

Commodity Movements Originating in West Virginia Summary of 1993 CFS

In West Virginia, the CFS measured \$35 billion of goods shipments weighing 234 million tons. West Virginia accounted for approximately 1 percent of the value and 2 percent of the weight of total U.S. shipments. See attached table. The CFS data cover shipments by establishments in mining, manufacturing, wholesale, and selected retail and service industries. The data exclude most shipments of crude oil; therefore, the totals and percentages do not fully reflect the contribution of pipeline shipments.

The major commodities shipped by establishments vary when measured by value and weight. The main commodities originating in West Virginia by value were: chemicals or allied products; coal; primary metal products; petroleum, or coal products; and food or kindred products. The main commodities by weight were: coal; petroleum or coal products; chemicals or allied products; nonmetallic minerals; and lumber or wood products, excluding furniture.

Local transportation of freight is important to West Virginia's commerce. The CFS shows that in 1993, about one-quarter of the value and over one-third of the weight of total shipments from West Virginia were shipped to destinations within the state. About 25 percent of the value and about 41 percent of the weight of all shipments were between places less than 50 miles apart. In comparison, about 30 percent of the value and 56 percent of the weight of total U.S. shipments were between places less than 50 miles apart. In West Virginia, about 39 percent of the value of shipments and 49 percent of the weight of shipments were between places less than 100 miles apart.

Approximately three-quarters of the value and two-thirds of the weight of all shipments from West Virginia went to other states. The most important destination state by value of shipments was Ohio. Other important states by value were: Virginia, Pennsylvania, New York, and Kentucky. Some of the most important destinations by weight of shipments were: Ohio, Virginia, Pennsylvania, Michigan, and North Carolina.

A large proportion of commodities were moved by trucks, about 65 percent of the value and 29 percent of the weight. Rail was also important, accounting for 14 percent of the value and 43 percent of the weight of shipments. Water transportation moved 5 percent of the value of shipments and 20 percent of the weight.

1993 Commodity Flow Survey State Summary: West Virginia
 Tabulation by the Bureau of Transportation Statistics, U.S. Department of Transportation

Summary	Value	Weight
Total shipments originating in West Virginia	\$34.9 billion	234.2 million tons
Percent of total U.S. shipments (preliminary U.S. estimate)	0.6	2.4

Commodity Shipments Originating in West Virginia Ranked by Value		Commodity Shipments Originating in West Virginia Ranked by Weight	
Commodity	Percent of value	Commodity	Percent of weight
Chemicals or allied products	17.4	Coal	67.6
Coal	12.8	Petroleum or coal products	16.7
Primary metal products	12.5	Chemicals or allied products	3.5
Petroleum or coal products	9.1	Nonmetallic minerals	3.4
Food or kindred products	6.6	Lumber or wood products, excluding furniture	2.4
Other commodities	41.6	Other commodities	6.4
Total	100.0	Total	100.0

Domestic Destinations of Shipments Originating in West Virginia Ranked by Value		Domestic Destinations of Shipments Originating in West Virginia Ranked by Weight	
State	Percent of value	State	Percent of weight
West Virginia	25.4	West Virginia	36.3
Ohio	11.8	Ohio	11.7
Virginia	7.5	Virginia	11.6
Pennsylvania	7.4	Pennsylvania	9.9
New York	3.9	Michigan	5.0
Kentucky	3.3	North Carolina	3.7
Other States	40.7	Other States	21.8
Total	100.0	Total	100.0

Modes of Transportation for Shipments Originating in West Virginia		
Modes	Percent of value	Percent of weight
Parcel, U.S. Postal Service, or courier service	**	-
Truck (for-hire, private, and both private truck and for-hire truck)	64.9	29.0
Air (including truck and air)	2.0	-
Rail	14.0	43.3
Water (inland water, Great Lakes, deep sea, truck and water, and rail and water)	4.9	20.1
Pipeline*	**	**
Truck and rail intermodal combination	**	0.9
Other intermodal (truck and pipeline, inland and Gt. Lakes, inland and deep sea)	**	**
Other, unknown, and withheld for sampling and disclosure reasons	14.2	6.7
Total	100.0	100.0

Domestic Distance Shipped for Commodities Originating in West Virginia		
Distance	Percent of value	Percent of weight
Less than 50 miles	25.4	40.6
50 to 99 miles	13.1	8.5
100 to 249 miles	21.0	18.1
250 to 499 miles	24.5	26.7
500 to 749 miles	6.5	4.5
750 to 999 miles	4.0	1.2
1,000 to 1,499 miles	1.6	0.2
1,500 to 1,999 miles	0.5	-
2,000 miles or more	3.3	0.2
Total	100.0	100.0

* CFS data for pipelines exclude most shipments of crude oil.

** Some or all data suppressed to avoid disclosure or because data are statistically unreliable.

- Represents zero or less than 1 unit of measurement.

NOTE: Data are estimates based on a sample and subject to error. See Appendix B, "Reliability of the Data," in source document.

SOURCE: U.S. Department of Commerce, Bureau of the Census, 1992 Census of Transportation, Communications, and Utilities, 1993 Commodity Flow Survey, TC92-CF (Washington, DC: 1996).

90-Percent Confidence Intervals for 1993 Commodity Flow Survey State Summary: West Virginia

Tabulation by the Bureau of Transportation Statistics, U.S. Department of Transportation

Summary	Value	Weight
Total shipments originating in West Virginia (in billion \$ and million tons)	31.17 - 38.63	203.38 - 265.02
Percent of total U.S. shipments (preliminary U.S. estimate)	0.51 - 0.64	2.05 - 2.69

Commodity Shipments Originating in West Virginia Ranked by Value		Commodity Shipments Originating in West Virginia Ranked by Weight	
Commodity	Percent of value	Commodity	Percent of weight
Chemicals or allied products	12.3 - 22.5	Coal	52.6 - 82.6
Coal	10.4 - 15.2	Petroleum or coal products	10.0 - 23.5
Primary metal products	9.3 - 15.7	Chemicals or allied products	2.3 - 4.6
Petroleum or coal products	6.1 - 12.0	Nonmetallic minerals	1.5 - 5.3
Food or kindred products	5.2 - 8.0	Lumber or wood products, excluding furniture	1.5 - 3.3
Other commodities	(NA)	Other commodities	(NA)
Total	(X)	Total	(X)

Domestic Destinations of Shipments Originating in West Virginia Ranked by Value		Domestic Destinations of Shipments Originating in West Virginia Ranked by Weight	
State	Percent of value	State	Percent of weight
West Virginia	22.1 - 28.7	West Virginia	29.9 - 42.7
Ohio	10.2 - 13.5	Ohio	9.6 - 13.8
Virginia	5.7 - 9.3	Virginia	6.5 - 16.7
Pennsylvania	6.1 - 8.7	Pennsylvania	7.4 - 12.4
New York	2.9 - 4.9	Michigan	2.2 - 7.8
Kentucky	2.6 - 4.0	North Carolina	1.6 - 5.8
Other States	(NA)	Other States	(NA)
Total	(X)	Total	(X)

Modes of Transportation for Shipments Originating in West Virginia		
Modes	Percent of value	Percent of weight
Parcel, U.S. Postal Service, or courier service	(X)	(X)
Truck (for-hire, private, and both private truck and for-hire truck)	59.4 - 70.4	25.9 - 32.1
Air (including truck and air)	1.2 - 2.8	(X)
Rail	12.0 - 16.0	36.2 - 50.4
Water (inland water, Great Lakes, deep sea, truck and water, and rail and water)	3.8 - 6.0	17.4 - 22.8
Pipeline*	(X)	(X)
Truck and rail intermodal combination	(X)	0.1 - 1.7
Other intermodal (truck and pipeline, inland and Gt. Lakes, inland and deep sea)	(X)	(X)
Other, unknown, and withheld for sampling and disclosure reasons	13.2 - 15.2	4.7 - 8.7
Total	(X)	(X)

Domestic Distance Shipped for Commodities Originating in West Virginia		
Distance	Percent of value	Percent of weight
Less than 50 miles	21.8 - 29.0	34.4 - 46.9
50 to 99 miles	7.7 - 18.5	6.0 - 11.0
100 to 249 miles	17.6 - 24.5	14.7 - 21.6
250 to 499 miles	22.0 - 27.0	20.5 - 33.0
500 to 749 miles	4.7 - 8.3	2.0 - 7.0
750 to 999 miles	3.2 - 4.8	0.7 - 1.7
1,000 to 1,499 miles	0.9 - 2.3	0.0 - 0.4
1,500 to 1,999 miles	0.2 - 0.8	(X)
2,000 miles or more	2.3 - 4.3	0.0 - 0.4
Total	(X)	(X)

* CFS data for pipelines exclude most shipments of crude oil.

NA Not available.

X Not applicable.

NOTE: For explanation of 90-percent confidence intervals see Appendix B, "Reliability of the Data," in source document.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *1992 Census of Transportation, Communications, and Utilities, 1993 Commodity Flow Survey*, TC92-CF (Washington, DC: 1996).

The Commodity Flow Survey (CFS) is a comprehensive effort to learn where and how goods are shipped in the U.S. The CFS measures shipments of commodities by establishments with paid employees and engaged in manufacturing, mining, wholesale trade, or selected retail and services industries. Prior commodity surveys covered shipments only by manufacturing firms. Commodity flows are estimated for a universe of approximately 900,000 establishments.

Data collected on individual shipments include total value, total weight, commodity type, modes of transport, domestic origin and destination; data for export shipments include the city and country of destination, mode and port of exit. Information is also obtained on whether shipments are containerized or a hazardous material. Some firms provided data concerning on-site shipping facilities and access to shipping facilities, plus data on ownership and leasing of transportation equipment.

The CFS is conducted by the Bureau of the Census as part of the Economic Census. Funding and technical guidance is provided by the U.S. Department of Transportation. Initiated for 1993, the CFS is scheduled for 1997 and every 5 years thereafter for years ending in 2 and 7. Commodity surveys were conducted between 1963 and 1982, but data for 1982 were not published. No data were collected for 1987. Participants will report for a sample of shipments during a 2-week period each quarter during the reporting year.

The CFS is a mail-out/mail-back survey of 200,000 sampled employer establishments in selected industries. Establishments were selected by stratified sample, with strata based on geographic location and industry. Geographic strata are the 89 National Transportation Analysis Regions (NTARs), which provide nationwide coverage and are aggregations of Bureau of Economic Analysis economic areas. Within the strata, all establishments with annualized employment above a specified cutoff were selected with certainty, and the remaining smaller establishments were sampled with probability proportional to annualized payroll.

For 1993, each sampled establishment reported on a sample of individual shipments during a 2 week period in each calendar quarter. In addition, about 20,000 establishments will provide information on transportation facilities and arrangements in their final reporting period.

For further information about survey design and printed products, contact the Commodity Flow Survey Branch, Services Division, Bureau of the Census, Washington, DC 20233, or by calling 301/457-2805 or 2114. For information on related data programs and studies, contact the Bureau of Transportation Statistics at 202/366-DATA for voice, 202/366-3640 for fax, or CFS@BTS.GOV for e-mail.