## Commodity Movements Originating in South Dakota Summary of 1993 CFS

In South Dakota, the CFS measured \$10 billion of goods weighing 25 million tons. South Dakota accounted for approximately 0.2 percent of the value and 0.3 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 ranked by value and by weight of the shipments. The main commodities shipped from South Dakota by value were: food or kindred products; chemicals or allied products; farm products; machinery, including computers; and petroleum or coal products. The main commodities by weight were: farm products; nonmetallic minerals; clay, concrete, glass, or stone products; food or kindred products; and petroleum or coal products.

Local transportation of freight is important to South Dakota's commerce. The distribution of commodities by domestic destination and distance of shipments reflects the importance of local transport. The CFS shows that in 1993, about 40 percent of the value and 55 percent of the weight of total shipments from South Dakota were shipped to destinations within the state. About 28 percent of the value and about 47 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 South Dakota, about 41 percent of the value of shipments and 59 percent of the weight of shipments were between places less than 100 miles apart.

About 60 percent of the value and about 45 percent of the weight of all shipments from South Dakota went to other states. The top two destinations by value and weight of shipments were Minnesota and Iowa. Other important destination states by value were: California, Nebraska, and Illinois. Other important destination states by weight: North Dakota, Wyoming, and Michigan.

Most commodities (80 percent of the value and the weight) were moved by trucks. Rail accounted for about 3 percent of the value and 15 percent of the weight of shipments. The CFS data confirm the rising importance of parcel, U.S. postal, and courier services that have emerged in recent years. In 1993, this mode of transport was used to ship 55,000 tons of goods worth about \$1 billion or 11 percent of the value of all shipments in South Dakota. In comparison, about 9 percent of the value of total U.S. shipments were moved by this mode.

## 1993 Commodity Flow Survey State Summary: South Dakota

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

Summary	Value	Weight
Total shipments originating in South Dakota	\$9.6 billion	25.2 million tons
Percent of total U.S. shipments (preliminary U.S. estimate)	0.2	0.3

Commodity Shipments Originating in South Dakota Ranked by Value		Commodity Shipments Originating in South Dakota Ranked by Weight	
Commodity	Percent of value	Commodity	Percent of weight
Food or kindred products	21.3	Farm products	29.1
Chemicals or allied products	13.2	Nonmetallic minerals	22.5
Farm products	12.5	Clay, concrete, glass, or stone products	14.8
Machinery, including computers	10.7	Food or kindred products	12.2
Petroleum or coal products	4.9	Petroleum or coal products	7.1
Other commodities	37.5	Other commodities	14.4
Total	100.0	Total	100.0

Domestic Destinations of Shipments Originating in South Dakota Ranked by Value		Domestic Destinations of Shipments Originating in South Dakota Ranked by Weight	
State	Percent of value	State	Percent of weight
South Dakota	40.0	South Dakota	55.1
Minnesota	12.1	Minnesota	15.3
lowa	7.2	lowa	5.7
California	4.1	North Dakota	2.5
Nebraska	3.5	Wyoming	2.5
Illinois	3.3	Michigan	1.8
Other States	29.8	Other States	17.1
Total	100.0	Total	100.0

Modes of Transportation for Shipments Originating in South Dakota				
Modes	Percent of value	Percent of weight		
Parcel, U.S. Postal Service, or courier service	10.9	0.2		
Truck (for-hire, private, and both private truck and for-hire truck)	80.1	79.6		
Air (including truck and air)	2.2	-		
Rail	3.3	14.5		
Water (inland water, Great Lakes, deep sea, truck and water, and rail and water)	-	-		
Pipeline*	-	-		
Truck and rail intermodal combination	0.3	0.8		
Other intermodal (truck and pipeline, inland and Gt. Lakes, inland and deep sea)	-	-		
Other, unknown, and withheld for sampling and disclosure reasons	3.2	4.9		
Total	100.0	100.0		

Domestic Distance Shipped for Commodities Originating in South Dakota			
Distance	Percent of value	Percent of weight	
Less than 50 miles	28.1	46.6	
50 to 99 miles	13.1	12.6	
100 to 249 miles	16.5	18.3	
250 to 499 miles	15.7	12.4	
500 to 749 miles	7.2	2.9	
750 to 999 miles	6.4	3.8	
1,000 to 1,499 miles	12.4	3.2	
1,500 to 1,999 miles	0.6	0.2	
2,000 miles or more	0.1	-	
Total	100.0	100.0	

<sup>\*</sup> CFS data for pipelines exclude most shipments of crude oil.

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).

<sup>\*\*</sup> Some or all data suppressed to avoid disclosure or because data are statistically unreliable.

<sup>-</sup> Represents zero or less than 1 unit of measurement.

## 90-Percent Confidence Intervals for 1993 Commodity Flow Survey State Summary: South Dakota

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

Summary	Value	Weight
Total shipments originating in South Dakota (in billion \$ and million tons)	8.59 - 10.61	22.55 - 27.85
Percent of total U.S. shipments (preliminary U.S. estimate)	0.14 - 0.18	0.23 - 0.28

Commodity Shipments Originating in South Dakota Ranked by Value		Commodity Shipments Originating in South Dakota Ranked by Weight	
Commodity	Percent of value	Commodity	Percent of weight
Food or kindred products	16.7 - 25.9	Farm products	19.2 - 39.0
Chemicals or allied products	7.5 - 18.8	Nonmetallic minerals	18.4 - 26.5
Farm products	9.2 - 15.8	Clay, concrete, glass, or stone products	9.2 - 20.4
Machinery, including computers	8.9 - 12.5	Food or kindred products	7.7 - 16.7
Petroleum or coal products	3.6 - 6.2	Petroleum or coal products	4.9 - 9.4
Other commodities	(NA)	Other commodities	(NA)
Total	(X)	Total	(X)

Domestic Destinations of Shipments Originating in South Dakota Ranked by Value		Domestic Destinations of Shipments Originating in South Dakota Ranked by Weight	
State	Percent of value	State	Percent of weight
South Dakota	36.2 - 43.8	South Dakota	49.0 - 61.2
Minnesota	10.5 - 13.8	Minnesota	11.5 - 19.1
lowa	5.9 - 8.5	lowa	3.6 - 7.8
California	3.3 - 4.9	North Dakota	1.5 - 3.5
Nebraska	2.4 - 4.7	Wyoming	1.5 - 3.5
Illinois	2.5 - 4.1	Michigan	1.1 - 2.5
Other States	(NA)	Other States	(NA)
Total	(X)	Total	(X)

Modes of Transportation for Shipments Originating in South Dakota			
Modes	Percent of value	Percent of weight	
Parcel, U.S. Postal Service, or courier service	9.3 - 12.6	(X)	
Truck (for-hire, private, and both private truck and for-hire truck)	77.1 - 83.1	73.5 - 85.7	
Air (including truck and air)	0.1 - 4.3	(X)	
Rail	1.7 - 5.0	10.6 - 18.5	
Water (inland water, Great Lakes, deep sea, truck and water, and rail and water)	(X)	(X)	
Pipeline*	(X)	(X)	
Truck and rail intermodal combination	0.1 - 0.5	0.1 - 1.5	
Other intermodal (truck and pipeline, inland and Gt. Lakes, inland and deep sea)	(X)	(X)	
Other, unknown, and withheld for sampling and disclosure reasons	2.7 - 3.7	1.0 - 8.9	
Total	(X)	(X)	

Domestic Distance Shipped for Commodities Originating in South Dakota				
Distance	Percent of value	Percent of weight		
Less than 50 miles	24.3 - 31.9	41.3 - 51.9		
50 to 99 miles	11.5 - 14.8	10.8 - 14.4		
100 to 249 miles	15.4 - 17.7	13.7 - 22.9		
250 to 499 miles	13.7 - 17.7	7.5 - 17.3		
500 to 749 miles	5.9 - 8.5	2.2 - 3.6		
750 to 999 miles	5.7 - 7.1	2.8 - 4.8		
1,000 to 1,499 miles	10.6 - 14.2	2.1 - 4.4		
1,500 to 1,999 miles	0.4 - 0.8	0.0 - 0.4		
2,000 miles or more	(X)	(X)		
Total	(X)	(X)		

<sup>\*</sup> CFS data for pipelines exclude most shipments of crude oil.

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

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).

NA Not available.

X Not applicable.

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 be 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.