172
10,000 to 49,999 lb	60 140	47 117	18 265	343	14 384	14 878	368	4 934	4 826	456
50,000 to 99,999 lb	1 040	1 512	714	433	141	295	6	S	S	S
100,000 lb or more	627	1 560	999	582	S	397	15	S	S	S

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	Total, all mileages				Less than 50 miles ¹			50 to 99 miles ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	Average miles per shipment	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 29, Printed products	134 452	34 015	17 037	816	36 181	8 083	174	8 735	3 616	373
Less than 50 lb	27 236	1 053	770	848	7 712	231	5	1 419	57	7
50 to 99 lb	8 708	681	S	785	2 608	148	3	426	30	3
100 to 499 lb	20 629	1 643	840	509	6 381	511	10	1 500	142	13
500 to 749 lb	5 925	677	364	527	1 795	198	4	419	57	5
750 to 999 lb	4 319	530	261	496	1 071	154	3	237	33	3
1,000 to 9,999 lb	37 103	8 404	4 063	477	11 001	2 714	53	2 294	712	67
10,000 to 49,999 lb	28 406	17 922	9 218	507	4 968	3 325	77	2 229	1 727	167
50,000 to 99,999 lb	1 771	1 715	465	274	526	345	10	S	S	S
100,000 lb or more	355	S	S	408	120	S	S	S	S	S
SCTG 30, Textiles, leather, and articles of textiles or leather	466 429	51 232	31 787	940	75 943	11 890	225	28 702	4 144	397
Less than 50 lb	61 198	1 730	1 637	967	6 301	167	4	2 537	78	8
50 to 99 lb	16 349	755	636	859	2 433	137	3	828	38	4
100 to 499 lb	50 020	2 844	2 076	743	10 330	670	13	2 015	157	14
500 to 749 lb	15 963	1 079	730	676	2 228	299	6	533	61	6
750 to 999 lb	12 342	909	580	631	1 634	212	4	669	65	6
1,000 to 9,999 lb	122 942	11 551	6 848	616	17 898	2 777	56	9 637	834	80
10,000 to 49,999 lb	184 777	31 000	18 887	596	33 847	6 850	133	12 400	2 880	277
50,000 to 99,999 lb	1 652	431	147	344	499	147	2	S	24	2
100,000 lb or more	1 187	934	246	457	S	S	S	S	S	S
SCTG 31, Nonmetallic mineral products	149 951	967 978	135 937	357	56 473	660 581	11 586	13 379	79 642	7 220
Less than 50 lb	5 597	328	164	636	1 835	143	3	486	37	3
50 to 99 lb	2 273	300	132	429	890	3	3	217	36	3
100 to 499 lb	8 117	1 917	691	359	3 373	979	19	S	216	18
500 to 749 lb	2 114	667	176	266	741	388	6	281	60	6
750 to 999 lb	1 638	701	222	306	581	392	7	85	50	4
1,000 to 9,999 lb	20 124	33 051	6 899	222	7 250	23 485	390	1 938	1 902	176
10,000 to 49,999 lb	86 100	651 855	71 973	102	30 610	495 334	7 868	6 798	39 309	3 471
50,000 to 99,999 lb	15 489	185 884	16 950	94	9 174	108 347	2 768	2 654	34 535	3 210
100,000 lb or more	8 498	93 274	38 730	435	2 019	31 359	520	244	3 496	328
SCTG 32, Base metal in primary or semifinished forms and in finished basic shapes	259 834	328 053	121 330	270	66 357	87 101	2 100	24 296	34 111	3 265
Less than 50 lb	5 428	292	88	351	2 208	150	3	389	28	3
50 to 99 lb	3 458	415	94	222	1 571	4	4	235	51	5
100 to 499 lb	13 981	2 868	554	193	6 827	1 737	38	1 155	344	32
500 to 749 lb	5 003	1 654	325	194	2 188	931	20	639	239	22
750 to 999 lb	3 623	1 217	239	196	1 498	655	14	530	197	18
1,000 to 9,999 lb	50 426	28 651	7 055	234	17 133	13 169	317	5 728	4 346	399
10,000 to 49,999 lb	139 618	193 439	62 431	314	24 624	43 275	1 045	13 234	21 834	2 041
50,000 to 99,999 lb	14 127	29 705	5 918	204	5 450	12 386	280	1 761	4 880	481
100,000 lb or more	24 170	69 812	44 626	631	4 858	14 575	378	626	2 193	264
SCTG 33, Articles of base metal	234 571	116 447	42 680	392	65 873	44 535	924	20 374	10 396	944
Less than 50 lb	36 337	850	352	410	13 721	398	7	3 029	68	6
50 to 99 lb	10 723	662	265	397	3 801	5	5	744	60	5
100 to 499 lb	27 940	3 512	1 256	351	8 956	1 578	30	2 390	366	32
500 to 749 lb	8 259	1 586	495	309	2 413	697	14	833	154	15
750 to 999 lb	5 673	1 298	403	309	1 540	544	10	575	158	14
1,000 to 9,999 lb	64 098	24 484	8 021	325	17 808	9 672	209	5 937	2 680	242
10,000 to 49,999 lb	72 806	64 288	24 517	368	15 130	20 104	576	5 866	5 883	535
50,000 to 99,999 lb	3 436	3 819	1 117	287	994	1 256	27	340	589	57
100,000 lb or more	5 298	S	6 255	860	1 511	S	45	S	S	36
SCTG 34, Machinery	484 152	63 390	34 535	377	106 633	16 470	369	32 561	4 588	437
Less than 50 lb	55 558	1 064	416	353	20 313	529	10	4 730	88	8
50 to 99 lb	18 310	649	276	425	6 733	301	6	1 409	63	5
100 to 499 lb	58 081	3 496	1 392	399	18 519	1 606	34	4 625	291	26
500 to 749 lb	19 050	1 480	774	511	4 585	560	14	1 365	94	10
750 to 999 lb	13 533	1 030	539	515	2 802	318	7	S	52	5
1,000 to 9,999 lb	128 445	14 652	8 538	581	20 592	3 593	84	7 926	1 159	110
10,000 to 49,999 lb	169 474	35 153	19 912	607	28 588	7 584	176	9 362	2 040	208
50,000 to 99,999 lb	12 104	3 907	1 280	314	3 584	1 637	33	986	S	58
100,000 lb or more	9 597	1 960	1 408	693	917	341	5	77	S	S
SCTG 35, Electronic and other electrical equipment and components and office equipment	890 803	49 592	30 269	713	188 396	14 959	311	38 560	2 172	208
Less than 50 lb	275 819	2 436	1 568	748	57 345	910	15	13 029	132	15
50 to 99 lb	88 684	1 335	740	551	18 342	585	11	2 320	73	6
100 to 499 lb	178 478	5 535	2 744	488	41 052	2 468	45	8 583	362	32
500 to 749 lb	44 559	1 995	945	469	15 242	835	18	1 288	96	9
750 to 999 lb	27 916	1 732	892	511	8 038	788	13	808	75	7
1,000 to 9,999 lb	166 449	12 311	7 187	557	33 455	3 636	82	6 951	682	67
10,000 to 49,999 lb	100 630	19 993	13 242	630	13 088	4 649	57	5 522	735	69
50,000 to 99,999 lb	3 407	902	766	840	931	243	7	S	S	23
100,000 lb or more	4 860	3 354	2 185	916	904	S	S	S	S	S

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	Total, all mileages				Less than 50 miles ¹			50 to 99 miles ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	Average miles per shipment	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 36, Motorized and other vehicles (including parts)	748 550	133 088	59 029	395	196 107	36 609	814	60 313	14 137	1 293
Less than 50 lb	32 303	1 346	447	406	13 696	711	12	2 644	100	9
50 to 99 lb	11 096	749	251	331	4 352	349	8	1 133	88	8
100 to 499 lb	36 139	3 132	1 086	335	10 482	1 235	30	4 144	384	33
500 to 749 lb	12 152	1 151	414	362	3 113	419	9	1 178	118	11
750 to 999 lb	9 134	1 029	311	299	2 301	324	8	1 325	163	14
1,000 to 9,999 lb	231 951	29 259	13 067	430	73 257	10 268	204	13 139	1 875	173
10,000 to 49,999 lb	327 406	76 708	31 195	407	74 394	20 073	483	28 553	8 819	840
50,000 to 99,999 lb	54 431	11 896	5 985	521	8 254	2 031	39	S	S	190
100,000 lb or more	33 939	7 819	6 274	709	6 258	1 198	S	S	102	15
SCTG 37, Transportation equipment, n.e.c.	155 013	18 352	10 649	1 074	S	S	S	6 027	S	S
Less than 50 lb	27 134	50	52	1 143	5 683	9	—	789	2	—
50 to 99 lb	7 356	27	29	1 083	1 747	4	—	238	1	—
100 to 499 lb	22 750	111	99	918	4 079	12	—	723	7	1
500 to 749 lb	5 384	59	42	709	345	S	—	S	S	—
750 to 999 lb	1 571	46	30	662	442	S	S	S	S	S
1,000 to 9,999 lb	22 914	885	669	728	2 150	117	3	S	34	3
10,000 to 49,999 lb	14 765	10 300	5 841	620	1 358	1 378	S	239	S	S
50,000 to 99,999 lb	S	S	S	500	S	S	S	S	S	S
100,000 lb or more	S	1 510	1 166	810	S	202	2	—	—	—
SCTG 38, Precision instruments and apparatus	225 070	18 352	3 912	922	35 993	8 395	234	13 155	3 369	287
Less than 50 lb	109 108	490	467	936	12 138	94	2	5 432	35	4
50 to 99 lb	14 634	153	113	742	2 393	49	1	716	9	1
100 to 499 lb	40 457	625	468	709	8 082	182	4	3 895	54	10
500 to 749 lb	10 814	202	125	634	3 928	57	2	409	23	2
750 to 999 lb	13 129	193	129	668	1 373	43	1	S	S	1
1,000 to 9,999 lb	24 930	1 587	848	626	6 388	576	16	S	129	12
10,000 to 49,999 lb	10 444	4 276	856	234	960	S	S	865	1 572	140
50,000 to 99,999 lb	332	S	105	54	S	S	S	S	S	S
100,000 lb or more	1 224	8 828	801	88	630	5 388	166	S	S	S
SCTG 39, Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	139 727	32 546	13 705	515	50 811	10 945	227	10 207	S	S
Less than 50 lb	5 477	245	161	632	1 738	79	1	329	12	1
50 to 99 lb	4 495	333	171	504	1 728	123	2	255	20	2
100 to 499 lb	23 225	2 301	912	401	9 902	907	22	1 938	196	18
500 to 749 lb	8 149	975	401	406	2 891	326	8	645	96	8
750 to 999 lb	6 384	748	295	394	3 177	274	6	394	77	7
1,000 to 9,999 lb	49 692	9 954	4 751	451	15 286	3 056	65	4 311	928	83
10,000 to 49,999 lb	40 404	14 734	6 659	467	14 726	4 238	94	2 078	S	S
50,000 to 99,999 lb	S	S	195	S	S	S	S	S	S	S
100,000 lb or more	561	S	S	278	415	S	S	S	S	S
SCTG 40, Miscellaneous manufactured products ...	387 426	79 208	34 467	995	79 295	26 324	607	25 896	8 002	714
Less than 50 lb	103 727	1 697	1 471	1 043	17 660	313	7	5 383	93	9
50 to 99 lb	18 298	847	649	763	3 792	201	4	1 078	53	5
100 to 499 lb	48 550	3 589	2 249	637	11 758	1 105	25	3 093	269	25
500 to 749 lb	13 594	1 423	874	610	3 020	391	9	949	112	10
750 to 999 lb	9 573	1 062	563	531	2 564	331	7	657	87	8
1,000 to 9,999 lb	96 770	16 054	9 133	577	19 140	4 144	109	6 789	1 601	135
10,000 to 49,999 lb	89 931	41 187	15 989	404	20 181	13 671	301	7 315	4 819	436
50,000 to 99,999 lb	4 999	4 757	1 246	244	726	1 528	36	499	835	77
100,000 lb or more	1 983	8 593	2 293	268	454	S	S	S	S	S
SCTG 41, Waste and scrap .	37 896	217 234	48 009	166	14 223	99 449	2 142	3 815	29 072	2 586
Less than 50 lb	37	1	S	822	S	—	—	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	93	12	2	S	62	S	S	S	S	S
500 to 749 lb	21	17	S	126	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	4	5	—	S	S	S
1,000 to 9,999 lb	888	1 126	86	S	S	901	12	30	44	4
10,000 to 49,999 lb	24 851	104 434	17 501	151	7 821	45 632	970	3 270	23 029	1 955
50,000 to 99,999 lb	1 823	18 083	1 915	102	1 176	11 017	224	275	3 965	365
100,000 lb or more	10 140	93 544	28 500	233	4 554	41 868	935	207	2 024	261
SCTG 43, Mixed freight.....	840 346	299 926	52 823	329	289 029	125 279	3 534	151 946	55 892	5 171
Less than 50 lb	43 830	1 883	616	434	17 466	936	19	3 866	184	17
50 to 99 lb	15 474	1 834	297	164	7 929	1 183	19	1 635	164	15
100 to 499 lb	54 429	9 637	1 450	156	27 178	5 605	130	7 480	1 478	137
500 to 749 lb	21 889	5 301	736	142	9 271	2 918	75	3 806	990	90
750 to 999 lb	16 584	4 406	587	133	7 196	2 407	64	2 470	690	64
1,000 to 9,999 lb	198 290	66 198	11 223	158	69 017	27 786	745	37 365	12 271	1 111
10,000 to 49,999 lb	469 479	186 337	34 689	185	141 724	68 186	1 999	93 684	38 121	3 502
50,000 to 99,999 lb	15 793	S	1 944	111	S	S	S	1 022	915	81
100,000 lb or more	4 578	6 402	1 282	214	2 421	3 645	79	618	1 079	153

See footnotes at end of table.

Table 10. **Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.**

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	Total, all mileages				Less than 50 miles ¹			50 to 99 miles ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	Average miles per shipment	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
Commodity unknown	17 229	24 266	8 889	485	6 035	12 309	S	1 329	1 692	157
Less than 50 lb	2 718	53	28	594	565	24	S	102	2	—
50 to 99 lb	398	23	7	281	174	15	—	15	2	—
100 to 499 lb	1 726	141	43	284	503	66	2	290	17	2
500 to 749 lb	478	73	10	139	297	50	1	S	9	1
750 to 999 lb	195	100	S	149	93	82	2	4	1	—
1,000 to 9,999 lb	3 238	1 313	278	201	1 182	851	20	293	136	12
10,000 to 49,999 lb	6 000	6 482	1 457	203	1 716	3 436	66	401	S	S
50,000 to 99,999 lb	643	2 521	220	84	361	1 763	40	S	412	39
100,000 lb or more	S	13 560	S	683	S	S	S	S	S	S

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	100 to 249 miles ¹			250 to 499 miles ¹			500 to 749 miles ¹			750 to 999 miles ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
Total³	1 329 245	1 480 571	329 721	1 221 437	1 082 136	534 562	844 880	604 036	504 193	548 768	437 418	510 469
Less than 50 lb	117 189	2 147	457	131 515	1 973	905	100 688	1 528	1 174	85 305	1 253	1 330
50 to 99 lb	38 176	1 578	349	32 342	1 187	585	39 218	823	632	17 929	569	598
100 to 499 lb	106 293	8 704	1 734	96 321	6 047	2 665	70 191	3 711	2 787	57 780	2 540	2 648
500 to 749 lb	34 129	4 561	893	31 744	2 888	1 265	23 202	1 679	1 262	15 042	1 047	1 096
750 to 999 lb	27 508	4 229	839	24 311	2 443	1 110	15 211	1 364	1 021	9 982	761	790
1,000 to 9,999 lb	294 526	85 471	16 959	270 376	54 472	23 811	169 364	28 925	21 354	104 237	17 209	17 811
10,000 to 49,999 lb	591 657	570 973	114 132	524 562	371 141	160 876	354 948	187 240	138 489	198 330	98 323	103 105
50,000 to 99,999 lb	53 247	221 689	43 199	31 332	71 777	30 847	18 063	21 619	16 081	8 604	6 932	7 531
100,000 lb or more	66 520	581 219	151 159	78 936	570 208	312 498	53 993	357 147	321 393	51 559	308 785	375 560
SCTG 01, Live animals and live fish	1 597	1 555	346	1 213	878	362	676	405	294	560	342	360
Less than 50 lb	S	S	S	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	S	S	S	S	95	46	S	S	S	S	S	S
10,000 to 49,999 lb	931	1 243	S	372	403	167	S	271	200	S	231	249
50,000 to 99,999 lb	129	107	24	S	S	S	141	119	82	88	60	63
100,000 lb or more	S	S	S	S	S	S	S	S	S	S	S	S
SCTG 02, Cereal grains	4 322	40 928	8 857	6 985	77 507	43 433	4 092	38 764	37 196	4 180	45 686	59 314
Less than 50 lb	S	S	S	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	54	71	14	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	437	2 639	488	431	2 368	1 064	S	422	353	92	S	S
50,000 to 99,999 lb	1 932	19 711	3 706	1 117	10 979	4 891	150	1 133	819	30	199	213
100,000 lb or more	1 848	18 496	4 647	5 366	64 142	37 469	3 691	37 198	36 016	4 056	45 197	58 800
SCTG 03, Other agricultural products	14 323	20 883	4 397	9 465	17 954	10 021	6 317	16 608	16 213	6 592	19 035	24 137
Less than 50 lb	161	9	2	290	16	7	250	12	9	251	S	S
50 to 99 lb	45	7	1	53	6	S	51	4	4	S	S	S
100 to 499 lb	423	88	17	S	40	18	S	22	18	S	31	33
500 to 749 lb	264	122	22	86	23	10	S	12	9	S	S	S
750 to 999 lb	143	117	20	106	31	13	93	32	23	S	S	S
1,000 to 9,999 lb	2 921	2 542	482	2 342	1 732	739	947	506	371	1 018	438	477
10,000 to 49,999 lb	7 696	8 251	1 591	4 264	5 988	2 682	2 247	3 472	2 585	2 262	3 317	3 545
50,000 to 99,999 lb	1 102	5 646	1 034	164	710	306	155	445	323	S	S	S
100,000 lb or more	1 567	4 101	S	1 725	9 407	6 239	2 261	12 104	12 871	2 621	15 123	19 947
SCTG 04, Animal feed and products of animal origin, n.e.c.	9 376	38 241	7 643	7 620	17 880	8 273	3 341	10 796	8 893	2 163	5 679	6 391
Less than 50 lb	S	8	2	22	3	1	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	148	49	9	20	S	S	S	S	S	11	S	S
500 to 749 lb	23	18	4	S	S	S	S	S	S	S	S	S
750 to 999 lb	60	S	S	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	1 008	1 547	290	369	627	S	163	S	S	66	74	80
10,000 to 49,999 lb	6 149	19 596	3 865	5 055	9 988	4 132	1 981	2 974	2 235	1 338	2 019	2 121
50,000 to 99,999 lb	1 456	14 407	2 862	390	2 914	1 209	236	552	434	32	112	118
100,000 lb or more	456	2 570	601	765	4 253	2 599	923	7 127	6 123	692	3 467	4 063
SCTG 05, Meat, fish, seafood, and their preparations	31 351	14 828	3 104	30 165	13 374	5 899	22 271	9 573	7 032	14 930	6 030	6 264
Less than 50 lb	109	13	2	51	5	2	43	4	3	33	3	3
50 to 99 lb	345	33	7	75	8	3	S	2	2	S	1	1
100 to 499 lb	1 615	333	63	423	75	29	226	24	18	122	12	13
500 to 749 lb	690	181	36	356	49	20	148	20	15	109	13	14
750 to 999 lb	428	146	28	116	34	14	S	14	11	68	8	9
1,000 to 9,999 lb	8 448	3 129	632	6 059	2 048	868	2 750	939	688	1 784	471	499
10,000 to 49,999 lb	18 770	10 081	2 128	22 134	10 548	4 706	18 598	8 341	6 106	12 210	5 144	5 320
50,000 to 99,999 lb	437	494	112	S	443	186	205	S	S	S	S	S
100,000 lb or more	S	S	S	153	164	70	S	S	S	S	S	S
SCTG 06, Milled grain products and preparations, and bakery products	21 740	24 050	4 843	18 504	17 409	7 870	12 441	11 358	8 742	7 229	6 865	7 631
Less than 50 lb	137	17	4	105	7	3	64	6	5	66	S	S
50 to 99 lb	S	14	3	S	S	S	S	S	S	2	S	S
100 to 499 lb	436	129	25	S	60	26	111	31	24	S	S	S
500 to 749 lb	207	84	16	62	28	13	S	7	5	S	9	10
750 to 999 lb	157	88	16	95	S	S	76	29	22	30	9	10
1,000 to 9,999 lb	4 469	2 673	506	2 548	1 302	564	1 350	559	414	750	372	397
10,000 to 49,999 lb	15 152	16 556	3 361	14 108	11 102	4 836	9 830	7 078	5 227	5 376	3 567	3 789
50,000 to 99,999 lb	775	3 165	577	518	948	395	224	S	S	S	137	162
100,000 lb or more	322	1 323	336	681	3 908	2 011	604	2 974	2 563	695	2 735	3 227

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	100 to 249 miles ¹			250 to 499 miles ¹			500 to 749 miles ¹			750 to 999 miles ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 07, Other prepared foodstuffs and fats and oils	63 373	83 918	17 234	48 170	58 084	27 285	36 026	35 183	27 005	20 325	20 347	22 088
Less than 50 lb	409	41	8	515	28	12	404	19	14	290	14	14
50 to 99 lb	387	70	13	110	16	6	52	6	4	S	2	2
100 to 499 lb	1 593	615	104	893	185	79	402	89	66	190	41	40
500 to 749 lb	703	354	61	565	139	54	364	45	34	101	16	17
750 to 999 lb	694	S	71	458	79	32	285	39	29	122	26	26
1,000 to 9,999 lb	9 787	5 955	1 075	6 232	2 601	1 089	4 079	1 241	953	2 197	859	890
10,000 to 49,999 lb	44 439	59 744	12 231	35 387	37 515	16 078	27 389	20 609	15 204	14 502	10 797	11 276
50,000 to 99,999 lb	2 952	9 003	1 742	797	2 370	977	284	535	383	170	442	471
100,000 lb or more	2 409	7 745	1 929	3 213	15 150	8 958	2 768	12 599	10 318	2 708	8 150	9 351
SCTG 08, Alcoholic beverages	11 024	11 468	2 371	8 322	10 915	4 834	3 249	3 692	2 792	2 497	2 398	2 698
Less than 50 lb	142	14	3	S	3	1	S	—	—	S	S	S
50 to 99 lb	179	26	5	8	1	1	S	—	—	S	S	S
100 to 499 lb	843	216	40	185	42	16	17	4	3	S	3	S
500 to 749 lb	294	77	14	20	S	S	18	2	1	S	S	S
750 to 999 lb	165	59	11	25	8	3	S	S	S	S	S	S
1,000 to 9,999 lb	1 824	711	129	317	205	87	272	148	105	142	62	69
10,000 to 49,999 lb	6 218	7 681	1 630	6 283	7 780	3 272	2 474	2 746	2 027	1 361	1 289	1 390
50,000 to 99,999 lb	1 028	1 861	352	474	489	234	71	102	75	122	S	S
100,000 lb or more	331	824	187	983	2 381	1 217	373	688	580	S	896	1 055
SCTG 09, Tobacco products	6 394	460	96	3 974	245	115	3 240	181	140	1 158	60	62
Less than 50 lb	386	6	1	100	2	1	141	4	3	S	S	S
50 to 99 lb	504	7	1	S	1	—	20	—	—	12	—	—
100 to 499 lb	1 328	28	5	241	8	3	161	4	3	S	2	2
500 to 749 lb	S	13	3	152	5	2	64	2	1	S	S	1
750 to 999 lb	S	S	S	65	2	1	S	S	S	S	S	S
1,000 to 9,999 lb	2 199	106	20	798	29	12	390	15	11	151	6	6
10,000 to 49,999 lb	1 319	278	62	2 437	177	85	2 093	116	95	S	S	S
50,000 to 99,999 lb	—	—	—	—	—	—	S	S	S	S	S	S
100,000 lb or more	—	—	—	S	S	S	S	S	S	S	S	S
SCTG 10, Monumental or building stone	361	1 810	362	S	497	237	97	204	146	S	S	S
Less than 50 lb	S	S	S	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	—	—	—	—	—	—	S	S	S
100 to 499 lb	S	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	211	1 231	249	70	S	S	71	167	120	S	S	S
50,000 to 99,999 lb	S	356	59	S	S	S	S	7	5	—	—	—
100,000 lb or more	S	S	S	—	—	—	S	S	S	—	—	—
SCTG 11, Natural sands	333	28 577	5 480	182	6 360	2 854	114	4 849	3 363	53	875	953
Less than 50 lb	S	S	S	—	—	—	—	—	—	S	S	S
50 to 99 lb	—	—	—	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S	S	S	S
750 to 999 lb	—	—	—	S	S	S	—	—	—	—	—	—
1,000 to 9,999 lb	25	142	29	S	36	15	S	S	S	S	S	S
10,000 to 49,999 lb	100	7 045	1 216	67	723	332	20	605	418	26	167	170
50,000 to 99,999 lb	92	6 698	1 165	29	913	359	S	S	S	S	S	S
100,000 lb or more	113	S	3 069	74	4 687	2 148	71	3 937	2 736	22	642	715
SCTG 12, Gravel and crushed stone	784	107 416	23 407	504	47 813	23 951	131	10 482	8 677	142	6 157	7 340
Less than 50 lb	—	—	—	—	—	—	—	—	—	S	S	S
50 to 99 lb	—	—	—	S	S	S	S	S	S	—	—	—
100 to 499 lb	S	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	—	—	—	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	—	—	—	—	—	—	—	—	—
1,000 to 9,999 lb	2	121	20	S	S	S	S	S	S	S	2	2
10,000 to 49,999 lb	299	29 480	5 169	140	3 069	1 263	47	S	S	36	395	396
50,000 to 99,999 lb	168	18 856	3 283	36	2 435	893	S	488	349	S	S	S
100,000 lb or more	314	58 956	14 936	323	42 294	21 789	62	6 348	5 902	103	5 724	6 903
SCTG 13, Nonmetallic minerals n.e.c.	2 313	27 153	5 836	1 422	14 495	6 620	947	6 922	5 683	716	5 905	6 761
Less than 50 lb	7	—	—	15	1	—	7	—	—	S	—	—
50 to 99 lb	S	—	—	S	—	—	S	S	S	S	S	S
100 to 499 lb	S	1	—	9	2	1	S	2	1	S	1	1
500 to 749 lb	S	S	S	S	2	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	S	191	37	203	51	25	57	70	52	S	S	S
10,000 to 49,999 lb	1 343	11 524	2 484	904	6 580	2 978	648	3 489	2 616	392	2 318	2 449
50,000 to 99,999 lb	259	3 916	783	75	1 411	642	41	524	412	21	194	229
100,000 lb or more	517	11 519	2 531	206	6 448	2 972	160	2 835	2 599	178	3 352	4 040

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	100 to 249 miles ¹			250 to 499 miles ¹			500 to 749 miles ¹			750 to 999 miles ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 14, Metallic ores and concentrates	2 210	7 886	1 986	2 320	28 564	23 225	3 474	19 826	17 167	1 494	9 703	12 828
Less than 50 lb	S	S	S	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	29	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	6	S	S	16	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	S	31	7	255	49	22	172	32	24	47	12	12
10,000 to 49,999 lb	850	1 009	252	1 080	641	276	1 484	736	523	S	80	81
50,000 to 99,999 lb	270	535	S	S	S	36	19	44	30	S	18	18
100,000 lb or more	834	6 307	1 504	872	27 785	22 890	1 788	19 014	16 590	374	9 594	12 717
SCTG 15, Coal	5 378	215 071	67 004	4 841	187 061	104 644	1 744	125 352	117 051	1 144	131 366	159 127
Less than 50 lb	—	—	—	—	—	—	—	—	—	—	—	—
50 to 99 lb	S	S	S	—	—	—	—	—	—	—	—	—
100 to 499 lb	S	S	S	—	—	—	—	—	—	—	—	—
500 to 749 lb	—	—	—	—	—	—	—	—	—	—	—	—
750 to 999 lb	—	—	—	—	—	—	—	—	—	—	—	—
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S	—	—	—
10,000 to 49,999 lb	S	S	S	S	S	S	S	S	S	S	S	S
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S	S	S	S
100,000 lb or more	5 022	199 795	63 924	4 666	179 834	101 333	1 742	125 292	117 001	1 144	131 361	159 121
SCTG 17, Gasoline and aviation turbine fuel	23 872	102 132	18 038	11 088	44 090	17 817	5 156	24 633	18 675	2 184	9 315	8 487
Less than 50 lb	S	S	S	S	S	S	—	—	—	—	—	—
50 to 99 lb	—	—	—	S	S	S	—	—	—	—	—	—
100 to 499 lb	S	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	—	—	—	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	—	—	—	—	—	—	—	—	—
1,000 to 9,999 lb	371	1 308	S	40	148	S	2	4	3	5	15	17
10,000 to 49,999 lb	3 792	13 760	2 573	2 127	7 425	3 071	380	1 377	1 099	S	S	S
50,000 to 99,999 lb	5 173	18 561	3 272	1 472	5 353	2 238	225	867	637	83	318	305
100,000 lb or more	14 535	68 503	11 963	7 446	31 162	12 443	4 550	22 384	16 936	1 935	8 521	7 715
SCTG 18, Fuel oils	10 780	54 495	10 493	4 369	23 752	10 199	2 066	11 717	9 620	1 075	6 250	7 754
Less than 50 lb	S	S	S	S	S	S	S	S	S	—	—	—
50 to 99 lb	S	S	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	S	S	—	—	—	—	—	—	—	—	—
500 to 749 lb	S	3	—	—	—	—	—	—	—	—	—	—
750 to 999 lb	S	S	S	S	S	S	—	—	—	—	—	—
1,000 to 9,999 lb	102	353	68	67	254	118	6	S	S	S	S	S
10,000 to 49,999 lb	1 040	4 424	804	326	1 385	589	78	S	S	S	149	153
50,000 to 99,999 lb	2 041	9 944	1 803	802	3 599	1 811	248	1 515	1 098	79	355	365
100,000 lb or more	7 581	39 767	7 815	3 172	18 507	7 678	1 733	9 975	8 350	930	5 705	7 195
SCTG 19, Coal and petroleum products, n.e.c.	11 604	51 275	11 847	11 334	46 096	22 836	3 852	12 739	10 328	2 867	11 315	13 770
Less than 50 lb	41	4	1	24	2	1	S	1	1	9	1	1
50 to 99 lb	27	3	1	S	S	S	S	S	S	10	S	S
100 to 499 lb	141	49	10	73	16	7	S	S	S	S	S	S
500 to 749 lb	50	26	5	6	S	S	S	S	S	S	S	S
750 to 999 lb	80	53	10	S	24	S	S	S	S	S	S	S
1,000 to 9,999 lb	871	727	134	738	307	128	245	80	60	124	S	S
10,000 to 49,999 lb	5 028	15 080	2 876	3 936	8 067	3 376	1 454	2 401	1 743	716	1 218	1 258
50,000 to 99,999 lb	1 969	11 850	2 295	531	2 691	1 054	69	355	S	S	S	S
100,000 lb or more	3 397	23 483	6 516	5 921	34 977	18 255	1 868	9 855	8 206	1 831	9 670	12 040
SCTG 20, Basic chemicals	19 497	55 152	11 502	22 492	36 343	17 487	14 504	19 925	16 483	12 759	17 058	20 246
Less than 50 lb	538	8	2	459	11	5	424	7	5	262	4	5
50 to 99 lb	138	11	2	63	4	2	94	7	6	58	2	3
100 to 499 lb	581	108	21	823	96	42	337	29	23	253	15	15
500 to 749 lb	S	55	15	195	42	17	172	19	15	S	11	S
750 to 999 lb	300	31	6	201	25	10	42	S	S	S	S	S
1,000 to 9,999 lb	2 736	1 352	261	2 745	681	287	2 367	593	452	1 273	336	348
10,000 to 49,999 lb	7 882	17 612	3 479	11 324	13 054	5 658	6 559	5 072	3 705	3 553	2 725	2 819
50,000 to 99,999 lb	657	4 032	863	529	1 549	652	132	378	314	S	213	226
100,000 lb or more	6 132	31 944	6 853	6 153	20 881	10 815	4 378	13 804	11 953	6 831	13 742	16 805
SCTG 21, Pharmaceutical products	93 484	5 711	1 205	63 473	4 891	2 063	61 786	2 219	1 644	38 521	1 035	1 059
Less than 50 lb	28 895	174	35	15 541	68	31	10 903	47	36	11 301	39	42
50 to 99 lb	9 158	82	17	3 782	26	11	1 667	14	11	1 270	10	11
100 to 499 lb	19 897	289	60	10 669	146	62	4 291	61	47	4 763	S	S
500 to 749 lb	3 145	75	17	1 404	33	14	807	17	13	1 723	S	S
750 to 999 lb	2 551	98	S	1 245	22	10	1 300	S	S	S	6	7
1,000 to 9,999 lb	18 636	2 547	505	12 321	S	S	9 255	S	S	2 013	S	S
10,000 to 49,999 lb	10 573	2 275	506	18 342	1 559	689	S	1 010	756	S	303	318
50,000 to 99,999 lb	S	S	S	S	S	S	—	—	—	—	—	—
100,000 lb or more	S	S	S	S	S	S	S	S	S	S	S	S

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	100 to 249 miles ¹			250 to 499 miles ¹			500 to 749 miles ¹			750 to 999 miles ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 22, Fertilizers	4 016	21 465	4 988	4 787	31 671	13 646	2 986	15 317	13 092	2 296	11 907	13 083
Less than 50 lb	S	S	S	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	10	2	S	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S	S	S	S
750 to 999 lb	1	1	—	—	—	—	S	S	S	—	—	—
1,000 to 9,999 lb	143	220	52	93	155	72	S	S	S	S	S	S
10,000 to 49,999 lb	1 757	7 604	1 609	1 721	5 716	2 423	997	2 769	2 054	591	1 326	1 379
50,000 to 99,999 lb	518	4 214	893	802	5 250	2 177	222	1 854	1 369	S	442	449
100,000 lb or more	1 561	9 404	2 430	2 160	S	8 971	1 594	10 476	9 502	S	S	S
SCTG 23, Chemical products and preparations, n.e.c.	36 703	17 492	3 685	36 481	18 430	8 217	29 060	14 098	10 497	20 173	8 709	9 262
Less than 50 lb	2 273	101	21	1 626	78	34	1 354	50	37	1 042	35	36
50 to 99 lb	1 249	63	12	741	48	20	463	26	20	422	20	20
100 to 499 lb	3 165	331	64	2 162	247	106	1 734	192	143	1 144	115	119
500 to 749 lb	1 022	176	35	758	127	54	481	69	51	632	48	48
750 to 999 lb	782	150	32	814	117	50	445	72	53	455	46	50
1,000 to 9,999 lb	8 958	2 534	526	8 102	2 306	995	6 598	1 566	1 144	4 065	1 007	1 047
10,000 to 49,999 lb	18 243	11 712	2 423	21 232	13 938	6 109	16 874	10 434	7 619	10 836	6 029	6 301
50,000 to 99,999 lb	435	1 066	222	403	452	212	428	506	410	S	S	S
100,000 lb or more	576	1 359	349	643	1 116	637	681	1 184	1 020	1 145	1 195	1 402
SCTG 24, Plastics and rubber	54 830	23 152	5 091	59 706	28 122	13 106	40 971	17 938	13 791	24 570	12 248	13 064
Less than 50 lb	2 481	90	19	2 385	89	39	1 670	58	44	1 284	44	47
50 to 99 lb	1 307	95	20	1 077	83	37	824	49	37	579	30	33
100 to 499 lb	4 738	565	116	4 418	525	235	3 264	326	244	1 616	165	174
500 to 749 lb	1 777	311	64	1 835	239	103	1 181	151	115	918	105	108
750 to 999 lb	1 099	219	45	1 297	212	96	907	126	95	407	69	72
1,000 to 9,999 lb	19 324	6 670	1 397	16 351	4 891	2 188	11 030	3 034	2 230	6 330	1 757	1 818
10,000 to 49,999 lb	21 688	11 170	2 382	28 560	15 649	7 009	18 415	9 182	6 840	10 234	5 503	5 609
50,000 to 99,999 lb	312	451	99	236	287	139	169	124	94	S	170	181
100,000 lb or more	2 105	3 581	948	3 546	6 148	3 258	3 511	4 888	4 092	3 054	4 404	5 022
SCTG 25, Logs and other wood in the rough	1 505	S	S	619	1 493	593	S	682	567	58	154	162
Less than 50 lb	S	S	S	S	S	S	—	—	—	S	S	S
50 to 99 lb	S	S	S	S	S	S	—	—	—	—	—	—
100 to 499 lb	1	S	S	S	S	S	S	S	S	—	—	—
500 to 749 lb	S	S	S	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	—	—	—	—	—	—
1,000 to 9,999 lb	32	39	7	18	30	13	S	S	S	S	S	S
10,000 to 49,999 lb	809	S	S	451	674	277	S	338	269	32	86	91
50,000 to 99,999 lb	S	S	S	44	124	46	S	S	S	S	S	S
100,000 lb or more	S	S	S	S	S	S	S	S	S	S	S	S
SCTG 26, Wood products ..	28 692	61 816	12 887	18 484	36 096	16 403	12 388	20 055	16 212	7 312	11 082	12 539
Less than 50 lb	294	20	4	167	13	6	162	10	8	65	6	6
50 to 99 lb	250	32	7	93	11	5	61	6	4	55	5	5
100 to 499 lb	1 179	212	41	730	99	43	368	52	39	198	29	30
500 to 749 lb	654	143	28	S	S	S	S	S	S	140	19	20
750 to 999 lb	519	112	22	192	50	21	S	46	33	S	S	S
1,000 to 9,999 lb	5 770	3 708	683	2 979	1 191	535	1 988	617	455	1 038	291	305
10,000 to 49,999 lb	15 284	35 706	7 200	10 209	21 743	9 518	6 696	10 465	7 849	3 993	5 182	5 467
50,000 to 99,999 lb	3 797	15 374	3 231	1 913	6 167	2 576	724	1 587	1 269	307	866	910
100,000 lb or more	944	6 509	1 672	1 683	6 741	3 663	1 784	7 230	6 525	1 436	4 671	5 782
SCTG 27, Pulp, newsprint, paper, and paperboard ..	16 544	24 507	5 471	19 743	27 504	13 408	14 837	21 806	17 649	9 438	13 160	14 376
Less than 50 lb	117	13	3	54	5	2	53	S	S	68	3	3
50 to 99 lb	144	21	4	20	3	1	28	3	2	S	3	3
100 to 499 lb	353	118	24	233	46	20	163	33	24	95	16	17
500 to 749 lb	146	58	12	142	42	17	50	13	10	31	S	S
750 to 999 lb	152	43	9	152	32	14	61	16	12	22	8	8
1,000 to 9,999 lb	2 336	1 776	349	1 665	985	413	1 375	396	296	550	227	240
10,000 to 49,999 lb	9 901	15 238	3 145	12 477	16 036	7 186	8 051	11 462	8 607	5 215	6 186	6 509
50,000 to 99,999 lb	578	1 229	281	339	812	380	296	580	464	131	279	322
100,000 lb or more	2 817	6 010	1 644	4 661	9 543	5 374	4 762	9 294	8 227	3 301	6 429	7 265
SCTG 28, Paper or paperboard articles	16 922	12 047	2 407	16 133	9 476	4 229	10 364	6 095	4 656	6 762	3 512	3 719
Less than 50 lb	413	53	10	420	27	12	318	20	16	239	16	17
50 to 99 lb	291	48	10	128	16	7	106	13	10	49	6	6
100 to 499 lb	588	160	30	403	83	36	342	46	36	212	38	40
500 to 749 lb	207	78	14	126	29	12	121	28	22	90	23	24
750 to 999 lb	191	80	16	144	37	15	81	23	17	25	8	8
1,000 to 9,999 lb	3 321	1 933	373	2 357	934	403	1 513	502	377	1 601	335	341
10,000 to 49,999 lb	11 395	9 379	1 891	12 337	7 583	3 396	7 729	4 964	3 752	4 380	2 535	2 635
50,000 to 99,999 lb	S	S	S	S	560	238	S	S	S	S	S	S
100,000 lb or more	S	S	S	S	S	S	S	S	S	S	S	S

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	100 to 249 miles ¹			250 to 499 miles ¹			500 to 749 miles ¹			750 to 999 miles ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 29, Printed products	18 175	6 060	1 298	24 141	6 287	2 834	17 617	3 850	3 007	9 524	2 569	2 650
Less than 50 lb	2 940	119	26	3 974	176	83	3 284	142	107	2 361	102	107
50 to 99 lb	935	64	13	1 353	129	63	997	96	76	587	S	S
100 to 499 lb	2 417	231	49	3 293	257	121	2 792	175	132	1 191	122	126
500 to 749 lb	896	102	21	1 024	123	57	S	81	63	233	36	37
750 to 999 lb	1 426	119	26	455	66	28	399	48	36	189	35	37
1,000 to 9,999 lb	4 808	1 241	260	7 283	1 389	623	4 783	844	625	2 419	598	612
10,000 to 49,999 lb	4 643	3 632	801	5 967	3 729	1 665	4 395	2 122	1 597	2 489	1 557	1 608
50,000 to 99,999 lb	57	81	19	S	S	S	29	23	16	17	13	13
100,000 lb or more	52	S	S	S	S	S	S	S	S	29	31	31
SCTG 30, Textiles, leather, and articles of textiles or leather	70 569	9 121	1 913	87 609	7 773	3 439	59 750	5 909	4 452	42 678	4 229	4 353
Less than 50 lb	6 329	206	45	9 434	298	136	8 340	235	178	9 106	256	266
50 to 99 lb	1 602	91	19	2 212	104	48	2 086	101	75	1 615	71	73
100 to 499 lb	5 386	354	76	7 241	436	201	6 309	378	273	4 386	236	245
500 to 749 lb	2 239	142	28	2 595	151	72	2 258	150	111	1 676	93	94
750 to 999 lb	1 810	161	34	2 210	133	60	1 647	117	86	708	62	63
1,000 to 9,999 lb	21 956	2 009	420	24 691	1 828	815	16 219	1 624	1 206	8 518	700	710
10,000 to 49,999 lb	31 008	6 014	1 268	38 430	4 606	2 003	22 836	3 253	2 484	16 492	2 748	2 831
50,000 to 99,999 lb	213	108	16	S	83	37	S	S	S	128	38	40
100,000 lb or more	27	S	S	S	S	S	S	S	S	S	S	S
SCTG 31, Nonmetallic mineral products	23 298	115 162	24 926	21 991	57 833	25 202	11 838	22 741	18 010	7 870	10 892	11 793
Less than 50 lb	521	37	8	563	24	11	547	18	14	539	18	19
50 to 99 lb	328	33	7	190	16	7	89	9	7	91	9	10
100 to 499 lb	1 159	293	59	802	126	56	458	41	31	315	43	45
500 to 749 lb	330	81	17	S	54	24	S	31	24	79	20	21
750 to 999 lb	233	55	11	S	91	42	88	S	S	S	11	12
1,000 to 9,999 lb	2 826	2 569	524	3 275	1 750	746	1 675	958	691	928	484	500
10,000 to 49,999 lb	13 858	52 566	10 793	14 081	33 545	14 028	7 957	13 399	9 945	4 533	6 447	6 668
50,000 to 99,999 lb	2 723	36 734	7 332	684	4 735	1 846	70	553	396	51	288	341
100,000 lb or more	1 320	22 796	6 176	1 619	17 493	8 441	679	7 673	6 857	S	S	S
SCTG 32, Base metal in primary or semifinished forms and in finished basic shapes	56 922	77 801	16 367	52 742	66 957	30 545	26 263	34 713	27 004	12 505	12 246	13 539
Less than 50 lb	624	39	8	546	28	12	569	18	14	200	8	9
50 to 99 lb	543	54	11	276	34	14	274	25	18	174	S	S
100 to 499 lb	1 582	338	65	1 392	181	79	901	97	73	695	65	68
500 to 749 lb	722	238	45	495	91	40	377	58	42	182	31	32
750 to 999 lb	481	171	32	451	90	39	314	40	30	80	19	19
1,000 to 9,999 lb	8 923	4 592	912	7 667	3 211	1 385	3 872	1 381	1 030	2 557	780	808
10,000 to 49,999 lb	36 217	55 423	11 208	34 659	43 804	18 844	15 916	17 301	12 629	6 523	5 619	5 704
50,000 to 99,999 lb	4 253	7 388	1 519	1 372	2 705	1 147	631	1 367	1 020	186	406	452
100,000 lb or more	3 576	9 557	2 567	5 884	16 812	8 983	3 409	14 426	12 150	1 908	5 306	6 437
SCTG 33, Articles of base metal	37 812	18 923	3 952	40 242	18 300	8 179	26 352	10 179	7 637	15 916	5 408	5 685
Less than 50 lb	4 507	98	21	4 429	86	39	3 111	65	49	2 179	43	45
50 to 99 lb	1 131	70	14	1 703	74	34	1 055	49	38	524	29	30
100 to 499 lb	3 475	432	89	4 577	436	195	2 730	260	194	1 704	157	163
500 to 749 lb	1 345	264	52	1 509	220	94	824	98	72	459	59	61
750 to 999 lb	888	207	40	1 141	165	72	569	101	76	256	48	49
1,000 to 9,999 lb	11 692	4 701	973	9 640	3 131	1 398	7 935	1 728	1 257	4 365	1 022	1 061
10,000 to 49,999 lb	13 802	11 796	2 460	16 000	12 622	5 530	8 867	6 197	4 535	6 056	3 453	3 547
50,000 to 99,999 lb	689	907	198	474	346	151	518	417	109	105	106	106
100,000 lb or more	284	448	105	769	1 218	676	546	1 164	999	264	493	623
SCTG 34, Machinery	66 379	9 019	1 931	87 085	12 159	5 580	64 656	8 252	6 170	46 115	5 326	5 545
Less than 50 lb	7 119	118	25	6 237	100	47	5 233	76	59	3 752	44	47
50 to 99 lb	2 248	69	15	2 069	64	30	1 489	46	35	973	26	27
100 to 499 lb	6 829	405	86	7 399	387	178	6 058	277	206	4 976	195	202
500 to 749 lb	2 383	176	38	2 739	197	90	3 077	173	135	1 672	91	95
750 to 999 lb	1 541	146	31	2 560	214	93	1 429	106	81	819	61	63
1,000 to 9,999 lb	18 211	1 928	420	27 449	3 023	1 408	14 781	1 661	1 224	15 282	1 316	1 329
10,000 to 49,999 lb	25 178	5 407	1 169	34 003	7 476	3 378	29 329	5 237	3 912	17 160	3 252	3 409
50,000 to 99,999 lb	1 679	538	96	S	250	116	893	219	158	533	162	173
100,000 lb or more	1 193	233	52	2 186	448	240	2 368	456	361	948	180	200
SCTG 35, Electronic and other electrical equipment and components and office equipment	94 674	5 345	1 152	125 777	8 772	3 981	104 919	6 392	4 928	74 793	3 506	3 662
Less than 50 lb	26 382	238	54	36 786	268	126	29 628	234	180	24 076	163	177
50 to 99 lb	8 498	133	27	8 940	150	80	S	103	82	7 136	82	88
100 to 499 lb	20 121	496	106	21 412	614	275	17 544	487	377	19 083	362	388
500 to 749 lb	4 592	220	44	6 579	331	142	4 659	162	123	3 455	115	124
750 to 999 lb	3 388	180	36	3 785	240	134	2 169	93	71	2 124	98	102
1,000 to 9,999 lb	19 618	1 660	355	23 290	1 927	872	16 413	1 559	1 171	11 729	953	985
10,000 to 49,999 lb	11 298	2 107	463	23 886	4 433	2 046	11 610	2 540	1 909	6 159	1 582	1 638
50,000 to 99,999 lb	475	S	S	S	63	30	378	109	77	S	S	42
100,000 lb or more	302	115	23	S	S	S	S	S	S	S	S	S

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	100 to 249 miles ¹			250 to 499 miles ¹			500 to 749 miles ¹			750 to 999 miles ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 36, Motorized and other vehicles (including parts)	127 687	24 664	5 193	136 095	23 525	10 665	93 157	13 399	9 890	56 021	8 852	9 707
Less than 50 lb	4 250	162	37	3 293	117	55	2 628	95	76	1 909	62	65
50 to 99 lb	1 841	115	27	1 289	65	30	864	46	35	486	31	32
100 to 499 lb	5 797	487	101	7 057	423	182	3 171	224	167	2 165	152	156
500 to 749 lb	2 297	227	46	2 538	174	77	1 039	80	60	534	44	46
750 to 999 lb	2 309	250	50	1 131	120	52	979	72	52	534	57	59
1,000 to 9,999 lb	33 996	4 438	950	45 547	5 327	2 386	26 279	3 032	2 261	13 605	1 423	1 530
10,000 to 49,999 lb	67 466	16 583	3 378	57 033	13 667	6 330	46 357	7 603	5 502	22 406	4 109	4 339
50,000 to 99,999 lb	9 146	2 025	525	S	1 754	759	8 203	1 496	1 172	4 378	853	959
100,000 lb or more	586	377	79	S	S	S	3 636	750	564	S	S	S
SCTG 37, Transportation equipment, n.e.c.	9 108	3 766	S	12 697	2 857	1 374	19 553	S	4 316	12 959	S	S
Less than 50 lb	1 958	4	1	2 678	6	3	3 374	8	6	2 873	5	6
50 to 99 lb	662	3	1	630	3	2	880	4	3	561	3	4
100 to 499 lb	1 584	11	2	1 627	20	10	4 729	19	15	S	15	17
500 to 749 lb	S	5	1	S	17	8	S	S	S	S	3	4
750 to 999 lb	237	5	S	208	11	6	S	S	S	156	3	S
1,000 to 9,999 lb	1 888	103	23	3 744	208	95	5 455	189	139	2 396	62	66
10,000 to 49,999 lb	1 914	S	S	1 921	1 831	855	1 767	S	S	1 385	S	S
50,000 to 99,999 lb	58	S	S	644	S	S	S	S	S	S	S	S
100,000 lb or more	185	226	46	70	74	36	S	S	S	104	S	S
SCTG 38, Precision instruments and apparatus	24 348	3 862	746	30 909	S	528	23 911	347	274	18 283	207	223
Less than 50 lb	9 440	56	13	18 924	70	37	11 779	48	41	10 174	41	49
50 to 99 lb	1 444	19	4	1 441	15	7	2 235	16	12	985	9	10
100 to 499 lb	3 279	78	16	3 740	65	29	3 760	52	41	2 358	42	44
500 to 749 lb	508	32	6	1 025	14	6	1 222	23	19	794	17	18
750 to 999 lb	1 365	25	5	S	S	S	1 100	14	12	S	15	16
1,000 to 9,999 lb	2 952	355	70	2 684	106	45	2 365	81	64	2 708	71	72
10,000 to 49,999 lb	S	1 154	278	1 112	350	130	1 451	113	85	290	12	13
50,000 to 99,999 lb	S	S	S	S	S	S	—	—	—	—	—	—
100,000 lb or more	S	S	S	S	S	S	—	—	—	—	—	—
SCTG 39, Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	18 423	4 046	844	17 721	3 852	1 724	17 423	3 285	2 414	9 268	1 995	2 054
Less than 50 lb	542	25	5	627	30	14	545	28	21	569	28	29
50 to 99 lb	384	32	6	560	50	25	483	34	26	398	39	41
100 to 499 lb	3 189	355	71	2 564	304	137	2 332	218	163	1 243	129	136
500 to 749 lb	1 225	166	34	1 132	148	69	1 182	106	79	508	63	67
750 to 999 lb	646	110	24	731	116	52	675	73	55	320	43	44
1,000 to 9,999 lb	6 962	1 439	292	6 549	1 354	603	7 245	1 260	919	3 542	719	741
10,000 to 49,999 lb	5 396	1 796	382	5 528	1 827	815	4 883	1 521	1 120	2 680	964	984
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	S	S	S	S	S	S	S	S	—	—	—
SCTG 40, Miscellaneous manufactured products	52 226	13 090	2 831	72 126	12 754	5 674	43 341	7 373	5 653	29 948	4 228	4 354
Less than 50 lb	9 781	212	46	17 129	230	104	12 021	205	158	9 668	191	199
50 to 99 lb	1 684	95	S	4 297	152	100	2 501	109	84	1 285	66	69
100 to 499 lb	4 991	405	88	8 204	486	216	5 801	374	283	4 146	305	315
500 to 749 lb	1 639	181	39	2 520	237	108	1 546	159	116	971	99	104
750 to 999 lb	1 506	168	35	1 665	147	66	1 289	113	84	609	55	56
1,000 to 9,999 lb	14 824	2 455	511	18 739	2 884	1 276	9 171	1 583	1 174	6 266	928	950
10,000 to 49,999 lb	15 956	6 776	1 398	17 836	6 975	3 054	10 140	3 803	2 883	6 733	2 112	2 194
50,000 to 99,999 lb	1 147	1 013	220	1 450	957	404	694	209	157	S	111	116
100,000 lb or more	698	1 785	448	286	685	346	180	S	S	S	S	S
SCTG 41, Waste and scrap	7 450	46 496	9 750	5 754	25 528	13 723	3 856	11 203	S	614	1 867	S
Less than 50 lb	S	S	S	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	—	—	—	S	S	S
1,000 to 9,999 lb	203	S	S	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	4 851	22 376	4 113	3 736	7 811	3 223	S	2 901	2 189	482	508	577
50,000 to 99,999 lb	182	1 852	381	124	809	379	S	S	S	S	S	S
100,000 lb or more	2 188	22 150	5 235	S	16 862	10 102	S	S	S	127	S	S
SCTG 43, Mixed freight	226 545	77 538	14 991	91 842	25 234	10 430	33 685	7 313	5 388	20 072	3 919	4 074
Less than 50 lb	5 956	250	50	4 831	179	78	3 013	107	81	2 641	79	82
50 to 99 lb	2 620	274	53	1 028	89	37	782	42	31	516	27	28
100 to 499 lb	9 133	1 475	286	4 721	603	247	1 615	149	110	1 208	110	111
500 to 749 lb	5 154	925	172	1 831	256	109	954	96	72	166	26	28
750 to 999 lb	4 056	969	187	1 509	193	79	361	43	32	204	34	35
1,000 to 9,999 lb	51 214	17 175	3 349	22 264	5 634	2 292	8 149	1 499	1 080	6 244	973	988
10,000 to 49,999 lb	142 517	52 321	10 103	53 616	17 363	7 197	18 017	4 939	3 643	8 951	2 603	2 726
50,000 to 99,999 lb	4 850	3 168	602	1 667	658	289	S	S	S	S	S	S
100,000 lb or more	1 045	981	189	S	S	S	S	S	S	—	—	—

See footnotes at end of table.

Table 10. **Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.**

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	100 to 249 miles ¹			250 to 499 miles ¹			500 to 749 miles ¹			750 to 999 miles ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
Commodity unknown	2 302	2 076	542	2 206	1 899	1 055	1 903	S	1 511	964	S	S
Less than 50 lb	256	6	1	244	3	1	S	2	2	195	S	S
50 to 99 lb	41	2	—	S	2	S	S	—	—	5	—	—
100 to 499 lb	135	18	3	222	18	7	S	5	4	S	2	3
500 to 749 lb	11	6	1	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	1	—	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	449	111	22	403	77	35	230	47	34	147	31	31
10,000 to 49,999 lb	1 309	707	140	967	612	255	332	236	178	S	S	S
50,000 to 99,999 lb	42	208	36	S	81	43	38	45	41	—	—	—
100,000 lb or more	53	S	S	S	1 091	705	S	S	S	38	S	S

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	1,000 to 1,499 miles ¹			1,500 to 1,999 miles ¹			2,000 miles or more ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
Total³	501 419	419 584	660 359	353 663	99 991	217 826	336 302	50 929	142 193
Less than 50 lb	94 525	1 140	1 665	74 303	821	1 709	87 377	869	2 399
50 to 99 lb	21 678	566	831	17 015	370	766	19 210	376	1 052
100 to 499 lb	50 803	2 254	3 274	41 216	1 460	3 044	51 273	1 441	3 935
500 to 749 lb	14 154	778	1 122	9 505	589	1 227	11 407	599	1 674
750 to 999 lb	15 075	815	1 167	7 206	419	872	7 760	444	1 205
1,000 to 9,999 lb	99 942	14 801	21 237	70 435	9 610	20 088	70 918	7 708	21 055
10,000 to 49,999 lb	155 226	75 803	108 737	116 815	45 405	96 073	77 021	26 756	74 264
50,000 to 99,999 lb	9 580	7 037	10 475	4 967	5 632	12 708	3 902	2 847	7 898
100,000 lb or more	40 435	316 390	511 852	12 201	35 685	81 340	7 435	9 887	28 711
SCTG 01, Live animals and live fish	S	S	S	S	S	S	S	S	S
Less than 50 lb	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S
750 to 999 lb	-	-	-	S	S	S	-	-	-
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	S	S	S	-	-	-	-	-	-
50,000 to 99,999 lb	S	S	S	-	-	-	-	-	-
100,000 lb or more	-	-	-	-	-	-	-	-	-
SCTG 02, Cereal grains	5 119	52 638	95 725	S	S	S	S	S	S
Less than 50 lb	S	S	S	-	-	-	-	-	-
50 to 99 lb	-	-	-	-	-	-	-	-	-
100 to 499 lb	S	S	S	-	-	-	S	S	S
500 to 749 lb	-	-	-	-	-	-	-	-	-
750 to 999 lb	S	S	S	-	-	-	-	-	-
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	270	S	S	S	S	S	S	S	S
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	4 785	51 395	93 828	S	S	S	-	-	-
SCTG 03, Other agricultural products	8 350	13 687	21 463	5 693	5 706	12 108	7 212	5 230	14 493
Less than 50 lb	212	16	25	S	S	S	S	S	S
50 to 99 lb	S	9	15	45	S	S	S	S	S
100 to 499 lb	424	45	69	S	16	36	194	19	50
500 to 749 lb	17	S	S	12	6	11	47	S	S
750 to 999 lb	228	47	71	S	S	S	S	6	17
1,000 to 9,999 lb	S	716	1 085	1 078	585	1 218	1 918	730	1 937
10,000 to 49,999 lb	3 011	4 639	7 101	3 469	3 753	7 717	3 945	3 676	10 171
50,000 to 99,999 lb	155	261	412	86	80	161	69	S	S
100,000 lb or more	1 731	7 948	12 677	506	1 239	2 906	S	562	1 628
SCTG 04, Animal feed and products of animal origin, n.e.c.	2 015	4 723	7 293	374	S	S	S	S	S
Less than 50 lb	6	S	S	S	S	S	S	S	S
50 to 99 lb	3	S	S	S	S	S	S	S	S
100 to 499 lb	19	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	90	55	73	S	S	S	S	7	21
10,000 to 49,999 lb	1 304	1 375	1 986	225	195	418	S	S	S
50,000 to 99,999 lb	90	354	493	S	S	S	S	S	S
100,000 lb or more	498	2 933	4 734	S	S	S	S	S	S
SCTG 05, Meat, fish, seafood, and their preparations	16 714	6 807	9 794	7 384	2 663	5 371	3 472	926	2 581
Less than 50 lb	S	S	S	17	2	3	21	1	4
50 to 99 lb	S	S	S	8	1	1	15	1	3
100 to 499 lb	98	14	22	S	14	29	174	12	38
500 to 749 lb	53	10	16	S	S	S	S	5	14
750 to 999 lb	78	12	19	34	4	9	54	5	14
1,000 to 9,999 lb	2 141	503	733	1 027	211	431	1 858	287	822
10,000 to 49,999 lb	13 823	5 756	8 233	5 801	2 184	4 396	1 202	472	1 282
50,000 to 99,999 lb	S	393	562	S	S	S	S	S	S
100,000 lb or more	62	S	S	161	172	348	S	S	S
SCTG 06, Milled grain products and preparations, and bakery products	6 212	5 857	8 687	3 795	3 093	6 728	1 848	1 025	2 858
Less than 50 lb	36	4	5	16	S	S	37	2	5
50 to 99 lb	S	S	S	S	S	S	S	S	4
100 to 499 lb	S	13	S	14	S	S	S	S	S
500 to 749 lb	1	1	1	S	S	S	S	S	S
750 to 999 lb	11	2	3	4	2	3	S	S	S
1,000 to 9,999 lb	481	214	299	497	161	331	313	103	291
10,000 to 49,999 lb	4 998	3 082	4 431	3 121	2 445	5 334	1 369	781	2 176
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	611	2 466	3 808	103	438	959	S	S	S

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	1,000 to 1,499 miles ¹			1,500 to 1,999 miles ¹			2,000 miles or more ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 07, Other prepared foodstuffs and fats and oils	15 587	15 627	24 054	11 163	8 830	18 909	7 197	5 768	16 280
Less than 50 lb	208	10	15	131	9	19	124	6	18
50 to 99 lb	S	S	S	29	2	5	31	3	8
100 to 499 lb	179	28	40	174	S	S	147	16	46
500 to 749 lb	59	13	18	S	4	8	57	11	32
750 to 999 lb	88	14	19	95	12	26	21	5	14
1,000 to 9,999 lb	1 855	753	1 085	1 076	333	679	1 460	523	1 506
10,000 to 49,999 lb	10 236	7 679	11 106	8 266	6 120	13 031	4 762	3 740	10 438
50,000 to 99,999 lb	270	360	598	205	285	611	153	269	754
100,000 lb or more	2 643	6 765	11 165	1 101	2 023	4 447	442	1 194	3 464
SCTG 08, Alcoholic beverages	1 756	2 043	3 059	1 813	1 375	2 883	3 016	1 973	5 602
Less than 50 lb	S	S	—	S	S	S	S	S	S
50 to 99 lb	3	—	—	S	S	S	S	S	S
100 to 499 lb	29	5	7	8	S	S	41	6	17
500 to 749 lb	S	S	S	7	2	4	24	S	S
750 to 999 lb	S	4	5	S	4	8	S	S	S
1,000 to 9,999 lb	180	104	120	217	127	277	497	178	494
10,000 to 49,999 lb	987	750	1 081	1 130	757	1 583	1 900	1 063	3 010
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	416	1 039	1 618	S	S	S	S	635	1 839
SCTG 09, Tobacco products	918	41	58	456	S	S	S	S	S
Less than 50 lb	47	1	1	18	—	1	81	2	5
50 to 99 lb	S	—	—	S	—	—	S	—	—
100 to 499 lb	52	1	2	32	1	2	S	—	4
500 to 749 lb	12	—	1	S	—	—	S	—	S
750 to 999 lb	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	755	37	53	S	S	S	S	S	S
50,000 to 99,999 lb	—	—	—	—	—	—	S	S	S
100,000 lb or more	—	—	—	—	—	—	S	S	S
SCTG 10, Monumental or building stone	S	109	174	S	S	S	S	S	S
Less than 50 lb	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	S	36	50	S	S	S	S	S	S
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	S	S	—	—	—	—	—	—
SCTG 11, Natural sands	115	1 812	2 471	S	831	1 710	12	S	S
Less than 50 lb	S	S	S	—	—	—	—	—	—
50 to 99 lb	—	—	—	S	S	S	—	—	—
100 to 499 lb	—	—	—	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	—	—	—
750 to 999 lb	—	—	—	S	S	S	—	—	—
1,000 to 9,999 lb	S	S	S	S	S	S	—	—	—
10,000 to 49,999 lb	S	416	598	S	S	S	S	36	97
50,000 to 99,999 lb	S	S	S	S	S	S	—	—	—
100,000 lb or more	33	1 375	1 846	S	665	1 361	S	S	S
SCTG 12, Gravel and crushed stone	27	646	899	27	1 092	S	5	278	754
Less than 50 lb	S	S	S	—	—	—	—	—	—
50 to 99 lb	S	S	S	—	—	—	—	—	—
100 to 499 lb	S	S	S	S	S	S	—	—	—
500 to 749 lb	—	—	—	S	S	S	—	—	—
750 to 999 lb	—	—	—	—	—	—	—	—	—
1,000 to 9,999 lb	S	S	S	—	—	—	S	S	S
10,000 to 49,999 lb	S	175	247	18	132	267	S	80	218
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	S	S	S	S	S	S	S	S
SCTG 13, Nonmetallic minerals n.e.c.	488	10 194	16 404	343	4 489	10 260	124	518	1 397
Less than 50 lb	S	—	—	S	—	—	2	S	S
50 to 99 lb	S	S	S	S	S	S	—	—	—
100 to 499 lb	S	S	S	S	S	S	—	—	—
500 to 749 lb	S	S	S	—	—	—	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	S	S	S	S	18	38	3	7	19
10,000 to 49,999 lb	161	915	1 316	114	511	1 078	70	296	761
50,000 to 99,999 lb	S	91	134	S	32	67	S	28	81
100,000 lb or more	285	9 169	14 927	154	S	S	44	187	536

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	1,000 to 1,499 miles ¹			1,500 to 1,999 miles ¹			2,000 miles or more ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 14, Metallic ores and concentrates	809	3 153	4 545	690	S	S	867	64	168
Less than 50 lb	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S
100 to 499 lb	10	—	—	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	—	—	—	S	S	S
1,000 to 9,999 lb	S	10	14	13	S	S	S	S	S
10,000 to 49,999 lb	277	150	211	S	S	S	379	38	98
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	322	2 984	4 308	S	S	163	S	S	S
SCTG 15, Coal	1 239	136 105	213 230	S	S	S	—	—	—
Less than 50 lb	—	—	—	—	—	—	—	—	—
50 to 99 lb	—	—	—	—	—	—	—	—	—
100 to 499 lb	—	—	—	—	—	—	—	—	—
500 to 749 lb	—	—	—	—	—	—	—	—	—
750 to 999 lb	—	—	—	—	—	—	—	—	—
1,000 to 9,999 lb	—	—	—	—	—	—	—	—	—
10,000 to 49,999 lb	S	S	S	—	—	—	—	—	—
50,000 to 99,999 lb	S	S	S	S	S	S	—	—	—
100,000 lb or more	1 236	135 952	213 017	S	S	S	—	—	—
SCTG 17, Gasoline and aviation turbine fuel	3 336	14 175	20 152	1 002	3 935	9 820	150	S	S
Less than 50 lb	S	S	S	—	—	—	—	—	—
50 to 99 lb	—	—	—	—	—	—	—	—	—
100 to 499 lb	S	S	S	—	—	—	—	—	—
500 to 749 lb	S	S	S	S	S	S	S	S	S
750 to 999 lb	—	—	—	—	—	—	—	—	—
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	S	S	S	S	S	S	S	S	S
50,000 to 99,999 lb	51	185	292	S	S	S	S	S	S
100,000 lb or more	3 267	13 961	19 820	S	S	S	S	S	S
SCTG 18, Fuel oils	123	S	S	S	S	S	S	S	S
Less than 50 lb	—	—	—	—	—	—	—	—	—
50 to 99 lb	—	—	—	—	—	—	—	—	—
100 to 499 lb	S	S	S	—	—	—	—	—	—
500 to 749 lb	—	—	—	S	S	S	—	—	—
750 to 999 lb	—	—	—	—	—	—	—	—	—
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	S	S	S	S	S	S	S	S	S
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	S	S	S	S	S	—	—	—
SCTG 19, Coal and petroleum products, n.e.c.	2 410	11 330	21 337	497	941	2 045	439	354	945
Less than 50 lb	7	1	1	S	—	1	4	—	S
50 to 99 lb	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	S	S	S	S	S	33	4	11
500 to 749 lb	22	5	6	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	246	128	202	64	27	54	S	S	S
10,000 to 49,999 lb	248	328	465	128	185	386	S	S	S
50,000 to 99,999 lb	S	37	56	S	S	—	—	—	—
100,000 lb or more	1 630	10 781	20 537	122	673	1 453	S	S	S
SCTG 20, Basic chemicals	11 577	18 625	29 996	4 416	3 741	8 057	4 907	2 181	6 145
Less than 50 lb	165	3	4	500	6	14	543	6	17
50 to 99 lb	37	2	3	36	2	3	S	1	4
100 to 499 lb	S	29	43	198	15	31	608	41	115
500 to 749 lb	S	18	25	S	S	S	S	9	26
750 to 999 lb	85	7	10	S	S	S	S	4	S
1,000 to 9,999 lb	S	251	375	793	97	192	639	S	S
10,000 to 49,999 lb	4 126	2 265	3 250	1 431	690	1 410	2 151	689	1 873
50,000 to 99,999 lb	65	103	141	26	S	S	S	S	S
100,000 lb or more	4 463	15 948	26 146	1 270	2 590	5 663	S	614	1 698
SCTG 21, Pharmaceutical products	27 763	1 282	1 744	23 252	964	2 044	32 058	461	1 211
Less than 50 lb	10 458	43	62	5 356	22	46	7 421	27	73
50 to 99 lb	3 034	8	11	594	4	9	1 501	5	13
100 to 499 lb	3 003	32	50	2 201	28	59	1 862	17	48
500 to 749 lb	1 257	9	14	S	S	S	S	5	15
750 to 999 lb	S	S	S	S	3	6	377	7	18
1,000 to 9,999 lb	2 689	S	S	3 270	S	S	655	24	65
10,000 to 49,999 lb	5 930	439	622	11 063	415	870	S	317	812
50,000 to 99,999 lb	—	—	—	—	—	—	—	—	—
100,000 lb or more	S	S	S	S	S	S	S	S	S

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	1,000 to 1,499 miles ¹			1,500 to 1,999 miles ¹			2,000 miles or more ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 22, Fertilizers	1 471	S	S	595	3 020	6 889	125	S	S
Less than 50 lb	S	S	S	S	S	S	S	S	S
50 to 99 lb	—	—	—	—	—	—	—	—	—
100 to 499 lb	S	S	S	S	S	S	—	—	—
500 to 749 lb	—	—	—	—	—	—	—	—	—
750 to 999 lb	—	—	—	—	—	—	—	—	—
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	S	S	S	S	S	S	S	S	S
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	1 061	S	S	278	1 965	4 401	S	S	S
SCTG 23, Chemical products and preparations, n.e.c.	12 594	5 638	8 085	8 309	3 777	8 008	8 544	1 666	4 535
Less than 50 lb	1 029	34	49	454	17	35	663	13	36
50 to 99 lb	345	13	19	115	5	11	241	11	30
100 to 499 lb	951	88	124	357	37	77	1 043	54	152
500 to 749 lb	343	45	63	274	34	73	S	34	94
750 to 999 lb	463	33	46	79	11	23	361	22	62
1,000 to 9,999 lb	3 368	818	1 155	1 825	371	758	1 519	203	550
10,000 to 49,999 lb	5 262	3 530	5 029	4 988	2 947	6 271	3 620	1 226	3 334
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	616	824	1 243	194	331	704	S	79	213
SCTG 24, Plastics and rubber	23 708	10 932	16 160	13 442	5 060	10 662	9 906	2 616	7 142
Less than 50 lb	1 397	39	57	1 067	32	66	932	27	72
50 to 99 lb	577	30	43	396	17	36	350	17	46
100 to 499 lb	2 433	192	276	1 707	118	246	855	73	190
500 to 749 lb	679	83	121	622	72	146	356	38	99
750 to 999 lb	437	74	112	539	39	80	223	38	111
1,000 to 9,999 lb	5 008	1 229	1 744	3 532	713	1 479	3 631	731	1 948
10,000 to 49,999 lb	9 910	4 589	6 517	4 588	2 551	5 374	3 318	1 417	3 900
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	3 148	4 602	7 156	918	1 475	3 144	222	264	740
SCTG 25, Logs and other wood in the rough	S	S	S	S	S	S	85	138	404
Less than 50 lb	S	S	S	S	S	S	—	—	—
50 to 99 lb	—	—	—	—	—	—	S	S	S
100 to 499 lb	S	S	S	S	S	S	—	—	—
500 to 749 lb	S	S	S	S	S	S	—	—	—
750 to 999 lb	S	S	S	S	S	S	—	—	—
1,000 to 9,999 lb	S	S	S	S	S	S	—	—	—
10,000 to 49,999 lb	S	S	S	S	S	S	64	83	238
50,000 to 99,999 lb	S	S	S	S	S	S	20	S	S
100,000 lb or more	S	S	S	S	S	S	S	S	S
SCTG 26, Wood products	7 050	12 338	19 322	4 601	7 239	16 367	3 549	5 300	15 572
Less than 50 lb	119	7	10	63	3	7	92	S	S
50 to 99 lb	58	6	8	23	3	6	52	5	13
100 to 499 lb	S	22	32	85	13	26	S	14	36
500 to 749 lb	68	10	14	44	6	12	S	S	S
750 to 999 lb	S	13	18	S	7	15	12	2	6
1,000 to 9,999 lb	S	S	S	329	127	265	188	42	121
10,000 to 49,999 lb	3 569	4 319	6 111	1 930	1 561	3 345	1 416	1 469	4 050
50,000 to 99,999 lb	243	521	782	235	304	630	350	495	1 413
100,000 lb or more	1 777	7 095	11 886	1 860	5 215	12 060	1 224	3 266	9 912
SCTG 27, Pulp, newsprint, paper, and paperboard	6 330	9 592	14 135	2 643	3 355	7 152	1 420	1 591	4 417
Less than 50 lb	21	S	3	19	1	2	24	1	3
50 to 99 lb	25	2	3	4	—	1	S	S	S
100 to 499 lb	62	10	14	40	5	10	S	5	13
500 to 749 lb	17	4	5	9	2	5	S	S	S
750 to 999 lb	22	5	7	S	S	S	6	1	3
1,000 to 9,999 lb	321	158	235	199	78	165	142	48	132
10,000 to 49,999 lb	3 102	3 472	4 983	1 602	1 770	3 703	872	947	2 539
50,000 to 99,999 lb	S	S	S	44	78	170	33	63	183
100,000 lb or more	2 458	5 501	8 330	713	1 416	3 089	289	522	1 531
SCTG 28, Paper or paperboard articles	3 380	1 637	2 351	2 781	1 415	3 050	1 177	581	1 618
Less than 50 lb	224	14	19	140	7	14	115	5	15
50 to 99 lb	57	5	8	13	2	4	S	S	S
100 to 499 lb	162	25	34	78	12	24	45	10	27
500 to 749 lb	66	13	19	33	12	S	21	4	12
750 to 999 lb	101	18	26	30	S	S	S	5	12
1,000 to 9,999 lb	545	243	336	357	117	244	231	79	215
10,000 to 49,999 lb	2 148	1 267	1 823	2 122	1 223	2 647	711	462	1 296
50,000 to 99,999 lb	S	54	88	S	S	S	S	S	S
100,000 lb or more	—	—	—	S	S	S	—	—	—

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	1,000 to 1,499 miles ¹			1,500 to 1,999 miles ¹			2,000 miles or more ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 29, Printed products	9 554	1 823	2 626	5 880	1 010	2 134	4 644	719	1 939
Less than 50 lb	2 729	113	168	1 355	56	113	1 462	58	156
50 to 99 lb	1 114	68	98	535	S	S	153	S	S
100 to 499 lb	1 471	105	157	900	60	123	685	41	110
500 to 749 lb	177	26	38	130	21	46	S	S	S
750 to 999 lb	263	49	67	165	18	38	115	8	22
1,000 to 9,999 lb	1 663	351	510	1 667	295	630	1 185	259	682
10,000 to 49,999 lb	2 074	1 069	1 530	945	475	1 004	696	287	770
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	S	S	S	S	S	S	S	S
SCTG 30, Textiles, leather, and articles of textiles or leather	38 954	3 938	5 355	28 594	1 885	3 937	33 630	2 343	7 716
Less than 50 lb	7 030	187	264	4 960	128	264	7 161	174	473
50 to 99 lb	2 099	100	141	1 349	52	106	2 125	61	168
100 to 499 lb	5 309	258	368	3 584	168	355	5 460	188	531
500 to 749 lb	1 434	65	93	S	S	97	1 621	71	223
750 to 999 lb	1 686	62	88	852	34	69	1 127	63	170
1,000 to 9,999 lb	7 782	695	977	7 811	557	1 196	8 431	526	1 390
10,000 to 49,999 lb	13 444	2 511	3 325	8 636	881	1 818	7 682	1 258	S
50,000 to 99,999 lb	58	18	29	S	S	S	S	S	S
100,000 lb or more	S	S	S	S	S	S	—	—	—
SCTG 31, Nonmetallic mineral products	7 760	13 441	20 601	4 214	5 847	11 702	3 128	1 838	4 898
Less than 50 lb	438	21	30	297	13	27	371	18	50
50 to 99 lb	117	10	15	160	11	22	190	S	S
100 to 499 lb	441	76	110	339	S	S	S	S	S
500 to 749 lb	60	12	17	15	2	4	57	S	S
750 to 999 lb	51	10	14	S	S	S	S	S	S
1,000 to 9,999 lb	977	560	842	649	S	S	606	S	S
10,000 to 49,999 lb	4 309	7 334	10 569	2 646	2 883	5 848	1 308	1 038	2 784
50,000 to 99,999 lb	S	S	S	16	87	183	S	S	S
100,000 lb or more	S	4 826	8 164	66	S	S	S	S	S
SCTG 32, Base metal in primary or semifinished forms and in finished basic shapes	11 194	8 848	13 683	5 695	4 392	9 807	3 862	1 887	5 019
Less than 50 lb	531	10	14	193	6	13	168	5	12
50 to 99 lb	213	12	17	91	3	7	80	3	7
100 to 499 lb	735	50	73	379	S	S	316	18	47
500 to 749 lb	167	21	30	136	S	S	99	12	30
750 to 999 lb	104	21	29	125	10	21	40	S	S
1,000 to 9,999 lb	2 029	499	703	1 630	405	810	887	267	690
10,000 to 49,999 lb	4 627	3 762	5 385	1 900	1 413	2 991	1 919	1 009	2 584
50,000 to 99,999 lb	366	446	737	68	S	162	S	S	S
100,000 lb or more	2 423	4 027	6 695	1 172	2 402	5 658	313	515	1 494
SCTG 33, Articles of base metal	13 952	5 456	8 045	7 762	2 167	4 434	6 287	1 084	2 881
Less than 50 lb	2 096	39	57	1 615	24	48	1 649	30	81
50 to 99 lb	794	29	43	371	16	32	601	23	64
100 to 499 lb	1 644	128	188	1 271	86	177	1 194	69	186
500 to 749 lb	374	43	62	195	21	43	307	32	82
750 to 999 lb	402	39	56	111	15	30	191	21	56
1,000 to 9,999 lb	3 824	805	1 125	1 719	433	923	1 178	312	833
10,000 to 49,999 lb	3 895	2 363	3 329	2 439	1 478	2 978	752	391	1 026
50,000 to 99,999 lb	99	68	99	14	S	S	S	S	S
100,000 lb or more	825	S	S	S	S	S	S	S	S
SCTG 34, Machinery	36 819	3 578	5 184	24 393	2 770	5 954	19 512	1 228	3 364
Less than 50 lb	3 695	43	64	2 285	36	74	2 195	30	82
50 to 99 lb	1 469	37	55	1 057	20	43	864	22	59
100 to 499 lb	4 519	155	226	2 897	93	196	2 260	85	237
500 to 749 lb	1 874	80	116	587	40	83	768	68	194
750 to 999 lb	795	54	78	940	45	92	565	34	88
1,000 to 9,999 lb	9 743	836	1 220	6 696	571	1 191	7 764	566	1 553
10,000 to 49,999 lb	13 115	2 100	3 018	9 198	1 692	3 662	3 539	365	981
50,000 to 99,999 lb	1 250	210	315	463	145	289	S	S	S
100,000 lb or more	S	61	92	S	S	S	S	S	S
SCTG 35, Electronic and other electrical equipment and components and office equipment	95 359	4 408	6 454	75 669	2 494	5 309	92 656	1 544	4 264
Less than 50 lb	32 204	200	298	24 557	143	297	31 812	148	406
50 to 99 lb	6 597	81	128	7 187	57	122	7 766	70	194
100 to 499 lb	15 648	309	453	13 558	201	429	21 477	236	639
500 to 749 lb	3 548	92	131	2 281	61	127	2 916	82	228
750 to 999 lb	2 524	94	133	2 231	65	136	2 849	98	260
1,000 to 9,999 lb	21 805	943	1 370	10 418	522	1 080	S	428	1 204
10,000 to 49,999 lb	12 011	2 441	3 590	S	1 099	2 289	2 756	406	1 126
50,000 to 99,999 lb	51	32	48	864	192	477	S	S	S
100,000 lb or more	S	216	302	272	S	S	S	S	S

See footnotes at end of table.

Table 10. Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	1,000 to 1,499 miles ¹			1,500 to 1,999 miles ¹			2,000 miles or more ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
SCTG 36, Motorized and other vehicles (including parts)	41 829	7 347	10 880	25 498	2 906	6 397	11 843	1 649	4 191
Less than 50 lb	1 528	44	63	1 375	35	75	979	19	55
50 to 99 lb	521	21	32	340	23	49	269	10	30
100 to 499 lb	1 820	126	186	1 054	71	150	448	30	80
500 to 749 lb	645	40	60	696	40	85	112	8	20
750 to 999 lb	287	26	38	149	10	21	118	7	18
1,000 to 9,999 lb	13 131	1 393	2 053	9 917	1 130	2 501	3 080	372	1 009
10,000 to 49,999 lb	16 492	3 610	5 162	9 683	1 358	2 953	5 020	885	2 207
50,000 to 99,999 lb	4 640	763	1 169	1 397	167	398	S	S	S
100,000 lb or more	2 764	S	S	887	71	165	—	—	—
SCTG 37, Transportation equipment, n.e.c.	11 901	348	566	10 168	158	332	8 005	143	397
Less than 50 lb	4 289	6	10	2 331	4	10	3 159	6	15
50 to 99 lb	682	3	5	773	2	5	1 182	3	9
100 to 499 lb	1 130	9	15	S	8	19	1 306	8	21
500 to 749 lb	223	4	6	S	S	S	269	S	S
750 to 999 lb	S	S	S	S	S	S	47	2	5
1,000 to 9,999 lb	2 116	86	125	S	29	58	1 052	58	157
10,000 to 49,999 lb	S	117	183	S	S	S	390	S	S
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	91	172	S	S	S	S	S	S
SCTG 38, Precision instruments and apparatus	23 977	280	423	27 020	189	393	27 473	301	804
Less than 50 lb	11 365	50	80	16 615	42	90	13 241	55	150
50 to 99 lb	1 496	12	19	2 188	9	19	1 735	14	40
100 to 499 lb	3 327	49	72	S	28	59	7 279	74	194
500 to 749 lb	922	15	21	813	9	20	1 192	12	30
750 to 999 lb	S	29	46	S	4	9	1 027	7	19
1,000 to 9,999 lb	2 371	97	148	1 771	66	137	2 706	106	S
10,000 to 49,999 lb	236	26	38	389	29	60	292	34	87
50,000 to 99,999 lb	—	—	—	—	—	—	—	—	—
100,000 lb or more	—	—	—	—	—	—	—	—	—
SCTG 39, Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	7 355	1 715	2 385	5 008	947	1 977	3 510	608	1 614
Less than 50 lb	345	17	23	459	18	39	324	9	26
50 to 99 lb	211	15	21	239	10	22	237	9	25
100 to 499 lb	858	93	131	532	48	98	666	51	137
500 to 749 lb	271	34	50	187	22	47	109	14	38
750 to 999 lb	186	27	37	144	20	41	111	11	29
1,000 to 9,999 lb	3 328	751	1 040	1 578	292	602	891	154	406
10,000 to 49,999 lb	2 128	742	1 029	1 815	493	1 037	1 171	356	945
50,000 to 99,999 lb	—	—	—	S	19	38	S	S	S
100,000 lb or more	S	S	S	S	S	S	—	—	—
SCTG 40, Miscellaneous manufactured products	30 524	3 069	4 396	26 898	2 436	4 997	27 172	1 933	5 241
Less than 50 lb	11 763	163	234	7 885	139	289	12 437	152	427
50 to 99 lb	1 330	71	105	1 161	53	109	1 170	45	126
100 to 499 lb	3 793	256	374	3 099	197	406	3 665	191	516
500 to 749 lb	1 204	93	135	913	87	178	832	64	174
750 to 999 lb	564	72	104	489	63	132	231	26	70
1,000 to 9,999 lb	6 941	938	1 366	8 970	803	1 648	5 929	717	1 965
10,000 to 49,999 lb	4 830	1 335	1 857	4 236	1 052	2 146	2 706	643	1 720
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	121	191	S	S	S	S	S	S
SCTG 41, Waste and scrap	535	1 750	2 818	1 097	1 176	2 606	S	S	1 867
Less than 50 lb	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	—	—	—	S	S	S
100 to 499 lb	S	S	S	S	S	S	S	S	S
500 to 749 lb	—	—	—	—	—	—	—	—	—
750 to 999 lb	—	—	—	S	S	S	—	—	—
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	381	579	788	784	1 093	2 413	S	S	S
50,000 to 99,999 lb	23	169	S	S	S	S	S	S	S
100,000 lb or more	124	S	S	S	S	S	25	S	S
SCTG 43, Mixed freight	11 065	2 177	3 182	10 192	1 722	3 585	5 969	853	2 470
Less than 50 lb	2 164	65	92	2 020	54	112	1 873	30	85
50 to 99 lb	369	18	26	253	20	43	342	17	45
100 to 499 lb	1 489	92	127	955	65	135	651	60	167
500 to 749 lb	366	34	50	182	20	40	158	S	S
750 to 999 lb	635	46	67	100	11	23	54	13	35
1,000 to 9,999 lb	1 793	400	567	1 418	284	568	826	177	523
10,000 to 49,999 lb	3 695	1 128	1 628	5 237	1 236	2 601	2 037	440	1 289
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	S	S	—	—	—	S	S	S

See footnotes at end of table.

Table 10. **Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.**

[Estimates are based on data from the 2002 Commodity Flow Survey. Because of rounding, estimates may not be additive]

SCTG code, description, shipment weight, and distance shipped	1,000 to 1,499 miles ¹			1,500 to 1,999 miles ¹			2,000 miles or more ¹		
	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)	2002 value (million dollars)	2002 tons (thousands)	2002 ton-miles ² (millions)
Commodity unknown	1 252	341	530	821	211	459	417	62	176
Less than 50 lb	S	3	5	S	2	4	52	S	S
50 to 99 lb	5	S	S	S	S	S	S	—	1
100 to 499 lb	251	S	S	S	2	3	S	1	3
500 to 749 lb	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	—	—	—
1,000 to 9,999 lb	241	27	45	S	29	63	25	S	S
10,000 to 49,999 lb	320	96	143	S	S	S	S	41	111
50,000 to 99,999 lb	S	S	S	S	S	S	—	—	—
100,000 lb or more	74	196	309	S	S	S	S	S	S

— Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Shipments are grouped into distance categories based on Great Circle Distance (GCD). GCD is the shortest distance between 2 points on the surface of a sphere over the surface of that sphere.

²Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

³Estimates exclude shipments of crude petroleum (SCTG 16).

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Discussion of Survey Changes and Comparing Estimates

The following tables provide comparisons of the 2002, 1997, and 1993 Commodity Flow Survey (CFS) estimates.

Data users are urged to use caution in comparing estimates from different survey years due to the changes that have occurred in sample design, industry coverage, methodology, commodity classification coding systems, geography, and sample sizes. Appendix A presents change in these areas by survey year.

INDUSTRY COVERAGE CHANGES

Changes to the 2002 CFS include moving the industry coverage from a Standard Industrial Classification (SIC) based definition in the 1997 CFS to a North American Industry Classification System (NAICS) based definition for the 2002 survey. For the 2002 CFS, this meant that selected industries previously covered in the 1997 CFS using the SIC definitions, were now out-of-scope to the 2002 CFS industry coverage based on the NAICS definitions. The major industries not covered by the 2002 CFS that were included in the 1997 CFS are Logging (NAICS 11331); Newspaper Periodical, Book, and Database Publishers (NAICS 5111); and Music Publishers (NAICS 51223).

To make the 1997 CFS estimates comparable with the 2002 CFS, the 1997 CFS estimates have been revised by removing shipments from establishments in the following industries:

- SIC 2411 Logging
- SIC 2711 Newspapers: Publishing, or Publishing and Printing
- SIC 2721 Periodicals: Publishing, or Publishing and Printing
- SIC 2731 Books: Publishing, or Publishing and Printing
- SIC 2741 Miscellaneous Publishing
- SIC 2771 Greeting Cards

We were not able to adjust the 1997 CFS estimates to account the NAICS coverage changes when only part of a SIC moved out-of-scope. For example, a wholesale industry in-scope to the 1997 CFS—SIC 5171 (Petroleum Bulk Stations and Terminals)—included Heating Oil Sold Via Retail Method, which is now classified as Retail (NAICS 454311) and is out-of-scope of the 2002 CFS. The majority of the industry remains in-scope to the 2002 CFS industry coverage, therefore we made no adjustment to the 1997 CFS estimates.

No adjustments have been made to the 1993 CFS estimates.

Detailed information about NAICS can be found at www.census.gov/epcd/www/naics.html.

AUXILIARY ESTABLISHMENT COVERAGE CHANGES

The 2002 CFS improved the coverage of auxiliary establishments. Auxiliary establishments are defined as warehouses and managing offices of multiestablishment companies, which have non-auxiliary establishments that are in-scope to CFS or are classified in retail trade. For the 1997 CFS sampling, managing offices had to have sales or inventory levels of greater than zero in order to be considered for selection. However, research conducted prior to the 2002 CFS showed that not all managing offices with shipping activity in the 1997 CFS indicated sales or inventories in the 1997 Economic Census. Therefore, to provide a more comprehensive coverage of auxiliaries, for the 2002 CFS managing offices were subjected to sampling, regardless of sales or inventories.

COMPARISON DATA AND STATISTICAL VALIDITY

Changes from the 1997 to 2002 CFS include a decrease in sample size, from approximately 100,000 establishments for the 1997 CFS to about 50,000 establishments for the 2002 survey.

One consequence of the decreased sample size was a substantial increase in the sampling variability for estimates of period-to-period change produced at full detail levels for mode and commodity. Because of the increased variability in many of these categories, one cannot conclude with a high degree of confidence that changes were significant. For a more detailed discussion of sampling variability, see Appendix B. We have provided period-to-period comparisons at the following, higher levels of aggregation for mode of transportation and commodity since the impact of increased sampling variability is less at those levels. For consistency, these aggregation levels are also now used in our Metropolitan Area and Export tables, where appropriate.

Table 11a. Shipment Characteristics by Mode of Transportation for the United States: 2002 and 1997

[Estimates are based on data from the 2002 and 1997 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

Mode of transportation	Value			Tons			Ton-miles ¹			Average miles per shipment		
	2002 (million dollars)	1997 (million dollars)	Percent change	2002 (thousands)	1997 (thousands)	Percent change	2002 (millions)	1997 (millions)	Percent change	2002	1997	Percent change
Total	8 397 210	6 859 805	22.4	11 667 919	10 566 330	10.4	3 137 898	2 592 590	21.0	546	486	12.5
Single modes	7 049 383	5 673 920	24.2	11 086 660	9 928 296	11.7	2 867 938	2 317 973	23.7	240	200	19.7
Truck ²	6 235 001	4 936 491	26.3	7 842 836	7 292 256	7.6	1 255 908	998 035	25.8	173	157	10.2
Rail	310 884	318 915	-2.5	1 873 884	1 543 727	21.4	1 261 612	1 021 250	23.5	807	775	4.2
Water	89 344	75 765	17.9	681 227	535 558	27.2	282 659	240 572	17.5	568	483	17.6
Air (includes truck and air)	264 959	229 272	15.6	3 760	4 378	-14.1	5 835	6 124	-4.7	1 919	1 394	37.6
Pipeline ³	149 195	113 476	31.5	684 953	552 377	24.0	S	S	S	S	S	S
Multiple modes	1 079 185	913 164	18.2	216 686	212 981	1.7	225 715	202 602	11.4	895	822	8.8
Parcel, U.S. Postal Service or courier ..	987 746	823 311	20.0	25 513	22 100	15.4	19 004	16 729	13.6	894	821	8.8
Truck and rail	69 929	75 566	-7.5	42 984	53 730	-20.0	45 525	55 371	-17.8	1 413	1 353	4.4
All other multiple modes	21 510	14 287	50.6	148 189	137 151	8.0	161 187	130 503	23.5	1 596	991	61.1
Other and unknown modes ...	268 642	272 722	-1.5	364 573	425 053	-14.2	44 245	72 015	-38.6	130	123	5.9

- Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

²"Truck" as a single mode includes shipments that were made by only private truck, only for-hire truck, or a combination of private truck and for-hire truck.

³Estimates for pipeline exclude shipments of crude petroleum.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 11b. Shipment Characteristics by Mode of Transportation for the United States: 2002 and 1993

[Estimates are based on data from the 2002 and 1993 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

Mode of transportation	Value			Tons			Ton-miles ¹			Average miles per shipment		
	2002 (million dollars)	1993 (million dollars)	Percent change	2002 (thousands)	1993 (thousands)	Percent change	2002 (millions)	1993 (millions)	Percent change	2002	1993	Percent change
Total	8 397 210	5 846 334	43.6	11 667 919	9 688 493	20.4	3 137 898	2 420 915	29.6	546	424	28.9
Single modes	7 049 383	4 941 452	42.7	11 086 660	8 922 286	24.3	2 867 938	2 136 873	34.2	240	197	21.8
Truck ²	6 235 001	4 403 494	41.6	7 842 836	6 385 915	22.8	1 255 908	869 536	44.4	173	144	20.0
Rail	310 884	247 394	25.7	1 873 884	1 544 148	21.4	1 261 612	942 561	33.8	807	766	5.3
Water	89 344	61 628	45.0	681 227	505 440	34.8	282 659	271 998	3.9	568	S	S
Air (includes truck and air)	264 959	139 086	90.5	3 760	3 139	19.8	5 835	4 009	45.5	1 919	1 415	35.7
Pipeline ³	149 195	89 849	66.1	684 953	483 645	41.6	S	S	S	S	S	S
Multiple modes	1 079 185	662 603	62.9	216 686	225 676	-4.0	225 715	191 461	17.9	895	736	21.6
Parcel, U.S. Postal Service or courier ..	987 746	563 277	75.4	25 513	18 892	35.0	19 004	13 151	44.5	894	734	21.8
Truck and rail	69 929	83 082	-15.8	42 984	40 624	5.8	45 525	37 675	20.8	1 413	1 403	.7
All other multiple modes	21 510	16 244	32.4	148 189	166 160	-10.8	161 187	140 635	14.6	1 596	1 302	22.6
Other and unknown modes ...	268 642	242 279	10.9	364 573	540 530	-32.6	44 245	92 581	-52.2	130	229	-43.2

- Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.

²"Truck" as a single mode includes shipments that were made by only private truck, only for-hire truck, or a combination of private truck and for-hire truck.

³Estimates for pipeline exclude shipments of crude petroleum.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 11c. Shipment Characteristics by Mode of Transportation for the United States: Annualized Growth Rate for 1997 to 2002 and 1993 to 2002

[Estimates are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

Mode of transportation	Value (percent)		Tons (percent)		Ton-miles ¹ (percent)		Average miles per shipment (percent)	
	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002
Total	4.1	4.1	2.0	2.1	3.9	2.9	2.4	2.9
Single modes	4.4	4.0	2.2	2.4	4.3	3.3	3.7	2.2
Truck ²	4.8	3.9	1.5	2.3	4.7	4.2	2.0	2.0
Rail	-5	2.6	4.0	2.2	4.3	3.3	.8	.6
Water	3.4	4.2	4.9	3.4	3.3	.4	3.3	S
Air (includes truck and air)	2.9	7.4	-3.0	2.0	-1.0	4.3	6.6	3.4
Pipeline ³	5.6	5.8	4.4	3.9	S	S	S	S
Multiple modes	3.4	5.6	.3	-5	2.2	1.8	1.7	2.2
Parcel, U.S. Postal Service or courier	3.7	6.4	2.9	3.4	2.6	4.2	1.7	2.2
Truck and rail	-1.5	-1.9	-4.4	.6	-3.8	2.1	.9	.1
All other multiple modes	8.5	3.2	1.6	-1.3	4.3	1.5	10.0	2.3
Other and unknown modes	-3	1.2	-3.0	-4.3	-9.3	-7.9	1.2	-6.1

- Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.
²"Truck" as a single mode includes shipments that were made by only private truck, only for-hire truck, or a combination of private truck and for-hire truck.
³Estimates for pipeline exclude shipments of crude petroleum.

Note: Annualized growth rate measures the annual rate of change between estimates from any 2 years by assuming a constant yearly rate of change. See Appendix C for additional information about this rate.

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Table 12. Shipment Characteristics by Commodity Group for the United States: 2002 and 1997

[Estimates are based on data from the 2002 and 1997 Commodity Flow Surveys. Because of rounding, estimates may not be additive]

SCTG code	Commodity description	Value			Tons			Ton-miles ¹			Average miles per shipment		
		2002 (million dollars)	1997 (million dollars)	Percent change	2002 (thousands)	1997 (thousands)	Percent change	2002 (millions)	1997 (millions)	Percent change	2002	1997	Percent change
	Total²	8 397 210	6 859 805	22.4	11 667 919	10 566 330	10.4	3 137 898	2 592 590	21.0	546	486	12.5
01-05	Agricultural products and fish	444 162	418 841	6.0	1 138 883	995 653	14.4	467 698	365 943	27.8	320	284	12.8
06-09	Grains, alcohol, and tobacco products	647 799	599 560	8.0	652 039	584 640	11.5	237 285	201 397	17.8	159	118	34.3
10-14	Stones, nonmetallic minerals, and metallic ores	43 626	42 426	2.8	2 644 812	2 597 744	1.8	257 045	219 655	17.0	51	58	-11.6
15-19	Coal and petroleum products	500 530	411 732	21.6	3 300 413	3 039 184	8.6	951 964	774 609	22.9	65	57	14.7
20-24	Basic chemicals, chemical, and pharmaceutical products	1 219 093	899 023	35.6	882 195	706 561	24.9	349 388	299 679	16.6	500	490	2.2
25-30	Logs, wood products, and textile and leather	971 432	911 224	6.6	701 145	638 905	9.7	278 286	251 275	10.7	759	644	17.8
31-34	Base metal and machinery ..	1 128 507	1 038 943	8.6	1 475 868	1 402 219	5.3	334 481	284 197	17.7	363	369	-1.7
35-38	Electronic, motorized vehicles, and precision instruments	2 019 435	1 723 322	17.2	219 384	146 057	50.2	103 858	78 828	31.8	671	538	24.7
39-43	Furniture, mixed freight and misc. manufactured prod. ..	1 405 394	778 478	80.5	628 914	420 432	49.6	149 004	108 696	37.1	663	743	-10.8
--	Commodity unknown	17 229	36 257	-52.5	24 266	34 935	-30.5	8 889	8 311	7.0	485	485	-

- Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

¹Ton-miles estimates are based on estimated distances traveled along a modeled transportation network. See "Mileage Calculations" section for additional information.
²Estimates exclude shipments of crude petroleum (SCTG 16).

Note: Value-of-shipments estimates have not been adjusted for price changes. Appendix B tables provide estimated measures of sampling variability. The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Note: Coverage for the 2002 Commodity Flow Survey (CFS) differs from the previous surveys due to a change from the 1987 Standard Industrial Classification System to the 1997 North American Industry Classification System and other survey improvements. Therefore, data users are urged to use caution when comparing 2002 CFS estimates with estimates from prior years.

Appendix A.

Comparability With the 1993 and 1997 Commodity Flow Surveys

The following tables show a comparison of the key characteristics among the 1993, 1997, and 2002 Commodity Flow Surveys.

Industry Coverage

1993	1997	2002
Based on 1987 SIC	Based on 1987 SIC	Based on 1997 NAICS ¹
Manufacturing (excluding Printing Trade Services (SIC 279))	Manufacturing (excluding Printing Trade Services (SIC 279))	Manufacturing (excluding Prepress Services (NAICS 323122))
Mining (except mining services (SICs 108, 124, 138, 148) and oil and gas extraction (SICs 131 and 132))	Mining (except mining services (SICs 108, 124, 138, 148) and oil and gas extraction (SICs 131 and 132))	Mining (except support activities (NAICS 213) and oil and gas extraction (NAICS 211))
Wholesale (merchants and manufacturers' sales branches and government-owned liquor stores)	Wholesale (merchants and manufacturers' sales branches and government-owned liquor stores)	Wholesale (merchants and manufacturers' sales branches and government-owned liquor stores)
Retail catalog and mail order houses	Retail catalog and mail order houses	Retail electronic shopping and mail order houses
Auxiliaries (e.g., warehouses)	Auxiliaries (e.g., warehouses)	Auxiliaries ² (e.g., warehouses)

¹Because of changes in the classification of establishments between SIC and NAICS, establishments classified in the following industries were covered in the 1993 and 1997 surveys, but not in the 2002 survey: NAICS 11331, Logging; NAICS 5111, Newspaper, Periodical, Book, and Database Publishers; and NAICS 51223, Music Publishers. Detailed information about NAICS can be found on the Census Bureau Web site at: <http://www.census.gov/epcd/www/naics.html>.

²Coverage of auxiliaries has been expanded for the 2002 CFS. In comparison, for the 1997 CFS, the number of in-scope managing offices was reduced to a large extent based on the results of the 1992 Economic Census. For the 1997 CFS, a managing office was considered in-scope only if it had sales or end-of-year inventories in the 1992 Census. Research conducted prior to the 2002 CFS showed that not all managing offices with shipping activity in the 1997 CFS indicated sales or inventories in the 1997 Economic Census. Therefore, the 1997 Economic Census results were not used to determine scope for managing offices in the 2002 CFS. For the 2002 survey, the inclusion of an increased number of auxiliaries (intermediary distribution centers) which support the operations of retail stores (most of which are, themselves out-of-scope) has more of an impact on the estimates of value and tonnage and less on ton-miles.

Commodity Classification System

1993	1997	2002
Standard Transportation Commodity Classification (STCC), developed by the Association of American Railroads (AAR)	Standard Classification of Transported Goods (SCTG)	Standard Classification of Transported Goods (SCTG)

Sample Size

1993	1997	2002
Approximately 200,000 establishments selected from a universe of about 790,000 in-scope establishments.	Approximately 100,000 establishments selected from a universe of about 770,000 in-scope establishments.	Approximately 50,000 establishments selected from a universe of about 760,000 in-scope establishments.

Survey Methodology

1993	1997	2002
Respondents reported for a sample of their individual outbound shipments for a 2-week period during each of the four calendar quarters of the reference year.	Respondents reported for a sample of their individual outbound shipments for a 1-week period during each of the four calendar quarters of the reference year.	Respondents reported for a sample of their individual outbound shipments for a 1-week period during each of the four calendar quarters of the reference year.
Respondents reported key characteristics for each sampled shipment	Respondents reported key characteristics for each sampled shipment.	Respondents reported key characteristics for each sampled shipment.

Reported Mode of Transportation

1993	1997	2002
For-hire truck	For-hire truck	For-hire truck
Private truck	Private truck	Private truck
Rail	Rail	Rail
Air	Air	Air
Inland Water	Shallow draft vessel	Shallow draft vessel
Deep Sea Water	Deep draft vessel	Deep draft vessel
Pipeline	Pipeline	Pipeline
Parcel, U.S. Postal Service, or courier	Parcel, U.S. Postal Service, or courier	Parcel, U.S. Postal Service, or courier
Other	Other	Other
Unknown	Unknown	Unknown

Data Items Requested

1993	1997	2002
For each shipment:	For each shipment:	For each shipment:
Total value	Total value	Total value
Total weight	Total weight	Total weight
Commodity that contributes the most to the shipment's weight (STCC)	Commodity that contributes the most to the shipment's weight (SCTG)	Commodity that contributes the most to the shipment's weight (SCTG)
All known modes of transportation	All known modes of transportation	All known modes of transportation
Single origin (assumed to be the mailing address unless the respondent provided a different physical location address)	Single origin (assumed to be the mailing address unless the respondent provided a different physical location address)	Single origin (assumed to be the mailing address unless the respondent provided a different physical location address)
Destination	Destination	Destination
Containerized (Y/N)	Containerized (Y/N)	
Hazardous material (Y/N)	Hazardous material (UN/NA) code	Hazardous material (UN/NA) code
Export (Y/N)	Export (Y/N)	Export (Y/N)
If export: mode of export, foreign city and country of destination; U.S. port, airport, or border crossing of exit.	If export: mode of export, foreign city and country of destination; U.S. port, airport, or border crossing of exit.	If export: mode of export, foreign city and country of destination; U.S. port, airport, or border crossing of exit.

Appendix B.

Reliability of the Estimates

The estimates in this publication may differ from the actual, unknown population values. Statisticians define this difference as the total error of the estimate. When describing the accuracy of survey results, it is convenient to discuss total error as the sum of sampling error and nonsampling error. Sampling error is the average difference between the estimate and the result that would be obtained from a complete enumeration of the sampling frame conducted under the same survey conditions. Nonsampling error encompasses all other factors that contribute to the total error of a sample survey estimate.

The sampling error of the estimates in this publication can be estimated from the selected sample because the sample was selected using probability sampling. Common measures related to sampling error are the sampling variance, the standard error, and the coefficient of variation (CV). The sampling variance is the squared difference, averaged over all possible samples of the same size and design, between the estimator and its average value. The standard error is the square root of the sampling variance. The CV expresses the standard error as a percentage of the estimate to which it refers. This publication presents these measures in Appendix B.

Nonsampling errors are difficult to measure and can be introduced through inadequacies in the questionnaire, nonresponse, inaccurate reporting by respondents, errors in the application of survey procedures, incorrect recording of answers, and errors in data entry and processing. No measures of nonsampling error are presented in this publication, however, every effort is made to minimize their effect on the estimates. Data users should take into account both the measures of sampling error and the potential effects of nonsampling error when using these estimates.

More detailed descriptions of sampling and nonsampling errors for the 2002 CFS are provided in the following sections.

Sampling Error

Because the estimates are based on a sample, exact agreement with results that would be obtained from a complete enumeration of all shipments made in 2002 from all establishments included on the sampling frame using the same enumeration procedures is not expected. However, because probability sampling was used at each stage of selection, it is possible to estimate the sampling variability of the survey estimates. For CFS estimates, sampling variability arises from each of the three stages of sampling. (See Appendix C for a description of the sample design.)

The particular sample used in this survey is one of a large number of samples of the same size that could have been selected using the same design. If all possible samples had been surveyed under the same conditions, an estimate of a population parameter of interest could have been obtained from each sample. These samples give rise to a distribution of estimates for the population parameter. A statistical measure of the variability among these estimates is the standard error, which can be approximated from any one sample. The *standard error* is defined as the square root of the variance. The *coefficient of variation* (or relative standard error) of an estimator is the standard error of the estimator divided by the estimator. Note that measures of sampling variability, such as the standard error and coefficient of variation, are estimated from the sample and are also subject to sampling variability. (Technically, we should refer to the *estimated* standard error or the *estimated* coefficient of variation of an estimator. However, for the sake of brevity, we have omitted this detail.) It is important to note that the standard error only measures sampling variability. It does not measure systematic biases of the sample. The Census Bureau recommends that individuals using estimates contained in this report incorporate this information into their analyses, as sampling error could affect the conclusions drawn from these estimates.

An estimate from a particular sample and the standard error associated with the estimate can be used to construct a confidence interval. A *confidence interval* is a range about a given estimator that has a specified probability of containing the result of a complete enumeration of the sampling frame conducted under the same survey conditions. Associated with each interval is a percentage of confidence, which is interpreted as follows. If, for each possible sample, an estimate of a population parameter and its approximate standard error were obtained, then:

1. For approximately 90 percent of the possible samples, the interval from 1.645 standard errors below to 1.645 standard errors above the estimate would include the result as obtained from a complete enumeration of the sampling frame conducted under the same survey conditions.
2. For approximately 95 percent of the possible samples, the interval from 1.96 standard errors below to 1.96 standard errors above the estimate would include the result as obtained from a complete enumeration of the sampling frame conducted under the same survey conditions.

To illustrate the computation of a confidence interval for an estimate of total value of shipments, assume that an estimate of total value is \$10,750 million and the coefficient of variation for this estimate is 1.8 percent, or 0.018. First obtain the standard error of the estimate by multiplying the value of shipments estimate by its coefficient of variation. For this example, multiply \$10,750 million by 0.018. This yields a standard error of \$193.5 million. The upper and lower bounds of the 90-percent confidence interval are computed as \$10,750 million plus or minus 1.645 times \$193.5 million. Consequently, the 90-percent confidence interval is \$10,432 million to \$11,068 million. If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately 9 out of 10 (90 percent) of these intervals would contain the result obtained from a complete enumeration.

Nonsampling Error

Nonsampling error encompasses all other factors that contribute to the total error of a sample survey estimate and may also occur in censuses. It is often helpful to think of nonsampling error as arising from deficiencies or mistakes in the survey process. In the CFS, nonsampling error can be attributed to many sources: inability to obtain information about all units in the sample; response errors; differences in the interpretation of the questions; mistakes in coding or keying the data obtained; and other errors of collection, response, coverage, and processing. Although no direct measurement of the potential biases due to nonsampling error has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence. The Census Bureau recommends that individuals using estimates in this report incorporate this information into their analyses, as nonsampling error could affect the conclusions drawn from these estimates.

A potential source of bias in the estimates is nonresponse. Nonresponse is defined as the inability to obtain all the intended measurements or responses from all units in the sample. Four levels of nonresponse can occur in the CFS: item, shipment, quarter (reporting week), and establishment. Item nonresponse occurs either when a question is unanswered or the response to the question fails computer or analyst edits. Nonresponse to the shipment value or weight items is corrected by imputation, which is the procedure by which a missing value is replaced by a predicted value obtained from an appropriate model. (See Appendix C for a description of the imputation procedure.) Shipment, quarter, and establishment nonresponse are used to describe the inability to obtain any of the substantive measurements about a sampled shipment, quarter, or establishment, respectively. Shipment and quarter nonresponse are corrected by reweighting. Reweighting allocates characteristics to the nonrespondents in proportion to the characteristics observed for the respondents. The amount of bias introduced by this nonresponse adjustment procedure depends on the extent to which the nonrespondents differ, characteristically, from the respondents. Establishment nonresponse is corrected during the estimation procedure by the industry-level adjustment weight. (See Appendix C for a description of the estimation procedure.) In most cases of establishment nonresponse, none of the four questionnaires have been returned to the Census Bureau, after several attempts to elicit a response. Approximately 63 percent of the establishments provided at least one quarter of data that contributed to tabulation.

Some possible sources of bias that are attributed to respondent-conducted sampling include misunderstanding the definition of a shipment, constructing an incomplete frame of shipments from which to sample, ordering the shipment sampling frame by selected shipment characteristics, and selecting shipment records by a method other than the one specified in the questionnaire's instructions. We often contact respondents who reported shipments having an atypically large value or weight when compared to the rest of their reported shipments. Upon contact, if we are able to collect information on all of a given respondent's large shipments made either for a particular reporting week or for the entire quarter, then we identify these large shipments as certainty shipments. (See Appendix C for a description of how certainty shipments are used in the estimation process.)

DEFINITION OF TERMS

Confidentiality

Title 13 of the United States Code authorizes the Census Bureau to conduct censuses and surveys. Section 9 of the same Title requires that any information collected from the public under the authority of Title 13 be maintained as confidential. Section 214 of Title 13 and Sections 3559 and 3571 of Title 18 of the United States Code provide for the imposition of penalties of up to 5 years in prison and up to \$250,000 in fines for wrongful disclosure of confidential census information. In accordance with Title 13, no estimates are published that would disclose the operations of an individual firm.

The Census Bureau's internal Disclosure Review Board sets the confidentiality rules for all data releases. A checklist approach is used to ensure that all potential risks to the confidentiality of the data are considered and addressed.

Disclosure Limitation

Disclosure is the release of data that have been deemed confidential. It generally reveals information about a specific individual or establishment or permits deduction of sensitive information about a particular individual or establishment. Disclosure limitation is the process used to protect the confidentiality of the survey data provided by an individual or firm. Using disclosure limitation procedures, the Census Bureau modifies or removes the characteristics that put confidential information at risk for disclosure. Although it may appear that a table shows information about a specific individual or business, the Census Bureau has taken steps to disguise or suppress the original data while making sure the results are still useful. The techniques used by the Census Bureau to protect confidentiality in tabulations vary, depending on the type of data.

Unpublished Estimates

Some unpublished estimates can be derived directly from this report by subtracting published estimates from their respective totals. However, the estimates obtained by such subtraction would be subject to poor response, high sampling variability, or other factors that may make them potentially misleading.

Individuals who use estimates in this report to create new estimates should cite the Census Bureau as the source of only the original estimates.

Table B-1a. **Estimated Measures of Reliability for Shipment Characteristics by Mode of Transportation for the United States: 2002**

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

Mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
Total	1.3	—	2.0	—	3.7	—	2.9
Single modes	1.4	.3	2.1	.5	3.1	.7	7.0
Truck	1.4	.4	2.6	1.0	2.8	1.5	3.7
For-hire truck	2.3	.6	3.6	1.0	3.1	1.2	2.6
Private truck	1.6	.5	3.4	.8	3.9	.4	4.2
Rail	6.0	.2	5.7	.7	6.7	1.3	6.7
Water	6.4	—	6.8	.4	7.4	.7	16.5
Shallow draft	8.6	—	7.9	.3	10.3	.7	15.2
Great Lakes	29.1	—	22.3	—	24.5	.1	15.0
Deep draft	15.4	—	18.0	.3	19.2	.4	28.6
Air (includes truck and air)	11.6	.4	11.6	—	15.5	—	4.2
Pipeline	6.4	.1	6.9	.4	S	S	S
Multiple modes	3.3	.4	10.0	.2	16.5	.8	2.2
Parcel, U.S. Postal Service or courier	3.3	.3	4.4	—	4.2	—	2.3
Truck and rail	13.2	.1	12.3	—	7.1	.1	3.1
Truck and water	26.4	—	16.6	—	18.5	.2	9.4
Rail and water	16.6	—	23.0	.2	35.1	.9	21.0
Other multiple modes	31.8	—	30.7	—	25.2	.1	S
Other and unknown modes	3.0	.1	12.6	.4	9.7	.2	13.0

— Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-1b. **Estimated Standard Errors for Shipment Characteristics by Mode of Transportation for the United States: 2002, 1997, and 1993**

[Estimates are shown as percents and are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys]

Mode of transportation	Value (percent)			Tons (percent)			Ton-miles ¹ (percent)		
	2002	1997	1993	2002	1997	1993	2002	1997	1993
Total	—	—	—	—	—	—	—	—	—
Single modes .....	.3	.3	.4	.5	.3	.4	.7	.8	.6
Truck .....	.4	.4	.4	1.0	.6	1.0	1.5	1.1	1.1
For-hire truck .....	.6	.3	.3	1.0	.6	.8	1.2	.8	.8
Private truck .....	.5	.4	.5	.8	.7	.7	.4	.3	.3
Rail .....	.2	.2	.2	.7	.5	.5	1.3	1.5	.8
Water	—	—	—	.4	.2	.4	.7	.5	.9
Shallow draft	—	—	—	.3	.2	.3	.7	.4	.7
Great Lakes	—	—	S	—	—	—	.1	.1	.1
Deep draft	—	—	—	.3	.1	.3	.4	.3	.7
Air (includes truck and air) .....	.4	.2	.1	—	—	—	—	—	—
Pipeline .....	.1	.1	.2	.4	.4	.5	S	S	S
Multiple modes .....	.4	.3	.3	.2	.1	.2	.8	.7	.7
Parcel, U.S. Postal Service or courier .....	.3	.2	.2	—	—	—	—	—	—
Truck and rail .....	.1	—	.2	—	.1	—	.1	.4	.1
Truck and water	—	—	—	—	—	.1	.2	.4	.3
Rail and water	—	—	—	.2	.1	.1	.9	.5	.5
Other multiple modes	—	—	—	—	—	—	.1	.2	S
Other and unknown modes .....	.1	.1	.2	.4	.3	.4	.2	.3	.5

— Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-2a. **Estimated Measures of Reliability for Shipment Characteristics by Total Modal Activity for the United States: 2002**

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

Mode of transportation	Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	
Total	3.7	—	2.8
Truck	2.8	1.5	3.6
Rail	7.6	1.6	6.1
Shallow draft	9.4	.6	13.1
Great Lakes	18.1	.3	16.0
Deep draft	17.3	.4	11.1
Air	15.7	—	4.3
Parcel, U.S. Postal Service or courier	4.2	—	2.3
Pipeline	S	S	S
Other and unknown modes	9.7	.2	13.0

— Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-2b. **Estimated Measures of Reliability for Shipment Characteristics by Total Modal Activity for the United States: 2002 and 1997**

[Estimates are shown as percents and are based on data from the 2002 and 1997 Commodity Flow Surveys]

Mode of transportation	Ton-miles			Average miles per shipment		
	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change
	2002	1997		2002	1997	
Total	3.7	2.3	5.3	2.8	2.6	4.3
Truck	2.8	1.7	4.1	3.6	2.8	4.9
Rail	7.6	5.3	11.3	6.1	2.6	6.6
Shallow draft	9.4	5.5	12.9	13.1	20.9	44.5
Great Lakes	18.1	14.1	29.5	16.0	10.8	17.7
Deep draft	17.3	17.3	26.2	11.1	13.0	19.2
Air	15.7	7.8	17.1	4.3	1.8	6.6
Parcel, U.S. Postal Service or courier	4.2	4.0	6.6	2.3	2.6	3.8
Pipeline	S	S	S	S	S	S
Other and unknown modes	9.7	8.5	7.8	13.0	9.6	17.2

— Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-2c. **Estimated Measures of Reliability for Shipment Characteristics by Total Modal Activity for the United States: 2002 and 1993**

[Estimates are shown as percents and are based on data from the 2002 and 1993 Commodity Flow Surveys]

Mode of transportation	Ton-miles			Average miles per shipment		
	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change
	2002	1993		2002	1993	
Total	3.7	3.4	6.5	2.8	3.9	6.1
Truck	2.8	1.4	4.5	3.6	1.3	4.6
Rail	7.6	5.4	12.6	6.1	5.2	7.7
Shallow draft	9.4	11.1	14.8	13.1	5.1	16.3
Great Lakes	18.1	24.6	43.5	16.0	14.4	15.0
Deep draft	17.3	14.0	19.2	11.1	5.4	11.0
Air	15.7	6.2	25.2	4.3	3.9	8.0
Parcel, U.S. Postal Service or courier	4.2	3.6	8.0	2.3	3.3	4.9
Pipeline	S	S	S	S	S	S
Other and unknown modes	9.7	11.6	7.2	13.0	14.4	11.0

– Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-2d. **Estimated Standard Errors for Shipment Characteristics by Total Modal Activity for the United States: Annualized Growth Rate for 1997 to 2002 and 1993 to 2002**

[Estimates are shown as percents and are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys]

Mode of transportation	Ton-miles		Average miles per shipment	
	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002
Total .....	.9	.5	.8	.5
Truck .....	.7	.3	.9	.4
Rail	1.9	.9	1.3	.9
Shallow draft	2.3	1.6	5.5	1.4
Great Lakes	4.8	2.7	3.8	3.0
Deep draft	5.0	2.7	3.5	1.5
Air	3.5	1.5	1.0	.5
Parcel, U.S. Postal Service or courier	1.2	.5	.7	.4
Pipeline	S	S	S	S
Other and unknown modes	2.3	2.6	3.3	3.0

– Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-2e. **Estimated Standard Errors for Shipment Characteristics by Total Modal Activity for the United States: Percent of Total for 2002, 1997, and 1993**

[Estimates are shown as percents and are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys]

Mode of transportation	Ton-miles		
	2002	1997	1993
Total	—	—	—
Truck	1.5	1.1	.9
Rail	1.6	1.5	.9
Shallow draft .....	.6	.4	1.0
Great Lakes .....	.3	.2	.3
Deep draft .....	.4	.5	.5
Air	—	—	—
Parcel, U.S. Postal Service or courier	—	—	—
Pipeline	S	S	S
Other and unknown modes .....	.2	.3	.5

— Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-3a. **Estimated Measures of Reliability for Shipment Characteristics by Distance Shipped for the United States: 2002**

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

Distance shipped (Based on Great Circle Distance)	Value		Tons		Ton-miles	
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage
Total	1.3	—	2.0	—	3.7	—
Less than 50 miles	1.4	.4	3.2	1.0	3.9	.2
50 to 99 miles	1.8	.2	5.8	.5	5.8	.2
100 to 249 miles	2.0	.3	2.9	.4	2.8	.4
250 to 499 miles	2.3	.2	3.2	.4	3.9	.8
500 to 749 miles	3.4	.3	3.1	.2	3.6	.6
750 to 999 miles	4.0	.2	6.2	.2	6.4	.7
1,000 to 1,499 miles	3.3	.2	11.2	.4	12.0	1.7
1,500 to 1,999 miles	5.8	.2	6.9	—	7.0	.4
2,000 miles or more	6.3	.2	3.9	—	4.3	.2

— Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B–3b. Estimated Measures of Reliability for Shipment Characteristics by Distance Shipped for the United States: 2002 and 1997

[Estimates are shown as percents and are based on data from the 2002 and 1997 Commodity Flow Surveys]

Distance shipped (Based on Great Circle Distance)	Value			Tons			Ton-miles		
	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change
	2002	1997		2002	1997		2002	1997	
Total	1.3	.9	2.0	2.0	1.6	2.8	3.7	2.3	5.3
Less than 50 miles	1.4	1.2	2.2	3.2	2.4	4.2	3.9	2.5	4.6
50 to 99 miles	1.8	2.9	4.3	5.8	2.9	7.8	5.8	3.4	8.0
100 to 249 miles	2.0	2.6	4.1	2.9	2.0	4.0	2.8	2.3	4.2
250 to 499 miles	2.3	1.9	3.7	3.2	2.9	5.2	3.9	3.5	6.5
500 to 749 miles	3.4	1.4	4.8	3.1	3.4	5.3	3.6	3.4	5.5
750 to 999 miles	4.0	2.0	5.6	6.2	5.6	10.1	6.4	5.7	10.3
1,000 to 1,499 miles	3.3	2.7	4.6	11.2	5.3	17.6	12.0	5.1	18.0
1,500 to 1,999 miles	5.8	2.8	7.9	6.9	3.7	10.3	7.0	3.7	10.3
2,000 miles or more	6.3	4.1	9.0	3.9	2.8	5.7	4.3	2.8	5.9

– Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B–3c. Estimated Measures of Reliability for Shipment Characteristics by Distance Shipped for the United States: 2002 and 1993

[Estimates are shown as percents and are based on data from the 2002 and 1993 Commodity Flow Surveys]

Distance shipped (Based on Great Circle Distance)	Value			Tons			Ton-miles		
	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change
	2002	1993		2002	1993		2002	1993	
Total	1.3	.8	2.2	2.0	1.6	3.1	3.7	2.7	6.0
Less than 50 miles	1.4	1.4	2.8	3.2	2.1	4.5	3.9	2.6	5.0
50 to 99 miles	1.8	1.8	3.6	5.8	2.1	6.8	5.8	3.4	7.0
100 to 249 miles	2.0	2.4	4.5	2.9	2.7	5.1	2.8	2.9	5.1
250 to 499 miles	2.3	1.9	4.2	3.2	2.8	5.4	3.9	3.3	6.5
500 to 749 miles	3.4	1.8	5.7	3.1	4.5	6.2	3.6	4.6	6.3
750 to 999 miles	4.0	1.9	6.5	6.2	5.0	12.1	6.4	5.8	12.9
1,000 to 1,499 miles	3.3	2.3	5.8	11.2	6.1	22.3	12.0	7.3	23.7
1,500 to 1,999 miles	5.8	2.2	9.7	6.9	4.7	10.9	7.0	6.1	11.8
2,000 miles or more	6.3	4.4	10.7	3.9	9.1	10.4	4.3	9.0	10.1

– Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-3d. Estimated Standard Errors for Shipment Characteristics by Distance Shipped for the United States: Annualized Growth Rate for 1997 to 2002 and 1993 to 2002

[Estimates are shown as percents and are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys]

Distance shipped (Based on Great Circle Distance)	Value		Tons		Ton-miles	
	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002
Total .....	.3	.1	.5	.3	.9	.4
Less than 50 miles .....	.4	.2	.8	.4	.9	.5
50 to 99 miles .....	.7	.2	1.3	.6	1.4	.7
100 to 249 miles .....	.7	.3	.7	.4	.8	.4
250 to 499 miles .....	.6	.3	.9	.4	1.1	.5
500 to 749 miles .....	.8	.3	.9	.6	1.0	.6
750 to 999 miles .....	.9	.4	1.7	.7	1.8	.8
1,000 to 1,499 miles .....	.9	.4	2.7	1.0	2.8	1.1
1,500 to 1,999 miles	1.3	.5	1.7	.8	1.7	.9
2,000 miles or more	1.6	.7	1.0	1.1	1.1	1.1

– Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-3e. Estimated Standard Errors for Shipment Characteristics by Distance Shipped for the United States: Percent of Total for 2002, 1997, and 1993

[Estimates are shown as percents and are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys]

Distance shipped (Based on Great Circle Distance)	Value			Tons			Ton-miles		
	2002	1997	1993	2002	1997	1993	2002	1997	1993
Total	–	–	–	–	–	–	–	–	–
Less than 50 miles .....	.4	.3	.3	1.0	.7	.6	.2	.2	.1
50 to 99 miles .....	.2	.2	.1	.5	.3	.3	.2	.2	.2
100 to 249 miles .....	.3	.3	.3	.4	.3	.3	.4	.3	.3
250 to 499 miles .....	.2	.2	.2	.4	.2	.2	.8	.5	.5
500 to 749 miles .....	.3	.1	.2	.2	.2	.2	.6	.4	.6
750 to 999 miles .....	.2	.1	.1	.2	.2	.1	.7	.7	.5
1,000 to 1,499 miles .....	.2	.2	.1	.4	.1	.1	1.7	.7	.9
1,500 to 1,999 miles .....	.2	.1	–	–	–	–	.4	.3	.4
2,000 miles or more .....	.2	.2	.2	–	–	–	.2	.2	.5

– Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-4a. Estimated Measures of Reliability for Shipment Characteristics by Shipment Weight for the United States: 2002

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

Shipment weight	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
Total	1.3	—	2.0	—	3.7	—	2.9
Less than 50 lb	2.5	.3	2.7	—	3.5	—	2.8
50 to 99 lb	5.6	.2	4.7	—	6.8	—	5.4
100 to 499 lb	3.0	.3	3.4	—	2.6	—	3.5
500 to 749 lb	3.3	.1	3.3	—	2.8	—	3.3
750 to 999 lb	3.8	—	4.6	—	2.6	—	4.4
1,000 to 9,999 lb	2.6	.3	1.9	.1	3.7	.2	2.8
10,000 to 49,999 lb	1.7	.5	3.3	.8	2.1	.9	2.7
50,000 to 99,999 lb	3.6	.2	3.8	.5	4.6	.3	4.5
100,000 lb or more	6.5	.5	3.4	1.0	6.2	1.3	3.2

— Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-4b. Estimated Measures of Reliability for Shipment Characteristics by Shipment Weight for the United States: 2002 and 1997

[Estimates are shown as percents and are based on data from the 2002 and 1997 Commodity Flow Surveys]

Shipment weight	Value			Tons			Ton-miles			Average miles per shipment		
	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change
	2002	1997		2002	1997		2002	1997		2002	1997	
Total	1.3	.9	2.0	2.0	1.6	2.8	3.7	2.3	5.3	2.9	2.6	4.4
Less than 50 lb	2.5	1.9	3.7	2.7	2.5	3.6	3.5	3.7	5.4	2.8	2.9	4.7
50 to 99 lb	5.6	2.1	7.2	4.7	2.0	5.6	6.8	4.2	9.4	5.4	3.4	7.0
100 to 499 lb	3.0	2.3	4.3	3.4	1.3	4.0	2.6	3.1	4.6	3.5	3.0	4.9
500 to 749 lb	3.3	2.1	4.4	3.3	1.3	3.8	2.8	4.8	6.1	3.3	3.8	5.1
750 to 999 lb	3.8	3.2	6.0	4.6	1.7	5.5	2.6	6.4	7.5	4.4	5.2	6.5
1,000 to 9,999 lb	2.6	2.4	4.2	1.9	1.5	2.7	3.7	3.4	6.0	2.8	3.1	4.5
10,000 to 49,999 lb	1.7	1.7	3.3	3.3	1.9	4.2	2.1	1.9	3.4	2.7	1.6	3.4
50,000 to 99,999 lb	3.6	3.7	5.7	3.8	2.9	5.2	4.6	2.7	5.8	4.5	2.5	5.3
100,000 lb or more	6.5	3.9	8.5	3.4	3.5	5.4	6.2	4.1	9.1	3.2	4.9	6.5

— Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-4c. Estimated Measures of Reliability for Shipment Characteristics by Shipment Weight for the United States: 2002 and 1993

[Estimates are shown as percents and are based on data from the 2002 and 1993 Commodity Flow Surveys]

Shipment weight	Value			Tons			Ton-miles			Average miles per shipment—coefficient of variation
	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change	
	2002	1993		2002	1993		2002	1993		
Total	1.3	.8	2.2	2.0	1.6	3.1	3.7	2.7	6.0	2.9
Less than 50 lb	2.5	1.3	4.7	2.7	2.9	3.4	3.5	4.5	6.6	2.8
50 to 99 lb	5.6	2.0	9.4	4.7	2.5	6.1	6.8	2.7	10.5	5.4
100 to 499 lb	3.0	2.5	5.3	3.4	2.3	4.7	2.6	2.4	4.7	3.5
500 to 749 lb	3.3	3.3	6.4	3.3	1.6	4.3	2.8	3.9	6.0	3.3
750 to 999 lb	3.8	4.7	7.9	4.6	1.7	5.9	2.6	2.4	4.7	4.4
1,000 to 9,999 lb	2.6	2.5	4.7	1.9	1.6	2.9	3.7	2.6	6.1	2.8
10,000 to 49,999 lb	1.7	1.4	3.3	3.3	1.7	5.0	2.1	1.2	3.5	2.7
50,000 to 99,999 lb	3.6	3.8	7.3	3.8	3.5	5.4	4.6	2.3	6.0	4.5
100,000 lb or more	6.5	6.1	11.9	3.4	3.4	5.6	6.2	4.6	9.6	3.2

– Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-4d. Estimated Standard Errors for Shipment Characteristics by Shipment Weight for the United States: Annualized Growth Rate for 1997 to 2002 and 1993 to 2002

[Estimates are shown as percents and are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys]

Shipment weight	Value		Tons		Ton-miles		Average miles per shipment	
	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002
Total .....	.3	.1	.5	.3	.9	.4	.8	.4
Less than 50 lb .....	.6	.2	.7	.5	1.0	.6	.8	.4
50 to 99 lb	1.2	.5	1.0	.6	1.7	.7	1.3	.6
100 to 499 lb .....	.8	.4	.7	.4	.8	.3	.9	.4
500 to 749 lb .....	.8	.4	.7	.4	1.1	.5	1.0	.4
750 to 999 lb	1.0	.6	1.0	.5	1.4	.3	1.4	.5
1,000 to 9,999 lb .....	.7	.3	.5	.3	1.0	.4	.9	.4
10,000 to 49,999 lb .....	.5	.2	.8	.3	.6	.2	.6	.3
50,000 to 99,999 lb	1.1	.5	1.0	.6	1.1	.5	1.0	.5
100,000 lb or more	1.6	.8	1.0	.5	1.5	.7	1.2	.5

– Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-4e. **Estimated Standard Errors for Shipment Characteristics by Shipment Weight for the United States: Percent of Total for 2002, 1997, and 1993**

[Estimates are shown as percents and are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys]

Shipment weight	Value			Tons			Ton-miles		
	2002	1997	1993	2002	1997	1993	2002	1997	1993
Total	—	—	—	—	—	—	—	—	—
Less than 50 lb .....	.3	.2	.1	—	—	—	—	—	—
50 to 99 lb .....	.2	—	—	—	—	—	—	—	—
100 to 499 lb .....	.3	.2	.2	—	—	—	—	—	—
500 to 749 lb .....	.1	—	.1	—	—	—	—	—	—
750 to 999 lb	—	—	.1	—	—	—	—	—	—
1,000 to 9,999 lb .....	.3	.4	.5	.1	—	.1	.2	.2	.2
10,000 to 49,999 lb .....	.5	.5	.6	.8	.7	.6	.9	.8	.7
50,000 to 99,999 lb .....	.2	.2	.2	.5	.5	.6	.3	.3	.2
100,000 lb or more .....	.5	.3	.4	1.0	.9	.9	1.3	1.1	1.0

— Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-5a. **Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity for the United States: 2002**

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code	Commodity description	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
		Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
	Total	1.3	—	2.0	—	3.7	—	2.9
01	Live animals and live fish	21.1	—	24.5	—	26.0	—	18.3
02	Cereal grains	7.1	—	7.5	.4	18.1	1.3	10.9
03	Other agricultural products	10.4	.2	7.8	.2	7.4	.3	12.2
04	Animal feed and products of animal origin, n.e.c.	9.6	—	14.1	.3	10.0	.2	24.8
05	Meat, fish, seafood, and their preparations	4.2	.1	4.6	—	6.5	.1	15.2
06	Milled grain products and preparations, and bakery products	8.2	.1	7.2	—	6.8	.1	19.1
07	Other prepared foodstuffs and fats and oils	4.4	.2	5.2	.2	6.3	.4	17.7
08	Alcoholic beverages	6.1	—	5.8	—	12.8	.1	4.7
09	Tobacco products	14.4	.1	29.9	—	36.3	—	22.1
10	Monumental or building stone	29.1	—	29.9	—	22.1	—	16.9
11	Natural sands	6.8	—	9.1	.4	11.8	.1	10.5
12	Gravel and crushed stone	6.7	—	9.0	1.2	10.5	.3	7.6
13	Nonmetallic minerals n.e.c.	11.5	—	11.9	.2	18.7	.3	15.9
14	Metallic ores and concentrates	14.0	—	12.4	.1	18.1	.3	7.9
15	Coal	8.0	—	8.8	.8	16.8	2.4	8.4
17	Gasoline and aviation turbine fuel	4.4	.2	5.0	.5	9.8	.4	10.1
18	Fuel oils	6.0	—	6.0	.3	10.1	.2	13.5
19	Coal and petroleum products, n.e.c.	7.5	—	10.2	.4	11.1	.3	24.7
20	Basic chemicals	7.7	.1	12.6	.4	10.8	.4	15.3
21	Pharmaceutical products	9.5	.5	16.7	—	21.0	—	5.7
22	Fertilizers	16.9	—	30.2	.7	24.7	.7	28.4
23	Chemical products and preparations, n.e.c.	5.0	.1	5.1	—	7.9	.1	7.2
24	Plastics and rubber	3.6	.1	4.0	—	5.2	.2	6.1
25	Logs and other wood in the rough	24.2	—	S	S	34.4	—	S
26	Wood products	8.4	.2	9.2	.2	11.7	.5	10.5
27	Pulp, newsprint, paper, and paperboard	5.2	—	6.2	—	7.4	.2	10.4
28	Paper or paperboard articles	4.0	—	5.2	—	8.5	—	9.5
29	Printed products	7.6	.1	8.1	—	8.5	—	3.9
30	Textiles, leather, and articles of textiles or leather	5.4	.3	7.5	—	10.5	.1	2.4
31	Nonmetallic mineral products	7.0	.1	9.0	.7	11.9	.5	9.5
32	Base metal in primary or semifinished forms and in finished basic shapes	5.0	.2	6.3	.2	6.0	.3	10.2
33	Articles of base metal	3.9	.1	9.5	—	7.0	.1	5.6
34	Machinery	5.7	.3	7.7	—	9.0	.1	6.6
35	Electronic and other electrical equipment and components and office equipment	5.6	.5	9.7	—	11.9	.1	4.9
36	Motorized and other vehicles (including parts)	8.3	.6	7.6	—	10.1	.2	12.3
37	Transportation equipment, n.e.c.	23.3	.4	40.9	—	41.7	.2	5.0
38	Precision instruments and apparatus	7.9	.2	18.3	—	12.6	—	8.0
39	Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	6.2	.1	11.8	—	6.4	—	6.2
40	Miscellaneous manufactured products	5.4	.2	10.5	—	7.7	—	4.3
41	Waste and scrap	14.4	—	16.8	.3	25.8	.4	10.5
43	Mixed freight	3.6	.4	5.6	.1	5.0	.1	7.9
--	Commodity unknown	9.9	—	22.3	—	41.7	.1	8.8

— Represents data cell equal to zero or less than 1 unit of measure.

S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-5b. Estimated Standard Errors for Shipment Characteristics by Two-Digit Commodity for the United States: Percent of Total for 2002 and 1997

[Estimates are shown as percents and are based on data from the 2002 and 1997 Commodity Flow Surveys]

SCTG code	Commodity description	Value		Tons		Ton-miles	
		2002	1997	2002	1997	2002	1997
	Total	-	-	-	-	-	-
01	Live animals and live fish	-	-	-	-	-	-
02	Cereal grains	-	-	.4	.2	1.3	.6
03	Other agricultural products .....	.2	-	.2	-	.3	.2
04	Animal feed and products of animal origin, n.e.c.	-	-	.3	-	.2	-
05	Meat, fish, seafood, and their preparations .....	.1	.1	-	-	.1	-
06	Milled grain products and preparations, and bakery products .....	.1	-	-	-	.1	.1
07	Other prepared foodstuffs and fats and oils .....	.2	.1	.2	.1	.4	.2
08	Alcoholic beverages	-	-	-	-	.1	.1
09	Tobacco products .....	.1	-	-	-	-	-
10	Monumental or building stone	-	-	-	-	-	-
11	Natural sands	-	-	.4	.4	.1	-
12	Gravel and crushed stone	-	-	1.2	.6	.3	.2
13	Nonmetallic minerals n.e.c.	-	-	.2	.3	.3	.3
14	Metallic ores and concentrates	-	-	.1	.1	.3	.4
15	Coal	-	-	.8	.5	2.4	1.6
17	Gasoline and aviation turbine fuel .....	.2	.2	.5	.4	.4	.6
18	Fuel oils	-	-	.3	.3	.2	.2
19	Coal and petroleum products, n.e.c.	-	-	.4	.3	.3	.4
20	Basic chemicals .....	.1	.3	.4	.2	.4	.7
21	Pharmaceutical products .....	.5	.2	-	-	-	-
22	Fertilizers	-	-	.7	.1	.7	.1
23	Chemical products and preparations, n.e.c. ....	.1	.1	-	-	.1	.1
24	Plastics and rubber .....	.1	.1	-	-	.2	.2
25	Logs and other wood in the rough	-	-	S	-	-	.1
26	Wood products .....	.2	-	.2	.2	.5	.3
27	Pulp, newsprint, paper, and paperboard	-	-	-	-	.2	.1
28	Paper or paperboard articles	-	-	-	-	-	-
29	Printed products .....	.1	.6	-	-	-	.1
30	Textiles, leather, and articles of textiles or leather .....	.3	.4	-	-	.1	-
31	Nonmetallic mineral products .....	.1	-	.7	.8	.5	.2
32	Base metal in primary or semifinished forms and in finished basic shapes .....	.2	.1	.2	.2	.3	.2
33	Articles of base metal .....	.1	.1	-	-	.1	.2
34	Machinery .....	.3	.1	-	-	.1	-
35	Electronic and other electrical equipment and components and office equipment .....	.5	.4	-	-	.1	-
36	Motorized and other vehicles (including parts) .....	.6	.3	-	-	.2	-
37	Transportation equipment, n.e.c. ....	.4	.3	-	-	.2	-
38	Precision instruments and apparatus .....	.2	.1	-	-	-	-
39	Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs .....	.1	-	-	-	-	-
40	Miscellaneous manufactured products .....	.2	.4	-	.2	-	.1
41	Waste and scrap	-	-	.3	.1	.4	.1
43	Mixed freight .....	.4	.3	.1	.1	.1	.1
--	Commodity unknown	-	-	-	-	.1	-

- Represents data cell equal to zero or less than 1 unit of measure.

S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-6. Estimated Measures of Reliability for Shipment Characteristics by Three-Digit Commodity for the United States: 2002

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code	Commodity description	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
		Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
	Total	1.3	—	2.0	—	3.7	—	2.9
010	Live animals and live fish	21.1	—	24.5	—	26.0	—	18.3
021	Wheat	11.4	—	10.9	.1	12.2	.2	17.3
022	Corn, except sweet	9.7	—	10.0	.3	23.4	1.2	17.5
029	Other cereal grains	17.4	—	17.6	.1	24.6	.2	15.6
031	Fresh or chilled potatoes (Irish potatoes), except sweet	19.5	—	21.9	—	34.7	—	32.7
032	Fresh or chilled edible vegetables, except potatoes (Irish potatoes), and dried vegetables	13.2	—	14.5	—	19.8	.1	36.4
033	Fresh, chilled, or dried edible fruit and nuts	30.9	.1	35.6	—	25.7	.2	15.9
034	Soya beans	8.9	—	8.6	.1	14.6	.3	18.9
035	Oil seeds and nuts, except olives and soya beans	35.5	—	31.1	—	46.1	—	21.9
036	Bulbs, live plants, and seeds for sowing, n.e.c.	17.5	—	29.3	—	39.3	—	13.2
039	Fresh-cut flowers, plants, and parts of plants, and other agricultural products, except forage products and cereal straw or husks	15.7	—	27.5	—	25.9	—	S
041	Cereal straw or husks, forage products, residues and waste from the food industries used in animal feeding, and eggs and other products of animal origin, n.e.c.	12.2	—	18.0	.1	16.4	.1	S
042	Animal feed preparations	12.3	—	19.1	.2	12.9	.1	21.4
051	Meat including poultry, except preparations	4.5	.1	4.6	—	6.6	—	13.1
052	Fish, except live, and seafood, except preparations	13.2	—	10.8	—	18.8	—	32.8
053	Preparations, extracts, and juices of meat, fish, or seafood	21.9	—	37.4	—	S	S	30.3
061	Wheat flour, groats, and meal	19.2	—	22.4	—	21.5	—	17.1
062	Malt, starches, inulin, wheat gluten, and milled or otherwise worked grains, except wheat flour, groats, and meal	16.8	—	17.9	—	18.5	.1	14.2
063	Food preparations of cereals, flour, starch, or milk	15.0	—	19.0	—	17.1	.1	10.0
064	Bakery products	9.2	—	16.3	—	12.0	—	32.5
071	Dairy products, except chocolate milk, eggnog, and food preparations of milk	10.1	.1	14.7	.1	7.9	—	29.2
072	Processed or prepared vegetables, fruit, or nuts, except dried or milled, and juices	9.7	—	11.6	—	15.8	.2	21.6
073	Coffee, tea, and spices, except unprocessed coffee and unfermented tea	21.5	—	26.0	—	33.7	—	17.9
074	Animal or vegetable fats and oils and their cleavage products, prepared edible fats, animal or vegetable waxes, and flours and meals	10.9	—	11.3	—	10.1	—	11.2
075	Cane, beet, and other sugars in solid form, sugar syrups not containing added flavoring or coloring matter, and molasses	11.6	—	17.4	—	23.0	.2	10.5
076	Confectionery, cocoa, and cocoa preparations	8.5	—	9.8	—	9.9	—	14.6
077	Edible preparations, n.e.c. and vinegar	9.3	—	10.6	—	15.5	.1	11.8
078	Nonalcoholic beverages, n.e.c. and ice	8.8	—	10.7	.1	16.8	.1	38.5
081	Malt Beer	5.7	—	5.9	—	18.6	—	10.3
082	Wine and other fermented beverages	8.8	—	12.5	—	17.0	—	15.2
083	Spirituos beverages and ethyl alcohol	9.5	—	13.4	—	20.6	—	11.2
090	Tobacco products	14.4	.1	29.9	—	36.3	—	22.1
100	Monumental or building stone, except dolomite	29.1	—	29.9	—	22.1	—	16.9
110	Natural sands, except metal-bearing	6.8	—	9.1	.4	11.8	.1	10.5
120	Gravel and crushed stone, except dolomite and slate	6.7	—	9.0	1.2	10.5	.3	7.6
131	Salt	35.6	—	28.1	—	32.9	.1	14.5
132	Natural calcium phosphates, natural aluminum-calcium phosphates, and phosphatic chalk	19.8	—	32.5	—	27.2	—	33.8
133	Dolomite	24.9	—	27.1	.2	45.5	.3	39.5
139	Other nonmetallic minerals	13.3	—	11.6	—	15.1	.1	15.6
141	Iron ores and concentrates	15.4	—	14.9	.1	20.2	.4	13.2
149	Other metallic ores and concentrates	17.4	—	35.8	—	32.0	—	16.5
151	Nonagglomerated bituminous coal	8.2	—	9.1	.8	16.9	2.4	8.5
159	Other coal	14.3	—	16.0	.1	35.5	—	S
171	Gasoline	4.8	.2	5.5	—	10.7	.4	10.3
172	Aviation turbine fuel (types A and B)	16.1	—	17.2	.1	22.3	—	18.0
180	Fuel oils	6.0	—	6.0	.3	10.1	.2	13.5
191	Lubricating oils and greases	13.8	—	16.6	—	25.0	—	25.8
192	Refined petroleum oils and oils obtained from bituminous minerals, n.e.c.	14.6	—	16.7	.1	22.7	—	30.1
193	Gaseous hydrocarbons	14.6	—	14.9	.1	19.3	.1	39.9
199	Other products of petroleum refining, and coal products	11.8	—	15.4	.4	17.3	.3	23.2
201	Sodium hydroxide (caustic soda) and potassium hydroxide (caustic potash)	10.8	—	13.7	—	15.2	—	18.8
202	Inorganic chemicals, n.e.c.	8.3	—	16.3	.2	16.7	.2	20.2
203	Cyclic hydrocarbons	24.7	—	28.7	—	18.8	—	19.4
204	Phenols, phenol-alcohols, aldehydes, cyclic polymers of aldehydes, paraformaldehyde, ketones, quinones, organic acids, and acyclic alcohols	14.6	—	42.5	.1	13.8	—	16.9
205	Organic chemicals, n.e.c.	13.7	.1	17.4	.2	20.7	.3	14.6
210	Pharmaceutical products	9.5	.5	16.7	—	21.0	—	5.7
220	Fertilizers and fertilizer materials	16.9	—	30.2	.7	24.7	.7	28.4
231	Paints and varnishes, tanning or dyeing extracts, tannins and their derivatives, dyes, putty and other mastics, inks, and coloring matter, except pigments and synthetic organic dyes, lakes, and toners	14.8	—	16.2	—	28.3	.1	11.2
232	Essential oils and resinoids, and perfumery, cosmetic, or toilet preparations	10.7	—	13.7	—	17.3	—	8.0
233	Soap, organic surface-active agents, cleaning preparations, polishes and creams, and scouring preparations	11.0	—	12.7	—	13.8	—	9.2
234	Photographic film, plates, paper, paperboard, or textiles, and chemical preparations for photographic use	17.5	—	17.7	—	22.5	—	26.5
235	Insecticides, rodenticides, fungicides, herbicides, antisprouting products, plant-growth regulators, disinfectants, and similar products, in packages for retail sale or as preparations or articles	15.9	—	23.9	—	24.3	—	13.1
239	Other chemical products and preparations	13.3	—	14.0	—	15.5	.1	7.9
241	Plastics in primary forms, rubber in primary forms or sheets, and unvulcanized compounded rubber	9.6	—	7.6	—	8.5	.1	10.1
242	Manmade fibers and plastics basic shapes and articles	3.6	—	4.7	—	5.7	—	6.9

See footnotes at end of table.

Table B-6. Estimated Measures of Reliability for Shipment Characteristics by Three-Digit Commodity for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code	Commodity description	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
		Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
	Total—Con.							
243	Rubber articles	12.9	.1	14.9	—	26.4	.1	9.2
250	Logs and other wood in the rough	24.2	—	S	S	34.4	—	S
261	Wood chips or particles	25.6	—	25.3	.2	33.0	—	13.7
262	Lumber, wood continuously shaped along any of its edges or faces, and shingles and shakes	7.9	—	8.6	.1	10.4	.2	15.1
263	Veneer sheets and sheets for plywood, particle board, fiberboard, plywood, veneered panels, and similar boards of ligneous material or laminated wood	6.6	—	8.6	—	20.5	.3	14.4
264	Builders' joinery and carpentry of wood, except shingles and shakes	19.9	.1	15.4	—	24.0	—	13.9
269	Other wood products	10.2	—	18.6	—	42.6	—	16.3
271	Pulp of fibrous cellulosic materials	24.2	—	27.2	—	36.3	.1	22.6
272	Newsprint in large rolls or sheets	8.7	—	8.5	—	9.8	—	10.0
273	Uncoated paper and paperboard in large rolls or sheets	5.9	—	6.7	—	5.4	—	14.9
274	Coated, impregnated, treated, or worked paper and paperboard, in large rolls or sheets	9.8	—	12.3	—	15.2	.1	10.2
280	Paper or paperboard articles	4.0	—	5.2	—	8.5	—	9.5
291	Printed books, brochures, leaflets, and similar printed products	15.7	.1	12.1	—	13.5	—	4.7
292	Newspapers, journals, and periodicals	14.5	—	13.1	—	14.9	—	13.5
293	Advertising material, commercial or trade catalogues, and similar printed products	7.5	—	15.6	—	13.4	—	7.4
299	Other printed products	8.3	—	18.8	—	14.4	—	5.4
301	Textile fibers, yarns, and broadwoven or knitted fabrics, except coated or treated	8.8	—	14.0	—	11.3	—	5.2
302	Textile clothing and accessories, and headgear, except safety	9.0	.3	11.3	—	30.3	.1	3.4
303	Textiles and textile articles, n.e.c.	9.1	.1	10.9	—	11.3	—	4.1
304	Footwear	27.6	.1	19.0	—	18.1	—	4.5
305	Leather and articles, luggage of related materials, and dressed furskins and articles	22.1	—	S	S	S	S	5.8
311	Hydraulic cements	11.2	—	11.9	.1	18.8	—	7.6
312	Ceramic products	21.1	—	29.9	.1	38.1	.3	9.3
313	Glass and glass products	13.0	—	37.9	.2	19.2	.1	17.0
319	Other nonmetallic mineral products	10.0	—	11.6	.7	17.2	.4	12.3
321	Iron and steel in primary forms, in semifinished forms, or in powders or granules, and ferroalloys	10.6	—	16.7	—	13.5	—	14.8
322	Flat-rolled products of iron or steel	7.3	—	8.0	.1	8.4	.2	8.5
323	Bars, rods, angles, shapes, sections, and wire, of iron or steel	10.0	—	9.5	—	14.1	.1	8.0
324	Nonferrous metal, except precious, in unwrought forms, in finished basic shapes, or in powders or granules	7.4	—	22.3	.1	17.6	.2	8.6
331	Pipes, tubes, and fittings	6.5	—	19.9	—	10.0	—	13.1
332	Structures and parts, except prefabricated buildings	8.7	—	10.5	—	14.6	—	7.7
333	Handtools, cutlery, except of precious metals, interchangeable tools for hand- or machine-tools, hardware, and industrial fasteners	5.8	—	11.3	—	15.4	—	8.1
339	Other articles of metal	11.4	—	24.8	—	21.5	—	8.6
341	Internal-combustion piston engines	12.3	.1	13.5	—	10.4	—	16.7
342	Turbines, boilers, nuclear reactors, and nonelectric engines and motors, except internal-combustion piston engines	14.9	—	18.1	—	18.6	—	8.5
343	Pumps, compressors, and fans, and ventilating or recycling hoods incorporating a fan	13.0	—	15.7	—	20.9	—	8.4
344	Air-conditioning, refrigerating, or freezing equipment	10.3	—	14.7	—	17.0	—	16.4
345	Materials-handling, excavating, boring, and related machinery and equipment	7.9	—	9.7	—	10.9	—	8.8
349	Other machinery	9.4	.2	15.8	—	17.0	—	8.4
351	Electric motors, generators, generating sets, rotary converters, transformers, static converters, and inductors	9.4	—	18.8	—	19.0	—	13.3
352	Electric cooking appliances and other electrothermic or electromechanical domestic appliances	22.5	—	39.6	—	42.1	—	7.9
353	Line telephone or telegraph apparatus	27.4	.2	22.9	—	33.4	—	7.5
354	Electronic entertainment products, except parts	17.6	.1	17.4	—	14.8	—	8.0
355	Computer and office equipment	10.9	.2	11.8	—	13.0	—	5.8
356	Prepared unrecorded or prerecorded media	17.7	.1	13.0	—	13.5	—	3.7
357	Transmission apparatus for radio or television broadcasting, radio transmission and reception apparatus, radar apparatus, radio navigational-aid apparatus, and radio remote-control apparatus, except radio broadcast receivers and parts	15.0	—	23.6	—	26.5	—	7.6
358	Electronic components and parts	11.1	.2	41.7	—	27.0	—	5.3
359	Other electronic and electrical equipment	11.9	.4	16.0	—	22.6	—	10.7
361	Motor vehicles for the transport of less than 10 people, except motorcycles, armored fighting vehicles, snowmobiles, golf carts and similar vehicles, and parts	11.1	.3	10.3	—	16.2	—	15.4
362	Motor vehicles for the transport of goods and road tractors for semitrailers, except parts	10.3	—	14.8	—	22.1	—	49.9
363	Other vehicles	10.0	.1	12.3	—	12.7	—	14.4
364	Parts and accessories for motor vehicles, except motorcycles and armored fighting vehicles	12.1	.5	10.8	—	14.4	.1	8.3
371	Locomotives and rolling stock, railway track fixtures and fittings, mechanical or electromechanical traffic-signalling equipment, and intermodal containers	27.9	—	44.0	—	46.1	.2	7.8
372	Aircraft and spacecraft	26.7	.4	14.3	—	28.0	—	4.4
373	Ships, boats, and floating structures	17.7	—	17.7	—	18.4	—	14.2
381	Optical elements, instruments, and apparatus, except photographic and photocopying equipment and optical instruments and apparatus for measuring or checking	19.0	—	28.4	—	26.4	—	11.6
382	Photographic and photocopying machines	20.9	—	24.3	—	30.0	—	8.5
383	Surveying, hydrographic, oceanographic, hydrological, geophysical, drawing, or length-measuring instruments and appliances, and navigational and meteorological instruments and appliances, except radar and other radio-type apparatus	26.4	—	44.2	—	42.0	—	11.1
384	Instruments, apparatus, and appliances for medical, surgical, dental, or veterinary sciences, or for similar purposes	15.1	.2	20.7	—	20.7	—	8.6

See footnotes at end of table.

Table B-6. **Estimated Measures of Reliability for Shipment Characteristics by Three-Digit Commodity for the United States: 2002—Con.**

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code	Commodity description	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
		Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
	Total—Con.							
385	Meters and other instruments and apparatus for measuring, checking, testing, or controlling	9.4	—	18.6	—	22.3	—	7.1
390	Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	6.2	.1	11.8	—	6.4	—	6.2
401	Arms and ammunition	25.4	—	33.5	—	29.0	—	4.5
402	Toys, games, and sporting equipment	17.0	.1	19.8	—	28.3	—	5.3
409	Miscellaneous manufactured products	5.2	.2	10.5	—	6.1	—	4.3
411	Metallic waste and scrap	15.0	—	19.4	.3	31.7	.4	10.9
412	Nonmetallic waste and scrap, except from food processing	23.9	—	20.9	—	27.9	—	17.7
439	Mixed freight	3.6	.4	5.6	.1	5.0	.1	7.9
—	Commodity unknown	9.9	—	22.3	—	41.7	.1	8.8

— Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-7. Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
ALL COMMODITIES							
Total	1.3	—	2.0	—	3.7	—	2.9
Single modes	1.4	.3	2.1	.5	3.1	.7	7.0
Truck	1.4	.4	2.6	1.0	2.8	1.5	3.7
For-hire truck	2.3	.6	3.6	1.0	3.1	1.2	2.6
Private truck	1.6	.5	3.4	.8	3.9	.4	4.2
Rail	6.0	.2	5.7	.7	6.7	1.3	6.7
Water	6.4	—	6.8	.4	7.4	.7	16.5
Shallow draft	8.6	—	7.9	.3	10.3	.7	15.2
Great Lakes	29.1	—	22.3	—	24.5	.1	15.0
Deep draft	15.4	—	18.0	.3	19.2	.4	28.6
Air (includes truck and air)	11.6	.4	11.6	—	15.5	—	4.2
Pipeline	6.4	.1	6.9	.4	S	S	S
Multiple modes	3.3	.4	10.0	.2	16.5	.8	2.2
Parcel, U.S. Postal Service or courier	3.3	.3	4.4	—	4.2	—	2.3
Truck and rail	13.2	.1	12.3	—	7.1	.1	3.1
Truck and water	26.4	—	16.6	—	18.5	.2	9.4
Rail and water	16.6	—	23.0	.2	35.1	.9	21.0
Other multiple modes	31.8	—	30.7	—	25.2	.1	S
Other and unknown modes	3.0	.1	12.6	.4	9.7	.2	13.0
SCTG 01, LIVE ANIMALS AND LIVE FISH							
Total	21.1	—	24.5	—	26.0	—	18.3
Single modes	21.7	2.8	24.7	2.2	24.5	1.9	47.7
Truck	21.8	2.8	24.7	2.1	24.6	2.0	38.8
For-hire truck	25.7	7.6	29.1	9.2	33.2	9.0	12.9
Private truck	32.8	8.3	37.1	9.5	42.4	9.3	43.8
Rail	—	—	—	—	—	—	—
Water	S	S	S	S	S	S	22.4
Shallow draft	—	—	—	—	—	—	—
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	22.4
Air (includes truck and air)	46.2	.6	46.5	.2	46.8	1.2	20.2
Pipeline	—	—	—	—	S	S	S
Multiple modes	S	S	S	S	S	S	22.4
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	22.4
Truck and rail	—	—	—	—	—	—	—
Truck and water	—	—	—	—	—	—	—
Rail and water	—	—	—	—	—	—	—
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	S	S	S	S	S	S	22.4
SCTG 02, CEREAL GRAINS							
Total	7.1	—	7.5	—	18.1	—	10.9
Single modes	7.5	1.2	7.9	1.3	19.0	1.8	10.8
Truck	12.0	3.1	13.1	3.2	16.2	1.5	11.7
For-hire truck	11.9	2.6	14.0	3.0	20.2	1.2	12.5
Private truck	27.7	2.4	29.5	2.6	38.6	1.1	14.2
Rail	15.7	3.3	18.3	3.8	31.1	5.0	10.9
Water	11.8	3.2	11.6	3.4	15.7	4.4	4.3
Shallow draft	15.9	2.2	13.8	2.1	16.5	4.4	3.5
Great Lakes	S	S	S	S	S	S	21.8
Deep draft	25.9	3.2	26.3	3.5	27.0	.5	26.1
Air (includes truck and air)	S	S	S	S	S	S	23.0
Pipeline	—	—	—	—	S	S	S
Multiple modes	24.1	.8	23.3	.8	28.7	1.8	36.5
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	23.4
Truck and rail	S	S	S	S	S	S	45.5
Truck and water	45.4	.3	45.7	.4	45.5	1.6	20.3
Rail and water	S	S	S	S	S	S	19.9
Other multiple modes	S	S	S	S	S	S	22.4
Other and unknown modes	S	S	S	S	49.4	.3	S

See footnotes at end of table.

Table B-7. Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
SCTG 03, OTHER AGRICULTURAL PRODUCTS							
Total	10.4	—	7.8	—	7.4	—	12.2
Single modes	10.9	.9	7.8	.6	7.2	1.3	29.5
Truck	13.4	2.8	14.6	4.5	11.2	4.6	30.3
For-hire truck	12.1	3.3	14.0	3.6	10.5	3.8	10.2
Private truck	20.5	3.4	20.4	3.3	23.9	1.6	25.3
Rail	24.1	1.3	24.0	3.2	26.4	4.3	19.4
Water	21.1	2.5	20.8	4.3	21.2	4.5	19.2
Shallow draft	15.8	.8	17.1	2.0	22.1	4.4	5.3
Great Lakes	—	—	—	—	—	—	—
Deep draft	41.3	2.4	41.2	4.1	43.3	.5	20.0
Air (includes truck and air)	S	S	43.7	—	47.0	—	10.8
Pipeline	S	S	S	S	S	S	S
Multiple modes	20.8	.8	31.8	.6	28.9	1.3	8.5
Parcel, U.S. Postal Service or courier	30.1	.5	37.9	—	48.7	.1	10.9
Truck and rail	27.5	.5	43.4	.4	24.2	.6	7.4
Truck and water	44.4	.1	S	S	S	S	28.9
Rail and water	S	S	S	S	S	S	21.2
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	20.3	.4	24.7	.3	23.0	—	S
SCTG 04, ANIMAL FEED AND PRODUCTS OF ANIMAL ORIGIN, N.E.C.							
Total	9.6	—	14.1	—	10.0	—	24.8
Single modes	9.8	1.9	14.5	1.2	7.8	4.0	17.5
Truck	10.2	2.3	15.5	2.5	10.5	4.7	17.1
For-hire truck	13.2	4.1	19.2	3.6	12.6	4.2	11.4
Private truck	16.1	3.9	22.9	3.7	14.4	2.3	14.5
Rail	14.6	1.2	18.5	1.9	16.8	3.6	5.1
Water	41.3	.3	36.1	.4	43.2	1.2	37.4
Shallow draft	39.6	.1	39.1	.3	43.5	1.2	17.2
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	22.4
Air (includes truck and air)	S	S	S	S	S	S	20.6
Pipeline	S	S	S	S	S	S	S
Multiple modes	S	S	44.5	1.1	S	S	13.4
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	12.5
Truck and rail	38.6	.1	S	S	S	S	19.5
Truck and water	S	S	S	S	S	S	18.1
Rail and water	S	S	S	S	S	S	22.9
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	27.8	.4	25.7	.4	44.9	.4	46.4
SCTG 05, MEAT, FISH, SEAFOOD, AND THEIR PREPARATIONS							
Total	4.2	—	4.6	—	6.5	—	15.2
Single modes	4.0	.4	4.5	.6	6.6	.2	16.6
Truck	4.0	.5	4.5	.7	6.6	.7	16.2
For-hire truck	4.8	2.6	5.9	2.6	6.9	1.7	5.0
Private truck	8.7	2.5	8.5	2.4	14.0	1.7	12.2
Rail	36.5	—	34.6	.2	31.1	.4	21.8
Water	30.9	—	S	S	S	S	18.2
Shallow draft	S	S	S	S	S	S	20.0
Great Lakes	—	—	—	—	—	—	—
Deep draft	40.8	—	S	S	S	S	18.7
Air (includes truck and air)	30.4	—	30.7	—	34.1	.1	5.9
Pipeline	—	—	—	—	S	S	S
Multiple modes	15.5	—	22.9	—	18.9	.1	12.2
Parcel, U.S. Postal Service or courier	35.4	—	36.2	—	44.5	—	10.5
Truck and rail	48.6	—	S	S	S	S	21.1
Truck and water	28.2	—	35.6	—	25.9	.1	16.0
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	22.2
Other and unknown modes	38.6	.4	39.3	.6	30.6	.2	S

See footnotes at end of table.

Table B-7. Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
SCTG 06, MILLED GRAIN PRODUCTS AND PREPARATIONS, AND BAKERY PRODUCTS							
Total	8.2	—	7.2	—	6.8	—	19.1
Single modes	8.2	.4	7.3	.5	6.2	1.4	15.7
Truck	8.3	.6	9.2	2.7	8.5	4.0	15.6
For-hire truck	9.5	3.1	12.9	4.0	9.3	3.8	11.1
Private truck	12.5	3.1	16.2	3.7	23.1	2.2	18.8
Rail	19.7	.6	19.6	2.7	20.2	4.3	6.3
Water	S	S	S	S	S	S	26.6
Shallow draft	S	S	S	S	S	S	20.6
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	31.9
Air (includes truck and air)	S	S	S	S	S	S	20.5
Pipeline	S	S	S	S	S	S	S
Multiple modes	16.7	.3	24.5	.4	28.3	1.3	15.2
Parcel, U.S. Postal Service or courier	25.8	.2	32.4	—	39.9	.1	15.1
Truck and rail	25.9	.3	26.7	.4	29.9	1.3	9.8
Truck and water	43.9	—	38.2	—	43.4	—	S
Rail and water	—	—	—	—	—	—	—
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	20.5	.2	29.7	.3	36.2	.2	S
SCTG 07, OTHER PREPARED FOODSTUFFS AND FATS AND OILS							
Total	4.4	—	5.2	—	6.3	—	17.7
Single modes	4.3	.5	5.2	.6	5.7	.9	11.0
Truck	4.5	.5	5.2	.9	6.6	2.3	10.9
For-hire truck	5.7	2.0	6.7	2.4	7.6	2.3	14.4
Private truck	7.0	2.0	8.6	2.4	10.0	1.5	7.9
Rail	9.4	.4	12.6	.9	13.1	2.3	3.1
Water	26.3	—	34.1	.3	37.1	.7	45.9
Shallow draft	37.0	—	37.6	.3	40.1	.7	S
Great Lakes	—	—	—	—	—	—	—
Deep draft	24.1	—	38.2	—	36.2	—	38.6
Air (includes truck and air)	47.8	—	S	S	S	S	12.5
Pipeline	46.4	—	S	S	S	S	S
Multiple modes	14.6	.3	26.1	.2	32.4	.9	10.5
Parcel, U.S. Postal Service or courier	19.7	.2	22.5	—	19.5	—	10.0
Truck and rail	28.1	.2	30.4	.2	36.4	.9	7.2
Truck and water	24.6	—	21.4	—	31.9	.1	20.8
Rail and water	S	S	S	S	S	S	21.8
Other multiple modes	S	S	S	S	S	S	24.8
Other and unknown modes	20.5	.3	34.7	.6	24.6	.2	S
SCTG 08, ALCOHOLIC BEVERAGES							
Total	6.1	—	5.8	—	12.8	—	4.7
Single modes	6.4	.6	6.1	.6	13.0	1.0	5.4
Truck	6.5	1.1	6.1	1.5	14.2	4.4	5.3
For-hire truck	9.4	2.1	9.3	2.5	16.5	4.0	24.5
Private truck	7.7	2.5	8.3	3.1	10.6	2.2	4.7
Rail	23.1	.8	19.4	1.3	26.9	3.6	17.4
Water	37.9	—	49.3	.3	47.9	1.3	22.0
Shallow draft	S	S	S	S	S	S	22.0
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	46.6	—	39.7	—	23.1
Air (includes truck and air)	S	S	S	S	S	S	36.2
Pipeline	S	S	S	S	S	S	S
Multiple modes	16.1	.2	19.2	.2	24.8	1.0	37.2
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	26.2
Truck and rail	22.1	.2	23.9	.1	23.3	.8	13.4
Truck and water	36.4	.1	33.7	—	43.7	.5	37.0
Rail and water	S	S	S	S	S	S	22.4
Other multiple modes	S	S	S	S	S	S	29.6
Other and unknown modes	30.6	.6	35.0	.6	49.8	.5	S

See footnotes at end of table.

Table B-7. Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
SCTG 09, TOBACCO PRODUCTS							
Total	14.4	—	29.9	—	36.3	—	22.1
Single modes	14.9	1.6	30.7	1.7	19.9	7.0	28.0
Truck	14.9	1.6	30.7	1.6	19.9	7.0	30.1
For-hire truck	31.8	6.8	41.6	8.3	22.8	7.0	21.9
Private truck	18.1	6.8	26.1	7.4	37.1	4.4	11.3
Rail	—	—	—	—	—	—	—
Water	—	—	—	—	—	—	—
Shallow draft	—	—	—	—	—	—	—
Great Lakes	—	—	—	—	—	—	—
Deep draft	—	—	—	—	—	—	—
Air (includes truck and air)	S	S	S	S	49.5	.2	23.6
Pipeline	—	—	—	—	S	S	S
Multiple modes	49.2	1.3	S	S	S	S	9.4
Parcel, U.S. Postal Service or courier	38.2	1.2	33.2	.6	35.7	2.5	10.4
Truck and rail	S	S	S	S	S	S	22.4
Truck and water	S	S	S	S	S	S	23.7
Rail and water	—	—	—	—	—	—	—
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	S	S	37.5	1.1	43.0	.2	36.9
SCTG 10, MONUMENTAL OR BUILDING STONE							
Total	29.1	—	29.9	—	22.1	—	16.9
Single modes	30.3	2.8	30.1	.7	23.6	3.4	17.8
Truck	30.3	3.2	30.2	.9	23.6	3.6	16.8
For-hire truck	26.3	6.5	37.4	8.3	32.2	7.7	43.9
Private truck	38.7	7.4	41.6	8.2	20.4	7.0	21.3
Rail	S	S	S	S	S	S	21.9
Water	S	S	S	S	S	S	32.0
Shallow draft	—	—	—	—	—	—	—
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	32.0
Air (includes truck and air)	—	—	—	—	—	—	—
Pipeline	—	—	—	—	S	S	S
Multiple modes	S	S	S	S	S	S	29.4
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	21.2
Truck and rail	S	S	S	S	S	S	21.0
Truck and water	S	S	S	S	S	S	22.2
Rail and water	—	—	—	—	—	—	—
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	46.0	2.2	42.2	.4	S	S	S
SCTG 11, NATURAL SANDS							
Total	6.8	—	9.1	—	11.8	—	10.5
Single modes	7.5	1.5	9.3	1.1	11.3	1.3	8.4
Truck	9.0	2.8	10.2	3.0	11.8	4.7	7.9
For-hire truck	13.1	3.5	15.9	4.1	16.9	4.6	20.3
Private truck	13.1	3.7	12.2	3.8	17.3	3.8	12.8
Rail	13.8	1.8	39.6	1.3	26.9	3.6	18.3
Water	S	S	S	S	S	S	24.7
Shallow draft	S	S	S	S	S	S	20.8
Great Lakes	S	S	S	S	S	S	22.4
Deep draft	—	—	—	—	—	—	—
Air (includes truck and air)	S	S	S	S	S	S	21.8
Pipeline	—	—	—	—	S	S	S
Multiple modes	S	S	29.3	—	41.0	.8	17.9
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	27.5
Truck and rail	31.7	—	33.3	—	44.3	.3	18.8
Truck and water	S	S	47.8	—	S	S	20.4
Rail and water	—	—	—	—	—	—	—
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	24.1	.8	29.0	1.1	38.2	.9	34.5

See footnotes at end of table.

Table B-7. Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
SCTG 12, GRAVEL AND CRUSHED STONE							
Total	6.7	—	9.0	—	10.5	—	7.6
Single modes	6.9	.5	9.3	.5	10.1	1.0	7.6
Truck	7.7	1.2	9.9	1.3	9.2	3.5	7.6
For-hire truck	8.5	2.0	11.8	1.6	10.1	1.8	8.4
Private truck	9.4	2.5	10.0	2.0	11.2	2.4	8.3
Rail	12.6	.9	15.9	.7	13.6	2.6	13.9
Water	17.6	.5	21.3	.9	20.2	2.8	26.1
Shallow draft	24.0	.5	29.9	.8	28.1	2.6	30.0
Great Lakes	38.9	.2	39.4	.5	39.9	1.9	17.8
Deep draft	S	S	S	S	46.3	.2	27.5
Air (includes truck and air)	—	—	—	—	—	—	—
Pipeline	—	—	—	—	S	S	S
Multiple modes	34.6	.1	47.1	.1	S	S	S
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	21.8
Truck and rail	S	S	S	S	S	S	23.2
Truck and water	46.0	—	40.1	—	39.1	.3	47.4
Rail and water	S	S	S	S	S	S	19.4
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	23.1	.5	20.0	.5	20.0	.4	S
SCTG 13, NONMETALLIC MINERALS N.E.C.							
Total	11.5	—	11.9	—	18.7	—	15.9
Single modes	11.8	.8	12.1	.4	18.9	.7	14.6
Truck	13.8	3.2	16.7	4.4	23.1	4.2	14.6
For-hire truck	15.0	4.0	18.6	3.8	26.5	4.1	16.6
Private truck	27.5	3.2	13.4	2.5	22.7	1.4	22.5
Rail	15.4	2.7	21.2	3.4	28.5	4.2	11.0
Water	40.3	.7	48.0	2.2	43.4	2.4	20.6
Shallow draft	S	S	S	S	S	S	21.1
Great Lakes	S	S	S	S	S	S	21.0
Deep draft	—	—	—	—	—	—	—
Air (includes truck and air)	S	S	S	S	S	S	21.2
Pipeline	38.8	.5	27.0	.3	S	S	S
Multiple modes	17.9	.3	41.1	.2	36.1	.3	16.6
Parcel, U.S. Postal Service or courier	24.3	.2	19.7	—	17.2	—	17.2
Truck and rail	29.9	.2	29.8	.1	26.5	.3	14.7
Truck and water	S	S	S	S	S	S	21.6
Rail and water	S	S	S	S	S	S	22.4
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	26.8	.7	35.9	.4	39.7	.7	45.9
SCTG 14, METALLIC ORES AND CONCENTRATES							
Total	14.0	—	12.4	—	18.1	—	7.9
Single modes	17.3	5.2	14.3	7.6	18.2	9.8	8.8
Truck	20.3	6.1	28.1	4.1	30.1	5.7	9.4
For-hire truck	21.7	4.7	33.9	4.0	34.7	5.1	8.5
Private truck	31.1	4.8	43.5	.7	39.5	1.2	18.8
Rail	26.5	2.9	16.4	6.2	23.8	6.1	11.9
Water	S	S	S	S	S	S	23.1
Shallow draft	S	S	S	S	S	S	22.4
Great Lakes	S	S	S	S	S	S	21.8
Deep draft	—	—	—	—	—	—	—
Air (includes truck and air)	S	S	S	S	S	S	19.5
Pipeline	—	—	—	—	S	S	S
Multiple modes	22.5	5.5	25.0	8.1	26.8	10.4	26.8
Parcel, U.S. Postal Service or courier	48.0	.2	S	S	S	S	35.1
Truck and rail	S	S	S	S	S	S	19.5
Truck and water	S	S	S	S	S	S	21.6
Rail and water	27.4	4.8	25.5	8.5	27.3	11.2	15.6
Other multiple modes	S	S	S	S	S	S	21.9
Other and unknown modes	33.9	1.6	S	S	S	S	S

See footnotes at end of table.

Table B-7. Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
SCTG 15, COAL							
Total	8.0	—	8.8	—	16.8	—	8.4
Single modes	8.4	2.0	8.6	2.6	13.2	1.7	9.5
Truck	12.6	2.0	12.6	2.0	29.4	.8	11.5
For-hire truck	13.6	1.4	13.6	1.2	33.7	.3	11.4
Private truck	25.1	1.2	25.5	1.3	S	S	16.1
Rail	10.9	2.4	10.8	2.6	13.8	1.9	7.5
Water	20.6	1.1	23.1	.9	28.9	.6	23.8
Shallow draft	20.6	1.1	23.1	.9	28.9	.6	23.8
Great Lakes	—	—	—	—	—	—	—
Deep draft	—	—	—	—	—	—	—
Air (includes truck and air)	S	S	S	S	S	S	24.8
Pipeline	S	S	S	S	S	S	S
Multiple modes	19.9	.8	39.3	.9	S	S	36.1
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	22.4
Truck and rail	27.6	.2	27.1	.1	31.6	.2	19.2
Truck and water	S	S	S	S	45.7	—	S
Rail and water	26.4	.8	46.6	.9	S	S	23.5
Other multiple modes	S	S	S	S	S	S	37.9
Other and unknown modes	18.6	2.0	22.9	2.7	37.6	.3	S
SCTG 17, GASOLINE AND AVIATION TURBINE FUEL							
Total	4.4	—	5.0	—	9.8	—	10.1
Single modes	4.5	.4	5.1	.3	10.1	1.5	10.2
Truck	5.8	2.4	6.8	2.5	14.6	4.2	10.6
For-hire truck	7.4	1.4	8.7	1.5	24.0	3.1	23.0
Private truck	7.4	2.1	8.3	2.1	15.8	2.4	12.1
Rail	31.4	.2	33.5	.2	43.5	1.5	27.7
Water	22.5	1.2	22.1	1.5	21.6	4.7	S
Shallow draft	32.6	.8	32.2	1.0	30.5	1.4	36.0
Great Lakes	—	—	—	—	—	—	—
Deep draft	27.6	.8	27.9	1.1	26.0	4.9	35.5
Air (includes truck and air)	S	S	S	S	S	S	21.8
Pipeline	8.9	2.1	8.7	2.1	S	S	S
Multiple modes	S	S	S	S	45.2	.8	19.9
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	23.0
Truck and rail	S	S	S	S	S	S	22.4
Truck and water	45.5	—	45.6	—	S	S	18.8
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	40.0	.3	35.9	.3	S	S	40.6
SCTG 18, FUEL OILS							
Total	6.0	—	6.0	—	10.1	—	13.5
Single modes	6.1	.9	6.3	1.0	10.1	3.0	12.7
Truck	5.3	1.9	5.5	1.9	13.3	4.4	12.8
For-hire truck	7.6	1.2	8.0	1.2	27.8	2.8	27.8
Private truck	7.3	2.1	7.5	1.8	15.8	3.6	12.1
Rail	29.5	.2	30.6	.3	38.0	2.0	12.9
Water	22.0	2.0	20.2	2.2	19.9	3.3	S
Shallow draft	27.1	2.1	24.7	2.2	29.0	2.9	S
Great Lakes	—	—	—	—	—	—	—
Deep draft	22.7	.6	23.6	.7	27.2	2.1	19.0
Air (includes truck and air)	—	—	—	—	—	—	—
Pipeline	11.6	1.9	11.8	2.1	S	S	S
Multiple modes	S	S	S	S	46.4	3.0	34.4
Parcel, U.S. Postal Service or courier	48.7	—	S	S	S	S	31.0
Truck and rail	—	—	—	—	—	—	—
Truck and water	S	S	S	S	S	S	19.8
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	32.5	.3	35.1	.3	32.0	—	47.5

See footnotes at end of table.

Table B-7. Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
SCTG 19, COAL AND PETROLEUM PRODUCTS, N.E.C.							
Total	7.5	—	10.2	—	11.1	—	24.7
Single modes	7.7	.6	10.6	.8	11.2	2.0	24.9
Truck	9.4	2.7	16.4	4.3	18.2	3.1	27.2
For-hire truck	12.8	2.4	16.4	2.2	19.8	2.2	19.7
Private truck	10.7	2.4	18.1	3.3	17.8	1.2	6.8
Rail	15.0	1.8	15.0	2.8	13.9	4.3	2.7
Water	14.3	1.4	14.7	1.7	33.9	4.5	17.4
Shallow draft	18.2	1.4	18.5	1.7	26.8	2.8	20.8
Great Lakes	S	S	S	S	S	S	21.8
Deep draft	31.3	.9	36.1	1.2	S	S	20.9
Air (includes truck and air)	47.9	—	S	S	46.7	—	18.0
Pipeline	16.3	1.4	14.1	1.5	S	S	S
Multiple modes	22.5	.5	33.6	.5	40.0	1.9	16.9
Parcel, U.S. Postal Service or courier	30.8	.3	38.5	—	39.0	—	17.2
Truck and rail	S	S	S	S	46.7	.3	37.8
Truck and water	41.7	.1	S	S	S	S	18.9
Rail and water	S	S	S	S	S	S	22.4
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	27.6	.3	26.8	.6	S	S	32.6
SCTG 20, BASIC CHEMICALS							
Total	7.7	—	12.6	—	10.8	—	15.3
Single modes	7.1	1.1	12.4	.3	10.6	2.0	18.6
Truck	7.9	2.7	12.4	3.5	9.0	2.2	14.3
For-hire truck	10.1	2.7	13.6	2.9	9.3	2.1	7.8
Private truck	10.7	1.6	16.6	2.5	24.4	1.4	24.8
Rail	13.2	1.4	13.6	1.9	17.1	3.4	4.1
Water	12.6	1.1	11.2	1.6	10.4	1.6	13.2
Shallow draft	13.0	.9	12.5	1.4	11.0	1.5	18.3
Great Lakes	—	—	—	—	—	—	—
Deep draft	33.9	.6	22.9	.7	43.4	.7	32.4
Air (includes truck and air)	43.1	.2	S	S	S	S	9.1
Pipeline	21.8	1.8	35.8	3.6	S	S	S
Multiple modes	26.3	.8	26.1	.2	44.7	1.2	16.4
Parcel, U.S. Postal Service or courier	20.9	.5	30.4	—	26.7	—	17.0
Truck and rail	21.2	.2	24.4	—	24.6	.2	16.6
Truck and water	S	S	48.5	.2	S	S	23.3
Rail and water	S	S	S	S	S	S	29.8
Other multiple modes	41.3	—	S	S	S	S	S
Other and unknown modes	37.0	.5	38.9	.2	S	S	19.8
SCTG 21, PHARMACEUTICAL PRODUCTS							
Total	9.5	—	16.7	—	21.0	—	5.7
Single modes	12.4	2.8	12.1	4.8	14.1	5.5	13.9
Truck	13.1	2.8	11.7	4.6	11.3	5.6	11.1
For-hire truck	15.3	2.9	14.9	4.2	12.3	5.3	10.4
Private truck	13.8	1.5	15.1	3.1	20.6	1.6	10.1
Rail	38.2	—	S	S	S	S	18.9
Water	S	S	S	S	S	S	22.4
Shallow draft	—	—	—	—	—	—	—
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	22.4
Air (includes truck and air)	12.0	.5	29.2	.2	17.1	.5	4.8
Pipeline	—	—	—	—	S	S	S
Multiple modes	9.5	2.8	11.7	.9	14.9	1.2	5.2
Parcel, U.S. Postal Service or courier	9.6	2.8	11.8	.8	15.2	1.2	5.2
Truck and rail	S	S	S	S	S	S	21.8
Truck and water	S	S	S	S	S	S	17.5
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	22.4
Other and unknown modes	34.8	.5	S	S	S	S	19.8

See footnotes at end of table.

Table B-7. Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
SCTG 22, FERTILIZERS							
Total	16.9	—	30.2	—	24.7	—	28.4
Single modes	17.1	.8	30.6	.9	25.2	1.3	28.9
Truck	20.2	3.7	26.8	3.6	47.2	6.1	29.1
For-hire truck	20.1	4.8	30.2	4.2	S	S	14.0
Private truck	32.8	4.4	32.0	3.8	24.0	1.6	34.5
Rail	25.4	3.6	45.3	4.0	23.4	5.2	S
Water	33.2	1.5	30.0	2.1	33.3	4.4	17.7
Shallow draft	40.7	1.3	34.7	1.7	36.7	3.7	18.1
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	22.0
Air (includes truck and air)	S	S	S	S	S	S	25.2
Pipeline	47.4	.7	43.9	.8	S	S	S
Multiple modes	S	S	S	S	S	S	25.5
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	24.0
Truck and rail	S	S	S	S	S	S	20.9
Truck and water	S	S	S	S	S	S	19.9
Rail and water	S	S	S	S	S	S	22.4
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	34.2	.5	35.6	.7	S	S	S
SCTG 23, CHEMICAL PRODUCTS AND PREPARATIONS, N.E.C.							
Total	5.0	—	5.1	—	7.9	—	7.2
Single modes	5.5	.9	5.2	.5	8.1	.9	11.2
Truck	5.8	1.1	5.8	1.0	9.1	1.9	11.9
For-hire truck	7.9	2.4	8.1	3.0	10.0	2.7	4.9
Private truck	7.8	1.9	11.6	2.3	24.1	1.6	17.1
Rail	22.9	.6	14.7	.9	16.1	2.1	19.5
Water	S	S	45.4	.2	46.6	.1	S
Shallow draft	S	S	38.8	—	S	S	S
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	S
Air (includes truck and air)	23.3	.1	S	S	S	S	9.7
Pipeline	S	S	S	S	S	S	S
Multiple modes	8.0	.9	14.7	.4	17.5	.9	7.1
Parcel, U.S. Postal Service or courier	10.2	1.0	24.1	.3	13.7	.2	7.2
Truck and rail	21.0	.3	24.1	.4	22.6	1.0	11.1
Truck and water	26.0	—	29.6	—	33.1	—	32.1
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	22.4
Other and unknown modes	18.8	.3	20.0	.3	25.3	.2	38.3
SCTG 24, PLASTICS AND RUBBER							
Total	3.6	—	4.0	—	5.2	—	6.1
Single modes	4.0	.5	4.2	.3	5.5	.7	6.3
Truck	4.0	.5	4.5	1.2	7.1	2.1	4.5
For-hire truck	5.4	1.3	5.6	1.6	7.3	2.0	4.0
Private truck	4.9	1.2	5.9	1.0	15.5	.7	9.1
Rail	8.9	.4	6.9	1.2	8.6	2.2	6.1
Water	S	S	S	S	S	S	S
Shallow draft	S	S	S	S	S	S	36.6
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	S
Air (includes truck and air)	24.4	.2	13.4	—	18.8	—	5.6
Pipeline	S	S	S	S	S	S	S
Multiple modes	5.0	.4	6.0	.1	9.2	.3	4.9
Parcel, U.S. Postal Service or courier	5.7	.4	7.3	—	11.9	.1	4.9
Truck and rail	18.6	—	16.3	—	16.6	.3	4.8
Truck and water	36.7	—	31.8	—	37.7	—	21.1
Rail and water	S	S	S	S	S	S	22.4
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	10.7	.3	13.6	.3	29.7	.5	13.1

See footnotes at end of table.

Table B-7. Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
SCTG 25, LOGS AND OTHER WOOD IN THE ROUGH							
Total	24.2	—	S	S	34.4	—	S
Single modes	26.6	5.0	S	S	37.3	5.2	S
Truck	28.4	6.2	S	S	39.9	6.3	S
For-hire truck	32.8	7.1	S	S	40.4	7.7	42.4
Private truck	42.2	4.7	S	S	S	S	28.6
Rail	40.6	3.3	S	S	44.8	4.1	28.1
Water	S	S	S	S	S	S	22.4
Shallow draft	—	—	—	—	—	—	—
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	22.4
Air (includes truck and air)	S	S	S	S	S	S	22.4
Pipeline	—	—	—	—	S	S	S
Multiple modes	39.1	1.0	S	S	42.7	2.9	27.7
Parcel, U.S. Postal Service or courier	45.2	—	S	S	S	S	20.5
Truck and rail	41.8	1.0	S	S	46.7	2.9	19.0
Truck and water	S	S	S	S	S	S	21.2
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	42.7	4.3	40.7	4.5	49.5	3.2	36.8
SCTG 26, WOOD PRODUCTS							
Total	8.4	—	9.2	—	11.7	—	10.5
Single modes	8.7	.5	9.7	.9	12.0	1.2	6.3
Truck	9.5	1.0	7.5	2.1	10.0	3.2	6.4
For-hire truck	12.7	1.6	11.4	2.3	11.7	2.6	6.0
Private truck	8.0	1.4	7.4	2.7	8.0	1.1	11.4
Rail	13.0	1.0	31.3	2.0	19.6	3.6	9.2
Water	36.8	—	42.7	—	S	S	34.1
Shallow draft	S	S	S	S	S	S	22.2
Great Lakes	—	—	—	—	—	—	—
Deep draft	39.6	—	49.0	—	S	S	35.8
Air (includes truck and air)	S	S	36.7	—	43.7	—	9.8
Pipeline	S	S	S	S	S	S	S
Multiple modes	13.8	.2	24.3	.2	24.1	1.0	6.5
Parcel, U.S. Postal Service or courier	22.2	.2	25.0	—	35.3	—	6.8
Truck and rail	19.1	.1	33.6	.2	21.7	.5	9.5
Truck and water	42.4	—	46.8	.1	S	S	17.1
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	21.8
Other and unknown modes	16.4	.3	20.3	.8	15.1	.2	24.8
SCTG 27, PULP, NEWSPRINT, PAPER, AND PAPERBOARD							
Total	5.2	—	6.2	—	7.4	—	10.4
Single modes	5.3	.3	6.3	.3	7.6	.6	10.3
Truck	5.8	1.0	7.6	1.3	9.9	1.6	10.3
For-hire truck	7.1	1.6	8.2	1.5	10.1	1.6	7.6
Private truck	8.2	1.7	11.1	1.4	17.4	.7	11.0
Rail	6.3	.9	5.5	1.2	6.3	1.3	2.8
Water	S	S	S	S	S	S	44.5
Shallow draft	S	S	S	S	S	S	22.3
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	43.9
Air (includes truck and air)	30.6	—	49.5	—	35.5	—	10.1
Pipeline	—	—	—	—	S	S	S
Multiple modes	9.5	.2	17.0	.2	18.7	.5	11.2
Parcel, U.S. Postal Service or courier	15.0	.2	17.3	—	20.1	—	11.4
Truck and rail	14.6	.1	20.0	.2	18.9	.4	8.9
Truck and water	49.6	—	45.4	—	40.0	.1	25.1
Rail and water	S	S	S	S	S	S	22.0
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	16.5	.2	17.4	.2	24.1	.3	30.5

See footnotes at end of table.

Table B-7. Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
SCTG 28, PAPER OR PAPERBOARD ARTICLES							
Total	4.0	—	5.2	—	8.5	—	9.5
Single modes	4.0	1.0	5.2	.7	8.9	1.2	8.8
Truck	4.2	1.0	5.4	.8	9.3	1.7	6.8
For-hire truck	6.6	2.5	7.4	2.9	8.8	2.0	4.5
Private truck	6.8	2.3	8.6	2.6	11.4	1.1	6.7
Rail	28.2	.2	33.6	.5	29.8	1.3	15.4
Water	S	S	S	S	45.1	—	45.1
Shallow draft	S	S	S	S	S	S	25.8
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	49.9	—	S	S	40.6
Air (includes truck and air)	37.5	—	44.0	—	38.6	—	13.3
Pipeline	S	S	S	S	S	S	S
Multiple modes	11.9	.5	17.5	.3	17.7	1.0	7.6
Parcel, U.S. Postal Service or courier	9.4	.4	16.1	.1	12.4	.1	7.6
Truck and rail	30.4	.3	30.9	.2	22.7	1.0	8.5
Truck and water	38.3	—	S	S	S	S	16.1
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	22.4
Other and unknown modes	26.5	.6	29.8	.5	25.9	.4	31.1
SCTG 29, PRINTED PRODUCTS							
Total	7.6	—	8.1	—	8.5	—	3.9
Single modes	8.8	1.6	8.4	2.0	9.2	2.0	12.2
Truck	9.1	1.6	7.9	2.0	8.4	2.1	14.8
For-hire truck	8.6	1.7	9.4	2.8	8.8	2.5	6.3
Private truck	13.5	1.8	14.0	2.4	27.0	1.5	39.2
Rail	38.6	—	S	S	S	S	16.2
Water	S	S	S	S	S	S	22.8
Shallow draft	S	S	S	S	S	S	21.8
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	21.6
Air (includes truck and air)	38.3	.8	37.1	.4	34.1	.9	5.6
Pipeline	S	S	S	S	S	S	S
Multiple modes	8.6	1.6	11.0	.7	14.2	1.2	3.2
Parcel, U.S. Postal Service or courier	8.6	1.6	11.7	.7	15.8	1.1	3.2
Truck and rail	24.9	—	S	S	S	S	15.4
Truck and water	S	S	S	S	S	S	20.3
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	7.1	.5	39.0	2.1	27.5	1.8	29.5
SCTG 30, TEXTILES, LEATHER, AND ARTICLES OF TEXTILES OR LEATHER							
Total	5.4	—	7.5	—	10.5	—	2.4
Single modes	6.6	1.8	6.6	2.1	6.2	3.8	6.9
Truck	6.7	1.8	6.8	2.2	6.5	3.9	7.4
For-hire truck	6.6	2.2	7.2	2.1	7.2	3.6	4.4
Private truck	19.9	2.2	9.7	1.9	12.7	1.6	18.8
Rail	38.5	—	S	S	45.5	.6	14.8
Water	47.6	—	31.8	—	S	S	23.6
Shallow draft	S	S	S	S	S	S	S
Great Lakes	—	—	—	—	—	—	—
Deep draft	49.9	—	36.0	—	S	S	20.4
Air (includes truck and air)	13.7	—	47.6	.1	S	S	6.1
Pipeline	S	S	S	S	S	S	S
Multiple modes	8.0	1.3	27.4	2.0	S	S	2.2
Parcel, U.S. Postal Service or courier	6.1	1.0	6.2	.4	7.0	.7	2.2
Truck and rail	42.4	—	S	S	S	S	12.3
Truck and water	S	S	S	S	S	S	11.3
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	22.1
Other and unknown modes	24.3	1.3	44.8	1.2	23.7	.8	17.1

See footnotes at end of table.

Table B-7. Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
SCTG 31, NONMETALLIC MINERAL PRODUCTS							
Total	7.0	—	9.0	—	11.9	—	9.5
Single modes	7.1	.5	9.1	.7	12.1	.8	20.4
Truck	7.2	1.3	9.4	1.2	11.3	3.3	21.2
For-hire truck	9.9	2.5	11.1	2.9	12.3	3.3	17.0
Private truck	9.1	2.5	14.4	3.5	22.5	3.2	28.8
Rail	48.1	1.3	22.2	.7	32.7	3.3	8.0
Water	32.9	.1	36.4	.5	34.3	.8	S
Shallow draft	28.8	—	29.9	.2	32.4	.6	16.4
Great Lakes	S	S	S	S	S	S	21.2
Deep draft	S	S	S	S	S	S	S
Air (includes truck and air)	34.7	.1	39.0	—	S	S	9.5
Pipeline	S	S	S	S	S	S	S
Multiple modes	11.4	.5	20.2	.1	16.5	.5	4.6
Parcel, U.S. Postal Service or courier	11.8	.5	16.8	—	20.6	—	4.6
Truck and rail	19.8	—	23.5	—	27.0	.3	20.0
Truck and water	41.2	—	S	S	28.5	.2	46.4
Rail and water	S	S	S	S	S	S	22.4
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	16.5	.3	37.5	.7	28.4	.5	38.7
SCTG 32, BASE METAL IN PRIMARY OR SEMIFINISHED FORMS AND IN FINISHED BASIC SHAPES							
Total	5.0	—	6.3	—	6.0	—	10.2
Single modes	5.1	.6	6.5	1.0	6.9	2.2	5.8
Truck	5.2	.7	6.9	1.2	7.4	2.1	6.0
For-hire truck	5.8	1.6	5.7	2.1	5.4	2.2	4.1
Private truck	8.0	1.4	14.3	2.1	25.3	1.8	7.7
Rail	7.6	.4	7.7	.9	9.9	1.9	5.5
Water	31.8	.1	31.3	.8	32.5	2.1	14.2
Shallow draft	39.1	.2	43.2	.5	S	S	19.3
Great Lakes	46.9	—	46.9	.7	47.0	1.5	20.5
Deep draft	S	S	S	S	S	S	20.7
Air (includes truck and air)	13.9	—	44.7	—	45.1	—	6.4
Pipeline	S	S	S	S	S	S	S
Multiple modes	15.7	.5	42.1	.7	40.9	2.1	8.7
Parcel, U.S. Postal Service or courier	15.4	.3	32.6	—	29.9	—	8.7
Truck and rail	21.3	—	30.6	—	33.6	.3	9.2
Truck and water	S	S	S	S	S	S	29.4
Rail and water	S	S	S	S	S	S	22.4
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	19.7	.5	32.2	.7	22.6	.5	16.5
SCTG 33, ARTICLES OF BASE METAL							
Total	3.9	—	9.5	—	7.0	—	5.6
Single modes	4.5	1.3	9.8	.5	7.0	.7	5.7
Truck	4.9	1.5	10.7	1.9	6.0	2.8	5.8
For-hire truck	5.9	1.5	15.1	3.1	6.9	2.5	5.4
Private truck	5.5	1.3	11.7	2.9	9.4	1.3	6.3
Rail	18.4	.3	27.7	1.4	35.6	2.6	18.7
Water	S	S	39.9	.1	35.4	.4	17.7
Shallow draft	S	S	42.2	.1	41.9	.4	26.3
Great Lakes	S	S	—	—	—	—	—
Deep draft	S	S	S	S	S	S	19.9
Air (includes truck and air)	25.5	.3	33.6	—	41.3	.2	3.9
Pipeline	S	S	S	S	S	S	S
Multiple modes	6.9	1.2	8.3	.1	12.8	.3	5.8
Parcel, U.S. Postal Service or courier	7.1	1.3	6.1	.1	8.2	.2	5.8
Truck and rail	23.1	—	30.5	—	43.2	.2	15.5
Truck and water	38.1	—	S	S	42.7	.1	21.7
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	22.2
Other and unknown modes	16.8	.5	15.8	.4	23.0	.6	26.4

See footnotes at end of table.

Table B-7. Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
SCTG 34, MACHINERY							
Total	5.7	—	7.7	—	9.0	—	6.6
Single modes	6.4	1.0	8.1	.8	9.2	1.1	7.7
Truck	6.3	1.1	8.4	1.1	9.7	1.7	8.0
For-hire truck	8.0	1.3	11.0	2.0	10.5	1.9	4.7
Private truck	5.5	1.1	7.0	1.6	13.6	1.2	6.9
Rail	15.4	.3	18.3	.7	16.0	1.0	6.8
Water	47.4	—	S	S	S	S	20.6
Shallow draft	S	S	S	S	S	S	40.5
Great Lakes	—	—	—	—	—	—	—
Deep draft	44.2	—	37.8	—	S	S	20.7
Air (includes truck and air)	16.4	.2	15.5	—	19.5	.1	4.1
Pipeline	S	S	S	S	S	S	S
Multiple modes	5.7	.8	11.4	.4	19.4	1.0	5.4
Parcel, U.S. Postal Service or courier	5.2	.8	5.7	.2	11.5	.4	5.4
Truck and rail	17.7	.1	28.0	.3	33.0	.8	6.6
Truck and water	S	S	48.6	—	48.2	.3	14.6
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	21.4
Other and unknown modes	12.3	.4	19.8	.9	25.6	.9	24.1
SCTG 35, ELECTRONIC AND OTHER ELECTRICAL EQUIPMENT AND COMPONENTS AND OFFICE EQUIPMENT							
Total	5.6	—	9.7	—	11.9	—	4.9
Single modes	6.8	2.0	10.7	1.2	14.2	1.9	11.5
Truck	8.1	2.4	10.5	1.1	14.4	1.9	12.2
For-hire truck	8.8	2.3	13.7	3.3	15.0	2.0	5.3
Private truck	8.8	1.2	17.4	3.1	16.4	.8	13.5
Rail	33.7	.1	S	S	42.6	.5	13.9
Water	S	S	S	S	43.7	—	S
Shallow draft	S	S	S	S	S	S	21.5
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	43.4	—	S
Air (includes truck and air)	8.9	1.0	15.4	.2	11.7	.4	3.5
Pipeline	S	S	S	S	S	S	S
Multiple modes	7.3	1.8	8.9	1.0	11.1	1.8	2.8
Parcel, U.S. Postal Service or courier	7.2	1.8	8.7	.8	8.9	1.1	2.8
Truck and rail	29.4	—	33.5	.3	35.0	1.2	10.4
Truck and water	S	S	32.4	—	43.0	.2	12.1
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	14.0	.6	15.1	.6	21.5	.8	21.8
SCTG 36, MOTORIZED AND OTHER VEHICLES (INCLUDING PARTS)							
Total	8.3	—	7.6	—	10.1	—	12.3
Single modes	9.9	1.7	8.8	2.3	10.9	1.5	24.1
Truck	9.0	2.0	8.0	2.5	8.7	2.6	10.4
For-hire truck	12.5	2.7	8.2	2.8	9.1	2.0	6.0
Private truck	10.3	2.2	19.5	2.8	12.5	1.3	8.0
Rail	22.3	1.4	23.8	1.4	23.2	2.6	6.7
Water	S	S	S	S	S	S	23.7
Shallow draft	S	S	S	S	S	S	21.6
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	30.7
Air (includes truck and air)	16.8	—	19.6	—	18.4	—	6.3
Pipeline	S	S	S	S	S	S	S
Multiple modes	13.9	1.0	14.2	.5	16.7	1.2	4.2
Parcel, U.S. Postal Service or courier	9.6	.3	10.9	.1	10.8	.2	4.2
Truck and rail	23.4	1.0	19.1	.5	19.7	1.2	8.0
Truck and water	41.9	—	45.3	—	36.5	—	17.0
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	21.4
Other and unknown modes	10.6	1.2	28.0	2.2	21.1	.7	40.4

See footnotes at end of table.

Table B-7. Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
SCTG 37, TRANSPORTATION EQUIPMENT, N.E.C.							
Total	23.3	—	40.9	—	41.7	—	5.0
Single modes	26.2	2.0	41.5	1.5	42.2	1.2	6.6
Truck	19.3	5.1	44.4	5.8	41.4	6.6	10.1
For-hire truck	12.3	3.7	41.4	6.2	37.2	6.8	6.1
Private truck	43.3	4.4	S	S	S	S	26.8
Rail	31.3	1.9	S	S	S	S	32.7
Water	S	S	S	S	S	S	21.1
Shallow draft	S	S	S	S	S	S	22.0
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	22.3
Air (includes truck and air)	48.3	6.5	37.4	2.4	48.3	6.5	3.0
Pipeline	S	S	S	S	S	S	S
Multiple modes	10.8	1.9	14.3	.4	13.2	.6	4.8
Parcel, U.S. Postal Service or courier	10.9	1.8	14.8	.3	13.0	.4	4.8
Truck and rail	S	S	S	S	S	S	21.0
Truck and water	S	S	S	S	S	S	31.4
Rail and water	—	—	—	—	—	—	—
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	25.5	.5	45.8	1.3	S	S	27.6
SCTG 38, PRECISION INSTRUMENTS AND APPARATUS							
Total	7.9	—	18.3	—	12.6	—	8.0
Single modes	9.2	2.9	18.9	1.6	14.5	2.6	12.8
Truck	9.4	3.0	19.1	2.1	15.6	3.5	18.1
For-hire truck	9.9	2.8	27.9	7.5	20.6	5.4	9.0
Private truck	17.1	1.3	24.3	8.8	33.2	5.5	33.3
Rail	S	S	S	S	S	S	22.4
Water	S	S	S	S	S	S	22.4
Shallow draft	S	S	S	S	S	S	22.4
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	22.4
Air (includes truck and air)	21.4	2.4	25.0	.7	30.9	1.8	7.2
Pipeline	S	S	S	S	S	S	S
Multiple modes	11.3	3.0	14.7	1.5	15.9	2.5	8.3
Parcel, U.S. Postal Service or courier	11.3	3.0	14.7	1.5	16.2	2.5	8.3
Truck and rail	S	S	43.4	—	44.8	.1	20.9
Truck and water	S	S	S	S	S	S	S
Rail and water	—	—	—	—	—	—	—
Other multiple modes	—	—	—	—	—	—	—
Other and unknown modes	20.8	.5	29.5	.2	30.0	.9	19.4
SCTG 39, FURNITURE, MATTRESSES AND MATTRESS SUPPORTS, LAMPS, LIGHTING FITTINGS, AND ILLUMINATED SIGNS							
Total	6.2	—	11.8	—	6.4	—	6.2
Single modes	5.9	.9	11.8	.9	6.8	.9	5.5
Truck	6.0	1.0	11.9	1.1	6.7	1.0	6.2
For-hire truck	5.4	3.1	9.8	4.1	7.1	2.1	2.8
Private truck	11.9	2.6	22.6	3.9	15.0	2.2	11.7
Rail	34.0	—	S	S	48.5	.5	21.2
Water	S	S	S	S	S	S	21.3
Shallow draft	—	—	—	—	—	—	—
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	21.3
Air (includes truck and air)	26.7	.1	27.4	—	25.4	—	9.8
Pipeline	—	—	—	—	S	S	S
Multiple modes	14.8	.6	17.2	.3	20.3	.9	6.0
Parcel, U.S. Postal Service or courier	16.1	.6	18.0	.2	16.7	.4	6.1
Truck and rail	29.7	.1	34.5	.2	37.5	.7	14.6
Truck and water	41.8	—	43.8	—	37.8	.1	20.4
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	22.4
Other and unknown modes	49.0	.8	S	S	29.8	.4	20.5

See footnotes at end of table.

Table B-7. Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
SCTG 40, MISCELLANEOUS MANUFACTURED PRODUCTS							
Total	5.4	—	10.5	—	7.7	—	4.3
Single modes	6.4	1.9	9.8	1.3	7.8	.8	8.4
Truck	6.7	2.0	10.0	2.0	8.0	1.9	6.9
For-hire truck	8.1	2.0	8.8	2.4	8.7	2.1	3.2
Private truck	11.9	2.0	16.9	3.0	13.2	1.4	9.8
Rail	34.5	.1	29.5	.2	29.7	.6	12.6
Water	S	S	S	S	S	S	S
Shallow draft	S	S	S	S	S	S	33.2
Great Lakes	S	S	S	S	S	S	22.4
Deep draft	39.0	—	44.5	—	S	S	S
Air (includes truck and air)	18.4	.5	23.7	—	33.7	.2	4.2
Pipeline	S	S	S	S	S	S	S
Multiple modes	9.4	1.9	8.4	.4	7.3	.7	3.9
Parcel, U.S. Postal Service or courier	9.5	1.9	7.9	.3	7.8	.6	3.9
Truck and rail	30.7	—	28.3	—	38.8	.3	11.0
Truck and water	S	S	S	S	S	S	14.2
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	22.1
Other and unknown modes	8.1	.4	36.5	1.5	24.6	.6	16.6
SCTG 41, WASTE AND SCRAP							
Total	14.4	—	16.8	—	25.8	—	10.5
Single modes	14.5	2.8	16.8	1.2	28.7	3.5	9.2
Truck	12.9	3.9	13.4	5.2	14.5	6.0	9.6
For-hire truck	15.0	3.9	18.4	4.5	16.8	4.8	12.7
Private truck	17.5	3.3	17.8	4.5	19.5	3.4	16.2
Rail	31.6	3.2	30.3	5.0	28.1	4.8	23.7
Water	S	S	S	S	S	S	20.9
Shallow draft	S	S	S	S	S	S	21.1
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	S
Air (includes truck and air)	S	S	S	S	S	S	21.3
Pipeline	—	—	—	—	S	S	S
Multiple modes	S	S	S	S	24.7	3.5	20.5
Parcel, U.S. Postal Service or courier	S	S	S	S	S	S	21.7
Truck and rail	S	S	S	S	27.0	3.1	25.6
Truck and water	S	S	44.9	—	44.6	.3	21.6
Rail and water	S	S	S	S	S	S	21.8
Other multiple modes	S	S	S	S	S	S	21.8
Other and unknown modes	44.8	.3	34.9	.9	S	S	S
SCTG 43, MIXED FREIGHT							
Total	3.6	—	5.6	—	5.0	—	7.9
Single modes	3.6	.6	5.7	.5	4.8	1.1	7.5
Truck	3.6	.6	5.7	.6	4.7	1.7	7.5
For-hire truck	7.4	1.4	16.5	2.2	8.6	2.1	9.3
Private truck	4.2	1.8	4.2	2.2	4.9	2.4	6.5
Rail	41.5	.1	40.5	.1	48.7	1.1	11.3
Water	S	S	42.4	—	S	S	18.5
Shallow draft	S	S	S	S	S	S	21.1
Great Lakes	S	S	S	S	S	S	22.4
Deep draft	S	S	44.2	—	S	S	19.3
Air (includes truck and air)	34.0	—	S	S	39.5	.1	5.3
Pipeline	S	S	S	S	S	S	S
Multiple modes	11.9	.5	27.0	.3	13.9	.6	5.8
Parcel, U.S. Postal Service or courier	11.2	.4	31.2	.2	14.2	.2	5.8
Truck and rail	42.1	.1	39.1	—	28.0	.3	17.0
Truck and water	31.8	—	S	S	41.1	.4	16.9
Rail and water	S	S	S	S	S	S	20.5
Other multiple modes	S	S	S	S	S	S	S
Other and unknown modes	14.5	.2	22.4	.4	34.9	.9	16.5

See footnotes at end of table.

Table B-7. **Estimated Measures of Reliability for Shipment Characteristics by Two-Digit Commodity and Mode of Transportation for the United States: 2002—Con.**

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and mode of transportation	Value		Tons		Ton-miles		Average miles per shipment—coefficient of variation
	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	Coefficient of variation of number	Standard error of percentage	
COMMODITY UNKNOWN							
Total	9.9	—	22.3	—	41.7	—	8.8
Single modes	11.0	3.5	24.1	3.5	43.4	1.8	13.3
Truck	8.3	4.1	24.8	6.0	S	S	13.7
For-hire truck	11.6	3.6	42.8	3.9	S	S	10.3
Private truck	11.6	3.0	14.5	4.6	18.3	2.9	17.1
Rail	31.2	1.4	26.8	4.0	29.7	6.7	13.5
Water	S	S	S	S	47.3	5.3	S
Shallow draft	S	S	S	S	47.3	5.3	S
Great Lakes	—	—	—	—	—	—	—
Deep draft	S	S	S	S	S	S	22.4
Air (includes truck and air)	23.1	.4	30.1	—	31.9	.1	7.0
Pipeline	S	S	S	S	S	S	S
Multiple modes	33.2	3.2	28.0	.4	28.2	1.2	9.5
Parcel, U.S. Postal Service or courier	36.4	3.0	27.5	.1	29.7	.2	9.5
Truck and rail	S	S	39.4	.3	35.9	1.1	17.0
Truck and water	S	S	S	S	S	S	20.9
Rail and water	—	—	—	—	—	—	—
Other multiple modes	S	S	S	S	S	S	22.4
Other and unknown modes	28.9	1.2	S	S	41.2	1.4	45.3

— Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B–8. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Distance Shipped for the United States: 2002

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and distance shipped (based on Great Circle Distance)	Value	Tons	Ton-miles
Total	1.3	2.0	3.7
Less than 50 miles	1.4	3.2	3.9
50 to 99 miles	1.8	5.8	5.8
100 to 249 miles	2.0	2.9	2.8
250 to 499 miles	2.3	3.2	3.9
500 to 749 miles	3.4	3.1	3.6
750 to 999 miles	4.0	6.2	6.4
1,000 to 1,499 miles	3.3	11.2	12.0
1,500 to 1,999 miles	5.8	6.9	7.0
2,000 miles or more	6.3	3.9	4.3
SCTG 01, Live animals and live fish	21.1	24.5	26.0
Less than 50 miles	30.1	47.4	S
50 to 99 miles	S	S	S
100 to 249 miles	29.5	37.5	42.0
250 to 499 miles	28.8	35.0	33.1
500 to 749 miles	38.0	34.5	34.1
750 to 999 miles	40.2	42.3	42.8
1,000 to 1,499 miles	S	S	S
1,500 to 1,999 miles	S	S	S
2,000 miles or more	S	S	S
SCTG 02, Cereal grains	7.1	7.5	18.1
Less than 50 miles	9.5	9.7	13.3
50 to 99 miles	20.2	22.2	24.4
100 to 249 miles	18.1	19.6	18.5
250 to 499 miles	19.7	24.3	29.6
500 to 749 miles	12.3	14.6	15.2
750 to 999 miles	14.4	15.9	16.4
1,000 to 1,499 miles	39.3	44.8	47.4
1,500 to 1,999 miles	S	S	S
2,000 miles or more	S	S	S
SCTG 03, Other agricultural products	10.4	7.8	7.4
Less than 50 miles	18.0	13.4	20.0
50 to 99 miles	24.6	20.3	19.8
100 to 249 miles	16.3	16.3	18.7
250 to 499 miles	13.7	21.7	26.9
500 to 749 miles	10.4	12.1	13.3
750 to 999 miles	11.2	16.8	18.6
1,000 to 1,499 miles	25.2	23.6	22.6
1,500 to 1,999 miles	15.1	14.8	13.9
2,000 miles or more	27.3	21.0	21.0
SCTG 04, Animal feed and products of animal origin, n.e.c.	9.6	14.1	10.0
Less than 50 miles	20.7	25.9	24.9
50 to 99 miles	13.0	13.2	13.3
100 to 249 miles	12.7	15.7	15.6
250 to 499 miles	17.9	12.9	11.4
500 to 749 miles	13.8	23.9	25.4
750 to 999 miles	15.5	15.6	16.5
1,000 to 1,499 miles	16.8	14.0	14.3
1,500 to 1,999 miles	30.2	S	S
2,000 miles or more	S	S	S
SCTG 05, Meat, fish, seafood, and their preparations	4.2	4.6	6.5
Less than 50 miles	10.0	10.0	8.2
50 to 99 miles	6.2	7.8	9.2
100 to 249 miles	7.1	8.3	8.1
250 to 499 miles	8.4	7.7	7.8
500 to 749 miles	7.4	9.6	9.7
750 to 999 miles	6.7	7.9	8.1
1,000 to 1,499 miles	7.2	10.1	9.8
1,500 to 1,999 miles	12.1	15.9	15.8
2,000 miles or more	32.0	20.5	20.8
SCTG 06, Milled grain products and preparations, and bakery products	8.2	7.2	6.8
Less than 50 miles	12.7	13.6	13.8
50 to 99 miles	14.8	15.2	15.2
100 to 249 miles	7.8	13.5	14.1
250 to 499 miles	12.6	11.8	10.9
500 to 749 miles	10.0	9.5	9.7
750 to 999 miles	19.1	15.6	15.6
1,000 to 1,499 miles	16.7	24.4	25.1
1,500 to 1,999 miles	9.8	12.7	13.4
2,000 miles or more	23.5	16.7	16.6
SCTG 07, Other prepared foodstuffs and fats and oils	4.4	5.2	6.3
Less than 50 miles	5.7	6.5	7.6
50 to 99 miles	7.5	9.7	9.5
100 to 249 miles	6.3	7.1	7.2
250 to 499 miles	6.9	9.0	9.6
500 to 749 miles	11.5	11.4	10.6
750 to 999 miles	7.6	8.1	8.2
1,000 to 1,499 miles	9.0	12.8	13.7
1,500 to 1,999 miles	10.4	10.7	11.0
2,000 miles or more	10.1	12.6	12.5

See footnotes at end of table.

Table B–8. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and distance shipped (based on Great Circle Distance)	Value	Tons	Ton-miles
SCTG 08, Alcoholic beverages	6.1	5.8	12.8
Less than 50 miles	7.1	7.1	7.2
50 to 99 miles	8.3	9.4	9.2
100 to 249 miles	9.9	10.5	10.5
250 to 499 miles	10.0	10.4	10.7
500 to 749 miles	14.6	15.2	15.0
750 to 999 miles	24.6	29.1	29.9
1,000 to 1,499 miles	14.7	18.0	19.2
1,500 to 1,999 miles	18.7	27.4	27.2
2,000 miles or more	13.7	20.0	20.1
SCTG 09, Tobacco products	14.4	29.9	36.3
Less than 50 miles	20.0	40.9	43.4
50 to 99 miles	35.7	S	S
100 to 249 miles	14.0	30.1	31.9
250 to 499 miles	21.6	21.7	22.2
500 to 749 miles	25.6	38.7	38.9
750 to 999 miles	29.9	36.6	38.2
1,000 to 1,499 miles	28.2	30.9	32.2
1,500 to 1,999 miles	45.4	S	S
2,000 miles or more	S	S	S
SCTG 10, Monumental or building stone	29.1	29.9	22.1
Less than 50 miles	41.0	33.3	34.0
50 to 99 miles	31.3	33.2	33.7
100 to 249 miles	42.6	27.5	26.4
250 to 499 miles	S	45.5	46.5
500 to 749 miles	36.6	31.1	30.0
750 to 999 miles	S	S	S
1,000 to 1,499 miles	S	37.3	42.3
1,500 to 1,999 miles	S	S	S
2,000 miles or more	S	S	S
SCTG 11, Natural sands	6.8	9.1	11.8
Less than 50 miles	10.6	10.4	13.8
50 to 99 miles	16.2	20.1	20.0
100 to 249 miles	13.4	29.3	26.2
250 to 499 miles	14.1	20.8	19.0
500 to 749 miles	25.1	44.2	41.4
750 to 999 miles	27.0	36.8	35.0
1,000 to 1,499 miles	41.8	37.5	33.6
1,500 to 1,999 miles	S	39.8	39.4
2,000 miles or more	42.1	S	S
SCTG 12, Gravel and crushed stone	6.7	9.0	10.5
Less than 50 miles	9.2	10.3	12.8
50 to 99 miles	10.9	19.0	20.3
100 to 249 miles	9.0	13.2	15.3
250 to 499 miles	15.1	18.3	17.9
500 to 749 miles	26.6	31.7	33.1
750 to 999 miles	27.5	23.4	23.0
1,000 to 1,499 miles	41.1	46.8	46.0
1,500 to 1,999 miles	32.6	49.0	S
2,000 miles or more	46.3	40.5	40.2
SCTG 13, Nonmetallic minerals n.e.c.	11.5	11.9	18.7
Less than 50 miles	22.6	19.7	24.9
50 to 99 miles	20.2	19.6	16.8
100 to 249 miles	22.4	20.6	21.7
250 to 499 miles	20.9	18.6	18.2
500 to 749 miles	17.2	18.0	18.0
750 to 999 miles	25.5	18.9	17.6
1,000 to 1,499 miles	19.6	36.2	37.4
1,500 to 1,999 miles	28.4	47.8	49.2
2,000 miles or more	20.7	21.8	21.5
SCTG 14, Metallic ores and concentrates	14.0	12.4	18.1
Less than 50 miles	26.6	25.0	32.7
50 to 99 miles	21.1	28.2	28.1
100 to 249 miles	17.1	35.0	32.5
250 to 499 miles	24.8	24.8	26.9
500 to 749 miles	25.0	27.4	28.6
750 to 999 miles	35.6	40.3	43.7
1,000 to 1,499 miles	25.6	44.4	41.7
1,500 to 1,999 miles	42.0	S	S
2,000 miles or more	47.0	30.6	30.8
SCTG 15, Coal	8.0	8.8	16.8
Less than 50 miles	7.6	10.5	7.6
50 to 99 miles	13.2	14.5	14.7
100 to 249 miles	10.3	10.9	10.6
250 to 499 miles	15.0	14.7	14.8
500 to 749 miles	14.1	11.6	12.6
750 to 999 miles	19.2	20.8	20.7
1,000 to 1,499 miles	24.5	30.8	32.5
1,500 to 1,999 miles	S	S	S
2,000 miles or more	—	—	—

See footnotes at end of table.

Table B–8. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and distance shipped (based on Great Circle Distance)	Value	Tons	Ton-miles
SCTG 17, Gasoline and aviation turbine fuel	4.4	5.0	9.8
Less than 50 miles	4.8	5.5	6.4
50 to 99 miles	15.1	16.1	13.4
100 to 249 miles	8.9	10.5	10.2
250 to 499 miles	19.4	18.5	17.2
500 to 749 miles	34.6	37.4	36.3
750 to 999 miles	34.7	35.3	34.7
1,000 to 1,499 miles	45.7	48.8	48.5
1,500 to 1,999 miles	49.5	47.2	45.0
2,000 miles or more	49.0	S	S
SCTG 18, Fuel oils	6.0	6.0	10.1
Less than 50 miles	7.9	8.3	12.3
50 to 99 miles	15.3	16.5	15.8
100 to 249 miles	13.0	12.9	13.7
250 to 499 miles	22.9	24.7	21.3
500 to 749 miles	21.0	20.1	20.7
750 to 999 miles	42.6	39.4	40.9
1,000 to 1,499 miles	48.7	S	S
1,500 to 1,999 miles	S	S	S
2,000 miles or more	S	S	S
SCTG 19, Coal and petroleum products, n.e.c.	7.5	10.2	11.1
Less than 50 miles	9.5	13.1	13.5
50 to 99 miles	13.9	22.0	21.1
100 to 249 miles	11.0	13.5	15.1
250 to 499 miles	11.5	17.0	16.6
500 to 749 miles	13.2	18.1	16.0
750 to 999 miles	16.6	19.2	20.8
1,000 to 1,499 miles	30.2	39.3	44.7
1,500 to 1,999 miles	24.9	21.4	21.8
2,000 miles or more	49.5	36.6	35.2
SCTG 20, Basic chemicals	7.7	12.6	10.8
Less than 50 miles	12.0	18.4	17.7
50 to 99 miles	13.4	14.0	11.4
100 to 249 miles	9.3	17.1	15.5
250 to 499 miles	9.6	10.2	10.2
500 to 749 miles	9.3	12.9	12.5
750 to 999 miles	14.7	14.9	14.8
1,000 to 1,499 miles	15.6	27.4	26.5
1,500 to 1,999 miles	16.8	16.2	17.5
2,000 miles or more	22.4	33.9	35.2
SCTG 21, Pharmaceutical products	9.5	16.7	21.0
Less than 50 miles	12.2	17.1	14.6
50 to 99 miles	8.8	15.2	15.5
100 to 249 miles	6.4	19.0	19.6
250 to 499 miles	8.6	29.8	29.3
500 to 749 miles	27.9	24.1	23.0
750 to 999 miles	22.7	35.7	33.8
1,000 to 1,499 miles	16.9	34.6	32.5
1,500 to 1,999 miles	20.8	31.6	32.0
2,000 miles or more	43.9	19.2	19.4
SCTG 22, Fertilizers	16.9	30.2	24.7
Less than 50 miles	35.1	S	45.4
50 to 99 miles	18.3	21.0	20.4
100 to 249 miles	20.1	22.4	24.3
250 to 499 miles	22.6	35.2	28.9
500 to 749 miles	20.3	13.4	13.6
750 to 999 miles	41.6	46.8	44.1
1,000 to 1,499 miles	35.2	S	S
1,500 to 1,999 miles	33.9	35.4	36.3
2,000 miles or more	41.5	S	S
SCTG 23, Chemical products and preparations, n.e.c.	5.0	5.1	7.9
Less than 50 miles	5.1	7.4	11.7
50 to 99 miles	9.3	12.0	11.8
100 to 249 miles	7.1	6.3	7.3
250 to 499 miles	8.9	9.8	10.3
500 to 749 miles	10.6	10.1	9.6
750 to 999 miles	9.6	14.8	14.7
1,000 to 1,499 miles	11.3	10.9	11.0
1,500 to 1,999 miles	13.5	16.1	16.5
2,000 miles or more	19.9	13.4	13.4
SCTG 24, Plastics and rubber	3.6	4.0	5.2
Less than 50 miles	3.7	4.9	5.9
50 to 99 miles	6.0	5.8	6.1
100 to 249 miles	7.2	6.9	7.4
250 to 499 miles	4.8	6.5	6.6
500 to 749 miles	6.6	10.3	10.1
750 to 999 miles	5.1	7.9	7.9
1,000 to 1,499 miles	8.0	8.1	8.4
1,500 to 1,999 miles	12.6	11.7	11.8
2,000 miles or more	15.5	19.4	18.6

See footnotes at end of table.

Table B–8. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and distance shipped (based on Great Circle Distance)	Value	Tons	Ton-miles
SCTG 25, Logs and other wood in the rough	24.2	S	34.4
Less than 50 miles	27.2	S	S
50 to 99 miles	38.9	S	S
100 to 249 miles	32.1	S	S
250 to 499 miles	36.2	41.7	39.9
500 to 749 miles	S	34.0	33.1
750 to 999 miles	37.2	38.5	38.3
1,000 to 1,499 miles	S	S	S
1,500 to 1,999 miles	S	S	S
2,000 miles or more	33.8	36.0	36.6
SCTG 26, Wood products	8.4	9.2	11.7
Less than 50 miles	10.5	9.1	10.1
50 to 99 miles	7.2	29.4	36.1
100 to 249 miles	7.3	5.9	7.0
250 to 499 miles	11.5	6.1	6.1
500 to 749 miles	21.0	17.0	17.6
750 to 999 miles	11.2	13.7	13.7
1,000 to 1,499 miles	21.8	20.3	20.1
1,500 to 1,999 miles	8.1	18.1	18.9
2,000 miles or more	11.1	20.3	21.3
SCTG 27, Pulp, newsprint, paper, and paperboard	5.2	6.2	7.4
Less than 50 miles	9.4	14.5	9.4
50 to 99 miles	10.1	12.4	12.3
100 to 249 miles	9.6	10.5	9.2
250 to 499 miles	7.9	6.3	6.7
500 to 749 miles	9.6	9.2	9.7
750 to 999 miles	8.3	7.3	6.8
1,000 to 1,499 miles	13.2	20.3	19.3
1,500 to 1,999 miles	7.0	8.5	9.0
2,000 miles or more	14.1	13.9	13.8
SCTG 28, Paper or paperboard articles	4.0	5.2	8.5
Less than 50 miles	6.0	7.5	7.4
50 to 99 miles	5.9	6.5	6.7
100 to 249 miles	6.6	6.7	7.1
250 to 499 miles	7.1	9.5	9.6
500 to 749 miles	10.0	11.4	11.2
750 to 999 miles	14.1	15.3	16.3
1,000 to 1,499 miles	7.0	9.0	8.9
1,500 to 1,999 miles	12.2	13.3	13.1
2,000 miles or more	11.4	15.3	15.1
SCTG 29, Printed products	7.6	8.1	8.5
Less than 50 miles	4.4	11.3	10.6
50 to 99 miles	5.8	30.0	35.8
100 to 249 miles	9.7	18.8	19.5
250 to 499 miles	15.8	11.2	11.1
500 to 749 miles	16.3	12.8	15.7
750 to 999 miles	8.3	9.7	9.6
1,000 to 1,499 miles	10.3	18.1	18.1
1,500 to 1,999 miles	13.4	11.8	11.9
2,000 miles or more	13.7	14.3	13.6
SCTG 30, Textiles, leather, and articles of textiles or leather	5.4	7.5	10.5
Less than 50 miles	8.6	19.7	12.6
50 to 99 miles	15.4	29.0	30.5
100 to 249 miles	11.0	10.1	10.3
250 to 499 miles	8.9	7.1	6.6
500 to 749 miles	6.0	7.3	7.5
750 to 999 miles	12.8	17.6	17.7
1,000 to 1,499 miles	10.0	22.1	20.1
1,500 to 1,999 miles	11.6	8.7	9.1
2,000 miles or more	11.3	20.0	33.9
SCTG 31, Nonmetallic mineral products	7.0	9.0	11.9
Less than 50 miles	9.1	12.8	13.9
50 to 99 miles	7.8	9.8	9.2
100 to 249 miles	8.0	12.1	12.3
250 to 499 miles	10.4	11.0	10.9
500 to 749 miles	13.1	19.8	22.5
750 to 999 miles	18.2	23.6	24.5
1,000 to 1,499 miles	19.1	24.9	26.9
1,500 to 1,999 miles	29.2	45.6	45.0
2,000 miles or more	23.0	25.0	24.7
SCTG 32, Base metal in primary or semifinished forms and in finished basic shapes	5.0	6.3	6.0
Less than 50 miles	7.6	7.5	9.7
50 to 99 miles	7.1	10.6	11.0
100 to 249 miles	7.4	10.0	9.0
250 to 499 miles	5.4	6.9	7.5
500 to 749 miles	5.3	9.3	9.4
750 to 999 miles	9.7	14.2	16.1
1,000 to 1,499 miles	9.0	11.2	13.1
1,500 to 1,999 miles	12.4	16.5	17.3
2,000 miles or more	11.4	23.7	23.3

See footnotes at end of table.

Table B–8. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and distance shipped (based on Great Circle Distance)	Value	Tons	Ton-miles
SCTG 33, Articles of base metal	3.9	9.5	7.0
Less than 50 miles	6.4	23.2	29.9
50 to 99 miles	8.2	12.3	12.5
100 to 249 miles	7.5	8.1	7.8
250 to 499 miles	5.7	6.1	6.2
500 to 749 miles	8.8	10.7	10.9
750 to 999 miles	7.7	8.6	8.5
1,000 to 1,499 miles	6.2	21.9	24.8
1,500 to 1,999 miles	9.0	18.0	17.7
2,000 miles or more	14.2	15.8	15.2
SCTG 34, Machinery	5.7	7.7	9.0
Less than 50 miles	6.7	7.7	8.7
50 to 99 miles	8.4	11.5	10.0
100 to 249 miles	5.1	10.5	8.8
250 to 499 miles	8.1	11.3	11.3
500 to 749 miles	15.0	18.8	18.1
750 to 999 miles	9.4	12.1	12.3
1,000 to 1,499 miles	6.1	7.2	7.4
1,500 to 1,999 miles	10.7	12.9	13.5
2,000 miles or more	16.3	22.8	22.7
SCTG 35, Electronic and other electrical equipment and components and office equipment	5.6	9.7	11.9
Less than 50 miles	9.5	15.6	20.7
50 to 99 miles	8.4	15.2	14.9
100 to 249 miles	7.6	9.3	10.0
250 to 499 miles	9.2	20.1	22.0
500 to 749 miles	14.3	22.3	23.5
750 to 999 miles	6.5	12.6	12.8
1,000 to 1,499 miles	8.3	16.4	16.1
1,500 to 1,999 miles	15.9	10.5	10.5
2,000 miles or more	17.7	8.3	8.3
SCTG 36, Motorized and other vehicles (including parts)	8.3	7.6	10.1
Less than 50 miles	6.5	11.4	14.2
50 to 99 miles	18.6	19.3	17.3
100 to 249 miles	14.7	13.6	12.6
250 to 499 miles	11.9	8.7	7.5
500 to 749 miles	11.8	8.6	8.3
750 to 999 miles	21.9	25.1	26.4
1,000 to 1,499 miles	8.5	10.6	11.3
1,500 to 1,999 miles	13.8	16.2	16.5
2,000 miles or more	25.2	32.8	30.5
SCTG 37, Transportation equipment, n.e.c.	23.3	40.9	41.7
Less than 50 miles	S	S	S
50 to 99 miles	47.4	S	S
100 to 249 miles	14.9	48.7	S
250 to 499 miles	11.4	43.1	42.9
500 to 749 miles	20.2	S	49.1
750 to 999 miles	28.0	S	S
1,000 to 1,499 miles	21.3	22.9	23.1
1,500 to 1,999 miles	29.8	34.6	35.0
2,000 miles or more	17.3	26.1	26.4
SCTG 38, Precision instruments and apparatus	7.9	18.3	12.6
Less than 50 miles	11.6	23.6	25.1
50 to 99 miles	24.1	30.4	28.3
100 to 249 miles	12.7	37.8	33.7
250 to 499 miles	14.0	S	50.0
500 to 749 miles	9.3	11.8	12.2
750 to 999 miles	9.5	16.1	15.4
1,000 to 1,499 miles	14.1	15.4	16.4
1,500 to 1,999 miles	22.6	15.9	15.8
2,000 miles or more	12.4	20.7	21.1
SCTG 39, Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	6.2	11.8	6.4
Less than 50 miles	14.9	20.7	19.3
50 to 99 miles	13.7	S	S
100 to 249 miles	9.9	8.7	8.8
250 to 499 miles	6.9	10.5	10.4
500 to 749 miles	7.9	6.6	6.6
750 to 999 miles	11.2	13.7	13.7
1,000 to 1,499 miles	9.5	15.9	14.7
1,500 to 1,999 miles	10.7	12.0	11.7
2,000 miles or more	11.4	18.8	18.2
SCTG 40, Miscellaneous manufactured products	5.4	10.5	7.7
Less than 50 miles	8.2	17.8	21.0
50 to 99 miles	10.6	20.2	19.2
100 to 249 miles	6.9	9.9	10.3
250 to 499 miles	6.3	9.5	8.8
500 to 749 miles	6.3	11.0	11.9
750 to 999 miles	7.0	11.1	10.7
1,000 to 1,499 miles	8.5	9.3	9.5
1,500 to 1,999 miles	17.3	17.9	17.3
2,000 miles or more	12.4	13.7	13.7

See footnotes at end of table.

Table B–8. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and distance shipped (based on Great Circle Distance)	Value	Tons	Ton-miles
SCTG 41, Waste and scrap	14.4	16.8	25.8
Less than 50 miles	17.7	23.1	26.0
50 to 99 miles	18.7	27.2	24.3
100 to 249 miles	21.0	22.5	24.1
250 to 499 miles	24.9	29.9	35.5
500 to 749 miles	47.2	44.1	S
750 to 999 miles	27.4	49.5	S
1,000 to 1,499 miles	28.7	34.9	38.0
1,500 to 1,999 miles	42.1	43.6	42.7
2,000 miles or more	S	S	49.5
SCTG 43, Mixed freight	3.6	5.6	5.0
Less than 50 miles	5.4	9.8	10.4
50 to 99 miles	3.7	3.8	4.0
100 to 249 miles	4.8	5.5	5.8
250 to 499 miles	5.3	9.3	9.3
500 to 749 miles	10.4	10.5	10.5
750 to 999 miles	14.8	14.1	13.6
1,000 to 1,499 miles	8.6	16.9	18.1
1,500 to 1,999 miles	13.9	19.3	19.6
2,000 miles or more	23.6	20.4	20.3
Commodity unknown	9.9	22.3	41.7
Less than 50 miles	17.4	32.9	S
50 to 99 miles	15.1	34.8	33.4
100 to 249 miles	23.5	26.1	34.9
250 to 499 miles	17.4	24.1	30.3
500 to 749 miles	34.8	S	47.8
750 to 999 miles	35.6	S	S
1,000 to 1,499 miles	19.8	30.3	30.3
1,500 to 1,999 miles	32.8	39.6	40.7
2,000 miles or more	41.6	33.4	33.6

– Represents data cell equal to zero or less than 1 unit of measure.

S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-9. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight for the United States: 2002

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and shipment weight	Value	Tons	Ton-miles
Total	1.3	2.0	3.7
Less than 50 lb	2.5	2.7	3.5
50 to 99 lb	5.6	4.7	6.8
100 to 499 lb	3.0	3.4	2.6
500 to 749 lb	3.3	3.3	2.8
750 to 999 lb	3.8	4.6	2.6
1,000 to 9,999 lb	2.6	1.9	3.7
10,000 to 49,999 lb	1.7	3.3	2.1
50,000 to 99,999 lb	3.6	3.8	4.6
100,000 lb or more	6.5	3.4	6.2
SCTG 01, Live animals and live fish	21.1	24.5	26.0
Less than 50 lb	S	S	S
50 to 99 lb	S	S	S
100 to 499 lb	46.7	42.8	38.0
500 to 749 lb	S	S	S
750 to 999 lb	S	41.6	S
1,000 to 9,999 lb	S	S	S
10,000 to 49,999 lb	31.0	27.5	31.7
50,000 to 99,999 lb	19.5	28.2	33.3
100,000 lb or more	45.6	44.7	39.1
SCTG 02, Cereal grains	7.1	7.5	18.1
Less than 50 lb	41.8	44.0	37.7
50 to 99 lb	S	33.8	S
100 to 499 lb	40.6	S	S
500 to 749 lb	49.3	26.1	40.6
750 to 999 lb	40.5	41.5	S
1,000 to 9,999 lb	29.6	17.7	28.8
10,000 to 49,999 lb	19.4	26.6	25.8
50,000 to 99,999 lb	15.1	15.3	21.8
100,000 lb or more	8.0	9.0	19.2
SCTG 03, Other agricultural products	10.4	7.8	7.4
Less than 50 lb	34.6	32.8	S
50 to 99 lb	22.5	18.4	38.7
100 to 499 lb	16.2	19.6	21.8
500 to 749 lb	21.3	30.0	21.9
750 to 999 lb	24.5	36.3	23.2
1,000 to 9,999 lb	21.7	26.3	23.1
10,000 to 49,999 lb	15.0	13.9	13.2
50,000 to 99,999 lb	14.1	16.4	15.6
100,000 lb or more	14.0	11.0	13.0
SCTG 04, Animal feed and products of animal origin, n.e.c.	9.6	14.1	10.0
Less than 50 lb	43.5	S	45.6
50 to 99 lb	36.6	46.2	28.8
100 to 499 lb	26.3	24.2	48.7
500 to 749 lb	20.6	22.1	48.6
750 to 999 lb	S	36.2	S
1,000 to 9,999 lb	20.7	19.7	24.2
10,000 to 49,999 lb	8.4	10.1	16.0
50,000 to 99,999 lb	27.8	25.8	15.7
100,000 lb or more	12.1	16.3	15.1
SCTG 05, Meat, fish, seafood, and their preparations	4.2	4.6	6.5
Less than 50 lb	21.7	17.4	36.3
50 to 99 lb	22.9	15.9	13.8
100 to 499 lb	15.1	13.0	10.0
500 to 749 lb	15.5	16.8	11.1
750 to 999 lb	14.2	18.3	13.1
1,000 to 9,999 lb	11.3	12.5	11.3
10,000 to 49,999 lb	4.7	5.3	6.8
50,000 to 99,999 lb	19.7	21.3	31.6
100,000 lb or more	27.6	28.8	24.0
SCTG 06, Milled grain products and preparations, and bakery products	8.2	7.2	6.8
Less than 50 lb	25.7	31.9	30.8
50 to 99 lb	23.8	26.1	26.9
100 to 499 lb	28.8	26.9	26.6
500 to 749 lb	20.7	25.6	23.7
750 to 999 lb	19.7	18.2	24.6
1,000 to 9,999 lb	10.9	23.6	15.6
10,000 to 49,999 lb	9.8	10.2	10.8
50,000 to 99,999 lb	16.3	20.7	26.5
100,000 lb or more	16.7	15.8	18.4
SCTG 07, Other prepared foodstuffs and fats and oils	4.4	5.2	6.3
Less than 50 lb	12.7	21.2	15.2
50 to 99 lb	14.5	33.1	20.9
100 to 499 lb	13.6	19.2	22.0
500 to 749 lb	13.0	18.6	20.9
750 to 999 lb	16.4	24.5	21.3
1,000 to 9,999 lb	7.8	11.5	9.9
10,000 to 49,999 lb	5.5	6.4	8.3
50,000 to 99,999 lb	10.0	11.0	9.0
100,000 lb or more	8.0	11.4	12.2

See footnotes at end of table.

Table B–9. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and shipment weight	Value	Tons	Ton-miles
SCTG 08, Alcoholic beverages	6.1	5.8	12.8
Less than 50 lb	15.2	11.8	25.8
50 to 99 lb	13.1	11.1	13.5
100 to 499 lb	8.3	8.3	12.0
500 to 749 lb	7.4	9.0	13.4
750 to 999 lb	5.9	7.9	16.0
1,000 to 9,999 lb	8.4	8.8	20.0
10,000 to 49,999 lb	8.1	8.3	12.5
50,000 to 99,999 lb	9.1	10.5	20.4
100,000 lb or more	22.2	17.8	23.0
SCTG 09, Tobacco products	14.4	29.9	36.3
Less than 50 lb	26.5	23.7	26.3
50 to 99 lb	19.6	18.4	17.3
100 to 499 lb	15.1	13.2	17.2
500 to 749 lb	23.8	21.5	20.4
750 to 999 lb	29.1	46.6	37.7
1,000 to 9,999 lb	30.3	48.9	30.2
10,000 to 49,999 lb	28.8	40.0	25.2
50,000 to 99,999 lb	S	S	S
100,000 lb or more	S	S	S
SCTG 10, Monumental or building stone	29.1	29.9	22.1
Less than 50 lb	S	S	S
50 to 99 lb	49.6	S	S
100 to 499 lb	S	S	S
500 to 749 lb	40.2	32.9	42.8
750 to 999 lb	S	S	S
1,000 to 9,999 lb	36.3	24.0	49.4
10,000 to 49,999 lb	37.8	40.6	25.9
50,000 to 99,999 lb	45.4	37.2	33.9
100,000 lb or more	30.1	S	48.2
SCTG 11, Natural sands	6.8	9.1	11.8
Less than 50 lb	S	S	S
50 to 99 lb	S	S	S
100 to 499 lb	40.6	20.6	S
500 to 749 lb	47.9	40.7	49.2
750 to 999 lb	S	43.4	S
1,000 to 9,999 lb	24.0	22.6	23.6
10,000 to 49,999 lb	12.7	15.5	14.1
50,000 to 99,999 lb	11.7	10.5	11.5
100,000 lb or more	13.2	20.5	19.1
SCTG 12, Gravel and crushed stone	6.7	9.0	10.5
Less than 50 lb	S	S	S
50 to 99 lb	S	S	S
100 to 499 lb	S	39.0	44.8
500 to 749 lb	31.8	40.3	S
750 to 999 lb	S	32.3	48.4
1,000 to 9,999 lb	25.5	17.6	9.9
10,000 to 49,999 lb	8.8	12.0	9.1
50,000 to 99,999 lb	7.4	9.3	9.8
100,000 lb or more	8.6	11.2	13.7
SCTG 13, Nonmetallic minerals n.e.c.	11.5	11.9	18.7
Less than 50 lb	21.1	17.2	21.9
50 to 99 lb	27.5	23.0	34.1
100 to 499 lb	31.2	23.5	31.4
500 to 749 lb	28.0	22.6	27.7
750 to 999 lb	42.8	46.5	34.4
1,000 to 9,999 lb	21.5	13.9	20.7
10,000 to 49,999 lb	16.7	20.0	16.0
50,000 to 99,999 lb	21.3	13.3	11.9
100,000 lb or more	21.4	16.5	25.6
SCTG 14, Metallic ores and concentrates	14.0	12.4	18.1
Less than 50 lb	48.7	41.0	47.6
50 to 99 lb	S	46.2	38.9
100 to 499 lb	41.6	41.4	43.0
500 to 749 lb	49.5	42.5	S
750 to 999 lb	S	39.9	S
1,000 to 9,999 lb	44.6	35.2	32.8
10,000 to 49,999 lb	25.7	27.7	39.1
50,000 to 99,999 lb	36.5	26.2	41.0
100,000 lb or more	18.3	13.2	19.3
SCTG 15, Coal	8.0	8.8	16.8
Less than 50 lb	—	—	—
50 to 99 lb	S	S	S
100 to 499 lb	S	S	S
500 to 749 lb	S	S	S
750 to 999 lb	S	S	S
1,000 to 9,999 lb	S	42.1	S
10,000 to 49,999 lb	23.4	21.9	29.1
50,000 to 99,999 lb	22.3	23.1	43.6
100,000 lb or more	8.6	9.4	17.0

See footnotes at end of table.

Table B–9. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and shipment weight	Value	Tons	Ton-miles
SCTG 17, Gasoline and aviation turbine fuel	4.4	5.0	9.8
Less than 50 lb	30.4	37.2	35.2
50 to 99 lb	40.4	49.3	S
100 to 499 lb	31.7	34.4	27.4
500 to 749 lb	31.4	17.5	48.5
750 to 999 lb	20.5	21.0	44.7
1,000 to 9,999 lb	9.5	10.1	20.0
10,000 to 49,999 lb	10.2	10.8	22.4
50,000 to 99,999 lb	6.7	8.2	15.4
100,000 lb or more	8.2	8.1	14.3
SCTG 18, Fuel oils	6.0	6.0	10.1
Less than 50 lb	42.1	31.7	36.4
50 to 99 lb	24.9	29.3	27.1
100 to 499 lb	14.9	15.4	15.6
500 to 749 lb	18.3	20.7	26.3
750 to 999 lb	31.0	30.1	36.0
1,000 to 9,999 lb	11.4	11.2	12.6
10,000 to 49,999 lb	6.4	7.7	11.7
50,000 to 99,999 lb	6.3	6.2	18.9
100,000 lb or more	9.0	8.4	13.2
SCTG 19, Coal and petroleum products, n.e.c.	7.5	10.2	11.1
Less than 50 lb	11.4	16.9	15.8
50 to 99 lb	27.1	23.9	S
100 to 499 lb	15.7	13.9	48.9
500 to 749 lb	10.0	15.6	31.4
750 to 999 lb	14.8	14.8	25.7
1,000 to 9,999 lb	18.4	13.4	19.5
10,000 to 49,999 lb	12.6	22.2	22.3
50,000 to 99,999 lb	13.7	13.7	12.9
100,000 lb or more	10.1	8.9	13.8
SCTG 20, Basic chemicals	7.7	12.6	10.8
Less than 50 lb	17.9	17.2	21.9
50 to 99 lb	15.2	14.1	21.2
100 to 499 lb	22.6	11.2	18.3
500 to 749 lb	37.5	18.1	29.1
750 to 999 lb	28.6	13.4	30.8
1,000 to 9,999 lb	19.5	13.1	27.3
10,000 to 49,999 lb	7.8	15.5	10.5
50,000 to 99,999 lb	11.6	12.2	34.3
100,000 lb or more	11.7	16.8	12.6
SCTG 21, Pharmaceutical products	9.5	16.7	21.0
Less than 50 lb	6.2	7.7	9.7
50 to 99 lb	8.7	12.8	6.7
100 to 499 lb	9.0	20.6	26.5
500 to 749 lb	11.6	21.0	31.6
750 to 999 lb	19.3	27.0	29.0
1,000 to 9,999 lb	13.6	34.5	S
10,000 to 49,999 lb	27.1	19.4	15.5
50,000 to 99,999 lb	S	S	S
100,000 lb or more	S	39.8	41.4
SCTG 22, Fertilizers	16.9	30.2	24.7
Less than 50 lb	46.5	S	S
50 to 99 lb	S	43.0	S
100 to 499 lb	25.6	32.1	S
500 to 749 lb	30.7	35.8	S
750 to 999 lb	23.1	30.6	48.2
1,000 to 9,999 lb	35.2	43.6	40.9
10,000 to 49,999 lb	22.3	24.4	25.9
50,000 to 99,999 lb	25.7	24.1	25.2
100,000 lb or more	19.4	38.0	30.9
SCTG 23, Chemical products and preparations, n.e.c.	5.0	5.1	7.9
Less than 50 lb	8.8	8.5	16.0
50 to 99 lb	10.2	6.8	11.1
100 to 499 lb	9.0	9.0	9.3
500 to 749 lb	11.5	7.5	13.6
750 to 999 lb	12.7	8.9	12.7
1,000 to 9,999 lb	11.6	6.6	9.8
10,000 to 49,999 lb	7.1	7.0	9.8
50,000 to 99,999 lb	25.2	16.4	22.5
100,000 lb or more	15.3	12.7	12.1
SCTG 24, Plastics and rubber	3.6	4.0	5.2
Less than 50 lb	5.0	5.9	13.1
50 to 99 lb	6.0	7.0	11.1
100 to 499 lb	5.2	7.0	8.6
500 to 749 lb	7.1	6.4	9.9
750 to 999 lb	5.8	6.0	8.7
1,000 to 9,999 lb	5.6	6.7	10.4
10,000 to 49,999 lb	7.0	5.5	6.6
50,000 to 99,999 lb	16.8	15.9	21.7
100,000 lb or more	8.8	6.6	7.8

See footnotes at end of table.

Table B–9. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and shipment weight	Value	Tons	Ton-miles
SCTG 25, Logs and other wood in the rough	24.2	S	34.4
Less than 50 lb	40.4	S	S
50 to 99 lb	48.8	29.5	S
100 to 499 lb	20.6	29.3	39.2
500 to 749 lb	28.4	35.5	S
750 to 999 lb	36.4	37.9	27.7
1,000 to 9,999 lb	38.4	S	S
10,000 to 49,999 lb	34.9	49.2	31.2
50,000 to 99,999 lb	44.3	S	S
100,000 lb or more	45.6	33.0	S
SCTG 26, Wood products	8.4	9.2	11.7
Less than 50 lb	16.2	15.2	26.9
50 to 99 lb	14.1	16.8	18.0
100 to 499 lb	13.6	12.7	13.3
500 to 749 lb	25.6	23.7	30.0
750 to 999 lb	16.0	12.0	18.1
1,000 to 9,999 lb	13.8	10.4	10.8
10,000 to 49,999 lb	7.5	6.3	11.3
50,000 to 99,999 lb	8.7	13.0	11.5
100,000 lb or more	11.5	22.4	18.1
SCTG 27, Pulp, newsprint, paper, and paperboard	5.2	6.2	7.4
Less than 50 lb	11.5	10.2	26.4
50 to 99 lb	12.8	11.9	22.7
100 to 499 lb	9.3	10.4	11.7
500 to 749 lb	11.8	11.4	16.4
750 to 999 lb	15.6	15.9	14.5
1,000 to 9,999 lb	10.8	10.2	8.6
10,000 to 49,999 lb	5.9	6.3	5.3
50,000 to 99,999 lb	21.3	26.1	15.1
100,000 lb or more	9.0	8.7	11.7
SCTG 28, Paper or paperboard articles	4.0	5.2	8.5
Less than 50 lb	9.5	15.8	18.4
50 to 99 lb	11.6	9.1	13.7
100 to 499 lb	7.2	7.3	10.0
500 to 749 lb	7.0	9.6	10.6
750 to 999 lb	10.0	12.6	15.8
1,000 to 9,999 lb	7.1	7.0	6.6
10,000 to 49,999 lb	5.3	6.2	9.5
50,000 to 99,999 lb	49.7	24.7	29.2
100,000 lb or more	40.9	27.4	42.3
SCTG 29, Printed products	7.6	8.1	8.5
Less than 50 lb	6.9	10.7	14.5
50 to 99 lb	12.7	31.6	S
100 to 499 lb	8.4	6.8	9.1
500 to 749 lb	16.3	11.0	19.7
750 to 999 lb	15.3	11.3	16.7
1,000 to 9,999 lb	11.3	6.8	10.2
10,000 to 49,999 lb	11.9	9.6	9.8
50,000 to 99,999 lb	33.8	46.5	32.2
100,000 lb or more	21.0	S	S
SCTG 30, Textiles, leather, and articles of textiles or leather	5.4	7.5	10.5
Less than 50 lb	4.4	7.1	7.4
50 to 99 lb	7.4	7.8	9.1
100 to 499 lb	9.8	9.7	14.2
500 to 749 lb	9.6	8.3	10.7
750 to 999 lb	17.9	9.2	12.1
1,000 to 9,999 lb	7.1	6.5	8.6
10,000 to 49,999 lb	9.0	11.1	16.3
50,000 to 99,999 lb	29.9	19.5	22.0
100,000 lb or more	34.1	46.1	37.4
SCTG 31, Nonmetallic mineral products	7.0	9.0	11.9
Less than 50 lb	16.7	20.3	16.2
50 to 99 lb	15.0	18.4	36.0
100 to 499 lb	18.7	18.3	39.8
500 to 749 lb	17.9	11.6	24.8
750 to 999 lb	17.9	9.9	36.7
1,000 to 9,999 lb	9.4	8.8	35.2
10,000 to 49,999 lb	10.0	12.3	9.6
50,000 to 99,999 lb	21.1	11.6	13.2
100,000 lb or more	35.3	16.5	28.6
SCTG 32, Base metal in primary or semifinished forms and in finished basic shapes	5.0	6.3	6.0
Less than 50 lb	13.4	16.9	25.1
50 to 99 lb	11.2	15.2	24.0
100 to 499 lb	8.8	9.3	14.1
500 to 749 lb	9.0	8.8	17.6
750 to 999 lb	9.7	8.8	13.3
1,000 to 9,999 lb	6.0	5.6	6.5
10,000 to 49,999 lb	6.5	8.3	8.1
50,000 to 99,999 lb	14.4	13.5	12.7
100,000 lb or more	8.6	8.2	8.3

See footnotes at end of table.

Table B–9. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and shipment weight	Value	Tons	Ton-miles
SCTG 33, Articles of base metal	3.9	9.5	7.0
Less than 50 lb	7.8	5.7	7.4
50 to 99 lb	7.7	7.9	9.6
100 to 499 lb	5.2	6.8	8.7
500 to 749 lb	9.2	8.6	8.8
750 to 999 lb	9.4	6.8	10.3
1,000 to 9,999 lb	6.7	8.1	10.9
10,000 to 49,999 lb	5.7	11.6	7.4
50,000 to 99,999 lb	13.4	12.7	16.9
100,000 lb or more	16.9	S	31.0
SCTG 34, Machinery	5.7	7.7	9.0
Less than 50 lb	4.8	5.4	9.6
50 to 99 lb	7.1	6.5	12.9
100 to 499 lb	4.2	4.2	6.4
500 to 749 lb	8.6	7.6	10.8
750 to 999 lb	11.8	6.9	8.7
1,000 to 9,999 lb	8.6	8.8	11.7
10,000 to 49,999 lb	8.2	9.3	9.9
50,000 to 99,999 lb	17.4	18.9	22.4
100,000 lb or more	18.2	12.5	24.6
SCTG 35, Electronic and other electrical equipment and components and office equipment	5.6	9.7	11.9
Less than 50 lb	4.7	6.1	8.0
50 to 99 lb	17.1	7.6	10.2
100 to 499 lb	7.1	9.8	9.1
500 to 749 lb	10.7	14.9	12.3
750 to 999 lb	9.9	20.3	15.0
1,000 to 9,999 lb	11.0	12.1	14.2
10,000 to 49,999 lb	13.1	15.5	15.8
50,000 to 99,999 lb	29.6	21.0	32.9
100,000 lb or more	27.1	39.9	42.3
SCTG 36, Motorized and other vehicles (including parts)	8.3	7.6	10.1
Less than 50 lb	7.4	10.2	9.7
50 to 99 lb	6.4	7.1	9.8
100 to 499 lb	8.4	6.9	8.9
500 to 749 lb	15.5	9.3	13.8
750 to 999 lb	11.1	10.5	9.5
1,000 to 9,999 lb	10.0	8.0	14.9
10,000 to 49,999 lb	7.6	8.6	7.8
50,000 to 99,999 lb	21.0	15.6	13.2
100,000 lb or more	45.8	39.3	44.9
SCTG 37, Transportation equipment, n.e.c.	23.3	40.9	41.7
Less than 50 lb	11.7	10.5	9.7
50 to 99 lb	17.5	16.3	18.2
100 to 499 lb	25.2	16.5	17.4
500 to 749 lb	28.0	28.2	30.3
750 to 999 lb	18.4	24.2	30.0
1,000 to 9,999 lb	17.5	9.8	10.1
10,000 to 49,999 lb	23.9	43.1	44.5
50,000 to 99,999 lb	S	S	S
100,000 lb or more	S	35.3	41.0
SCTG 38, Precision instruments and apparatus	7.9	18.3	12.6
Less than 50 lb	11.9	10.6	13.2
50 to 99 lb	11.9	13.8	13.4
100 to 499 lb	12.7	12.7	18.4
500 to 749 lb	15.7	13.9	15.6
750 to 999 lb	26.1	21.2	19.2
1,000 to 9,999 lb	12.8	11.2	26.5
10,000 to 49,999 lb	29.0	21.8	19.3
50,000 to 99,999 lb	39.3	S	45.9
100,000 lb or more	37.6	30.3	40.1
SCTG 39, Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	6.2	11.8	6.4
Less than 50 lb	13.3	14.2	15.1
50 to 99 lb	13.0	12.3	14.5
100 to 499 lb	14.9	13.1	8.6
500 to 749 lb	12.3	10.9	9.5
750 to 999 lb	26.1	12.1	8.0
1,000 to 9,999 lb	5.0	7.3	8.1
10,000 to 49,999 lb	13.3	15.2	9.8
50,000 to 99,999 lb	S	S	47.9
100,000 lb or more	32.3	S	S
SCTG 40, Miscellaneous manufactured products	5.4	10.5	7.7
Less than 50 lb	10.3	6.6	8.5
50 to 99 lb	10.0	8.5	15.8
100 to 499 lb	5.3	8.0	5.9
500 to 749 lb	8.9	7.5	9.9
750 to 999 lb	10.9	7.1	10.9
1,000 to 9,999 lb	10.6	9.4	14.0
10,000 to 49,999 lb	8.8	12.1	7.0
50,000 to 99,999 lb	23.1	21.3	24.2
100,000 lb or more	23.7	43.2	37.6

See footnotes at end of table.

Table B-9. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, and shipment weight	Value	Tons	Ton-miles
SCTG 41, Waste and scrap	14.4	16.8	25.8
Less than 50 lb	41.7	37.7	S
50 to 99 lb	S	S	S
100 to 499 lb	34.9	41.9	33.7
500 to 749 lb	40.0	44.4	S
750 to 999 lb	S	S	S
1,000 to 9,999 lb	39.3	33.4	37.8
10,000 to 49,999 lb	15.4	13.9	13.8
50,000 to 99,999 lb	20.8	20.3	17.6
100,000 lb or more	27.5	28.4	42.5
SCTG 43, Mixed freight	3.6	5.6	5.0
Less than 50 lb	7.2	12.9	11.8
50 to 99 lb	9.2	13.2	14.3
100 to 499 lb	9.1	10.3	8.3
500 to 749 lb	8.8	9.0	8.4
750 to 999 lb	6.5	8.0	7.1
1,000 to 9,999 lb	4.7	5.6	6.5
10,000 to 49,999 lb	4.5	6.7	6.3
50,000 to 99,999 lb	27.9	S	24.8
100,000 lb or more	27.3	18.5	43.6
Commodity unknown	9.9	22.3	41.7
Less than 50 lb	37.2	24.7	27.8
50 to 99 lb	20.4	18.7	22.3
100 to 499 lb	20.4	18.2	29.3
500 to 749 lb	30.8	16.9	20.9
750 to 999 lb	26.6	35.3	S
1,000 to 9,999 lb	12.8	20.5	16.9
10,000 to 49,999 lb	14.5	13.2	16.7
50,000 to 99,999 lb	22.2	22.5	14.4
100,000 lb or more	S	40.2	S

— Represents data cell equal to zero or less than 1 unit of measure.

S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	Total, all mileages				Less than 50 miles			50 to 99 miles		
	Value	Tons	Ton-miles	Average miles per shipment	Value	Tons	Ton-miles	Value	Tons	Ton-miles
Total	1.3	2.0	3.7	2.9	1.4	3.2	3.9	1.8	5.8	5.8
Less than 50 lb	2.5	2.7	3.5	2.8	2.7	4.2	4.4	3.7	3.6	3.7
50 to 99 lb	5.6	4.7	6.8	5.4	5.2	7.3	8.4	5.6	5.3	5.5
100 to 499 lb	3.0	3.4	2.6	3.5	3.5	4.7	4.9	5.4	4.7	4.4
500 to 749 lb	3.3	3.3	2.8	3.3	6.4	4.7	4.9	6.7	6.7	6.8
750 to 999 lb	3.8	4.6	2.6	4.4	5.8	6.4	6.6	9.7	5.7	5.6
1,000 to 9,999 lb	2.6	1.9	3.7	2.8	3.2	3.0	3.3	4.1	2.4	2.5
10,000 to 49,999 lb	1.7	3.3	2.1	2.7	3.5	5.6	4.9	2.2	5.3	5.0
50,000 to 99,999 lb	3.6	3.8	4.6	4.5	4.5	4.5	5.6	12.4	8.4	7.8
100,000 lb or more	6.5	3.4	6.2	3.2	13.6	5.0	7.3	13.2	11.2	10.6
SCTG 01, Live animals and live fish	21.1	24.5	26.0	18.3	30.1	47.4	S	S	S	S
Less than 50 lb	S	S	S	30.2	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	46.7	42.8	38.0	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	22.6	S	S	S	-	-	-
750 to 999 lb	S	41.6	S	38.9	S	49.8	S	S	S	S
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	31.0	27.5	31.7	16.2	28.7	S	S	S	S	S
50,000 to 99,999 lb	19.5	28.2	33.3	17.1	28.2	S	S	45.0	42.8	40.8
100,000 lb or more	45.6	44.7	39.1	27.2	44.9	44.0	S	S	S	S
SCTG 02, Cereal grains	7.1	7.5	18.1	10.9	9.5	9.7	13.3	20.2	22.2	24.4
Less than 50 lb	41.8	44.0	37.7	S	44.0	S	S	S	S	S
50 to 99 lb	S	33.8	S	33.6	S	34.4	S	S	S	S
100 to 499 lb	40.6	S	S	17.4	44.3	25.7	25.2	S	S	S
500 to 749 lb	49.3	26.1	40.6	47.0	42.7	31.6	40.8	S	S	S
750 to 999 lb	40.5	41.5	S	S	33.4	46.2	S	S	S	S
1,000 to 9,999 lb	29.6	17.7	28.8	S	30.3	21.3	16.3	33.0	26.2	25.1
10,000 to 49,999 lb	19.4	26.6	25.8	34.8	31.2	38.8	31.8	33.7	46.5	38.4
50,000 to 99,999 lb	15.1	15.3	21.8	11.4	21.6	22.3	21.4	26.5	26.6	27.1
100,000 lb or more	8.0	9.0	19.2	12.5	12.8	12.9	19.8	43.0	49.0	S
SCTG 03, Other agricultural products	10.4	7.8	7.4	12.2	18.0	13.4	20.0	24.6	20.3	19.8
Less than 50 lb	34.6	32.8	S	13.4	41.4	30.5	26.2	27.7	34.5	34.3
50 to 99 lb	22.5	18.4	38.7	32.9	24.7	22.8	26.6	47.7	31.7	31.6
100 to 499 lb	16.2	19.6	21.8	27.0	21.5	21.5	25.4	25.6	28.6	30.0
500 to 749 lb	21.3	30.0	21.9	40.2	24.8	30.7	35.4	46.2	S	S
750 to 999 lb	24.5	36.3	23.2	39.5	35.5	46.0	49.4	23.6	22.0	23.1
1,000 to 9,999 lb	21.7	26.3	23.1	25.1	34.2	39.6	48.0	17.5	19.6	19.1
10,000 to 49,999 lb	15.0	13.9	13.2	13.9	29.3	25.4	28.7	28.6	25.7	21.7
50,000 to 99,999 lb	14.1	16.4	15.6	15.7	16.7	17.8	23.8	27.4	30.4	31.1
100,000 lb or more	14.0	11.0	13.0	13.6	22.4	24.5	35.7	S	S	S
SCTG 04, Animal feed and products of animal origin, n.e.c.	9.6	14.1	10.0	24.8	20.7	25.9	24.9	13.0	13.2	13.3
Less than 50 lb	43.5	S	45.6	32.6	S	S	S	S	S	S
50 to 99 lb	36.6	46.2	28.8	40.8	45.8	S	S	S	S	S
100 to 499 lb	26.3	24.2	48.7	S	30.7	28.8	35.7	S	34.6	29.9
500 to 749 lb	20.6	22.1	48.6	S	28.5	25.5	31.0	27.3	23.0	22.1
750 to 999 lb	S	36.2	S	16.4	41.2	32.1	41.7	46.5	42.6	43.6
1,000 to 9,999 lb	20.7	19.7	24.2	17.2	22.8	25.7	23.0	40.1	29.0	25.9
10,000 to 49,999 lb	8.4	10.1	16.0	27.9	15.4	17.0	19.6	16.4	19.0	18.9
50,000 to 99,999 lb	27.8	25.8	15.7	19.6	40.6	39.1	34.6	14.2	16.1	17.2
100,000 lb or more	12.1	16.3	15.1	7.3	33.9	41.9	38.3	48.2	38.6	35.0
SCTG 05, Meat, fish, seafood, and their preparations	4.2	4.6	6.5	15.2	10.0	10.0	8.2	6.2	7.8	9.2
Less than 50 lb	21.7	17.4	36.3	26.2	27.7	21.7	23.2	21.4	20.3	20.4
50 to 99 lb	22.9	15.9	13.8	23.0	25.2	18.2	21.2	22.4	19.2	20.4
100 to 499 lb	15.1	13.0	10.0	20.1	18.9	15.2	15.7	18.2	15.9	16.0
500 to 749 lb	15.5	16.8	11.1	17.0	20.2	22.0	15.8	16.1	15.1	16.5
750 to 999 lb	14.2	18.3	13.1	15.0	22.3	26.6	17.7	25.4	31.3	30.2
1,000 to 9,999 lb	11.3	12.5	11.3	11.1	16.5	21.4	14.5	13.8	14.6	14.2
10,000 to 49,999 lb	4.7	5.3	6.8	2.9	10.8	10.8	11.3	11.0	11.2	13.5
50,000 to 99,999 lb	19.7	21.3	31.6	14.7	45.8	38.7	33.9	S	S	S
100,000 lb or more	27.6	28.8	24.0	17.2	S	S	S	S	S	S
SCTG 06, Milled grain products and preparations, and bakery products	8.2	7.2	6.8	19.1	12.7	13.6	13.8	14.8	15.2	15.2
Less than 50 lb	25.7	31.9	30.8	48.0	33.1	37.3	38.2	S	47.3	44.3
50 to 99 lb	23.8	26.1	26.9	33.3	34.1	30.4	33.0	31.3	39.5	42.1
100 to 499 lb	28.8	26.9	26.6	20.1	39.7	35.8	37.6	21.5	18.4	17.0
500 to 749 lb	20.7	25.6	23.7	33.9	30.1	35.1	29.2	21.0	17.0	16.3
750 to 999 lb	19.7	18.2	24.6	42.5	32.4	27.4	30.5	21.0	16.3	16.3
1,000 to 9,999 lb	10.9	23.6	15.6	12.1	19.2	30.7	36.3	17.1	25.8	25.3
10,000 to 49,999 lb	9.8	10.2	10.8	7.0	15.4	21.1	19.5	20.9	17.2	18.3
50,000 to 99,999 lb	16.3	20.7	26.5	13.7	26.3	24.9	25.5	41.4	44.4	43.5
100,000 lb or more	16.7	15.8	18.4	11.1	34.0	35.0	39.3	45.6	47.8	S

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	Total, all mileages				Less than 50 miles			50 to 99 miles		
	Value	Tons	Ton-miles	Average miles per shipment	Value	Tons	Ton-miles	Value	Tons	Ton-miles
SCTG 07, Other prepared foodstuffs and fats and oils	4.4	5.2	6.3	17.7	5.7	6.5	7.6	7.5	9.7	9.5
Less than 50 lb	12.7	21.2	15.2	19.6	17.6	28.9	35.3	33.9	23.2	23.7
50 to 99 lb	14.5	33.1	20.9	14.2	17.0	38.9	45.7	32.2	29.7	30.5
100 to 499 lb	13.6	19.2	22.0	19.0	14.0	19.7	22.7	20.7	31.7	29.3
500 to 749 lb	13.0	18.6	20.9	12.8	13.4	16.2	18.2	22.0	37.9	38.0
750 to 999 lb	16.4	24.5	21.3	19.2	19.2	22.8	26.7	18.1	34.0	31.2
1,000 to 9,999 lb	7.8	11.5	9.9	13.6	10.4	12.7	14.8	9.3	15.8	16.2
10,000 to 49,999 lb	5.5	6.4	8.3	6.7	7.2	9.4	9.2	10.0	10.5	10.4
50,000 to 99,999 lb	10.0	11.0	9.0	10.6	16.0	16.0	20.7	12.8	17.5	17.2
100,000 lb or more	8.0	11.4	12.2	3.9	17.4	14.1	19.5	30.3	31.2	30.3
SCTG 08, Alcoholic beverages	6.1	5.8	12.8	4.7	7.1	7.1	7.2	8.3	9.4	9.2
Less than 50 lb	15.2	11.8	25.8	16.4	15.8	11.1	9.8	17.0	16.4	16.4
50 to 99 lb	13.1	11.1	13.5	9.0	13.7	11.1	8.6	18.7	15.1	15.0
100 to 499 lb	8.3	8.3	12.0	4.4	8.4	8.0	7.9	12.2	11.0	10.8
500 to 749 lb	7.4	9.0	13.4	7.5	7.8	9.0	10.4	14.4	14.9	14.7
750 to 999 lb	5.9	7.9	16.0	15.7	6.6	8.2	10.9	20.1	13.0	12.6
1,000 to 9,999 lb	8.4	8.8	20.0	11.5	8.9	9.3	8.6	12.6	8.5	9.0
10,000 to 49,999 lb	8.1	8.3	12.5	8.1	8.1	9.1	11.5	15.1	15.2	14.8
50,000 to 99,999 lb	9.1	10.5	20.4	16.2	18.5	15.7	17.0	21.1	19.8	20.5
100,000 lb or more	22.2	17.8	23.0	13.6	28.8	28.4	44.0	S	S	S
SCTG 09, Tobacco products	14.4	29.9	36.3	22.1	20.0	40.9	43.4	35.7	S	S
Less than 50 lb	26.5	23.7	26.3	21.4	31.8	28.7	30.0	48.5	S	S
50 to 99 lb	19.6	18.4	17.3	36.3	24.6	23.6	22.8	18.7	18.4	19.0
100 to 499 lb	15.1	13.2	17.2	20.8	20.8	18.0	15.4	20.5	21.5	22.5
500 to 749 lb	23.8	21.5	20.4	24.1	37.2	25.7	27.0	28.5	37.5	38.3
750 to 999 lb	29.1	46.6	37.7	29.6	34.0	38.5	S	28.0	48.7	47.6
1,000 to 9,999 lb	30.3	48.9	30.2	18.6	27.6	49.4	S	S	S	S
10,000 to 49,999 lb	28.8	40.0	25.2	S	33.5	48.8	S	40.5	44.9	44.3
50,000 to 99,999 lb	S	S	S	21.6	—	—	—	S	S	S
100,000 lb or more	S	S	S	21.6	—	—	—	S	S	S
SCTG 10, Monumental or building stone	29.1	29.9	22.1	16.9	41.0	33.3	34.0	31.3	33.2	33.7
Less than 50 lb	S	S	S	21.4	S	S	S	S	S	S
50 to 99 lb	49.6	S	S	20.1	33.3	42.7	S	S	S	S
100 to 499 lb	S	S	S	18.0	41.4	42.9	43.8	S	49.6	49.6
500 to 749 lb	40.2	32.9	42.8	41.7	37.9	33.1	30.7	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	36.3	24.0	49.4	24.5	44.2	24.0	23.0	46.5	39.3	39.3
10,000 to 49,999 lb	37.8	40.6	25.9	34.3	S	48.0	S	32.3	45.5	43.7
50,000 to 99,999 lb	45.4	37.2	33.9	S	35.8	40.7	S	S	36.4	37.8
100,000 lb or more	30.1	S	48.2	47.3	41.4	S	S	S	S	S
SCTG 11, Natural sands	6.8	9.1	11.8	10.5	10.6	10.4	13.8	16.2	20.1	20.0
Less than 50 lb	S	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	40.6	20.6	S	39.1	28.1	22.3	28.4	S	S	S
500 to 749 lb	47.9	40.7	49.2	44.7	S	46.1	S	S	S	S
750 to 999 lb	S	43.4	S	22.1	S	41.7	37.5	—	—	—
1,000 to 9,999 lb	24.0	22.6	23.6	27.7	25.0	24.8	25.1	S	35.6	35.6
10,000 to 49,999 lb	12.7	15.5	14.1	15.8	17.0	16.9	17.6	29.7	33.6	33.7
50,000 to 99,999 lb	11.7	10.5	11.5	6.7	12.4	11.9	16.7	11.5	16.6	16.9
100,000 lb or more	13.2	20.5	19.1	17.1	25.2	24.5	37.9	24.0	19.6	20.0
SCTG 12, Gravel and crushed stone	6.7	9.0	10.5	7.6	9.2	10.3	12.8	10.9	19.0	20.3
Less than 50 lb	S	S	S	S	S	S	S	—	—	—
50 to 99 lb	S	S	S	S	S	S	S	—	—	—
100 to 499 lb	S	39.0	44.8	S	S	42.2	32.5	—	—	—
500 to 749 lb	31.8	40.3	S	S	29.1	41.8	S	—	—	—
750 to 999 lb	S	32.3	48.4	25.2	S	35.2	49.6	S	S	S
1,000 to 9,999 lb	25.5	17.6	9.9	23.4	28.3	18.6	17.7	S	S	48.0
10,000 to 49,999 lb	8.8	12.0	9.1	9.3	11.0	13.1	13.0	11.5	14.8	14.2
50,000 to 99,999 lb	7.4	9.3	9.8	6.8	8.8	10.0	14.4	12.6	15.5	15.0
100,000 lb or more	8.6	11.2	13.7	21.7	16.5	16.5	26.2	22.5	30.4	33.0
SCTG 13, Nonmetallic minerals n.e.c.	11.5	11.9	18.7	15.9	22.6	19.7	24.9	20.2	19.6	16.8
Less than 50 lb	21.1	17.2	21.9	40.8	30.0	29.5	37.3	S	S	S
50 to 99 lb	27.5	23.0	34.1	S	34.8	25.0	24.3	S	S	S
100 to 499 lb	31.2	23.5	31.4	29.2	46.3	29.7	35.2	41.2	S	S
500 to 749 lb	28.0	22.6	27.7	29.6	36.4	25.3	27.9	S	S	S
750 to 999 lb	42.8	46.5	34.4	S	48.4	S	S	S	S	S
1,000 to 9,999 lb	21.5	13.9	20.7	31.0	19.6	17.4	39.2	47.1	30.0	29.1
10,000 to 49,999 lb	16.7	20.0	16.0	21.3	17.7	26.8	34.4	23.6	30.8	28.6
50,000 to 99,999 lb	21.3	13.3	11.9	11.1	43.7	17.1	23.1	17.4	25.7	23.0
100,000 lb or more	21.4	16.5	25.6	9.0	S	25.8	32.8	33.1	24.2	24.4

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	Total, all mileages				Less than 50 miles			50 to 99 miles		
	Value	Tons	Ton-miles	Average miles per shipment	Value	Tons	Ton-miles	Value	Tons	Ton-miles
SCTG 14, Metallic ores and concentrates	14.0	12.4	18.1	7.9	26.6	25.0	32.7	21.1	28.2	28.1
Less than 50 lb	48.7	41.0	47.6	25.8	48.6	42.4	47.6	S	S	S
50 to 99 lb	S	46.2	38.9	47.5	S	S	S	S	S	S
100 to 499 lb	41.6	41.4	43.0	25.4	S	43.0	S	S	S	S
500 to 749 lb	49.5	42.5	S	25.7	S	S	S	S	S	S
750 to 999 lb	S	39.9	S	28.1	S	S	S	S	S	S
1,000 to 9,999 lb	44.6	35.2	32.8	18.8	41.9	S	34.3	S	S	S
10,000 to 49,999 lb	25.7	27.7	39.1	9.1	36.1	35.5	31.6	29.4	24.1	24.4
50,000 to 99,999 lb	36.5	26.2	41.0	28.4	44.3	35.5	26.4	38.9	32.3	34.1
100,000 lb or more	18.3	13.2	19.3	9.9	36.2	26.9	34.1	24.1	29.8	29.4
SCTG 15, Coal	8.0	8.8	16.8	8.4	7.6	10.5	7.6	13.2	14.5	14.7
Less than 50 lb	-	-	-	-	-	-	-	-	-	-
50 to 99 lb	S	S	S	22.4	S	S	S	S	S	S
100 to 499 lb	S	S	S	22.6	S	S	S	S	S	S
500 to 749 lb	S	S	S	39.8	S	S	S	-	-	-
750 to 999 lb	S	S	S	21.5	S	S	S	-	-	-
1,000 to 9,999 lb	S	42.1	S	40.9	S	44.2	41.8	S	S	S
10,000 to 49,999 lb	23.4	21.9	29.1	10.3	28.3	26.2	20.2	32.5	32.5	28.5
50,000 to 99,999 lb	22.3	23.1	43.6	11.7	20.4	21.8	17.0	18.1	19.0	18.1
100,000 lb or more	8.6	9.4	17.0	10.2	10.4	13.8	9.7	13.6	14.6	15.2
SCTG 17, Gasoline and aviation turbine fuel	4.4	5.0	9.8	10.1	4.8	5.5	6.4	15.1	16.1	13.4
Less than 50 lb	30.4	37.2	35.2	S	32.6	37.3	37.6	S	S	S
50 to 99 lb	40.4	49.3	S	32.9	40.9	S	45.6	S	S	S
100 to 499 lb	31.7	34.4	27.4	28.2	32.2	34.5	28.7	S	46.4	45.6
500 to 749 lb	31.4	17.5	48.5	S	17.9	19.6	18.5	S	S	S
750 to 999 lb	20.5	21.0	44.7	14.5	16.3	19.0	19.8	S	S	S
1,000 to 9,999 lb	9.5	10.1	20.0	15.6	10.5	11.9	12.4	16.8	16.2	16.5
10,000 to 49,999 lb	10.2	10.8	22.4	9.3	8.8	9.1	10.4	8.7	9.1	9.8
50,000 to 99,999 lb	6.7	8.2	15.4	12.7	7.1	8.7	8.8	10.4	10.6	10.5
100,000 lb or more	8.2	8.1	14.3	17.2	10.6	10.8	12.9	26.3	25.0	21.3
SCTG 18, Fuel oils	6.0	6.0	10.1	13.5	7.9	8.3	12.3	15.3	16.5	15.8
Less than 50 lb	42.1	31.7	36.4	32.5	44.7	31.4	31.9	S	S	S
50 to 99 lb	24.9	29.3	27.1	37.1	25.5	31.3	29.8	S	S	S
100 to 499 lb	14.9	15.4	15.6	13.7	15.1	15.7	19.1	S	38.1	35.4
500 to 749 lb	18.3	20.7	26.3	17.1	18.9	20.5	27.7	S	S	S
750 to 999 lb	31.0	30.1	36.0	10.6	31.4	30.5	39.3	41.8	44.4	42.9
1,000 to 9,999 lb	11.4	11.2	12.6	13.7	11.7	11.6	11.9	26.1	23.1	23.9
10,000 to 49,999 lb	6.4	7.7	11.7	16.8	7.6	8.9	9.3	13.6	13.4	13.8
50,000 to 99,999 lb	6.3	6.2	18.9	14.2	5.9	6.0	6.6	11.9	11.7	11.7
100,000 lb or more	9.0	8.4	13.2	14.7	13.4	12.7	24.2	27.6	28.0	25.8
SCTG 19, Coal and petroleum products, n.e.c.	7.5	10.2	11.1	24.7	9.5	13.1	13.5	13.9	22.0	21.1
Less than 50 lb	11.4	16.9	15.8	28.3	13.9	19.3	21.3	35.1	S	48.0
50 to 99 lb	27.1	23.9	S	35.3	36.2	28.1	15.4	31.4	32.2	30.3
100 to 499 lb	15.7	13.9	48.9	32.4	14.0	15.4	18.2	31.9	31.1	31.0
500 to 749 lb	10.0	15.6	31.4	47.1	13.7	18.9	18.0	34.8	36.5	38.0
750 to 999 lb	14.8	14.8	25.7	S	17.1	16.9	19.4	42.2	45.5	S
1,000 to 9,999 lb	18.4	13.4	19.5	33.7	21.3	14.3	17.6	31.0	27.8	29.4
10,000 to 49,999 lb	12.6	22.2	22.3	20.6	15.5	21.8	25.5	21.9	47.8	46.1
50,000 to 99,999 lb	13.7	13.7	12.9	12.8	23.3	16.3	14.5	20.3	19.3	18.6
100,000 lb or more	10.1	8.9	13.8	3.7	16.1	14.0	14.0	29.6	26.5	25.3
SCTG 20, Basic chemicals	7.7	12.6	10.8	15.3	12.0	18.4	17.7	13.4	14.0	11.4
Less than 50 lb	17.9	17.2	21.9	15.8	28.5	27.1	36.9	35.2	27.0	28.8
50 to 99 lb	15.2	14.1	21.2	26.0	17.1	16.8	16.8	31.5	28.0	26.6
100 to 499 lb	22.6	11.2	18.3	27.9	13.1	15.1	17.1	34.5	17.4	18.0
500 to 749 lb	37.5	18.1	29.1	21.7	18.9	21.1	25.7	S	26.5	27.5
750 to 999 lb	28.6	13.4	30.8	20.6	18.1	15.8	20.5	28.8	23.6	22.9
1,000 to 9,999 lb	19.5	13.1	27.3	13.9	16.4	17.1	16.0	26.9	16.9	15.2
10,000 to 49,999 lb	7.8	15.5	10.5	10.6	18.6	24.5	22.6	13.6	16.6	16.9
50,000 to 99,999 lb	11.6	12.2	34.3	21.6	24.8	13.1	14.4	26.1	18.9	20.4
100,000 lb or more	11.7	16.8	12.6	5.0	16.6	24.4	27.3	25.2	21.6	16.9
SCTG 21, Pharmaceutical products	9.5	16.7	21.0	5.7	12.2	17.1	14.6	8.8	15.2	15.5
Less than 50 lb	6.2	7.7	9.7	5.4	12.3	13.2	13.9	14.7	16.1	16.8
50 to 99 lb	8.7	12.8	6.7	9.8	15.9	27.2	25.8	16.7	17.7	17.1
100 to 499 lb	9.0	20.6	26.5	10.6	13.3	48.6	46.5	14.6	15.8	15.7
500 to 749 lb	11.6	21.0	31.6	18.3	22.8	34.5	34.5	32.4	30.9	28.2
750 to 999 lb	19.3	27.0	29.0	13.2	31.2	47.6	S	42.0	28.8	34.6
1,000 to 9,999 lb	13.6	34.5	S	9.1	44.2	18.8	20.3	14.6	26.0	26.5
10,000 to 49,999 lb	27.1	19.4	15.5	9.8	27.8	36.7	21.0	47.4	21.2	21.1
50,000 to 99,999 lb	S	S	S	18.8	S	S	S	S	S	S
100,000 lb or more	S	39.8	41.4	21.1	S	S	S	-	-	-

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	Total, all mileages				Less than 50 miles			50 to 99 miles		
	Value	Tons	Ton-miles	Average miles per shipment	Value	Tons	Ton-miles	Value	Tons	Ton-miles
SCTG 22, Fertilizers	16.9	30.2	24.7	28.4	35.1	S	45.4	18.3	21.0	20.4
Less than 50 lb	46.5	S	S	20.7	S	45.0	S	S	S	S
50 to 99 lb	S	43.0	S	20.1	33.4	29.5	31.8	S	S	S
100 to 499 lb	25.6	32.1	S	24.1	29.7	33.3	31.4	S	44.9	43.7
500 to 749 lb	30.7	35.8	S	20.3	34.8	42.5	32.8	S	42.4	S
750 to 999 lb	23.1	30.6	48.2	S	26.3	33.0	25.5	49.3	47.8	S
1,000 to 9,999 lb	35.2	43.6	40.9	S	44.7	47.9	43.9	22.4	27.5	27.3
10,000 to 49,999 lb	22.3	24.4	25.9	25.7	40.6	40.3	31.7	17.2	20.1	19.2
50,000 to 99,999 lb	25.7	24.1	25.2	14.8	29.2	27.8	28.7	39.0	38.7	34.4
100,000 lb or more	19.4	38.0	30.9	13.5	39.6	S	S	36.9	37.7	49.4
SCTG 23, Chemical products and preparations, n.e.c.	5.0	5.1	7.9	7.2	5.1	7.4	11.7	9.3	12.0	11.8
Less than 50 lb	8.8	8.5	16.0	8.7	12.1	10.9	10.7	14.2	12.0	12.4
50 to 99 lb	10.2	6.8	11.1	9.4	11.5	9.0	9.0	15.1	11.3	11.7
100 to 499 lb	9.0	9.0	9.3	10.3	14.4	13.9	12.9	21.4	19.0	17.9
500 to 749 lb	11.5	7.5	13.6	13.4	14.2	16.1	23.2	25.5	14.9	15.3
750 to 999 lb	12.7	8.9	12.7	10.6	13.1	11.8	11.9	35.2	16.9	15.9
1,000 to 9,999 lb	11.6	6.6	9.8	7.8	10.8	12.2	11.8	18.8	10.3	10.2
10,000 to 49,999 lb	7.1	7.0	9.8	4.2	13.0	11.0	14.3	15.8	16.3	16.2
50,000 to 99,999 lb	25.2	16.4	22.5	19.7	29.5	27.2	36.4	45.4	27.5	27.8
100,000 lb or more	15.3	12.7	12.1	7.3	39.8	36.4	42.6	49.0	40.2	38.4
SCTG 24, Plastics and rubber	3.6	4.0	5.2	6.1	3.7	4.9	5.9	6.0	5.8	6.1
Less than 50 lb	5.0	5.9	13.1	8.2	8.0	6.9	8.7	13.1	7.7	8.2
50 to 99 lb	6.0	7.0	11.1	5.7	6.7	7.6	8.3	12.1	12.0	12.2
100 to 499 lb	5.2	7.0	8.6	5.3	5.2	7.7	10.9	10.2	18.4	16.4
500 to 749 lb	7.1	6.4	9.9	10.5	9.3	9.7	12.4	13.1	16.8	17.2
750 to 999 lb	5.8	6.0	8.7	11.0	14.0	14.8	14.9	18.3	18.1	19.5
1,000 to 9,999 lb	5.6	6.7	10.4	5.4	6.4	6.1	9.4	10.8	12.2	12.6
10,000 to 49,999 lb	7.0	5.5	6.6	3.1	10.5	10.9	8.4	11.6	8.5	8.0
50,000 to 99,999 lb	16.8	15.9	21.7	21.0	30.8	26.5	46.3	37.6	41.9	38.3
100,000 lb or more	8.8	6.6	7.8	4.7	24.5	13.3	15.5	21.1	19.3	21.4
SCTG 25, Logs and other wood in the rough	24.2	S	34.4	S	27.2	S	S	38.9	S	S
Less than 50 lb	40.4	S	S	27.4	42.1	31.2	41.3	S	48.5	S
50 to 99 lb	48.8	29.5	S	37.6	39.5	27.1	S	S	S	S
100 to 499 lb	20.6	29.3	39.2	42.9	27.7	41.2	29.9	41.1	32.4	31.4
500 to 749 lb	28.4	35.5	S	19.2	31.4	46.9	39.4	S	35.4	39.4
750 to 999 lb	36.4	37.9	27.7	S	42.0	40.3	41.1	S	S	S
1,000 to 9,999 lb	38.4	S	S	18.0	43.0	S	S	32.6	S	S
10,000 to 49,999 lb	34.9	49.2	31.2	S	29.5	S	S	30.9	S	47.8
50,000 to 99,999 lb	44.3	S	S	S	S	S	S	S	S	S
100,000 lb or more	45.6	33.0	S	22.7	S	S	S	42.9	S	S
SCTG 26, Wood products ..	8.4	9.2	11.7	10.5	10.5	9.1	10.1	7.2	29.4	36.1
Less than 50 lb	16.2	15.2	26.9	12.5	25.4	20.2	16.3	14.6	11.6	12.5
50 to 99 lb	14.1	16.8	18.0	16.2	22.2	24.1	34.0	11.6	13.2	13.6
100 to 499 lb	13.6	12.7	13.3	15.6	17.1	16.3	18.4	15.7	9.8	9.5
500 to 749 lb	25.6	23.7	30.0	9.6	17.0	23.0	31.2	22.4	16.5	18.2
750 to 999 lb	16.0	12.0	18.1	12.2	14.0	17.0	14.4	17.9	13.8	13.6
1,000 to 9,999 lb	13.8	10.4	10.8	9.5	16.1	15.8	20.8	10.5	9.8	9.6
10,000 to 49,999 lb	7.5	6.3	11.3	5.5	8.3	7.7	9.3	7.2	7.2	6.6
50,000 to 99,999 lb	8.7	13.0	11.5	8.8	9.2	15.6	12.7	17.2	36.3	34.0
100,000 lb or more	11.5	22.4	18.1	9.4	15.5	24.9	22.2	S	S	S
SCTG 27, Pulp, newsprint, paper, and paperboard	5.2	6.2	7.4	10.4	9.4	14.5	9.4	10.1	12.4	12.3
Less than 50 lb	11.5	10.2	26.4	24.3	13.6	14.8	16.4	30.6	25.3	26.3
50 to 99 lb	12.8	11.9	22.7	22.3	13.1	15.8	15.6	22.1	19.0	20.6
100 to 499 lb	9.3	10.4	11.7	14.1	12.6	12.3	10.6	13.7	16.6	16.9
500 to 749 lb	11.8	11.4	16.4	12.1	15.1	12.6	15.7	25.2	26.4	23.2
750 to 999 lb	15.6	15.9	14.5	18.5	19.2	21.5	18.6	23.8	26.4	25.7
1,000 to 9,999 lb	10.8	10.2	8.6	8.8	13.3	11.0	11.9	15.1	16.4	15.6
10,000 to 49,999 lb	5.9	6.3	5.3	5.0	11.4	13.8	10.0	11.5	13.3	12.4
50,000 to 99,999 lb	21.3	26.1	15.1	18.2	S	S	S	26.5	26.4	24.8
100,000 lb or more	9.0	8.7	11.7	2.0	11.4	11.1	16.5	17.3	22.2	22.8
SCTG 28, Paper or paperboard articles	4.0	5.2	8.5	9.5	6.0	7.5	7.4	5.9	6.5	6.7
Less than 50 lb	9.5	15.8	18.4	12.5	11.2	15.8	15.7	18.6	38.1	40.5
50 to 99 lb	11.6	9.1	13.7	14.6	16.3	11.4	14.6	15.7	21.0	22.0
100 to 499 lb	7.2	7.3	10.0	10.5	8.0	8.0	9.4	12.1	12.8	12.2
500 to 749 lb	7.0	9.6	10.6	14.0	10.6	12.9	14.1	14.7	15.1	17.4
750 to 999 lb	10.0	12.6	15.8	15.7	13.0	16.1	13.8	24.0	18.4	18.7
1,000 to 9,999 lb	7.1	7.0	6.6	7.2	8.9	10.6	10.9	13.2	13.1	13.6
10,000 to 49,999 lb	5.3	6.2	9.5	5.9	9.6	8.9	8.5	7.0	7.4	7.6
50,000 to 99,999 lb	49.7	24.7	29.2	21.2	43.4	35.8	42.1	S	S	S
100,000 lb or more	40.9	27.4	42.3	21.5	S	31.3	44.0	S	S	S

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	Total, all mileages				Less than 50 miles			50 to 99 miles		
	Value	Tons	Ton-miles	Average miles per shipment	Value	Tons	Ton-miles	Value	Tons	Ton-miles
SCTG 29, Printed products	7.6	8.1	8.5	3.9	4.4	11.3	10.6	5.8	30.0	35.8
Less than 50 lb	6.9	10.7	14.5	4.2	7.4	9.1	13.0	13.8	15.3	26.5
50 to 99 lb	12.7	31.6	S	9.6	9.3	11.0	13.2	23.0	19.1	18.3
100 to 499 lb	8.4	6.8	9.1	6.3	8.6	9.9	11.7	12.5	13.2	12.9
500 to 749 lb	16.3	11.0	19.7	10.0	11.2	9.2	10.9	33.0	29.1	31.3
750 to 999 lb	15.3	11.3	16.7	10.3	14.3	10.9	14.2	23.5	19.6	19.9
1,000 to 9,999 lb	11.3	6.8	10.2	7.9	11.2	13.8	13.0	12.0	15.1	15.4
10,000 to 49,999 lb	11.9	9.6	9.8	5.0	9.5	13.9	13.2	11.8	28.1	29.3
50,000 to 99,999 lb	33.8	46.5	32.2	30.0	37.2	39.8	40.8	S	S	S
100,000 lb or more	21.0	S	S	23.3	36.4	S	S	S	S	S
SCTG 30, Textiles, leather, and articles of textiles or leather	5.4	7.5	10.5	2.4	8.6	19.7	12.6	15.4	29.0	30.5
Less than 50 lb	4.4	7.1	7.4	2.4	9.1	7.6	9.3	8.8	10.1	10.0
50 to 99 lb	7.4	7.8	9.1	5.2	10.0	14.6	16.1	17.3	11.3	11.6
100 to 499 lb	9.8	9.7	14.2	5.8	15.6	17.7	21.0	10.2	11.7	12.0
500 to 749 lb	9.6	8.3	10.7	9.6	17.9	25.6	32.1	15.4	26.4	27.4
750 to 999 lb	17.9	9.2	12.1	9.1	21.3	15.6	19.8	27.5	22.4	22.7
1,000 to 9,999 lb	7.1	6.5	8.6	6.6	10.9	15.4	15.4	26.1	16.3	16.4
10,000 to 49,999 lb	9.0	11.1	16.3	10.5	16.6	28.1	18.6	17.1	38.0	40.2
50,000 to 99,999 lb	29.9	19.5	22.0	20.2	43.2	33.0	29.3	S	35.9	37.1
100,000 lb or more	34.1	46.1	37.4	19.3	S	S	S	S	S	S
SCTG 31, Nonmetallic mineral products	7.0	9.0	11.9	9.5	9.1	12.8	13.9	7.8	9.8	9.2
Less than 50 lb	16.7	20.3	16.2	9.4	34.5	33.6	37.7	32.8	39.0	36.5
50 to 99 lb	15.0	18.4	36.0	18.3	22.7	24.2	34.1	30.6	39.2	38.4
100 to 499 lb	18.7	18.3	39.8	16.0	23.2	14.9	24.1	S	48.4	45.1
500 to 749 lb	17.9	11.6	24.8	25.4	18.3	14.4	21.3	49.1	34.0	42.2
750 to 999 lb	17.9	9.9	36.7	20.9	24.2	12.3	19.4	36.0	34.4	33.4
1,000 to 9,999 lb	9.4	8.8	35.2	19.6	11.1	10.0	11.8	18.5	15.3	15.8
10,000 to 49,999 lb	10.0	12.3	9.6	17.1	12.5	15.9	18.3	13.0	14.2	13.4
50,000 to 99,999 lb	21.1	11.6	13.2	8.3	31.9	16.5	12.2	13.6	13.9	13.2
100,000 lb or more	35.3	16.5	28.6	12.9	18.4	25.7	28.3	31.4	29.1	23.8
SCTG 32, Base metal in primary or semifinished forms and in finished basic shapes	5.0	6.3	6.0	10.2	7.6	7.5	9.7	7.1	10.6	11.0
Less than 50 lb	13.4	16.9	25.1	15.6	17.5	14.3	17.7	16.9	23.9	24.2
50 to 99 lb	11.2	15.2	24.0	13.8	21.2	13.1	13.9	17.8	26.4	26.6
100 to 499 lb	8.8	9.3	14.1	10.5	11.8	11.1	13.3	10.9	10.3	10.4
500 to 749 lb	9.0	8.8	17.6	13.3	12.2	11.6	11.2	20.6	23.0	23.4
750 to 999 lb	9.7	8.8	13.3	8.1	15.5	12.2	10.2	31.5	15.6	16.4
1,000 to 9,999 lb	6.0	5.6	6.5	6.4	8.6	8.9	10.5	10.0	9.4	10.7
10,000 to 49,999 lb	6.5	8.3	8.1	4.1	8.1	8.1	10.6	9.4	11.6	12.2
50,000 to 99,999 lb	14.4	13.5	12.7	9.6	19.6	18.4	18.4	18.6	32.0	30.6
100,000 lb or more	8.6	8.2	8.3	4.1	20.4	17.9	19.2	30.1	29.5	31.3
SCTG 33, Articles of base metal	3.9	9.5	7.0	5.6	6.4	23.2	29.9	8.2	12.3	12.5
Less than 50 lb	7.8	5.7	7.4	7.2	10.2	8.3	6.6	17.2	8.9	8.8
50 to 99 lb	7.7	7.9	9.6	7.9	10.6	10.4	7.6	16.9	17.1	17.5
100 to 499 lb	5.2	6.8	8.7	5.6	7.8	8.6	9.0	15.3	14.2	13.8
500 to 749 lb	9.2	8.6	8.8	7.5	13.5	11.6	12.7	17.1	14.1	13.9
750 to 999 lb	9.4	6.8	10.3	8.0	12.4	10.1	10.9	24.3	18.6	18.2
1,000 to 9,999 lb	6.7	8.1	10.9	7.6	7.3	15.4	13.0	8.9	8.4	8.3
10,000 to 49,999 lb	5.7	11.6	7.4	6.5	15.0	34.5	48.3	15.8	17.6	17.6
50,000 to 99,999 lb	13.4	12.7	16.9	10.7	28.2	22.4	25.4	28.1	29.4	32.6
100,000 lb or more	16.9	S	31.0	10.9	42.2	S	44.2	S	S	48.6
SCTG 34, Machinery	5.7	7.7	9.0	6.6	6.7	7.7	8.7	8.4	11.5	10.0
Less than 50 lb	4.8	5.4	9.6	7.8	7.7	8.9	7.9	11.1	8.8	8.6
50 to 99 lb	7.1	6.5	12.9	7.7	16.1	6.5	7.8	20.4	20.9	19.3
100 to 499 lb	4.2	4.2	6.4	6.2	6.6	8.0	7.2	13.5	11.0	10.6
500 to 749 lb	8.6	7.6	10.8	9.3	12.3	15.2	17.1	26.7	17.0	24.3
750 to 999 lb	11.8	6.9	8.7	8.5	18.0	15.7	15.6	S	18.6	20.2
1,000 to 9,999 lb	8.6	8.8	11.7	5.5	8.6	9.9	9.9	12.1	10.5	10.1
10,000 to 49,999 lb	8.2	9.3	9.9	4.8	13.6	12.6	14.0	13.4	10.6	11.2
50,000 to 99,999 lb	17.4	18.9	22.4	19.5	20.1	24.1	25.7	35.4	S	49.4
100,000 lb or more	18.2	12.5	24.6	11.7	28.3	31.1	45.4	43.0	S	S
SCTG 35, Electronic and other electrical equipment and components and office equipment	5.6	9.7	11.9	4.9	9.5	15.6	20.7	8.4	15.2	14.9
Less than 50 lb	4.7	6.1	8.0	4.9	9.4	9.0	9.5	7.2	12.6	15.5
50 to 99 lb	17.1	7.6	10.2	6.9	12.0	12.1	13.8	13.6	20.4	18.7
100 to 499 lb	7.1	9.8	9.1	9.0	12.4	14.4	14.0	21.1	29.2	27.3
500 to 749 lb	10.7	14.9	12.3	10.8	26.9	24.7	24.9	20.7	30.8	32.3
750 to 999 lb	9.9	20.3	15.0	16.7	24.5	29.5	36.3	13.5	27.7	24.6
1,000 to 9,999 lb	11.0	12.1	14.2	8.6	21.4	17.0	17.3	16.4	23.7	23.8
10,000 to 49,999 lb	13.1	15.5	15.8	7.2	15.9	37.7	S	34.4	18.0	18.0
50,000 to 99,999 lb	29.6	21.0	32.9	18.3	49.1	43.0	48.3	S	S	S
100,000 lb or more	27.1	39.9	42.3	16.7	38.3	S	S	S	S	S

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	Total, all mileages				Less than 50 miles			50 to 99 miles		
	Value	Tons	Ton-miles	Average miles per shipment	Value	Tons	Ton-miles	Value	Tons	Ton-miles
SCTG 36, Motorized and other vehicles (including parts)	8.3	7.6	10.1	12.3	6.5	11.4	14.2	18.6	19.3	17.3
Less than 50 lb	7.4	10.2	9.7	14.2	10.7	16.1	8.9	9.7	11.4	11.6
50 to 99 lb	6.4	7.1	9.8	7.9	11.7	9.5	9.6	11.7	13.7	12.5
100 to 499 lb	8.4	6.9	8.9	6.2	10.0	8.0	9.3	17.2	17.4	16.1
500 to 749 lb	15.5	9.3	13.8	8.0	14.5	13.4	12.8	16.9	13.7	13.2
750 to 999 lb	11.1	10.5	9.5	9.1	22.7	20.3	16.5	32.1	24.0	23.7
1,000 to 9,999 lb	10.0	8.0	14.9	7.0	11.7	12.2	16.6	20.4	9.6	9.7
10,000 to 49,999 lb	7.6	8.6	7.8	4.4	17.2	18.0	20.7	17.6	21.8	20.6
50,000 to 99,999 lb	21.0	15.6	13.2	12.6	20.1	18.4	21.1	S	S	43.4
100,000 lb or more	45.8	39.3	44.9	9.5	33.2	36.4	S	S	40.2	44.0
SCTG 37, Transportation equipment, n.e.c.	23.3	40.9	41.7	5.0	S	S	S	47.4	S	S
Less than 50 lb	11.7	10.5	9.7	5.0	20.1	22.2	25.4	21.8	39.3	35.0
50 to 99 lb	17.5	16.3	18.2	8.1	36.2	22.9	18.8	43.0	27.4	26.8
100 to 499 lb	25.2	16.5	17.4	7.3	40.8	22.4	24.9	30.9	35.8	29.9
500 to 749 lb	28.0	28.2	30.3	19.1	49.7	S	41.9	S	S	44.3
750 to 999 lb	18.4	24.2	30.0	14.4	42.4	S	S	S	S	S
1,000 to 9,999 lb	17.5	9.8	10.1	11.8	30.3	44.0	46.7	S	35.2	32.1
10,000 to 49,999 lb	23.9	43.1	44.5	18.1	36.6	48.0	S	38.0	S	S
50,000 to 99,999 lb	S	S	S	22.0	S	S	S	S	S	S
100,000 lb or more	S	35.3	41.0	13.2	S	46.8	48.9	-	-	-
SCTG 38, Precision instruments and apparatus	7.9	18.3	12.6	8.0	11.6	23.6	25.1	24.1	30.4	28.3
Less than 50 lb	11.9	10.6	13.2	8.2	10.9	15.5	16.0	25.5	21.5	22.6
50 to 99 lb	11.9	13.8	13.4	11.5	20.2	38.1	49.9	28.5	20.5	34.1
100 to 499 lb	12.7	12.7	18.4	8.7	18.9	18.1	19.9	46.3	43.0	50.0
500 to 749 lb	15.7	13.9	15.6	12.4	33.8	22.3	28.6	43.8	38.5	44.0
750 to 999 lb	26.1	21.2	19.2	13.0	32.7	24.0	24.1	S	S	49.0
1,000 to 9,999 lb	12.8	11.2	26.5	13.4	27.2	21.2	22.1	S	29.1	29.0
10,000 to 49,999 lb	29.0	21.8	19.3	22.1	37.8	S	S	37.7	29.7	29.2
50,000 to 99,999 lb	39.3	S	45.9	45.6	S	S	S	S	S	S
100,000 lb or more	37.6	30.3	40.1	22.0	38.7	33.5	34.7	S	S	S
SCTG 39, Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	6.2	11.8	6.4	6.2	14.9	20.7	19.3	13.7	S	S
Less than 50 lb	13.3	14.2	15.1	9.9	19.0	23.3	14.6	37.9	23.0	22.1
50 to 99 lb	13.0	12.3	14.5	6.6	17.9	18.0	20.3	28.9	32.1	33.1
100 to 499 lb	14.9	13.1	8.6	6.4	16.4	15.7	19.9	20.3	18.4	18.3
500 to 749 lb	12.3	10.9	9.5	7.4	14.1	13.7	15.7	22.9	28.7	27.4
750 to 999 lb	26.1	12.1	8.0	7.4	48.9	25.3	18.8	26.2	28.9	27.2
1,000 to 9,999 lb	5.0	7.3	8.1	6.6	10.1	14.0	15.6	18.5	22.0	22.0
10,000 to 49,999 lb	13.3	15.2	9.8	9.9	37.3	32.6	31.8	24.4	S	S
50,000 to 99,999 lb	S	S	47.9	S	S	S	S	S	S	S
100,000 lb or more	32.3	S	S	46.4	41.9	S	S	S	S	S
SCTG 40, Miscellaneous manufactured products	5.4	10.5	7.7	4.3	8.2	17.8	21.0	10.6	20.2	19.2
Less than 50 lb	10.3	6.6	8.5	4.4	11.8	11.0	10.6	13.4	12.8	13.6
50 to 99 lb	10.0	8.5	15.8	6.0	8.5	9.5	10.7	12.8	11.5	10.6
100 to 499 lb	5.3	8.0	5.9	5.5	12.7	20.9	26.2	10.1	10.4	10.4
500 to 749 lb	8.9	7.5	9.9	4.7	13.8	8.6	10.8	21.4	16.6	17.9
750 to 999 lb	10.9	7.1	10.9	7.3	20.4	14.1	16.0	16.1	17.7	16.5
1,000 to 9,999 lb	10.6	9.4	14.0	4.6	13.3	11.4	14.9	17.8	27.6	21.8
10,000 to 49,999 lb	8.8	12.1	7.0	8.2	23.4	22.9	25.5	24.2	29.2	28.0
50,000 to 99,999 lb	23.1	21.3	24.2	15.9	25.0	24.8	20.6	30.5	40.4	40.8
100,000 lb or more	23.7	43.2	37.6	35.1	34.3	S	S	S	S	S
SCTG 41, Waste and scrap	14.4	16.8	25.8	10.5	17.7	23.1	26.0	18.7	27.2	24.3
Less than 50 lb	41.7	37.7	S	23.4	S	42.6	34.4	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	34.9	41.9	33.7	S	40.0	S	S	S	S	S
500 to 749 lb	40.0	44.4	S	39.4	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	39.5	39.5	33.8	S	S	S
1,000 to 9,999 lb	39.3	33.4	37.8	S	S	39.6	26.3	45.9	36.7	38.9
10,000 to 49,999 lb	15.4	13.9	13.8	10.1	18.9	20.5	21.3	21.4	32.7	30.6
50,000 to 99,999 lb	20.8	20.3	17.6	22.5	27.0	26.9	25.1	24.2	24.7	25.3
100,000 lb or more	27.5	28.4	42.5	22.6	38.3	38.7	41.2	36.4	33.5	38.7
SCTG 43, Mixed freight	3.6	5.6	5.0	7.9	5.4	9.8	10.4	3.7	3.8	4.0
Less than 50 lb	7.2	12.9	11.8	8.8	8.8	11.8	15.7	10.7	16.5	17.3
50 to 99 lb	9.2	13.2	14.3	11.0	10.7	13.6	13.5	11.1	11.2	11.7
100 to 499 lb	9.1	10.3	8.3	8.1	12.5	11.1	11.6	12.1	16.0	16.2
500 to 749 lb	8.8	9.0	8.4	12.4	8.5	13.0	14.4	11.4	11.4	11.7
750 to 999 lb	6.5	8.0	7.1	8.4	9.1	12.3	13.4	8.4	9.2	9.7
1,000 to 9,999 lb	4.7	5.6	6.5	5.1	5.7	9.0	8.0	5.7	6.5	5.9
10,000 to 49,999 lb	4.5	6.7	6.3	3.1	8.6	9.5	9.4	4.5	5.2	5.3
50,000 to 99,999 lb	27.9	S	24.8	21.3	S	S	S	23.1	23.0	22.6
100,000 lb or more	27.3	18.5	43.6	27.3	33.4	30.7	38.0	37.6	32.3	41.9

See footnotes at end of table.

Table B-10. **Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.**

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	Total, all mileages				Less than 50 miles			50 to 99 miles		
	Value	Tons	Ton-miles	Average miles per shipment	Value	Tons	Ton-miles	Value	Tons	Ton-miles
Commodity unknown	9.9	22.3	41.7	8.8	17.4	32.9	S	15.1	34.8	33.4
Less than 50 lb	37.2	24.7	27.8	10.1	29.5	44.4	S	42.5	25.1	26.9
50 to 99 lb	20.4	18.7	22.3	42.2	27.9	26.2	29.2	41.4	41.9	35.1
100 to 499 lb	20.4	18.2	29.3	13.6	37.0	18.9	22.0	34.4	30.2	30.3
500 to 749 lb	30.8	16.9	20.9	26.6	33.1	24.2	24.7	S	38.2	37.6
750 to 999 lb	26.6	35.3	S	47.6	25.4	42.0	46.4	47.4	39.1	41.2
1,000 to 9,999 lb	12.8	20.5	16.9	24.7	19.9	28.4	26.8	31.3	23.0	22.5
10,000 to 49,999 lb	14.5	13.2	16.7	29.8	20.7	18.8	19.5	23.7	S	S
50,000 to 99,999 lb	22.2	22.5	14.4	45.3	35.6	31.6	33.3	S	38.4	42.6
100,000 lb or more	S	40.2	S	20.9	S	S	S	S	S	S

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	100 to 249 miles			250 to 499 miles			500 to 749 miles			750 to 999 miles		
	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles
Total	2.0	2.9	2.8	2.3	3.2	3.9	3.4	3.1	3.6	4.0	6.2	6.4
Less than 50 lb	3.7	2.9	2.9	5.1	4.4	4.2	6.2	4.0	3.9	4.0	5.4	5.3
50 to 99 lb	5.2	5.4	8.3	8.3	8.1	10.6	34.0	6.4	6.6	8.4	9.5	9.6
100 to 499 lb	4.8	4.4	3.9	4.9	3.4	3.4	4.8	3.0	3.2	7.1	4.2	4.1
500 to 749 lb	5.0	5.2	4.9	6.6	4.1	3.8	7.3	3.6	3.8	9.1	7.2	7.1
750 to 999 lb	7.4	5.0	4.2	9.1	4.8	6.1	8.4	7.7	7.8	15.7	6.9	6.9
1,000 to 9,999 lb	3.5	2.7	2.6	6.3	4.0	3.9	5.6	4.0	3.9	5.1	5.7	5.4
10,000 to 49,999 lb	3.1	4.2	4.0	2.5	3.1	3.1	5.1	3.0	2.8	6.4	3.2	3.3
50,000 to 99,999 lb	9.1	5.5	6.3	20.7	13.6	14.2	18.0	15.7	14.3	15.5	6.5	6.1
100,000 lb or more	5.6	5.4	5.5	8.8	6.6	7.3	4.3	4.9	5.4	15.6	8.5	8.5
SCTG 01, Live animals and live fish	29.5	37.5	42.0	28.8	35.0	33.1	38.0	34.5	34.1	40.2	42.3	42.8
Less than 50 lb	S	S	S	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	S	S	S	S	48.1	49.9	S	S	S	S	S	S
10,000 to 49,999 lb	44.8	46.4	S	24.4	27.1	28.3	S	40.8	41.9	S	48.1	48.9
50,000 to 99,999 lb	40.2	44.8	47.1	S	S	S	43.4	48.2	45.6	48.4	47.5	47.0
100,000 lb or more	S	S	S	S	S	S	S	S	S	S	S	S
SCTG 02, Cereal grains	18.1	19.6	18.5	19.7	24.3	29.6	12.3	14.6	15.2	14.4	15.9	16.4
Less than 50 lb	S	S	S	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	35.2	32.5	38.6	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	35.4	36.2	35.6	28.0	38.5	43.3	S	38.9	40.4	49.5	S	S
50,000 to 99,999 lb	31.6	31.3	30.6	35.6	37.3	38.4	32.0	37.1	36.6	37.6	48.1	46.6
100,000 lb or more	20.7	22.5	21.9	26.6	30.4	35.2	14.6	15.2	15.8	14.4	16.0	16.4
SCTG 03, Other agricultural products	16.3	16.3	18.7	13.7	21.7	26.9	10.4	12.1	13.3	11.2	16.8	18.6
Less than 50 lb	28.4	24.8	25.5	27.3	35.1	33.7	28.7	42.5	41.5	32.7	S	S
50 to 99 lb	28.0	26.1	25.8	42.1	41.6	S	42.6	46.3	49.1	S	S	S
100 to 499 lb	33.1	18.4	18.0	S	28.0	29.3	S	32.1	35.0	S	42.0	41.7
500 to 749 lb	41.2	34.3	32.0	37.5	31.2	34.1	S	41.9	40.8	S	S	S
750 to 999 lb	31.1	39.8	36.2	44.0	39.2	43.4	40.3	40.7	39.3	S	S	S
1,000 to 9,999 lb	23.3	24.5	23.6	22.3	20.2	23.3	23.2	22.5	22.7	36.4	29.0	29.3
10,000 to 49,999 lb	24.2	23.6	22.0	17.6	21.8	20.9	17.3	17.4	17.4	25.8	25.8	25.4
50,000 to 99,999 lb	29.1	34.4	37.2	28.9	35.6	35.1	47.9	40.5	39.2	S	S	S
100,000 lb or more	30.4	42.9	S	32.6	40.4	43.2	15.7	15.6	16.0	22.6	23.3	24.4
SCTG 04, Animal feed and products of animal origin, n.e.c.	12.7	15.7	15.6	17.9	12.9	11.4	13.8	23.9	25.4	15.5	15.6	16.5
Less than 50 lb	S	40.0	44.5	43.8	47.0	46.8	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	36.5	30.5	31.5	26.4	S	S	S	S	S	47.8	S	S
500 to 749 lb	32.6	29.8	32.5	S	S	S	S	S	S	S	S	S
750 to 999 lb	48.0	S	S	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	23.4	23.5	23.4	32.7	47.3	S	30.5	S	S	30.6	44.9	46.5
10,000 to 49,999 lb	16.4	14.6	14.4	18.5	21.1	20.4	17.6	18.1	19.1	22.8	26.9	26.6
50,000 to 99,999 lb	19.3	26.6	27.6	18.1	24.1	23.4	25.9	20.5	21.1	43.2	31.6	31.0
100,000 lb or more	24.7	23.8	22.9	16.8	12.2	13.7	17.2	34.1	35.1	23.6	22.3	23.9
SCTG 05, Meat, fish, seafood, and their preparations	7.1	8.3	8.1	8.4	7.7	7.8	7.4	9.6	9.7	6.7	7.9	8.1
Less than 50 lb	20.6	17.2	17.0	35.0	34.7	38.8	27.6	30.3	27.3	33.3	38.3	40.4
50 to 99 lb	47.6	25.5	29.1	36.2	21.2	20.3	S	24.9	24.7	S	39.3	39.1
100 to 499 lb	20.3	17.9	16.7	16.3	15.4	14.4	40.3	20.8	20.6	31.0	26.8	26.8
500 to 749 lb	20.8	19.3	30.7	20.9	18.7	27.5	20.9	22.3	22.3	38.2	41.0	42.0
750 to 999 lb	18.3	23.9	22.6	16.5	18.5	17.0	S	30.5	30.8	36.1	37.0	37.3
1,000 to 9,999 lb	18.0	18.7	18.8	21.7	21.2	20.5	13.4	15.0	14.9	14.9	15.6	15.9
10,000 to 49,999 lb	7.4	9.1	9.2	7.9	7.3	7.4	8.1	9.8	9.7	8.0	9.1	9.3
50,000 to 99,999 lb	22.0	23.5	28.9	S	39.3	39.8	46.8	S	S	S	S	S
100,000 lb or more	S	S	S	34.0	28.7	28.2	S	S	S	S	S	S
SCTG 06, Milled grain products and preparations, and bakery products	7.8	13.5	14.1	12.6	11.8	10.9	10.0	9.5	9.7	19.1	15.6	15.6
Less than 50 lb	35.8	38.5	40.9	28.8	32.5	33.3	37.4	31.5	30.6	38.2	S	S
50 to 99 lb	S	45.5	49.0	S	S	S	S	S	S	40.6	38.0	38.6
100 to 499 lb	22.2	16.2	17.1	S	40.5	38.7	43.5	44.5	47.9	S	S	S
500 to 749 lb	22.8	24.5	26.3	23.9	25.3	27.0	S	33.6	31.7	S	45.7	45.2
750 to 999 lb	20.6	23.4	24.4	31.6	S	S	34.2	39.2	38.1	38.5	36.0	36.7
1,000 to 9,999 lb	15.1	24.0	23.5	14.9	26.4	26.4	18.1	17.2	17.0	16.5	19.6	20.0
10,000 to 49,999 lb	10.8	15.2	16.3	16.7	14.6	14.5	12.3	11.7	11.3	26.5	18.6	19.0
50,000 to 99,999 lb	24.6	28.2	32.5	39.7	43.2	36.8	41.8	S	S	S	46.4	46.4
100,000 lb or more	33.1	31.5	28.2	16.3	32.1	25.9	18.6	18.1	18.6	44.8	36.4	34.7

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	100 to 249 miles			250 to 499 miles			500 to 749 miles			750 to 999 miles		
	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles
SCTG 07, Other prepared foodstuffs and fats and oils	6.3	7.1	7.2	6.9	9.0	9.6	11.5	11.4	10.6	7.6	8.1	8.2
Less than 50 lb	23.1	21.5	20.9	25.4	24.1	24.2	21.8	20.9	21.2	29.2	30.5	30.0
50 to 99 lb	27.9	22.9	24.3	24.7	24.1	22.7	39.0	37.8	38.4	S	23.3	23.1
100 to 499 lb	23.5	32.6	29.1	19.9	30.9	32.9	26.1	45.2	46.1	23.1	40.1	40.2
500 to 749 lb	19.8	38.4	33.0	20.1	35.5	31.3	49.9	22.3	22.6	35.1	22.4	23.7
750 to 999 lb	22.0	S	43.1	32.4	21.2	21.9	32.1	25.3	24.4	26.9	25.4	25.3
1,000 to 9,999 lb	9.5	17.2	15.1	11.7	14.1	14.7	16.1	14.1	14.0	12.3	15.1	14.9
10,000 to 49,999 lb	7.9	10.2	10.4	8.1	9.7	9.7	14.4	12.4	12.5	9.6	10.4	10.4
50,000 to 99,999 lb	13.0	11.5	13.4	26.5	28.2	28.5	31.1	19.8	19.4	36.7	42.7	43.2
100,000 lb or more	16.1	15.5	16.0	16.4	22.5	22.9	12.1	23.7	20.7	18.0	17.2	17.0
SCTG 08, Alcoholic beverages	9.9	10.5	10.5	10.0	10.4	10.7	14.6	15.2	15.0	24.6	29.1	29.9
Less than 50 lb	27.9	22.7	22.5	S	34.3	34.2	S	49.2	48.0	S	S	S
50 to 99 lb	20.5	17.5	18.5	27.5	25.2	25.8	S	47.8	47.8	S	S	S
100 to 499 lb	17.1	27.8	32.6	31.4	29.9	29.8	29.7	28.8	29.8	S	48.4	S
500 to 749 lb	25.0	28.9	32.3	34.8	S	S	43.9	41.5	38.0	S	S	S
750 to 999 lb	20.2	26.2	29.9	43.7	41.6	37.8	S	S	S	S	S	S
1,000 to 9,999 lb	13.3	15.5	14.1	20.7	28.9	29.3	28.4	29.8	29.0	27.6	28.2	29.6
10,000 to 49,999 lb	12.2	11.5	11.4	10.3	10.8	10.8	17.5	18.2	18.4	17.4	20.9	21.5
50,000 to 99,999 lb	23.3	17.7	16.6	30.6	33.6	40.6	41.4	44.3	44.3	44.5	S	S
100,000 lb or more	40.9	42.1	40.0	22.5	22.8	21.4	20.0	20.9	24.3	S	43.4	42.5
SCTG 09, Tobacco products	14.0	30.1	31.9	21.6	21.7	22.2	25.6	38.7	38.9	29.9	36.6	38.2
Less than 50 lb	19.3	20.2	21.2	41.0	37.8	38.4	35.4	35.4	34.6	S	S	S
50 to 99 lb	21.3	25.9	21.5	S	33.1	31.3	46.0	30.3	29.9	47.1	34.8	39.1
100 to 499 lb	17.3	15.3	15.8	20.7	19.0	18.9	28.0	28.3	29.7	S	33.0	33.7
500 to 749 lb	S	39.3	42.1	25.1	23.2	21.0	33.3	31.8	30.1	S	S	48.2
750 to 999 lb	S	S	S	30.7	28.3	27.7	S	S	S	S	S	S
1,000 to 9,999 lb	19.9	41.2	33.6	25.5	28.2	27.9	23.3	28.1	30.8	39.7	39.8	40.6
10,000 to 49,999 lb	42.5	47.2	48.9	37.6	31.8	31.6	39.9	43.1	43.5	S	S	S
50,000 to 99,999 lb	-	-	-	-	-	-	S	S	S	S	S	S
100,000 lb or more	-	-	-	S	S	S	S	S	S	S	S	S
SCTG 10, Monumental or building stone	42.6	27.5	26.4	S	45.5	46.5	36.6	31.1	30.0	S	S	S
Less than 50 lb	S	S	S	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	36.9	30.8	29.8	42.9	S	S	43.0	32.8	32.0	S	S	S
50,000 to 99,999 lb	S	47.9	42.1	S	S	S	S	47.3	45.9	-	-	-
100,000 lb or more	S	S	S	-	-	-	S	S	S	-	-	-
SCTG 11, Natural sands	13.4	29.3	26.2	14.1	20.8	19.0	25.1	44.2	41.4	27.0	36.8	35.0
Less than 50 lb	S	S	S	S	S	S	-	-	-	S	S	S
50 to 99 lb	-	-	-	-	-	-	-	-	-	-	-	-
100 to 499 lb	S	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S	S	S	S
750 to 999 lb	-	-	-	S	S	S	-	-	-	-	-	-
1,000 to 9,999 lb	47.2	43.4	43.8	S	42.1	42.7	S	S	S	S	S	S
10,000 to 49,999 lb	28.7	24.3	21.8	23.4	15.6	17.5	17.6	39.1	39.6	31.0	33.3	33.3
50,000 to 99,999 lb	20.5	15.7	14.7	36.1	32.5	32.6	S	S	S	S	S	S
100,000 lb or more	15.3	S	45.4	19.5	24.5	22.0	32.9	46.1	42.7	39.1	44.8	42.2
SCTG 12, Gravel and crushed stone	9.0	13.2	15.3	15.1	18.3	17.9	26.6	31.7	33.1	27.5	23.4	23.0
Less than 50 lb	-	-	-	-	-	-	-	-	-	S	S	S
50 to 99 lb	-	-	-	S	S	S	-	-	-	-	-	-
100 to 499 lb	S	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	-	-	-	S	S	S	S	S	S	-	-	-
750 to 999 lb	S	S	S	-	-	-	-	-	-	-	-	-
1,000 to 9,999 lb	32.0	37.5	34.8	S	S	S	S	S	S	S	43.9	43.2
10,000 to 49,999 lb	10.6	12.7	12.1	28.7	23.0	20.7	34.2	S	S	45.3	23.3	23.3
50,000 to 99,999 lb	14.0	19.4	16.7	18.1	24.7	22.6	S	35.1	34.5	S	S	S
100,000 lb or more	11.9	17.3	20.2	15.3	20.0	19.2	22.3	36.9	41.6	28.9	24.5	24.0
SCTG 13, Nonmetallic minerals n.e.c.	22.4	20.6	21.7	20.9	18.6	18.2	17.2	18.0	18.0	25.5	18.9	17.6
Less than 50 lb	47.7	37.2	37.8	36.6	44.4	49.2	45.6	36.5	35.7	S	46.9	48.4
50 to 99 lb	S	47.5	49.8	S	48.5	48.7	S	S	S	S	S	S
100 to 499 lb	S	34.8	32.7	43.4	44.1	41.9	S	43.6	44.6	S	44.6	45.7
500 to 749 lb	S	S	S	S	49.8	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	S	30.2	29.7	49.3	26.8	27.4	40.7	33.8	32.0	S	S	S
10,000 to 49,999 lb	30.6	32.5	34.0	24.0	23.0	23.6	20.7	20.8	20.6	42.5	32.9	32.1
50,000 to 99,999 lb	18.5	13.2	13.1	19.6	22.6	22.9	25.6	24.4	24.2	24.6	35.5	38.9
100,000 lb or more	22.9	27.2	30.3	25.1	26.8	24.2	15.6	20.3	20.3	13.6	23.3	21.0

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	100 to 249 miles			250 to 499 miles			500 to 749 miles			750 to 999 miles		
	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles
SCTG 14, Metallic ores and concentrates	17.1	35.0	32.5	24.8	24.8	26.9	25.0	27.4	28.6	35.6	40.3	43.7
Less than 50 lb	S	S	S	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	43.1	S	S	S	S	S	S	S	49.4	S	S	S
500 to 749 lb	47.3	S	S	49.4	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	S	44.7	45.1	47.5	33.5	34.4	40.4	41.2	39.7	39.3	48.1	47.5
10,000 to 49,999 lb	28.2	31.0	38.1	42.4	35.7	35.0	47.5	41.3	41.9	S	30.9	31.4
50,000 to 99,999 lb	37.2	48.8	S	S	S	49.2	37.6	39.4	39.8	S	44.2	44.2
100,000 lb or more	35.4	44.5	42.2	24.6	25.6	27.3	38.5	28.7	29.7	32.7	40.8	44.2
SCTG 15, Coal	10.3	10.9	10.6	15.0	14.7	14.8	14.1	11.6	12.6	19.2	20.8	20.7
Less than 50 lb	—	—	—	—	—	—	—	—	—	—	—	—
50 to 99 lb	S	S	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	—	—	—	—	—	—	—	—	—	—	—	—
750 to 999 lb	—	—	—	—	—	—	—	—	—	—	—	—
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	S	S	S	S	S	S	S	S	S	S	S	S
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S	S	S	S
100,000 lb or more	11.2	11.8	11.0	15.4	15.0	15.1	14.1	11.7	12.6	19.2	20.8	20.7
SCTG 17, Gasoline and aviation turbine fuel	8.9	10.5	10.2	19.4	18.5	17.2	34.6	37.4	36.3	34.7	35.3	34.7
Less than 50 lb	S	S	S	S	S	S	—	—	—	—	—	—
50 to 99 lb	—	—	—	S	S	S	—	—	—	—	—	—
100 to 499 lb	S	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	46.3	S	49.7	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	—	—	—	—	—	—	—	—	—
1,000 to 9,999 lb	45.5	49.4	S	40.0	48.3	S	46.0	41.6	43.9	44.3	42.6	40.9
10,000 to 49,999 lb	24.4	26.1	27.7	45.9	47.7	46.0	46.3	47.6	48.2	S	S	S
50,000 to 99,999 lb	14.6	15.0	17.8	20.0	19.1	18.9	34.1	33.4	34.2	31.5	28.6	28.6
100,000 lb or more	16.5	17.3	16.9	27.2	25.4	24.3	39.7	41.5	40.4	39.3	38.7	38.3
SCTG 18, Fuel oils	13.0	12.9	13.7	22.9	24.7	21.3	21.0	20.1	20.7	42.6	39.4	40.9
Less than 50 lb	S	S	S	S	S	S	S	S	S	—	—	—
50 to 99 lb	S	S	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	43.3	46.8	48.2	48.1	46.9	S	S	S	S	S	S
500 to 749 lb	S	40.9	40.5	47.8	47.5	49.2	S	S	S	—	—	—
750 to 999 lb	S	S	S	S	S	S	—	—	—	—	—	—
1,000 to 9,999 lb	25.1	32.9	32.6	43.0	45.2	48.2	49.4	S	S	S	S	S
10,000 to 49,999 lb	14.7	13.8	14.6	18.5	19.0	18.1	49.6	S	S	S	43.7	43.3
50,000 to 99,999 lb	12.1	13.3	13.2	19.3	17.1	21.2	22.6	25.4	25.3	41.1	36.1	33.7
100,000 lb or more	18.4	16.7	17.4	28.5	30.0	26.6	24.5	22.9	23.7	49.5	43.5	44.2
SCTG 19, Coal and petroleum products, n.e.c.	11.0	13.5	15.1	11.5	17.0	16.6	13.2	18.1	16.0	16.6	19.2	20.8
Less than 50 lb	27.0	20.6	20.2	33.3	30.0	28.8	S	40.7	41.2	41.3	36.1	36.0
50 to 99 lb	38.9	26.0	34.4	S	S	S	S	S	S	49.9	S	S
100 to 499 lb	27.4	26.8	28.8	35.5	29.1	28.8	S	S	S	S	S	S
500 to 749 lb	33.4	33.8	33.7	42.5	S	S	S	S	S	S	S	S
750 to 999 lb	26.2	28.9	27.7	S	47.7	S	S	S	S	S	S	S
1,000 to 9,999 lb	23.7	29.1	27.7	39.0	23.1	23.1	33.3	27.1	28.1	36.7	S	S
10,000 to 49,999 lb	14.7	17.0	16.9	15.1	22.6	24.4	22.1	39.6	38.1	32.8	45.2	45.2
50,000 to 99,999 lb	20.0	19.3	18.1	28.1	26.2	24.0	32.8	49.0	S	S	S	S
100,000 lb or more	18.2	20.8	24.4	18.0	22.2	20.7	18.8	17.7	16.5	23.1	22.4	23.7
SCTG 20, Basic chemicals	9.3	17.1	15.5	9.6	10.2	10.2	9.3	12.9	12.5	14.7	14.9	14.8
Less than 50 lb	27.3	20.0	23.6	25.2	43.4	39.6	26.7	26.3	26.3	30.4	25.8	28.7
50 to 99 lb	33.3	37.0	37.0	23.9	25.2	23.5	29.8	38.3	39.8	31.5	31.6	36.2
100 to 499 lb	27.1	18.5	20.4	35.8	27.2	27.0	25.0	27.4	28.0	32.7	28.0	26.9
500 to 749 lb	S	28.9	33.1	35.3	35.0	33.8	40.3	27.1	29.6	S	40.1	S
750 to 999 lb	47.4	31.1	30.0	43.7	32.4	29.9	42.4	S	S	S	S	S
1,000 to 9,999 lb	20.2	17.1	17.1	19.6	16.1	15.3	33.6	26.7	27.7	36.4	22.8	23.3
10,000 to 49,999 lb	7.2	16.9	18.0	14.6	19.9	20.7	8.9	17.4	16.6	12.7	11.4	11.8
50,000 to 99,999 lb	21.6	31.9	35.5	28.7	35.2	33.0	27.4	24.7	24.5	S	40.7	40.5
100,000 lb or more	19.0	27.3	23.3	8.8	8.2	8.3	12.1	15.9	14.5	22.6	17.7	17.1
SCTG 21, Pharmaceutical products	6.4	19.0	19.6	8.6	29.8	29.3	27.9	24.1	23.0	22.7	35.7	33.8
Less than 50 lb	10.9	12.4	11.8	6.5	9.0	8.2	14.8	13.4	13.1	14.6	10.5	10.4
50 to 99 lb	13.2	11.2	10.6	20.6	9.3	8.4	26.3	23.8	27.5	31.8	17.4	17.7
100 to 499 lb	13.9	10.8	11.1	27.6	30.0	31.0	23.7	21.8	22.3	30.4	S	S
500 to 749 lb	20.1	23.5	23.1	24.8	17.7	17.8	24.7	25.6	25.8	34.8	S	S
750 to 999 lb	42.4	46.1	S	43.8	39.9	38.4	41.4	S	S	S	30.3	30.1
1,000 to 9,999 lb	19.6	30.2	27.5	19.6	S	S	32.5	S	S	22.4	S	S
10,000 to 49,999 lb	23.1	36.0	39.4	18.5	23.7	22.9	S	23.2	22.8	S	17.8	17.6
50,000 to 99,999 lb	S	S	S	S	S	S	—	—	—	—	—	—
100,000 lb or more	S	S	S	S	S	S	S	S	S	S	S	S

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	100 to 249 miles			250 to 499 miles			500 to 749 miles			750 to 999 miles		
	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles
SCTG 22, Fertilizers	20.1	22.4	24.3	22.6	35.2	28.9	20.3	13.4	13.6	41.6	46.8	44.1
Less than 50 lb	S	S	S	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	43.9	35.7	S	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S	S	S	S
750 to 999 lb	49.5	40.9	41.3	—	—	—	S	S	S	—	—	—
1,000 to 9,999 lb	31.8	28.4	33.4	40.8	35.0	38.9	S	S	S	S	S	S
10,000 to 49,999 lb	27.7	23.1	23.6	28.8	28.4	27.3	45.5	32.5	31.9	34.6	35.5	35.4
50,000 to 99,999 lb	23.0	25.6	26.3	47.4	46.6	45.2	28.6	29.0	29.5	S	45.4	45.6
100,000 lb or more	39.4	39.9	38.5	39.6	S	40.2	23.1	15.6	15.9	S	S	S
SCTG 23, Chemical products and preparations, n.e.c.	7.1	6.3	7.3	8.9	9.8	10.3	10.6	10.1	9.6	9.6	14.8	14.7
Less than 50 lb	13.8	13.9	15.6	10.5	14.8	15.5	20.4	27.8	27.4	22.6	34.4	34.2
50 to 99 lb	39.5	21.6	20.6	20.4	21.0	20.5	21.1	24.6	25.6	35.5	24.3	24.4
100 to 499 lb	18.3	8.1	7.6	15.3	12.3	12.6	22.3	22.6	22.8	20.0	17.3	17.4
500 to 749 lb	15.7	16.2	15.5	13.2	11.6	13.0	18.5	15.8	15.7	43.1	20.7	20.0
750 to 999 lb	17.8	14.4	16.4	22.2	15.4	15.3	22.9	20.6	20.5	25.4	24.2	26.0
1,000 to 9,999 lb	15.0	9.3	9.4	13.8	7.9	8.1	23.5	15.7	15.5	17.8	13.9	14.1
10,000 to 49,999 lb	8.2	7.9	8.6	10.8	11.4	11.8	11.0	12.6	12.2	14.8	20.3	20.2
50,000 to 99,999 lb	29.2	24.6	26.0	44.4	28.0	27.2	33.4	30.2	31.5	S	S	S
100,000 lb or more	18.9	22.8	20.6	26.9	24.0	27.4	15.8	16.5	16.3	42.8	25.6	26.3
SCTG 24, Plastics and rubber	7.2	6.9	7.4	4.8	6.5	6.6	6.6	10.3	10.1	5.1	7.9	7.9
Less than 50 lb	9.3	8.8	7.8	7.2	10.2	10.2	10.1	10.4	10.2	10.3	12.6	12.9
50 to 99 lb	14.0	11.3	11.5	7.9	9.7	9.4	14.0	15.2	15.8	18.1	13.5	13.9
100 to 499 lb	9.5	9.6	9.4	9.8	11.5	12.2	8.9	11.9	11.6	11.5	11.6	12.4
500 to 749 lb	18.7	16.2	15.5	16.2	14.8	14.3	18.9	14.5	14.6	19.3	19.4	19.8
750 to 999 lb	13.1	11.7	12.7	16.6	15.7	16.3	32.3	17.1	17.3	21.3	18.7	18.3
1,000 to 9,999 lb	9.5	13.6	14.1	8.8	7.8	7.9	11.8	17.4	17.5	13.4	12.6	12.7
10,000 to 49,999 lb	17.9	7.7	8.5	7.2	7.7	7.5	7.2	7.6	7.5	8.9	12.5	12.6
50,000 to 99,999 lb	37.0	30.8	27.6	24.7	28.8	28.3	36.7	27.3	27.6	S	47.8	49.4
100,000 lb or more	13.6	14.7	15.5	16.0	18.6	18.1	25.9	20.9	18.7	12.8	12.7	13.2
SCTG 25, Logs and other wood in the rough	32.1	S	S	36.2	41.7	39.9	S	34.0	33.1	37.2	38.5	38.3
Less than 50 lb	S	S	S	S	S	S	—	—	—	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S	—	—	—
100 to 499 lb	37.2	S	S	S	S	S	S	S	S	—	—	—
500 to 749 lb	S	S	S	S	S	S	S	S	S	—	—	—
750 to 999 lb	S	S	S	S	S	S	—	—	—	—	—	—
1,000 to 9,999 lb	43.2	42.2	42.1	38.4	38.8	42.0	S	S	S	S	S	S
10,000 to 49,999 lb	38.9	S	S	48.1	24.8	24.7	S	40.7	39.2	40.7	37.4	37.1
50,000 to 99,999 lb	S	S	S	40.2	40.4	40.0	S	S	S	S	S	S
100,000 lb or more	S	S	S	S	S	S	S	S	S	S	S	S
SCTG 26, Wood products	7.3	5.9	7.0	11.5	6.1	6.1	21.0	17.0	17.6	11.2	13.7	13.7
Less than 50 lb	20.4	19.6	21.9	21.3	30.2	30.3	26.8	26.9	28.9	33.3	46.3	48.2
50 to 99 lb	27.6	28.7	31.0	23.6	23.4	23.5	38.7	30.5	29.4	44.7	38.8	40.5
100 to 499 lb	15.0	11.4	13.0	34.2	29.0	29.4	27.0	22.3	21.2	26.1	21.8	21.7
500 to 749 lb	44.5	27.0	31.1	S	S	S	S	S	S	35.3	27.1	27.1
750 to 999 lb	27.6	15.5	14.6	23.0	22.7	21.4	S	44.9	42.9	S	S	S
1,000 to 9,999 lb	8.9	12.2	11.1	30.8	14.5	15.7	38.4	19.7	18.4	29.7	16.7	16.6
10,000 to 49,999 lb	7.4	6.3	6.9	7.6	7.0	6.9	19.0	19.1	19.6	16.5	22.4	22.8
50,000 to 99,999 lb	13.5	12.0	13.0	14.8	17.3	15.6	26.6	24.4	26.8	17.3	29.3	27.8
100,000 lb or more	17.6	25.1	25.1	13.3	14.1	14.4	14.5	18.4	18.9	15.8	14.2	14.6
SCTG 27, Pulp, newsprint, paper, and paperboard	9.6	10.5	9.2	7.9	6.3	6.7	9.6	9.2	9.7	8.3	7.3	6.8
Less than 50 lb	33.2	32.2	34.9	19.4	23.4	24.7	33.8	S	S	42.8	27.6	27.2
50 to 99 lb	42.0	43.1	47.0	21.9	23.3	22.2	36.8	29.2	28.7	S	37.4	36.8
100 to 499 lb	12.8	11.9	13.9	39.4	31.2	31.3	28.9	25.4	24.8	31.4	32.7	32.3
500 to 749 lb	18.0	20.9	22.2	31.2	26.3	25.9	24.8	27.3	28.3	33.1	S	S
750 to 999 lb	33.3	20.3	21.4	30.0	26.1	25.7	41.2	34.8	33.8	23.6	30.9	30.7
1,000 to 9,999 lb	16.7	24.7	23.6	17.3	20.4	19.8	35.3	13.7	12.9	13.7	13.0	13.4
10,000 to 49,999 lb	12.7	13.2	11.2	9.9	7.1	7.1	7.8	7.1	7.1	8.6	6.7	6.8
50,000 to 99,999 lb	15.5	13.2	13.1	15.4	16.0	16.8	16.4	19.2	18.0	22.1	19.5	19.9
100,000 lb or more	12.6	12.4	12.0	12.5	11.2	11.3	16.4	14.7	15.1	15.8	11.8	10.6
SCTG 28, Paper or paperboard articles	6.6	6.7	7.1	7.1	9.5	9.6	10.0	11.4	11.2	14.1	15.3	16.3
Less than 50 lb	25.2	37.3	32.5	18.1	21.0	21.7	30.6	32.5	33.9	19.4	21.2	21.1
50 to 99 lb	27.7	29.1	28.5	22.5	20.1	20.5	33.2	32.3	32.6	28.2	27.4	27.9
100 to 499 lb	12.7	9.8	9.7	19.7	16.3	17.2	23.2	18.3	19.1	24.7	19.5	20.0
500 to 749 lb	15.7	19.4	16.4	25.4	15.3	16.0	22.1	23.9	27.1	37.9	27.4	27.1
750 to 999 lb	20.0	22.9	23.7	22.2	18.3	15.5	20.3	27.4	25.9	28.3	29.3	28.6
1,000 to 9,999 lb	7.7	7.8	8.1	12.6	9.9	9.6	17.0	9.4	9.4	46.3	20.3	19.7
10,000 to 49,999 lb	7.2	7.7	8.2	9.8	11.4	11.0	13.2	13.8	13.6	12.7	12.7	12.7
50,000 to 99,999 lb	S	S	S	S	47.3	41.3	S	S	S	S	S	S
100,000 lb or more	S	S	S	S	S	S	S	S	S	S	S	S

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	100 to 249 miles			250 to 499 miles			500 to 749 miles			750 to 999 miles		
	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles
SCTG 29, Printed products .	9.7	18.8	19.5	15.8	11.2	11.1	16.3	12.8	15.7	8.3	9.7	9.6
Less than 50 lb	13.7	11.7	11.7	11.8	16.5	17.4	10.4	14.9	14.6	10.6	16.4	16.4
50 to 99 lb	16.6	16.8	17.4	24.0	44.8	47.3	19.1	44.3	45.0	33.9	S	S
100 to 499 lb	13.0	10.7	11.0	14.0	17.7	18.5	19.6	16.3	16.1	15.2	11.6	11.8
500 to 749 lb	22.3	21.2	21.7	43.3	25.6	27.7	S	32.9	34.5	35.5	26.8	26.8
750 to 999 lb	42.8	23.0	25.7	24.7	28.9	28.2	20.1	20.5	20.1	22.9	36.4	36.5
1,000 to 9,999 lb	11.5	10.5	10.4	27.1	11.6	11.3	27.0	12.6	12.1	22.1	14.9	14.5
10,000 to 49,999 lb	14.2	27.0	28.6	14.9	13.3	13.4	23.8	13.6	13.7	19.0	14.6	14.5
50,000 to 99,999 lb	46.8	47.7	48.6	S	S	S	35.3	32.8	32.9	43.1	41.8	42.7
100,000 lb or more	37.5	S	S	S	S	S	S	S	S	S	48.4	48.7
SCTG 30, Textiles, leather, and articles of textiles or leather	11.0	10.1	10.3	8.9	7.1	6.6	6.0	7.3	7.5	12.8	17.6	17.7
Less than 50 lb	7.4	9.9	10.1	6.4	13.8	13.3	7.4	7.5	7.2	14.3	17.4	17.5
50 to 99 lb	11.4	15.6	14.3	16.4	14.9	16.1	13.3	16.9	15.5	27.4	15.6	15.2
100 to 499 lb	9.6	11.3	12.1	12.4	14.2	15.8	15.4	12.8	12.1	20.8	22.9	22.7
500 to 749 lb	20.8	18.5	17.6	17.1	14.3	14.9	18.8	11.8	11.9	37.2	27.5	26.2
750 to 999 lb	25.9	16.8	17.0	20.3	13.8	13.1	23.7	24.5	23.7	21.1	24.5	25.0
1,000 to 9,999 lb	14.5	11.5	11.4	11.4	10.9	10.6	8.0	14.5	14.6	17.5	10.3	10.4
10,000 to 49,999 lb	14.8	13.6	14.2	15.1	11.8	10.8	16.5	9.4	9.6	33.0	27.2	27.3
50,000 to 99,999 lb	44.4	48.8	43.6	S	30.5	32.4	S	S	S	47.4	33.1	33.7
100,000 lb or more	49.7	S	S	S	S	S	S	S	S	S	S	S
SCTG 31, Nonmetallic mineral products	8.0	12.1	12.3	10.4	11.0	10.9	13.1	19.8	22.5	18.2	23.6	24.5
Less than 50 lb	14.9	24.1	26.8	15.3	12.8	13.1	29.7	13.9	13.2	16.1	18.4	18.5
50 to 99 lb	26.4	20.2	21.3	26.4	21.4	22.7	18.5	28.4	27.5	28.8	30.6	30.0
100 to 499 lb	31.9	29.3	26.5	22.7	23.4	24.7	18.9	25.5	24.3	20.1	25.5	25.3
500 to 749 lb	26.1	20.5	22.0	S	33.1	33.6	S	39.2	41.3	34.9	35.8	35.4
750 to 999 lb	26.6	23.9	27.6	S	30.7	31.5	26.9	S	S	S	43.7	46.0
1,000 to 9,999 lb	13.1	14.1	16.4	21.6	17.4	17.3	22.0	20.6	20.4	16.3	21.7	20.6
10,000 to 49,999 lb	10.5	12.6	12.9	12.7	12.4	12.6	18.5	14.9	15.2	18.4	17.4	17.8
50,000 to 99,999 lb	17.2	21.3	24.9	24.3	23.5	22.6	27.0	25.0	26.1	39.6	22.4	24.6
100,000 lb or more	19.1	19.9	20.4	29.2	23.9	23.2	44.8	37.8	41.0	S	S	S
SCTG 32, Base metal in primary or semifinished forms and in finished basic shapes	7.4	10.0	9.0	5.4	6.9	7.5	5.3	9.3	9.4	9.7	14.2	16.1
Less than 50 lb	12.8	34.7	36.4	17.4	31.8	32.3	30.7	27.2	28.7	10.8	18.9	18.2
50 to 99 lb	20.2	33.6	34.6	17.6	33.3	30.4	21.6	41.4	39.6	35.9	S	S
100 to 499 lb	11.2	13.1	12.3	14.2	11.9	13.2	14.7	15.2	15.9	21.2	16.9	16.7
500 to 749 lb	15.1	20.4	18.8	18.3	10.8	11.1	20.4	11.8	11.5	28.4	25.6	24.4
750 to 999 lb	15.9	26.0	20.5	21.6	12.5	12.2	27.1	15.8	16.3	27.8	28.2	28.9
1,000 to 9,999 lb	6.0	6.4	6.8	9.9	8.5	8.7	10.5	10.2	10.1	11.1	9.6	9.6
10,000 to 49,999 lb	10.8	13.4	12.3	7.7	9.4	9.6	6.9	7.2	7.2	11.9	12.3	12.1
50,000 to 99,999 lb	20.2	17.5	17.8	15.9	17.2	17.8	17.4	28.9	28.2	38.5	39.6	40.9
100,000 lb or more	17.4	12.4	12.8	19.3	17.5	20.5	13.8	19.7	18.8	24.1	26.2	30.0
SCTG 33, Articles of base metal	7.5	8.1	7.8	5.7	6.1	6.2	8.8	10.7	10.9	7.7	8.6	8.5
Less than 50 lb	14.5	8.6	8.8	11.4	7.5	7.6	11.7	11.1	11.1	14.0	11.9	12.0
50 to 99 lb	18.9	8.7	8.9	17.2	10.5	10.7	16.6	14.1	14.3	17.5	17.5	18.6
100 to 499 lb	11.3	10.6	10.4	11.0	10.1	10.7	12.0	14.3	14.1	9.2	12.3	12.1
500 to 749 lb	17.5	16.6	11.9	16.8	11.9	11.3	17.4	14.8	15.4	25.0	19.0	18.8
750 to 999 lb	13.9	11.6	11.0	21.6	14.9	14.7	19.8	23.5	23.8	21.4	19.3	19.2
1,000 to 9,999 lb	13.0	10.2	10.3	8.8	8.8	9.2	20.7	14.0	13.3	14.0	19.3	19.6
10,000 to 49,999 lb	12.0	10.0	9.7	8.8	8.0	8.4	7.5	11.3	11.1	14.8	11.4	11.3
50,000 to 99,999 lb	22.2	21.2	23.9	25.5	18.6	18.2	29.9	37.7	38.7	30.4	33.7	31.9
100,000 lb or more	28.4	26.9	30.3	31.8	33.6	35.3	46.4	40.9	39.4	30.3	31.9	31.9
SCTG 34, Machinery	5.1	10.5	8.8	8.1	11.3	11.3	15.0	18.8	18.1	9.4	12.1	12.3
Less than 50 lb	6.3	7.2	6.8	10.2	8.2	8.9	8.3	10.7	10.3	7.2	7.0	7.0
50 to 99 lb	13.8	7.3	9.0	9.0	10.9	11.7	10.1	10.9	11.3	12.7	16.3	15.6
100 to 499 lb	7.1	8.1	8.1	7.7	7.4	7.8	10.0	11.4	11.0	12.1	11.0	10.9
500 to 749 lb	11.3	9.8	9.5	15.9	16.3	15.4	16.4	10.3	11.0	17.3	15.7	15.5
750 to 999 lb	22.7	18.2	19.1	16.7	20.1	19.0	15.5	14.3	14.3	24.5	16.9	17.1
1,000 to 9,999 lb	8.5	9.5	9.8	18.0	19.6	19.8	14.4	16.3	14.7	17.5	17.2	16.3
10,000 to 49,999 lb	10.9	12.8	11.2	8.0	11.8	11.8	24.6	24.6	24.1	11.4	14.2	14.6
50,000 to 99,999 lb	29.7	45.8	37.9	S	23.7	24.2	25.5	23.8	23.9	27.8	41.1	40.8
100,000 lb or more	29.0	40.2	36.0	21.3	23.2	22.5	26.6	25.3	26.1	42.5	34.2	34.4
SCTG 35, Electronic and other electrical equipment and components and office equipment	7.6	9.3	10.0	9.2	20.1	22.0	14.3	22.3	23.5	6.5	12.6	12.8
Less than 50 lb	12.0	12.9	12.0	12.2	9.2	9.1	12.6	12.8	12.4	6.7	9.1	9.3
50 to 99 lb	18.0	13.1	13.2	20.1	14.5	20.3	S	19.3	19.5	19.5	14.5	15.8
100 to 499 lb	14.8	11.4	10.0	12.5	17.8	17.6	9.3	15.6	16.3	17.3	14.3	13.9
500 to 749 lb	20.0	24.5	23.3	24.3	25.2	24.6	30.2	15.1	15.2	19.2	26.7	27.3
750 to 999 lb	36.7	36.9	32.1	28.7	28.2	32.4	16.9	15.2	15.5	15.4	26.3	24.7
1,000 to 9,999 lb	18.9	15.3	15.9	12.4	15.9	16.4	23.1	24.9	24.2	15.8	14.6	14.6
10,000 to 49,999 lb	17.6	17.0	17.2	29.1	33.8	35.8	13.3	10.6	10.6	13.9	18.6	19.6
50,000 to 99,999 lb	45.6	S	S	S	42.0	44.9	29.8	48.7	47.3	S	37.5	37.2
100,000 lb or more	43.8	41.3	39.3	S	S	S	S	S	S	S	S	S

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	100 to 249 miles			250 to 499 miles			500 to 749 miles			750 to 999 miles		
	Value	Tons	Ton-miles									
SCTG 36, Motorized and other vehicles (including parts)	14.7	13.6	12.6	11.9	8.7	7.5	11.8	8.6	8.3	21.9	25.1	26.4
Less than 50 lb	11.1	16.1	18.8	11.7	12.2	11.9	14.0	13.2	12.8	17.7	14.3	14.1
50 to 99 lb	11.3	12.8	17.5	19.1	9.2	10.9	21.2	17.4	17.3	23.1	22.7	22.0
100 to 499 lb	11.1	10.7	12.2	19.3	12.2	12.7	19.5	14.8	14.8	19.1	11.1	10.5
500 to 749 lb	16.4	13.0	13.3	35.1	16.3	18.0	26.4	19.2	19.0	35.3	19.5	19.5
750 to 999 lb	22.0	18.4	18.9	16.8	12.7	11.7	18.3	15.8	15.3	28.7	32.9	31.3
1,000 to 9,999 lb	16.4	11.4	11.4	18.7	14.2	12.5	13.6	12.6	12.9	20.0	16.3	16.0
10,000 to 49,999 lb	20.9	18.4	17.3	9.2	7.2	6.9	20.9	12.6	12.0	20.2	16.9	16.6
50,000 to 99,999 lb	35.9	31.6	33.8	S	42.5	34.6	32.4	18.6	18.4	26.5	27.2	27.1
100,000 lb or more	43.0	37.3	32.8	S	S	S	20.4	19.5	18.7	S	S	S
SCTG 37, Transportation equipment, n.e.c.	14.9	48.7	S	11.4	43.1	42.9	20.2	S	49.1	28.0	S	S
Less than 50 lb	16.5	30.1	22.2	16.0	13.3	12.2	23.0	16.7	16.5	15.8	17.7	15.7
50 to 99 lb	36.6	34.3	31.1	23.0	21.6	26.0	30.7	26.1	23.0	17.9	39.4	36.2
100 to 499 lb	34.0	27.1	24.3	22.0	23.1	22.1	40.7	28.3	28.3	S	27.9	26.6
500 to 749 lb	S	32.8	33.6	S	42.7	41.1	S	S	S	S	46.6	47.6
750 to 999 lb	36.5	49.4	S	29.9	35.3	32.7	S	S	S	46.8	S	S
1,000 to 9,999 lb	25.6	19.2	20.6	24.9	19.1	21.4	37.3	20.0	19.8	30.2	17.0	16.3
10,000 to 49,999 lb	35.3	S	S	40.4	45.1	44.0	29.7	S	S	41.2	S	S
50,000 to 99,999 lb	44.4	S	S	43.2	S	S	S	S	S	S	S	S
100,000 lb or more	43.9	46.3	40.5	36.8	43.4	34.1	S	S	S	43.0	S	S
SCTG 38, Precision instruments and apparatus	12.7	37.8	33.7	14.0	S	50.0	9.3	11.8	12.2	9.5	16.1	15.4
Less than 50 lb	13.5	14.6	15.0	23.7	14.9	14.7	13.7	15.2	15.6	11.4	14.4	16.0
50 to 99 lb	21.0	24.4	25.8	20.0	23.5	23.5	36.7	21.1	20.7	18.4	19.8	19.2
100 to 499 lb	18.1	22.3	20.6	13.5	12.3	12.6	25.1	19.0	21.0	18.4	29.6	29.1
500 to 749 lb	27.5	34.0	29.0	34.7	20.0	20.8	41.7	32.9	33.8	34.8	36.8	36.1
750 to 999 lb	47.8	31.2	33.3	S	S	S	49.0	24.6	28.6	S	42.5	42.9
1,000 to 9,999 lb	38.6	34.1	35.4	18.0	19.8	18.8	20.4	24.9	26.9	19.4	24.5	24.0
10,000 to 49,999 lb	S	36.5	35.5	21.1	36.0	32.5	28.9	23.8	23.5	45.4	33.2	33.0
50,000 to 99,999 lb	S	S	S	S	S	S	—	—	—	—	—	—
100,000 lb or more	S	S	S	S	S	S	—	—	—	—	—	—
SCTG 39, Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	9.9	8.7	8.8	6.9	10.5	10.4	7.9	6.6	6.6	11.2	13.7	13.7
Less than 50 lb	26.7	20.6	20.0	19.9	23.7	24.9	15.4	17.3	17.0	20.5	24.7	24.9
50 to 99 lb	23.3	17.4	15.5	19.0	18.1	20.0	25.8	19.8	19.8	33.1	48.4	49.2
100 to 499 lb	40.0	37.9	35.3	10.9	10.8	10.7	18.0	12.0	11.8	20.9	14.0	13.7
500 to 749 lb	23.0	26.8	24.2	16.9	13.4	14.5	40.9	11.3	11.6	33.1	23.0	23.6
750 to 999 lb	16.2	17.0	17.9	14.5	12.5	11.3	19.8	13.2	13.1	19.4	14.3	14.1
1,000 to 9,999 lb	7.1	9.2	8.1	7.9	8.7	9.0	9.4	9.6	9.3	15.0	16.5	16.6
10,000 to 49,999 lb	14.2	16.6	17.3	17.0	18.5	17.7	12.4	10.8	10.8	18.0	21.2	21.3
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	S	S	S	S	S	S	S	S	—	—	—
SCTG 40, Miscellaneous manufactured products ...	6.9	9.9	10.3	6.3	9.5	8.8	6.3	11.0	11.9	7.0	11.1	10.7
Less than 50 lb	7.2	10.0	10.1	12.7	5.9	6.0	12.8	6.3	6.5	10.9	9.2	9.0
50 to 99 lb	18.1	17.0	S	33.6	21.3	44.2	18.0	8.1	8.2	9.8	9.4	9.1
100 to 499 lb	10.4	9.1	8.8	10.0	7.8	7.7	9.6	8.0	8.1	12.6	9.5	9.4
500 to 749 lb	17.5	16.6	15.2	14.9	12.5	12.6	19.1	11.7	11.6	17.6	15.0	14.7
750 to 999 lb	35.2	17.8	17.3	19.9	14.3	14.0	25.1	13.0	12.2	32.3	23.1	23.3
1,000 to 9,999 lb	12.4	9.4	9.8	10.6	7.3	7.3	7.8	7.9	8.1	14.0	10.6	10.4
10,000 to 49,999 lb	11.2	12.0	10.6	14.2	13.9	12.3	13.2	17.8	18.5	17.6	14.4	14.3
50,000 to 99,999 lb	19.9	24.6	25.5	44.7	33.8	32.6	45.4	37.8	36.8	S	48.2	47.9
100,000 lb or more	34.0	40.9	44.2	20.5	43.2	48.0	47.4	S	S	S	S	S
SCTG 41, Waste and scrap .	21.0	22.5	24.1	24.9	29.9	35.5	47.2	44.1	S	27.4	49.5	S
Less than 50 lb	S	S	S	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	—	—	—	S	S	S	S	S
100 to 499 lb	S	S	S	S	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	—	—	—	S	S	S
1,000 to 9,999 lb	49.4	S	S	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	18.4	19.6	18.8	23.9	19.1	18.3	S	30.2	29.3	31.8	26.0	27.9
50,000 to 99,999 lb	22.4	27.4	24.4	28.5	29.1	30.2	S	S	S	S	S	S
100,000 lb or more	37.3	36.6	39.1	S	44.7	47.8	S	S	S	47.2	S	S
SCTG 43, Mixed freight	4.8	5.5	5.8	5.3	9.3	9.3	10.4	10.5	10.5	14.8	14.1	13.6
Less than 50 lb	14.0	19.7	19.5	12.3	24.4	22.6	13.0	16.3	16.4	14.9	12.7	12.8
50 to 99 lb	31.2	33.0	31.3	10.8	16.6	14.8	25.7	13.4	13.4	17.0	17.9	17.7
100 to 499 lb	8.7	9.2	10.4	14.3	17.8	17.3	16.6	11.7	11.1	11.7	13.3	13.5
500 to 749 lb	20.4	6.8	8.7	22.5	13.7	14.5	37.5	20.6	21.1	22.3	23.5	24.3
750 to 999 lb	15.3	7.1	7.6	21.1	12.1	12.1	20.5	18.6	19.2	26.6	28.4	28.2
1,000 to 9,999 lb	5.2	5.5	6.1	7.0	9.3	8.8	15.5	14.6	13.8	33.7	26.2	24.0
10,000 to 49,999 lb	6.3	7.8	8.1	6.7	12.7	12.6	14.6	11.8	11.9	15.4	15.8	15.8
50,000 to 99,999 lb	38.3	31.2	31.1	34.7	33.2	33.5	S	S	S	S	S	S
100,000 lb or more	45.8	27.0	28.4	S	S	S	S	S	S	—	—	—

See footnotes at end of table.

Table B-10. **Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.**

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	100 to 249 miles			250 to 499 miles			500 to 749 miles			750 to 999 miles		
	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles
Commodity unknown	23.5	26.1	34.9	17.4	24.1	30.3	34.8	S	47.8	35.6	S	S
Less than 50 lb	40.9	33.5	32.7	46.0	27.6	27.1	S	31.4	32.4	36.1	S	S
50 to 99 lb	30.3	30.1	34.1	S	35.0	S	S	35.0	35.5	46.7	40.5	41.1
100 to 499 lb	23.7	32.1	30.1	45.0	41.4	40.0	S	42.6	45.7	S	32.6	32.2
500 to 749 lb	46.1	45.1	42.7	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	37.1	37.6	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	18.1	25.2	24.8	19.9	17.9	20.0	35.7	35.6	37.5	36.7	43.9	42.7
10,000 to 49,999 lb	36.3	23.8	21.4	26.6	19.1	17.8	29.1	38.4	39.5	S	S	S
50,000 to 99,999 lb	20.9	24.1	28.3	S	44.0	47.8	43.3	49.4	47.3	-	-	-
100,000 lb or more	40.5	S	S	S	43.3	47.0	S	S	S	43.6	S	S

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	1,000 to 1,499 miles			1,500 to 1,999 miles			2,000 miles or more		
	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles
Total	3.3	11.2	12.0	5.8	6.9	7.0	6.3	3.9	4.3
Less than 50 lb	5.1	4.5	4.4	7.1	3.9	3.9	5.9	7.7	7.8
50 to 99 lb	7.6	9.4	9.0	6.9	9.3	9.0	8.1	8.7	9.2
100 to 499 lb	3.8	3.4	3.5	10.1	5.8	5.9	8.6	7.1	7.3
500 to 749 lb	9.1	5.2	5.2	10.5	7.7	7.7	10.3	8.1	7.8
750 to 999 lb	27.7	6.8	6.8	11.1	6.8	6.7	13.1	10.0	9.6
1,000 to 9,999 lb	6.5	6.1	6.0	9.8	11.2	11.3	19.1	9.1	9.1
10,000 to 49,999 lb	3.5	4.8	4.8	10.8	6.8	6.7	17.9	6.9	7.8
50,000 to 99,999 lb	12.6	10.9	10.5	25.5	37.7	38.7	31.4	22.9	23.3
100,000 lb or more	7.3	14.8	15.4	8.4	11.5	11.6	24.1	13.4	13.4
SCTG 01, Live animals and live fish	S	S	S	S	S	S	S	S	S
Less than 50 lb	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	S	S	49.2	48.8	48.7	48.1	S	49.8
500 to 749 lb	S	S	S	S	S	S	S	S	S
750 to 999 lb	-	-	-	S	S	S	-	-	-
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	S	S	S	-	-	-	-	-	-
50,000 to 99,999 lb	S	S	S	-	-	-	-	-	-
100,000 lb or more	-	-	-	-	-	-	-	-	-
SCTG 02, Cereal grains	39.3	44.8	47.4	S	S	S	S	S	S
Less than 50 lb	S	S	S	-	-	-	-	-	-
50 to 99 lb	-	-	-	-	-	-	-	-	-
100 to 499 lb	S	S	S	-	-	-	S	S	S
500 to 749 lb	-	-	-	-	-	-	-	-	-
750 to 999 lb	S	S	S	-	-	-	-	-	-
1,000 to 9,999 lb	S	S	S	S	S	S	-	-	-
10,000 to 49,999 lb	43.7	S	S	S	S	S	S	S	S
50,000 to 99,999 lb	S	S	S	S	S	S	-	-	-
100,000 lb or more	41.6	45.9	48.3	S	S	S	-	-	-
SCTG 03, Other agricultural products	25.2	23.6	22.6	15.1	14.8	13.9	27.3	21.0	21.0
Less than 50 lb	28.5	49.1	47.4	S	S	S	S	S	S
50 to 99 lb	S	33.8	36.1	40.6	S	S	S	S	S
100 to 499 lb	33.5	34.9	35.6	S	47.6	49.3	36.6	41.3	44.7
500 to 749 lb	43.5	S	S	40.8	44.8	43.6	35.0	S	S
750 to 999 lb	45.7	45.6	47.0	S	S	S	S	44.1	43.5
1,000 to 9,999 lb	S	34.8	35.7	41.0	36.0	35.5	42.3	37.7	37.2
10,000 to 49,999 lb	26.6	23.9	24.2	21.9	19.2	18.5	33.5	25.4	25.9
50,000 to 99,999 lb	39.4	37.7	39.6	42.2	31.8	32.2	29.9	S	S
100,000 lb or more	32.1	36.5	33.5	31.7	27.6	28.4	S	40.3	38.4
SCTG 04, Animal feed and products of animal origin, n.e.c.	16.8	14.0	14.3	30.2	S	S	S	S	S
Less than 50 lb	36.7	S	S	S	S	S	S	S	S
50 to 99 lb	47.0	S	S	S	S	S	S	S	S
100 to 499 lb	44.5	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	32.3	46.0	44.6	S	S	S	S	47.9	47.4
10,000 to 49,999 lb	23.8	22.0	22.3	35.8	32.1	32.8	S	S	S
50,000 to 99,999 lb	31.3	38.8	35.6	S	S	S	S	S	S
100,000 lb or more	24.5	20.6	20.4	S	S	S	S	S	S
SCTG 05, Meat, fish, seafood, and their preparations	7.2	10.1	9.8	12.1	15.9	15.8	32.0	20.5	20.8
Less than 50 lb	S	S	S	35.8	39.6	36.3	33.2	40.4	38.7
50 to 99 lb	S	S	S	44.9	40.7	40.2	39.8	42.7	41.3
100 to 499 lb	22.5	24.8	24.8	S	36.9	38.1	36.7	36.6	36.2
500 to 749 lb	32.0	27.2	27.9	S	S	S	S	45.0	45.4
750 to 999 lb	34.0	37.4	35.5	38.9	30.5	29.5	38.7	32.5	31.2
1,000 to 9,999 lb	14.7	12.5	12.6	17.8	18.3	18.0	45.3	32.9	33.0
10,000 to 49,999 lb	9.0	10.7	10.3	14.5	15.9	15.7	21.9	19.0	19.4
50,000 to 99,999 lb	S	42.4	38.1	S	S	S	S	S	S
100,000 lb or more	45.8	S	S	38.4	45.2	46.2	S	S	S
SCTG 06, Milled grain products and preparations, and bakery products	16.7	24.4	25.1	9.8	12.7	13.4	23.5	16.7	16.6
Less than 50 lb	30.9	32.0	31.7	41.2	S	S	32.5	37.2	37.7
50 to 99 lb	S	S	S	S	S	S	S	S	48.7
100 to 499 lb	S	50.0	S	40.4	S	S	S	S	S
500 to 749 lb	48.9	45.9	46.0	S	S	S	S	S	S
750 to 999 lb	42.4	32.7	33.5	45.2	42.2	42.9	S	S	S
1,000 to 9,999 lb	17.0	17.6	17.5	39.2	37.2	37.5	43.8	34.7	34.3
10,000 to 49,999 lb	18.3	18.9	18.9	11.6	16.1	17.1	24.5	17.3	17.2
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	49.9	48.3	48.9	41.1	45.8	45.2	S	S	S

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	1,000 to 1,499 miles			1,500 to 1,999 miles			2,000 miles or more		
	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles
SCTG 07, Other prepared foodstuffs and fats and oils	9.0	12.8	13.7	10.4	10.7	11.0	10.1	12.6	12.5
Less than 50 lb	28.6	30.7	30.0	25.7	30.3	29.0	40.2	37.9	38.9
50 to 99 lb	S	S	S	34.7	25.5	25.9	40.1	40.3	39.7
100 to 499 lb	27.3	24.8	25.1	27.7	S	S	41.0	35.0	33.2
500 to 749 lb	30.5	28.8	29.3	S	26.3	26.0	29.7	33.4	34.6
750 to 999 lb	38.6	29.3	30.3	45.1	34.3	34.3	23.3	29.6	28.5
1,000 to 9,999 lb	18.6	16.4	16.5	21.0	12.9	13.1	23.5	26.8	28.8
10,000 to 49,999 lb	12.0	16.4	16.7	11.6	12.6	12.8	12.2	16.2	15.6
50,000 to 99,999 lb	31.5	29.5	32.0	35.6	29.9	29.8	35.4	22.3	22.4
100,000 lb or more	29.0	22.2	23.5	19.5	15.0	15.6	20.9	28.2	27.8
SCTG 08, Alcoholic beverages	14.7	18.0	19.2	18.7	27.4	27.2	13.7	20.0	20.1
Less than 50 lb	S	S	48.8	S	S	S	S	S	S
50 to 99 lb	49.8	46.2	45.3	S	S	S	S	S	S
100 to 499 lb	31.5	23.2	25.7	43.5	S	S	46.9	44.9	44.2
500 to 749 lb	S	S	S	44.9	42.6	42.9	33.3	S	S
750 to 999 lb	S	42.2	48.1	S	42.6	43.2	S	S	S
1,000 to 9,999 lb	26.3	23.2	23.0	28.6	44.4	45.1	35.2	47.1	46.2
10,000 to 49,999 lb	16.6	14.6	16.3	18.3	26.3	26.9	15.4	15.5	15.9
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	32.8	31.7	31.6	S	S	S	S	48.7	48.7
SCTG 09, Tobacco products	28.2	30.9	32.2	45.4	S	S	S	S	S
Less than 50 lb	42.7	42.8	42.1	32.2	32.4	33.1	39.3	38.4	38.9
50 to 99 lb	S	46.8	46.3	S	40.6	40.4	S	S	S
100 to 499 lb	35.1	31.9	31.5	44.4	39.3	39.5	S	S	46.3
500 to 749 lb	47.4	40.8	40.4	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	32.0	32.9	34.3	S	S	S	S	S	S
50,000 to 99,999 lb	-	-	-	-	-	-	S	S	S
100,000 lb or more	-	-	-	-	-	-	S	S	S
SCTG 10, Monumental or building stone	S	37.3	42.3	S	S	S	S	S	S
Less than 50 lb	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	S	S	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	S	29.3	29.2	S	S	S	S	S	S
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	S	S	S	S	S	S	S	S
SCTG 11, Natural sands	41.8	37.5	33.6	S	39.8	39.4	42.1	S	S
Less than 50 lb	S	S	S	-	-	-	-	-	-
50 to 99 lb	-	-	-	S	S	S	S	S	S
100 to 499 lb	-	-	-	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S
750 to 999 lb	-	-	-	S	S	S	S	S	S
1,000 to 9,999 lb	S	S	S	S	S	S	S	-	-
10,000 to 49,999 lb	S	48.8	47.2	28.7	S	S	S	47.4	45.3
50,000 to 99,999 lb	S	S	S	S	S	S	S	-	-
100,000 lb or more	30.7	42.7	37.0	S	49.5	49.3	S	S	S
SCTG 12, Gravel and crushed stone	41.1	46.8	46.0	32.6	49.0	S	46.3	40.5	40.2
Less than 50 lb	S	S	S	-	-	-	-	-	-
50 to 99 lb	S	S	S	-	-	-	-	-	-
100 to 499 lb	S	S	S	S	S	S	S	S	S
500 to 749 lb	-	-	-	S	S	S	S	S	S
750 to 999 lb	-	-	-	-	-	-	-	-	-
1,000 to 9,999 lb	S	S	S	-	-	-	S	S	S
10,000 to 49,999 lb	S	34.8	34.6	41.9	36.3	35.7	S	43.3	41.0
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	S	S	S	S	S	S	S	S
SCTG 13, Nonmetallic minerals n.e.c.	19.6	36.2	37.4	28.4	47.8	49.2	20.7	21.8	21.5
Less than 50 lb	S	46.2	44.7	S	45.8	45.3	45.9	S	S
50 to 99 lb	S	S	S	S	S	S	-	-	-
100 to 499 lb	S	S	S	S	S	S	-	-	-
500 to 749 lb	S	S	S	-	-	-	S	S	S
750 to 999 lb	S	S	S	-	-	-	S	S	S
1,000 to 9,999 lb	S	S	S	S	36.2	36.9	42.6	47.7	47.0
10,000 to 49,999 lb	25.9	29.4	27.5	26.5	29.8	31.1	26.3	27.3	26.4
50,000 to 99,999 lb	S	36.1	36.1	S	44.5	45.8	S	45.8	45.3
100,000 lb or more	21.2	40.1	41.0	42.6	S	S	40.0	38.8	37.4

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	1,000 to 1,499 miles			1,500 to 1,999 miles			2,000 miles or more		
	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles
SCTG 14, Metallic ores and concentrates	25.6	44.4	41.7	42.0	S	S	47.0	30.6	30.8
Less than 50 lb	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	S	S	S	S	S	S
100 to 499 lb	48.3	44.0	42.2	S	S	S	S	S	S
500 to 749 lb	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	-	-	-	S	S	S
1,000 to 9,999 lb	S	45.7	43.1	46.4	S	S	S	S	S
10,000 to 49,999 lb	33.3	50.0	48.7	S	S	S	47.9	43.4	44.2
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	40.1	46.8	43.9	S	S	49.7	S	S	S
SCTG 15, Coal	24.5	30.8	32.5	S	S	S	-	-	-
Less than 50 lb	-	-	-	-	-	-	-	-	-
50 to 99 lb	-	-	-	-	-	-	-	-	-
100 to 499 lb	-	-	-	-	-	-	-	-	-
500 to 749 lb	-	-	-	-	-	-	-	-	-
750 to 999 lb	-	-	-	-	-	-	-	-	-
1,000 to 9,999 lb	-	-	-	-	-	-	-	-	-
10,000 to 49,999 lb	S	S	S	-	-	-	-	-	-
50,000 to 99,999 lb	S	S	S	S	S	S	-	-	-
100,000 lb or more	24.6	30.9	32.6	S	S	S	-	-	-
SCTG 17, Gasoline and aviation turbine fuel	45.7	48.8	48.5	49.5	47.2	45.0	49.0	S	S
Less than 50 lb	S	S	S	-	-	-	-	-	-
50 to 99 lb	-	-	-	-	-	-	-	-	-
100 to 499 lb	S	S	S	-	-	-	-	-	-
500 to 749 lb	S	S	S	S	S	S	S	S	S
750 to 999 lb	-	-	-	-	-	-	-	-	-
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	S	S	S	S	S	S	S	S	S
50,000 to 99,999 lb	37.4	37.9	38.4	S	S	S	S	S	S
100,000 lb or more	46.8	49.6	49.3	S	S	S	S	S	S
SCTG 18, Fuel oils	48.7	S	S	S	S	S	S	S	S
Less than 50 lb	-	-	-	-	-	-	-	-	-
50 to 99 lb	-	-	-	-	-	-	-	-	-
100 to 499 lb	S	S	S	-	-	-	-	-	-
500 to 749 lb	-	-	-	S	S	S	-	-	-
750 to 999 lb	-	-	-	-	-	-	-	-	-
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	S	S	S	S	S	S	S	S	S
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	S	S	S	S	S	-	-	-
SCTG 19, Coal and petroleum products, n.e.c.	30.2	39.3	44.7	24.9	21.4	21.8	49.5	36.6	35.2
Less than 50 lb	38.4	27.4	27.5	S	39.4	40.0	44.1	41.8	S
50 to 99 lb	S	S	S	S	S	S	S	S	S
100 to 499 lb	S	S	S	S	S	S	43.3	44.7	44.1
500 to 749 lb	45.7	43.6	43.8	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	S	S	S
1,000 to 9,999 lb	37.1	37.3	40.9	45.1	41.8	41.7	S	S	S
10,000 to 49,999 lb	18.5	31.5	33.4	31.6	31.2	30.8	S	S	S
50,000 to 99,999 lb	S	45.8	48.0	S	S	S	-	-	-
100,000 lb or more	33.6	41.3	46.5	29.2	29.0	29.9	S	S	S
SCTG 20, Basic chemicals	15.6	27.4	26.5	16.8	16.2	17.5	22.4	33.9	35.2
Less than 50 lb	21.9	25.8	25.4	47.8	32.3	33.2	27.9	32.8	32.9
50 to 99 lb	43.6	49.8	48.7	39.7	44.5	44.9	S	41.4	41.5
100 to 499 lb	S	37.2	40.3	29.3	42.2	41.4	30.1	34.8	34.9
500 to 749 lb	S	44.0	42.5	S	S	S	S	44.3	45.4
750 to 999 lb	45.4	36.3	36.8	S	S	S	S	48.0	S
1,000 to 9,999 lb	S	28.8	29.6	40.1	20.2	19.3	28.0	S	S
10,000 to 49,999 lb	19.0	13.9	13.8	17.4	13.3	14.2	34.3	27.7	27.8
50,000 to 99,999 lb	42.6	32.8	31.3	42.8	S	S	S	S	S
100,000 lb or more	15.8	32.0	30.3	34.2	21.5	23.1	S	49.1	49.5
SCTG 21, Pharmaceutical products	16.9	34.6	32.5	20.8	31.6	32.0	43.9	19.2	19.4
Less than 50 lb	15.6	14.4	13.9	16.6	17.2	17.1	19.3	20.8	19.7
50 to 99 lb	40.1	17.6	16.1	31.4	20.0	20.1	36.9	23.3	21.7
100 to 499 lb	22.0	21.7	23.7	25.9	44.6	44.2	32.9	24.8	24.9
500 to 749 lb	35.5	27.9	29.6	S	S	S	S	34.5	34.5
750 to 999 lb	S	S	S	S	41.7	40.9	43.8	44.5	43.8
1,000 to 9,999 lb	27.1	S	S	30.3	S	S	25.0	25.5	25.7
10,000 to 49,999 lb	41.1	19.7	19.5	36.3	35.8	36.9	S	24.4	24.1
50,000 to 99,999 lb	-	-	-	-	-	-	-	-	-
100,000 lb or more	S	S	S	S	S	S	S	S	S

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	1,000 to 1,499 miles			1,500 to 1,999 miles			2,000 miles or more		
	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles
SCTG 22, Fertilizers	35.2	S	S	33.9	35.4	36.3	41.5	S	S
Less than 50 lb	S	S	S	S	S	S	S	S	S
50 to 99 lb	—	—	—	S	S	S	S	S	S
100 to 499 lb	S	S	S	S	S	S	—	—	—
500 to 749 lb	—	—	—	S	S	S	—	—	—
750 to 999 lb	—	—	—	—	—	—	—	—	—
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	S	S	S	S	S	S	S	S	S
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	30.3	S	S	40.5	44.4	43.0	S	S	S
SCTG 23, Chemical products and preparations, n.e.c.	11.3	10.9	11.0	13.5	16.1	16.5	19.9	13.4	13.4
Less than 50 lb	21.1	27.8	28.5	25.8	23.1	23.1	30.8	21.3	20.4
50 to 99 lb	27.1	27.1	26.8	29.4	22.9	23.7	18.7	19.2	18.4
100 to 499 lb	20.6	19.7	20.3	18.2	20.0	19.6	18.8	17.0	16.7
500 to 749 lb	24.8	22.0	21.4	32.6	47.2	48.1	S	36.3	36.0
750 to 999 lb	40.8	26.8	27.0	44.2	37.6	37.9	47.1	34.7	35.0
1,000 to 9,999 lb	20.0	19.9	19.8	27.4	20.5	20.4	14.1	14.4	14.1
10,000 to 49,999 lb	10.7	12.2	11.8	16.2	19.1	19.7	37.6	17.0	17.1
50,000 to 99,999 lb	S	S	S	S	S	S	48.0	48.5	S
100,000 lb or more	26.0	22.4	21.8	30.8	35.3	34.6	S	43.4	44.2
SCTG 24, Plastics and rubber	8.0	8.1	8.4	12.6	11.7	11.8	15.5	19.4	18.6
Less than 50 lb	10.5	11.8	11.6	18.8	20.9	21.1	21.3	36.8	36.3
50 to 99 lb	13.7	15.4	15.5	23.8	17.5	17.1	21.4	22.9	23.0
100 to 499 lb	15.3	13.7	13.8	18.8	14.8	15.4	11.2	15.5	14.7
500 to 749 lb	21.6	17.3	18.0	28.5	23.6	23.6	26.4	25.3	24.8
750 to 999 lb	23.2	24.7	25.5	32.3	17.0	16.7	32.6	32.2	31.8
1,000 to 9,999 lb	11.3	10.2	10.1	29.8	14.2	14.6	29.2	37.6	36.5
10,000 to 49,999 lb	13.3	9.7	9.5	15.6	17.2	17.7	17.3	17.8	17.7
50,000 to 99,999 lb	S	S	S	S	S	S	S	49.0	47.6
100,000 lb or more	10.9	14.5	14.7	17.7	21.1	20.5	24.8	23.1	22.8
SCTG 25, Logs and other wood in the rough	S	S	S	S	S	S	33.8	36.0	36.6
Less than 50 lb	S	—	—	—	—	—	—	—	—
50 to 99 lb	—	—	—	—	—	—	S	S	S
100 to 499 lb	S	S	S	—	—	—	—	—	—
500 to 749 lb	S	S	S	S	S	S	—	—	—
750 to 999 lb	S	S	S	S	S	S	—	—	—
1,000 to 9,999 lb	S	S	S	S	S	S	—	—	—
10,000 to 49,999 lb	S	S	S	S	S	S	38.6	37.1	36.8
50,000 to 99,999 lb	S	S	S	S	S	S	45.6	S	S
100,000 lb or more	S	S	S	S	S	S	S	S	S
SCTG 26, Wood products ..	21.8	20.3	20.1	8.1	18.1	18.9	11.1	20.3	21.3
Less than 50 lb	26.8	30.7	30.9	32.2	27.1	27.2	45.3	S	S
50 to 99 lb	33.6	45.5	43.9	30.3	29.3	30.1	45.4	47.2	47.4
100 to 499 lb	S	29.9	27.9	27.3	21.4	21.9	S	47.1	46.2
500 to 749 lb	33.3	33.2	32.4	46.6	33.5	33.8	S	S	S
750 to 999 lb	S	42.4	42.3	S	41.5	41.1	49.2	42.0	43.8
1,000 to 9,999 lb	S	S	S	26.3	27.2	26.6	25.3	16.0	17.1
10,000 to 49,999 lb	26.4	27.7	26.5	16.9	10.6	10.8	15.6	16.4	17.3
50,000 to 99,999 lb	13.1	19.7	22.1	29.1	20.8	18.8	31.3	25.0	25.9
100,000 lb or more	14.2	29.3	28.5	18.6	24.2	25.1	22.8	32.6	33.1
SCTG 27, Pulp, newsprint, paper, and paperboard	13.2	20.3	19.3	7.0	8.5	9.0	14.1	13.9	13.8
Less than 50 lb	26.1	S	49.5	45.2	34.9	33.8	37.2	30.7	30.7
50 to 99 lb	29.2	31.5	31.8	43.5	49.2	48.8	S	S	S
100 to 499 lb	21.7	22.8	22.5	36.6	31.0	30.2	S	34.3	34.8
500 to 749 lb	30.9	46.2	44.8	31.0	27.9	27.4	36.8	S	S
750 to 999 lb	43.4	45.0	44.3	S	S	S	30.3	31.7	31.0
1,000 to 9,999 lb	20.0	29.0	30.0	20.2	20.0	19.3	30.0	26.9	27.4
10,000 to 49,999 lb	10.7	10.8	10.8	10.7	10.3	10.2	16.8	18.5	17.6
50,000 to 99,999 lb	S	S	S	32.3	36.0	36.5	40.9	36.1	36.8
100,000 lb or more	22.8	31.4	29.2	13.6	17.9	18.8	22.4	23.4	24.6
SCTG 28, Paper or paperboard articles	7.0	9.0	8.9	12.2	13.3	13.1	11.4	15.3	15.1
Less than 50 lb	17.6	27.2	26.5	29.3	32.3	31.4	23.8	38.4	41.1
50 to 99 lb	37.8	27.9	28.9	32.1	34.5	33.9	S	S	S
100 to 499 lb	33.6	25.0	25.6	25.6	23.0	23.2	31.0	36.0	38.1
500 to 749 lb	35.6	25.3	26.5	40.1	50.0	S	31.0	31.6	31.4
750 to 999 lb	47.0	37.7	38.9	45.5	S	S	S	48.9	47.0
1,000 to 9,999 lb	13.9	24.8	22.9	14.6	12.1	12.2	17.0	23.8	24.7
10,000 to 49,999 lb	8.6	10.2	10.3	14.1	15.4	15.2	15.2	17.6	17.3
50,000 to 99,999 lb	S	48.6	49.0	S	S	S	S	S	S
100,000 lb or more	—	—	—	S	S	S	—	—	—

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	1,000 to 1,499 miles			1,500 to 1,999 miles			2,000 miles or more		
	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles
SCTG 29, Printed products .	10.3	18.1	18.1	13.4	11.8	11.9	13.7	14.3	13.6
Less than 50 lb	10.7	16.0	16.4	12.3	16.8	15.9	16.4	31.2	31.1
50 to 99 lb	30.3	42.7	42.3	35.2	S	S	30.9	S	S
100 to 499 lb	18.7	13.5	13.7	28.9	18.2	18.0	21.9	16.2	15.4
500 to 749 lb	20.9	32.7	35.2	25.5	35.7	37.9	S	S	S
750 to 999 lb	38.2	48.1	46.1	36.5	38.7	39.5	40.2	30.3	28.0
1,000 to 9,999 lb	19.6	21.8	21.4	31.8	25.5	25.5	32.8	30.3	28.3
10,000 to 49,999 lb	24.0	25.4	25.1	24.7	16.4	16.5	19.4	16.9	17.4
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	S	S	S	S	S	S	S	S
SCTG 30, Textiles, leather, and articles of textiles or leather	10.0	22.1	20.1	11.6	8.7	9.1	11.3	20.0	33.9
Less than 50 lb	7.5	10.8	10.2	8.8	7.6	7.7	9.9	11.7	11.2
50 to 99 lb	23.6	21.0	20.1	23.5	14.1	14.1	9.9	11.8	12.2
100 to 499 lb	17.7	21.9	22.2	24.4	33.6	35.0	15.4	15.4	17.4
500 to 749 lb	30.5	15.4	15.8	S	30.0	30.3	16.0	20.3	27.3
750 to 999 lb	49.4	31.8	30.6	40.6	21.8	22.6	32.2	34.0	35.0
1,000 to 9,999 lb	16.8	22.5	22.0	24.1	18.6	19.3	17.1	16.9	16.8
10,000 to 49,999 lb	24.0	30.3	27.6	22.6	16.3	16.7	23.6	34.7	S
50,000 to 99,999 lb	38.5	38.8	39.9	S	S	S	S	S	S
100,000 lb or more	S	S	S	S	S	S	—	—	—
SCTG 31, Nonmetallic mineral products	19.1	24.9	26.9	29.2	45.6	45.0	23.0	25.0	24.7
Less than 50 lb	14.9	16.5	16.5	24.2	32.3	32.0	27.1	30.4	29.8
50 to 99 lb	27.3	26.6	27.2	31.4	31.6	30.7	43.2	S	S
100 to 499 lb	23.8	35.6	36.6	38.4	S	S	S	S	S
500 to 749 lb	25.1	32.5	32.2	33.1	32.2	32.1	39.2	S	S
750 to 999 lb	33.2	47.0	47.1	S	S	S	S	S	S
1,000 to 9,999 lb	26.0	30.9	32.4	29.6	S	S	32.0	S	S
10,000 to 49,999 lb	25.6	31.8	32.4	37.0	47.6	47.2	38.5	22.4	22.5
50,000 to 99,999 lb	S	S	S	41.4	43.3	45.3	S	S	S
100,000 lb or more	S	43.3	48.3	32.8	S	S	S	S	S
SCTG 32, Base metal in primary or semifinished forms and in finished basic shapes	9.0	11.2	13.1	12.4	16.5	17.3	11.4	23.7	23.3
Less than 50 lb	41.4	21.3	21.4	20.1	37.1	39.8	26.2	32.5	32.1
50 to 99 lb	27.6	36.9	36.7	25.4	21.7	21.4	19.8	20.9	20.4
100 to 499 lb	19.4	17.6	17.8	29.1	S	S	26.9	17.4	17.1
500 to 749 lb	23.2	19.1	18.5	30.2	S	S	23.3	31.1	30.9
750 to 999 lb	25.7	30.2	31.6	43.2	33.6	33.6	36.7	S	S
1,000 to 9,999 lb	20.7	16.8	17.0	33.6	26.6	26.1	16.1	19.4	18.9
10,000 to 49,999 lb	9.4	10.6	10.7	14.3	15.0	15.1	21.2	36.8	35.4
50,000 to 99,999 lb	26.6	27.3	29.1	38.5	S	47.6	S	S	S
100,000 lb or more	29.8	23.5	26.1	23.6	27.5	28.1	41.4	41.8	41.9
SCTG 33, Articles of base metal	6.2	21.9	24.8	9.0	18.0	17.7	14.2	15.8	15.2
Less than 50 lb	13.3	18.0	17.6	27.4	14.6	14.0	27.6	14.3	14.1
50 to 99 lb	24.1	13.9	13.5	19.7	21.2	21.3	24.8	22.0	21.6
100 to 499 lb	16.1	14.4	14.1	20.5	12.9	13.3	28.3	15.4	15.7
500 to 749 lb	18.3	18.1	18.2	25.2	17.4	17.4	19.7	19.8	19.1
750 to 999 lb	27.7	18.2	18.5	18.8	21.7	21.7	23.3	25.4	24.0
1,000 to 9,999 lb	11.4	11.2	10.9	21.2	37.4	39.4	17.9	20.9	21.0
10,000 to 49,999 lb	9.3	12.9	13.0	18.0	22.8	22.2	23.1	28.8	28.3
50,000 to 99,999 lb	40.2	25.0	25.2	46.2	S	S	S	S	S
100,000 lb or more	29.3	S	S	S	S	S	S	S	S
SCTG 34, Machinery	6.1	7.2	7.4	10.7	12.9	13.5	16.3	22.8	22.7
Less than 50 lb	9.5	8.8	9.1	10.9	16.2	16.2	10.3	23.6	23.3
50 to 99 lb	26.5	27.5	27.5	25.8	22.2	22.7	26.1	29.8	29.3
100 to 499 lb	11.7	8.1	7.7	22.7	17.3	17.2	12.2	24.5	24.7
500 to 749 lb	36.9	11.0	11.2	15.2	18.4	18.3	23.8	32.3	31.9
750 to 999 lb	10.8	16.7	16.9	31.7	19.9	20.1	27.6	27.9	29.0
1,000 to 9,999 lb	14.8	7.7	7.6	17.6	14.0	14.4	32.7	42.7	42.0
10,000 to 49,999 lb	9.2	10.4	10.1	11.7	12.6	12.7	21.6	13.7	13.6
50,000 to 99,999 lb	49.9	39.7	41.6	26.4	48.7	46.0	S	S	S
100,000 lb or more	S	40.6	42.6	S	S	S	S	S	S
SCTG 35, Electronic and other electrical equipment and components and office equipment	8.3	16.4	16.1	15.9	10.5	10.5	17.7	8.3	8.3
Less than 50 lb	9.9	11.9	12.1	9.7	10.0	10.2	10.7	11.2	11.2
50 to 99 lb	18.6	16.0	16.1	14.2	13.6	13.5	17.7	12.7	12.9
100 to 499 lb	9.9	9.6	9.0	14.3	12.0	12.1	17.6	13.2	13.1
500 to 749 lb	22.9	18.4	16.9	20.7	15.4	14.8	25.9	26.9	27.3
750 to 999 lb	36.5	23.8	22.8	22.2	13.5	13.8	32.1	39.2	36.7
1,000 to 9,999 lb	22.2	20.9	20.4	13.8	14.7	14.6	S	18.8	19.0
10,000 to 49,999 lb	16.9	21.8	21.5	S	15.3	15.0	16.8	18.2	18.1
50,000 to 99,999 lb	38.5	33.8	33.4	44.3	48.0	49.6	S	S	S
100,000 lb or more	S	47.9	47.9	47.8	S	S	S	S	S

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	1,000 to 1,499 miles			1,500 to 1,999 miles			2,000 miles or more		
	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles
SCTG 36, Motorized and other vehicles (including parts)	8.5	10.6	11.3	13.8	16.2	16.5	25.2	32.8	30.5
Less than 50 lb	13.9	15.4	14.6	18.5	14.4	14.2	25.8	16.7	18.1
50 to 99 lb	23.6	16.1	16.8	17.9	16.7	16.7	24.0	32.9	34.0
100 to 499 lb	13.8	14.5	14.6	19.4	18.9	18.4	26.1	22.2	22.9
500 to 749 lb	23.7	24.6	26.2	32.0	29.1	29.9	40.4	41.6	40.9
750 to 999 lb	23.1	16.0	15.8	28.0	25.6	26.7	35.3	33.9	37.3
1,000 to 9,999 lb	17.2	17.4	17.1	28.6	35.9	36.1	23.6	18.5	20.3
10,000 to 49,999 lb	15.5	14.0	13.3	14.2	14.2	14.4	33.0	34.5	32.6
50,000 to 99,999 lb	22.1	27.1	28.4	48.7	40.1	41.4	S	S	S
100,000 lb or more	38.8	S	S	47.6	44.0	45.6	—	—	—
SCTG 37, Transportation equipment, n.e.c.	21.3	22.9	23.1	29.8	34.6	35.0	17.3	26.1	26.4
Less than 50 lb	17.9	13.9	14.1	11.1	16.6	16.7	17.1	16.6	16.0
50 to 99 lb	28.5	16.2	18.2	32.8	26.1	26.4	42.5	28.3	34.3
100 to 499 lb	14.8	18.5	18.4	S	30.9	31.8	36.6	26.4	27.5
500 to 749 lb	32.9	35.0	33.2	S	S	S	34.5	S	S
750 to 999 lb	S	S	S	S	S	S	37.3	42.9	41.3
1,000 to 9,999 lb	31.6	20.3	20.2	S	21.7	21.0	38.8	34.4	33.7
10,000 to 49,999 lb	S	37.9	36.6	S	S	S	39.8	S	S
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	44.7	46.3	S	S	S	S	S	S
SCTG 38, Precision instruments and apparatus	14.1	15.4	16.4	22.6	15.9	15.8	12.4	20.7	21.1
Less than 50 lb	13.9	13.8	16.2	21.6	14.0	14.4	17.0	17.5	17.3
50 to 99 lb	13.4	13.4	13.6	31.8	22.1	21.5	18.8	32.4	34.0
100 to 499 lb	11.5	19.2	19.0	S	23.3	23.2	25.0	24.6	24.9
500 to 749 lb	39.1	28.3	27.3	25.1	27.4	29.1	35.2	31.3	29.8
750 to 999 lb	S	30.5	34.8	S	39.6	40.1	39.4	27.5	27.8
1,000 to 9,999 lb	26.8	35.8	37.4	24.8	34.8	34.8	41.2	49.6	S
10,000 to 49,999 lb	43.0	28.3	27.7	40.5	31.2	29.6	27.7	29.1	29.0
50,000 to 99,999 lb	—	—	—	—	—	—	—	—	—
100,000 lb or more	—	—	—	—	—	—	—	—	—
SCTG 39, Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	9.5	15.9	14.7	10.7	12.0	11.7	11.4	18.8	18.2
Less than 50 lb	16.8	21.0	20.1	28.5	25.6	26.3	47.7	16.4	17.7
50 to 99 lb	21.9	19.3	18.5	41.1	23.9	24.5	49.1	20.0	20.0
100 to 499 lb	13.6	10.2	10.0	10.3	8.8	8.9	15.7	17.3	17.4
500 to 749 lb	17.0	16.6	17.4	16.5	19.5	19.9	28.7	34.0	34.2
750 to 999 lb	21.7	18.3	17.9	25.4	24.0	24.1	36.5	31.5	31.8
1,000 to 9,999 lb	14.4	24.5	22.5	15.0	15.7	16.0	20.5	18.8	18.4
10,000 to 49,999 lb	15.1	20.1	19.0	20.2	19.4	18.9	20.8	27.8	27.0
50,000 to 99,999 lb	—	—	—	S	48.0	49.4	S	S	S
100,000 lb or more	S	S	S	S	S	S	—	—	—
SCTG 40, Miscellaneous manufactured products ...	8.5	9.3	9.5	17.3	17.9	17.3	12.4	13.7	13.7
Less than 50 lb	13.8	7.3	7.3	12.6	10.2	10.3	19.1	17.3	17.3
50 to 99 lb	10.9	8.8	8.5	18.8	18.5	18.5	16.3	15.1	14.5
100 to 499 lb	11.6	9.7	9.9	8.6	8.8	8.8	19.1	14.3	13.5
500 to 749 lb	31.4	11.1	11.1	17.7	22.9	22.6	24.6	20.2	19.2
750 to 999 lb	14.7	20.8	21.9	26.0	28.8	28.5	28.7	25.3	25.0
1,000 to 9,999 lb	21.5	21.4	22.3	34.1	23.9	23.4	28.3	28.4	28.3
10,000 to 49,999 lb	23.4	10.7	10.2	39.6	25.1	24.4	19.1	20.7	22.0
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	40.7	40.7	S	S	S	S	S	S
SCTG 41, Waste and scrap .	28.7	34.9	38.0	42.1	43.6	42.7	S	S	49.5
Less than 50 lb	S	S	S	S	S	S	S	S	S
50 to 99 lb	S	S	S	—	—	—	S	S	S
100 to 499 lb	S	S	S	S	S	S	S	S	S
500 to 749 lb	—	—	—	—	—	—	—	—	—
750 to 999 lb	—	—	—	S	S	S	—	—	—
1,000 to 9,999 lb	S	S	S	S	S	S	S	S	S
10,000 to 49,999 lb	37.7	36.7	37.6	48.8	46.7	45.9	S	S	S
50,000 to 99,999 lb	49.8	49.4	S	S	S	S	S	S	S
100,000 lb or more	41.1	S	S	S	S	S	47.6	S	S
SCTG 43, Mixed freight	8.6	16.9	18.1	13.9	19.3	19.6	23.6	20.4	20.3
Less than 50 lb	11.7	16.0	15.8	16.8	18.5	19.1	43.3	19.1	19.1
50 to 99 lb	40.4	16.0	16.2	35.4	42.4	42.5	45.8	28.4	29.5
100 to 499 lb	26.8	13.4	12.5	25.9	16.3	17.0	31.1	36.9	37.1
500 to 749 lb	29.8	42.2	42.7	30.5	22.5	22.3	41.2	S	S
750 to 999 lb	35.0	24.4	24.4	49.3	40.4	43.1	36.9	39.9	39.3
1,000 to 9,999 lb	13.6	16.9	17.1	25.1	23.3	23.4	23.8	30.7	33.5
10,000 to 49,999 lb	14.0	11.5	11.0	23.6	24.3	24.3	28.5	27.0	25.6
50,000 to 99,999 lb	S	S	S	S	S	S	S	S	S
100,000 lb or more	S	S	S	—	—	—	S	S	S

See footnotes at end of table.

Table B-10. Estimated Coefficients of Variation for Shipment Characteristics by Two-Digit Commodity and Shipment Weight by Distance Shipped for the United States: 2002—Con.

[Estimates are shown as percents and are based on data from the 2002 Commodity Flow Survey]

SCTG code, description, shipment weight, and distance shipped	1,000 to 1,499 miles			1,500 to 1,999 miles			2,000 miles or more		
	Value	Tons	Ton-miles	Value	Tons	Ton-miles	Value	Tons	Ton-miles
Commodity unknown	19.8	30.3	30.3	32.8	39.6	40.7	41.6	33.4	33.6
Less than 50 lb	S	36.8	44.1	S	32.8	32.6	27.5	S	S
50 to 99 lb	47.7	S	S	S	S	S	S	42.5	44.0
100 to 499 lb	44.7	S	S	S	41.8	41.9	S	48.8	47.7
500 to 749 lb	S	S	S	S	S	S	S	S	S
750 to 999 lb	S	S	S	S	S	S	-	-	-
1,000 to 9,999 lb	43.0	39.2	41.1	S	39.0	39.3	42.5	S	S
10,000 to 49,999 lb	43.6	28.6	29.8	S	S	S	S	43.9	42.3
50,000 to 99,999 lb	S	S	S	S	S	S	-	-	-
100,000 lb or more	48.4	46.7	46.2	S	S	S	S	S	S

- Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-11a. Estimated Measures of Reliability for Shipment Characteristics by Mode of Transportation for the United States: 2002 and 1997

[Estimates are shown as percents and are based on data from the 2002 and 1997 Commodity Flow Surveys]

Mode of transportation	Value		Standard error of percent change	Tons		Standard error of percent change	Ton-miles		Standard error of percent change	Average miles per shipment		Standard error of percent change
	Coefficient of variation of number			Coefficient of variation of number			Coefficient of variation of number			Coefficient of variation of number		
	2002	1997	2002	1997	2002	1997	2002	1997	2002	1997		
Total	1.3	.9	2.0	2.0	1.6	2.8	3.7	2.3	5.3	2.9	2.6	4.4
Single modes	1.4	1.1	2.3	2.1	1.5	2.9	3.1	2.6	5.0	7.0	3.0	9.1
Truck	1.4	1.0	2.2	2.6	1.7	3.3	2.8	1.8	4.1	3.7	2.9	5.2
Rail	6.0	5.1	7.7	5.7	4.0	8.5	6.7	5.5	10.7	6.7	3.1	7.6
Water	6.4	4.8	9.4	6.8	4.7	10.4	7.4	6.1	11.3	16.5	29.9	40.1
Air (includes truck and air)	11.6	7.0	15.7	11.6	5.7	11.1	15.5	7.7	16.5	4.2	1.7	6.3
Pipeline	6.4	7.0	12.4	6.9	7.7	12.9	S	S	S	S	S	S
Multiple modes	3.3	1.8	4.4	10.0	7.3	12.6	16.5	9.6	21.3	2.2	2.6	3.8
Parcel, U.S. Postal Service or courier ..	3.3	2.0	4.6	4.4	2.7	5.9	4.2	4.0	6.6	2.3	2.6	3.8
Truck and rail	13.2	7.5	14.1	12.3	19.8	18.6	7.1	18.2	16.1	3.1	2.6	4.2
All other multiple modes	18.8	8.8	31.2	15.2	10.8	20.1	23.6	14.2	34.1	10.8	9.5	23.2
Other and unknown modes ...	3.0	3.4	4.4	12.6	8.4	13.0	9.7	8.5	7.9	13.0	9.6	17.1

- Represents data cell equal to zero or less than 1 unit of measure.
S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-11b. Estimated Measures of Reliability for Shipment Characteristics by Mode of Transportation for the United States: 2002 and 1993

[Estimates are shown as percents and are based on data from the 2002 and 1993 Commodity Flow Surveys]

Mode of transportation	Value			Tons			Ton-miles			Average miles per shipment		
	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change
	2002	1993		2002	1993		2002	1993		2002	1993	
Total	1.3	.8	2.2	2.0	1.6	3.1	3.7	2.7	6.0	2.9	3.0	5.4
Single modes	1.4	.9	2.4	2.1	1.6	3.2	3.1	2.7	5.5	7.0	4.6	10.2
Truck	1.4	1.1	2.5	2.6	1.9	3.9	2.8	1.9	4.9	3.7	1.5	4.8
Rail	6.0	3.3	8.6	5.7	3.8	8.3	6.7	4.5	10.8	6.7	1.9	7.3
Water	6.4	6.9	13.7	6.8	8.0	14.1	7.4	9.5	12.5	16.5	S	S
Air (includes truck and air)	11.6	5.2	24.2	11.6	12.7	20.6	15.5	8.1	25.5	4.2	2.7	6.8
Pipeline	6.4	9.7	19.3	6.9	10.7	18.0	S	S	S	S	S	S
Multiple modes	3.3	2.5	6.7	10.0	6.6	11.5	16.5	10.7	23.2	2.2	2.9	4.5
Parcel, U.S. Postal Service or courier ..	3.3	1.6	6.4	4.4	2.4	6.7	4.2	3.8	8.1	2.3	3.0	4.5
Truck and rail	13.2	15.6	17.2	12.3	9.4	16.4	7.1	9.1	13.9	3.1	6.0	6.8
All other multiple modes	18.8	9.8	28.0	15.2	8.4	15.4	23.6	14.8	32.0	10.8	7.2	15.9
Other and unknown modes ...	3.0	5.2	6.6	12.6	7.7	9.9	9.7	11.6	7.2	13.0	12.6	10.3

– Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-11c. Estimated Standard Errors for Shipment Characteristics by Mode of Transportation for the United States: Annualized Growth Rate for 1997 to 2002 and 1993 to 2002

[Estimates are shown as percents and are based on data from the 2002, 1997, and 1993 Commodity Flow Surveys]

Mode of transportation	Value		Tons		Ton-miles		Average miles per shipment	
	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002	1997 to 2002	1993 to 2002
Total .....	.3	.1	.5	.3	.9	.4	.8	.4
Single modes .....	.4	.2	.5	.3	.8	.4	1.6	.8
Truck .....	.4	.2	.6	.3	.7	.3	1.0	.4
Rail	1.6	.7	1.4	.7	1.8	.8	1.5	.7
Water	1.7	.8	1.7	1.0	2.0	1.3	7.1	S
Air (includes truck and air)	2.8	1.0	2.5	1.7	3.4	1.6	1.0	.5
Pipeline	2.0	1.0	2.2	1.1	S	S	S	S
Multiple modes .....	.8	.3	2.5	1.4	3.9	2.0	.7	.4
Parcel, U.S. Postal Service or courier .....	.8	.3	1.1	.5	1.2	.5	.7	.4
Truck and rail	3.0	2.5	4.5	1.7	3.8	1.1	.8	.7
All other multiple modes	4.5	2.0	3.8	2.1	5.8	2.9	3.2	1.3
Other and unknown modes .....	.9	.6	2.9	2.1	2.3	2.6	3.3	2.8

– Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Table B-12. Estimated Measures of Reliability for Shipment Characteristics by Commodity Group for the United States: 2002 and 1997

[Estimates are shown as percents and are based on data from the 2002 and 1997 Commodity Flow Surveys]

SCTG code	Commodity description	Value			Tons			Ton-miles			Average miles per shipment		
		Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change	Coefficient of variation of number		Standard error of percent change
		2002	1997		2002	1997		2002	1997		2002	1997	
	Total	1.3	.9	2.0	2.0	1.6	2.8	3.7	2.3	5.3	2.9	2.6	4.4
01-05	Agricultural products and fish	3.2	2.5	4.3	4.9	3.4	6.8	10.1	5.3	14.6	11.7	11.4	18.4
06-09	Grains, alcohol, and tobacco products	3.5	2.7	4.8	4.3	2.8	5.7	5.0	2.6	6.6	11.6	13.2	23.6
10-14	Stones, nonmetallic minerals, and metallic ores	6.5	5.4	8.7	7.3	3.9	8.4	9.7	5.6	13.0	9.6	6.5	10.2
15-19	Coal and petroleum products	3.3	3.4	5.8	4.4	2.7	5.6	12.3	6.9	17.3	10.7	14.1	20.3
20-24	Basic chemicals, chemical, and pharmaceutical products	4.2	2.9	7.0	9.5	4.2	13.0	7.0	7.1	11.6	3.9	3.7	5.5
25-30	Logs, wood products, and textile and leather	3.6	5.3	6.8	8.8	3.6	10.4	5.7	3.8	7.7	2.5	4.5	6.1
31-34	Base metal and machinery ..	3.8	1.3	4.4	6.2	6.3	9.4	5.9	3.0	7.8	4.3	4.7	6.3
35-38	Electronic, motorized vehicles, and precision instruments	4.6	1.8	5.8	6.4	2.9	10.6	7.3	3.2	10.5	3.6	2.5	5.5
39-43	Furniture, mixed freight and misc. manufactured prod. ..	2.4	3.4	7.4	7.1	6.2	14.0	9.0	5.4	14.3	6.4	4.3	6.9
--	Commodity unknown	9.9	11.0	7.0	22.3	18.1	20.0	41.7	15.5	47.5	8.8	9.7	13.1

– Represents data cell equal to zero or less than 1 unit of measure.
 S Estimate does not meet publication standards because of high sampling variability or poor response quality.

Note: The Introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at www.census.gov/cfs.

Appendix C.

Sample Design, Data Collection, and Estimation

INTRODUCTION

The primary goal for the 2002 Commodity Flow Survey (CFS) is to estimate *shipping volumes* (value, tons, and ton-miles) by *commodity* and *mode of transportation* at varying levels of geographic detail. A secondary objective is to estimate the volume of shipments moving from one geographic area to another (i.e., flows of commodities between states, regions, etc.) by mode and commodity. A detailed description of the sample design for the 2002 CFS is provided below.

SAMPLE DESIGN

The sample for the 2002 Commodity Flow Survey (CFS) was selected using a stratified three-stage design in which the first-stage sampling units were establishments, the second-stage sampling units were groups of four 1-week periods (reporting weeks) within the survey year, and the third-stage sampling units were shipments.

First Stage

Sampling frame

To create the first-stage sampling frame, we extracted a subset of establishment records from the Business Register (formerly the Standard Statistical Establishment List) as of September 2001. The Business Register is a database of all known establishments located in the United States or its territories. (An establishment is a single physical location where business transactions take place or services are performed.) Establishments located in the United States, having nonzero payroll in 2000, and classified in mining (except oil and gas extraction), manufacturing, wholesale, or electronic shopping and mail order retail industries, as defined by the 1997 North American Industry Classification System (NAICS), were included on the sampling frame. *Auxiliary establishments* (e.g. warehouses and central administrative offices) with shipping activity were also included on the sampling frame. Auxiliary establishments are establishments that are primarily involved in rendering support services for other establishments within the same company, instead of for the public, government, or other business firms. All other establishments included on the sampling frame are referred to as *nonauxiliary establishments*.

Some portion of establishments classified in the Retail Trade sector in the 1997 Economic Census was expected to be classified in the Wholesale Trade sector in the 2002 Economic Census. Because we wanted complete coverage of the Wholesale Trade sector as defined for the 2002 Economic Census, the 2002 CFS sampling frame also included establishments that were classified in particular retail industries (automotive parts and accessories, tires, floor coverings, building materials, nursery and garden, and office supplies) in the 1997 Economic Census and had characteristics indicating that they were likely to be classified as wholesale in the 2002 Economic Census. Of the establishments selected for the 2002 CFS from this set of establishments, only those that were classified as wholesale in the 2002 Economic Census were used in the production of estimates for this report.

Establishments classified in forestry, fishing, utilities, construction, transportation, services, and all other retail industries were not included on the sampling frame. Farms and government-owned entities (except government-owned liquor stores) were also excluded from the sampling frame. The resulting frame comprised approximately 760,000 establishments.

For each establishment we extracted sales, payroll, number of employees, a six-digit NAICS code, name and address, and a primary identifier. We also computed a measure of size for each establishment. The measure of size was designed to approximate an establishment's annual total value of shipments for the year 2000.

All of the establishments included on the sampling frame had state, county, and place geographic codes. We used these codes to assign each establishment to one of the 273 metropolitan areas (MAs) defined as a combination of the metropolitan statistical areas (MSAs) and consolidated metropolitan statistical areas (CMSAs). Establishments not located in an MA were assigned to MA 9999.

Stratification

We stratified the sampling frame by geography and industry. Geographic strata were defined by a combination of the 50 states, the District of Columbia, and the top 50 metropolitan areas (MAs) based on their population in Census 2000. If a particular MA was not one of the 50 largest, then it was collapsed with the remaining MAs and non-MAs within the state in which the particular MA resided. We refer to these collapsed strata as Rest of State (ROS) strata. When an MA crossed state boundaries, we considered the size of each part of the MA relative to the MAs total measure of size when determining whether or not to create strata in each state in which the MA was defined. The industry strata were determined as follows. Within each of the geographic strata, we started with a total of 45 industry groups based on 1997 NAICS: three mining (four-digit NAICS); 21 manufacturing (three-digit NAICS); 18 wholesale (four-digit NAICS); 1 retail (NAICS 4541); and 2 auxiliary (NAICS 4931 and 5511). We then implemented a rule that states a particular industry stratum will be defined within a geographic stratum if it contributes at least 2 percent to its corresponding state total measure of size or it contributes at least 2 percent to the national total measure of size for the industry. Industry groups not meeting these criteria were combined into at most 12 new collapsed industry strata using a clustering algorithm. Because of potential differences in shipping patterns between auxiliary and nonauxiliary establishments, we created two industry strata of auxiliary establishments in every geographic stratum. We refer to a particular geographic-by-industry combination as a *primary stratum*. Also note that a separate stratum was created at the national level for those Retail Trade sector establishments that we included in our sample.

Sample size and allocation

To reduce the sampling variability of the estimates, we used a stratified design with a certainty component. Within each primary stratum, a boundary (or cutoff) that divides the certainty establishments from the noncertainty establishments was determined using the Lavallee-Hidiroglou algorithm. If an establishment's measure of size was greater than the cutoff, the establishment was selected with certainty. Establishments selected with certainty were sure to be selected and represent only themselves (i.e., had a selection probability of one and a sampling weight of one).

Because the 2002 sample was about half the size of the 1997 CFS sample, we were concerned about the ability of the sample to capture less frequent types of shipments (e.g., air, water, rail, and hazardous materials). After considering several different alternatives, we felt the best approach was to identify those establishments which made the bulk of these types of shipments in 1997 and then select them with certainty. To identify these establishments, we proceeded as follows.

We identified all establishments in the 1997 CFS sample that reported shipments made by air, water, or rail. We also identified those establishments that reported shipments of hazardous materials. For each of these establishments, we computed the percentage of the establishment's total value and tonnage accounted for by each of these types of shipments. Next, we matched these establishments to the sampling frame for the 2002 CFS and identified each establishment with measure of size less than the certainty boundary. For both value and tons, we then looked to see what percent of the total volume of shipments for each type of shipment was captured by selecting with certainty the top 50, top 100, or all establishments. We considered the top 50 establishments as those establishments making the largest volume of each type of shipment (air, water, rail, hazardous). Once these establishments were identified, we grouped them into one file and unduplicated them. This procedure added a total of about 500 certainty establishments.

Establishments not selected with certainty made up the noncertainty frame. We further stratified the noncertainty establishments within each primary stratum using the measure of size previously described. We refer to these measure-of-size strata as *substrata* of the primary strata. The measure of size stratification increased the efficiency of the sample design. The Dalenius-Hodges

cumulative \sqrt{f} rule was used to set the substratum boundaries. We then used optimum allocation to determine the sample size required within each substratum to meet a coefficient of variation constraint on an estimate of the total measure of size for the primary stratum. Within each substratum, a simple random sample of establishments was selected without replacement.

To arrive at the final sample size, we allocated additional establishments to some of the strata so that the minimum substratum sample size was two and the probability of selecting any establishment was no less than 1 in 100. In total, the first-stage sample comprised 51,005 establishments.

Second Stage

The frame for the second stage of sampling consisted of 52-weeks from January 6, 2002 to January 4, 2003. Each establishment selected into the 2002 CFS sample was systematically assigned to report for four reporting weeks—one in each quarter of the reference year. Each of the 4-weeks was in the same relative position of the quarter. For example, an establishment might have been requested to report data for the 5th, 18th, 31st, and 44th weeks of the reference year. In this instance, each reporting week corresponds to the 5th week of each quarter. Prior to assignment of weeks to establishments, we sorted the selected sample by primary stratum (state x metropolitan area x industry) and measure-of-size.

Third Stage

For each of the four reporting weeks in which an establishment was asked to report, we requested the respondent to construct a sampling frame consisting of all shipments made by the establishment in the reporting week. Each respondent was asked to count or estimate the total number of shipments comprising the sampling frame and to record this number on the questionnaire. For each assigned reporting week, if an establishment made *more than 40* shipments during that week, we asked the respondent to select a systematic sample of the establishment's shipments and to provide us with information only about the selected shipments. If an establishment made *40 or fewer* shipments during that week, we asked the respondent to provide information about *all* of the establishment's shipments made during that week; i.e., no sampling was required.

DATA COLLECTION

Each establishment selected into the CFS sample was mailed a questionnaire for each of its four reporting weeks. We mailed each establishment a questionnaire once every quarter of 2002. For a given establishment, we requested that the respondent provide the following information about each of the establishment's reported shipments: shipment identification number, the date on which the shipment was made, value, weight, commodity, mode(s) of transportation, domestic destination or port of exit, an indication of whether the shipment was an export, and the United Nations or North America (UN/NA) number for hazardous material shipments. For a shipment that included more than one commodity, the respondent was instructed to report the commodity that made up the greatest percentage of the shipment's *weight*. For an export shipment, we also asked the respondent to provide the mode of export and the foreign destination city and country. See Appendix E for a copy of the questionnaire.

IMPUTATION OF SHIPMENT VALUE OR WEIGHT

To correct for nonresponse to *either* the value *or* weight item for a given shipment reported in the CFS, the missing value or value that failed edit is replaced by a predicted value obtained from an appropriate model. Such a shipment is considered a "recipient" if its commodity code is valid and the other item is reported greater than zero and passed edit. The recipient's item that is missing or failed edit is imputed as follows. First, a "donor" shipment is randomly selected from shipments that were reported in the CFS with:

- The same commodity code as the recipient.
- Both value and weight items reported greater than zero and passed edit.
- Origin and value for the item reported by the recipient similar to those of the recipient.

Then, the donor's value and weight data are used to calculate a ratio, which is applied to the recipient's reported item, to impute the item that is missing or failed edit. If no donor is found, the median ratio for all shipments reported in the survey with the same commodity code as the recipient and with both value and weight items reported greater than zero is applied to the recipient's reported item. For either the value or weight item, about 3 percent of the shipment records input to the calculation of estimates have imputed data for the item.

ESTIMATION

Estimated totals (e.g., value of shipments, tons, ton-miles) are produced as the sum of weighted shipment data (reported or imputed). Percent change and percent-of-total estimates are derived using the appropriate estimated totals. Estimates of average miles per shipment are computed by dividing an estimate of the total miles traveled by the estimated number of shipments. The annualized growth rate \hat{A} for estimates from year y_1 to y_2 is computed as:

$$\hat{A} = 100 * \left(\left(\frac{\hat{X}_{y_2}}{\hat{X}_{y_1}} \right)^{1/(y_2 - y_1)} - 1 \right)$$

where \hat{X}_{y_1} and \hat{X}_{y_2} are estimates of the value of shipments, tons, ton-miles, or average miles per shipment for years y_1 and y_2 , respectively. The annualized growth rate measures the annual rate of change between estimates from any 2 years by assuming a constant yearly rate of change.

Each *shipment* has associated with it a single *tabulation weight*, which was used in computing all estimates to which the shipment contributes. The tabulation weight is a product of seven different component weights. A description of each component weight follows.

CFS respondents provided data for a sample of shipments made by their respective establishments in the survey year. For each establishment, we produced an estimate of that establishment's total value of shipments for the entire survey year. To do this, we used four different weights, the *shipment weight*, the *shipment nonresponse weight*, the *quarter weight*, and the *quarter nonresponse weight*.

Like establishments, we identified shipments as either certainty or noncertainty. (See the Nonsampling Error section in Appendix B for a description of how certainty shipments were identified.) For noncertainty shipments, the *shipment weight* was defined as the ratio of the total number of shipments (as reported by the respondent) made by an establishment in a reporting week to the number of sampled shipments for the same week. This weight uses data from the sampled shipments to represent all the establishment's shipments made in the reporting week. However, a respondent may have failed to provide sufficient information about a particular sampled shipment. For example, a respondent may not have been able to provide value, weight, or a destination for one of the sampled shipments. If this data item could not be imputed, then this shipment did not contribute to tabulations and was deemed unusable. (A *usable shipment* is one that has valid entries for value, weight, and origin and destination ZIP Codes.) To account for these unusable shipments, we applied the *shipment nonresponse weight*. For noncertainty shipments from a particular establishment's reporting week, this weight is equal to the ratio of the number of sampled shipments for the reporting week to the number of usable shipments for the same week. The shipment weight for certainty shipments from a particular establishment's reporting week is equal to one.

The *quarter weight* inflates an establishment's estimate for a particular reporting week to an estimate for the corresponding quarter. For noncertainty shipments, the quarter weight is equal to 13. The quarter weight for most certainty shipments is also equal to 13. However, if a respondent was able to provide information about all large (or certainty) shipments made in the quarter containing the reporting week, then the quarter weight for each of these shipments was one. For each establishment, the quarterly estimates were added to produce an estimate of the establishment's value of shipments for the entire survey year. Whenever an establishment did not provide the Census Bureau with a response for each of its four reporting weeks, we computed a quarter nonresponse

weight. The *quarter nonresponse weight* for a particular establishment is defined as the ratio of the number of quarters for which the establishment was in business in the survey year to the total number of quarters (reporting weeks) for which we received usable shipment data from the establishment.

Using these four component weights, we computed an estimate of each establishment's value of shipments for the entire survey year. We then multiplied this estimate by a factor that adjusts the estimate using value of shipments and sales data obtained from other surveys and censuses conducted by the Census Bureau. This weight, the *establishment-level adjustment weight*, attempts to correct for any sampling or nonsampling errors that occur during the sampling of shipments by the respondent.

The adjusted value of shipments estimate for an establishment was then weighted by the *establishment weight*. This weight is equal to the reciprocal of the establishment's probability of being selected into the sample.

A final adjustment weight, the *industry-level adjustment weight*, uses information from other surveys and censuses conducted by the Census Bureau to account for establishments from which we did not receive a response (including establishments from which we did not receive any usable shipment data) and for changes in the population of establishments between the time the first-stage sampling frame was constructed (2001) and the year in which the data were collected (2002). Separate industry-level adjustment weights were determined for nonauxiliary and auxiliary establishments.

Appendix D.

Standard Classification of Transported Goods Code Information

The commodities shown in this report are classified using the Standard Classification of Transported Goods (SCTG) coding system. The SCTG coding system was created jointly by agencies of the United States and Canadian governments based on the Harmonized System of product classification that is used worldwide. The purpose of the SCTG coding system was to specifically address statistical needs in regard to products transported.

In 1993, Commodity Flow Survey (CFS) data were collected and reported using product classifications found in the Standard Transportation Commodity Classification (STCC) system. These classifications were developed in the early 1960s by the American Association of Railroads (AAR) to analyze commodity movements by rail. The original purpose of the STCC was for identification of commodities for purposes of assigning rates for Interstate Commerce Commission (ICC) regulated rail carriers. The STCC continues to be used by the AAR as a tariff mechanism.

At the time that the Commodity Transportation Survey (CTS) (the CTS—the predecessor of the CFS) was first conducted in 1963, STCC codes were still useful for analyzing most important aspects of the U.S. transportation system. Since then, many changes have taken place that have gradually made the STCC code less useful for tracking domestic product movements across all modes (although it remains perfectly functional for tracking rail-only movements). These include the deregulation of trucking, the enactment of North American Free Trade Agreement (NAFTA), changes in logistics practices, the emergence of plastics and composite materials to replace metals and glass, the obsolescence of many categories of wood products, and the very rapid recent development of high-tech electronic goods. Because the CFS is a shipper survey, the CFS collects information about shipments moving on all modes. As a consequence, STCC classifications frequently provide inadequate detail for identifying products that are significant for modes, such as truck and air. It is for these reasons that the Bureau of Transportation Statistics (BTS) has sponsored the development of a new product code to collect and report CFS data.

In 1997 and 2002, the CFS provided respondents with a listing of SCTG codes and descriptions at the five-digit level to use in assigning a commodity code for each shipment. For shipments of more than one commodity, we instructed respondents to use the five-digit code for the major commodity, defined as the commodity of greatest total weight in the shipment. For the data presented on this report, we aggregated the SCTG codes to the two-digit level.

