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## BTS Data

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### 2012 Commodity Flow Survey Final Estimates

Final estimates from the 2012 Commodity Flow Survey (CFS) released today by the U.S. Department of Transportation's Bureau of Transportation Statistics (BTS) and the U.S. Department of Commerce's Census Bureau, show that the nation's manufacturing and wholesale establishments, mines, and mail-order houses shipped 11.3 billion tons of raw material and finished goods, valued at \$13.9 trillion, and accounting for nearly 3.0 trillion ton-miles during 2012 (Table 1). These numbers are an approximate 18.5 percent increase in value (unadjusted for inflation), and decreases of about 9.9 percent for tonnage and 11.2 percent for ton-miles during the five years since the previous survey in 2007.

Trucking continues to be the most dominant mode of transportation for these shippers accounting for 73.1 percent of the value and 71.3 percent of the tonnage of their cargo, according to the 2012 CFS. Shipments by truck accounted for 8.1 billion tons of goods valued at about \$10.1 trillion. The trucking mode was used to move goods about 1.2 trillion ton-miles.

In terms of ton-miles, trucking and rail are the leading modes at 42.0 percent and 40.8 percent, respectively.

Shipments by rail accounted for 1.6 billion tons of goods, 14.4 percent of the total 2012 CFS tonnage, valued at about \$473.0 billion. The rail mode was used to move goods about 1.2 trillion ton-miles.

Water shipments of freight totaled about \$301.6 billion in goods, almost 576.0 million tons, and nearly 192.9 billion ton-miles.

In terms of commodities, the 2012 CFS results indicate the category of mixed freight, multiple commodities such as supplies, including food, for grocery stores and restaurants, hardware or plumbing supplies, and office supplies, contributed the highest value at \$1.4 trillion, followed by gasoline, aviation turbine fuel, and ethanol at \$1.2 trillion. Gravel and crushed stone was the top commodity by weight at 1.5 billion tons. Coal was the top commodity by ton-miles in 2012 accounting for 663.7 billion ton-miles (Table 2).

By industry, the CFS shows that manufacturing industries contributed the most overall tonnage of goods shipped in 2012. This industry sector accounted for 4.2 billion tons, or 36.8 percent of all tonnage, and amounted to \$5.7 trillion or 41.0 percent of the total value. Wholesale industries led by overall value and accounted for 44.2 percent of the total value at \$6.1 trillion, and 33.5 percent of the total weight, with 3.8 billion tons (Table 3).

The [CFS](#), conducted as a partnership between BTS and the U.S. Census Bureau, is the primary source of national and state-level data on domestic freight shipments in the United States. The CFS measures domestic freight shipments by American establishments in mining, manufacturing, wholesale, auxiliaries, and selected retail industries. Data are provided on the types, origins and destinations, values, weights, modes of transport, distance shipped, and ton-miles of commodities shipped. The CFS is a shipper-based survey and is conducted every five years as part of the Economic Census. It provides a multi-modal picture of national freight flows and represents the only publicly available source of commodity flow data for the highway mode. The 2012 CFS is the fifth in a series and was previously conducted in 1993, 1997, 2002, and 2007.

The 2012 CFS is published for 132 CFS areas (e.g., large metropolitan areas, other major freight gateways, the remainder of state components and, in some cases, entire states). This represents an expansion from 123 geographic areas in the 2007 CFS. Also new for the 2012 CFS, the survey collected additional information to determine whether shipments were temperature-controlled and or shipped via an expedited service. Additionally, for the first time in the CFS series the 2012 CFS data tables will be complemented with a public use microdata file that is scheduled for release by the end of June 2015.

2012 CFS final data tables along with survey documentation and methodology can be found at the Census Bureau's [American Fact Finder](#).

**Table 1****Shipment Characteristics by Mode of Transportation for the United States: 2012**

[Estimates are based on data from the 2012 Commodity Flow Survey. Because of rounding, estimates may not be additive.]

Mode of transportation	Value		Tons		Ton-miles		Average miles per shipment
	2012 (million dollars)	Percent of total	2012 (thousands)	Percent of total	2012 (millions)	Percent of total	
<b>All modes</b>	13,852,143	100.0	11,299,409	100.0	2,969,506	100.0	630
<b>Single modes</b>	11,900,364	85.9	10,905,518	96.5	2,697,418	90.8	262
Truck	10,132,229	73.1	8,060,166	71.3	1,247,717	42.0	227
For-hire truck	6,504,636	47.0	4,298,693	38.0	1,050,942	35.4	508
Private truck	3,627,592	26.2	3,761,472	33.3	196,775	6.6	58
Rail	473,070	3.4	1,628,537	14.4	1,211,481	40.8	805
Water	301,554	2.2	575,996	5.1	192,866	6.5	908
Inland water	218,927	1.6	424,542	3.8	118,742	4.0	275
Great lakes	424	Z	31,403	0.3	10,959	0.4	347
Deep sea	59,878	0.4	72,987	0.6	22,130	0.7	1,157
Multiple waterways	22,325	0.2	47,064	0.4	41,035	1.4	1,034
Air (includes truck and air)	450,575	3.3	4,845	Z	5,810	0.2	1,295
Pipeline	542,936	3.9	635,975	5.6	S	S	S
<b>Multiple modes</b>	1,950,753	14.1	357,047	3.2	271,832	9.2	922
Parcel, U.S. Postal Service, or courier	1,688,242	12.2	28,490	0.3	22,716	0.8	922
Truck and rail	224,833	1.6	213,814	1.9	169,524	5.7	988
Truck and water	29,035	0.2	56,720	0.5	48,568	1.6	1,562
Rail and water	7,976	0.1	55,570	0.5	29,170	1.0	1,073
Other multiple modes	668	Z	2,452	Z	1,853	0.1	S
<b>Other modes</b>	1,026	Z	36,844	0.3	256	Z	S

Z- Rounds to Zero.

S- Withheld because estimate did not meet publication standards.

Note: Value-of-shipments estimates have not been adjusted for price changes.

**SOURCE:** U.S. Department of Transportation, Bureau of Transportation Statistics, and U.S. Department of Commerce, U.S. Census Bureau, 2012 Commodity Flow Survey, Final Estimates, December 2014.

Table 2

## Shipment Characteristics by Two-Digit Commodity for the United States: 2012

[Estimates are based on data from the 2012 Commodity Flow Survey. Because of rounding, estimates may not be additive.]

SCTG code	Commodity description	Value		Tons		Ton-miles		Average miles per shipment
		2012 (million dollars)	Percent of total	2012 (thousands)	Percent of total	2012 (millions)	Percent of total	
	All Commodities	13,852,143	100.0	11,299,409	100.0	2,969,506	100.0	630
01	Live animals and live fish	6,390	Z	2,237	Z	1,475	Z	565
02	Cereal grains (includes seed)	130,140	0.9	479,064	4.2	184,888	6.2	202
03	Agricultural products (excludes animal feed, cereal grains, and forage products)	197,793	1.4	218,995	1.9	107,383	3.6	505
04	Animal feed, eggs, honey, and other products of animal origin	118,666	0.9	238,507	2.1	59,660	2.0	706
05	Meat, poultry, fish, seafood, and their preparations	302,153	2.2	90,090	0.8	43,798	1.5	184
06	Milled grain products and preparations and bakery products	151,799	1.1	115,109	1.0	53,947	1.8	169
07-R	Other prepared foodstuffs and fats and oils (CF10)	584,496	4.2	527,393	4.7	201,438	6.8	450
08-R	Alcoholic beverages, and Denatured Alcohol (CF20)	178,011	1.3	99,255	0.9	35,176	1.2	81
09	Tobacco products	67,395	0.5	2,919	Z	650	Z	830
10	Monumental or building stone	4,221	Z	11,366	0.1	1,605	0.1	135
11	Natural sands	7,806	0.1	438,136	3.9	38,847	1.3	51
12	Gravel and crushed stone (excludes dolomite and slate)	17,519	0.1	1,538,494	13.6	82,244	2.8	30
13	Other nonmetallic minerals, nec	13,646	0.1	144,500	1.3	35,384	1.2	253
14	Metallic ores and concentrates	29,072	0.2	94,801	0.8	48,181	1.6	397
15	Coal	41,178	0.3	1,047,934	9.3	663,676	22.3	87
17-R	Gasoline, aviation turbine fuel, and ethanol (includes kerosene, and fuel alcohols) (CF30)	1,158,935	8.4	1,244,059	11.0	97,395	3.3	46
18-R	Fuel oils (includes diesel, bunker c, and biodiesel) (CF40)	706,535	5.1	843,282	7.5	59,341	2.0	31
19	Other coal and petroleum products, nec	388,085	2.8	528,059	4.7	99,564	3.4	98
20	Basic chemicals	316,754	2.3	342,969	3.0	143,230	4.8	662
21	Pharmaceutical products	814,703	5.9	16,197	0.1	7,798	0.3	656
22	Fertilizers	84,213	0.6	193,918	1.7	61,745	2.1	142
23	Chemical products and preparations, nec	351,146	2.5	105,660	0.9	46,991	1.6	667
24	Plastics and rubber	549,130	4.0	182,918	1.6	100,600	3.4	696
25	Logs and other wood in the rough	4,527	Z	35,123	0.3	3,878	0.1	184
26	Wood products	144,134	1.0	297,429	2.6	82,275	2.8	299
27	Pulp, newsprint, paper, and paperboard	123,892	0.9	123,300	1.1	69,122	2.3	261
28	Paper or paperboard articles	126,268	0.9	76,530	0.7	26,687	0.9	634
29	Printed products	159,583	1.2	38,800	0.3	14,890	0.5	506
30	Textiles, leather, and articles of textiles or leather	465,777	3.4	39,849	0.4	25,485	0.9	1,064
31	Nonmetallic mineral products	180,504	1.3	793,046	7.0	93,581	3.2	414
32	Base metal in primary or semifinished forms and in finished basic shapes	457,280	3.3	304,658	2.7	109,923	3.7	320
33	Articles of base metal	352,135	2.5	100,754	0.9	41,985	1.4	530
34	Machinery	753,095	5.4	74,650	0.7	36,968	1.2	438
35	Electronic and other electrical equipment and components and office equipment	1,031,944	7.4	46,212	0.4	28,362	1.0	838
36	Motorized and other vehicles (including parts)	1,038,341	7.5	130,069	1.2	64,758	2.2	479
37	Transportation equipment, nec	280,391	2.0	7,514	0.1	4,342	0.1	844
38	Precision instruments and apparatus	351,894	2.5	7,306	0.1	5,324	0.2	954
39	Furniture, mattresses and mattress supports, lamps, lighting fittings, and illuminated signs	160,790	1.2	27,573	0.2	13,621	0.5	837
40	Miscellaneous manufactured products	517,067	3.7	74,128	0.7	31,204	1.1	1,042
41	Waste and scrap	107,002	0.8	241,232	2.1	66,654	2.2	183
43	Mixed freight	1,377,371	9.9	374,071	3.3	75,269	2.5	413
99	Commodity unknown	360	Z	1,303	Z	162	Z	112

Z- Rounds to Zero.

(CF10) Prior to the 2012 CFS, oils and fats treated for use as biodiesel were included in Commodity Code 07. In the 2012 CFS, oils and fats treated for use as biodiesel moved to Commodity Code 18.

(CF20) Prior to the 2012 CFS, alcohols intended for use as fuel such as ethanol, although not specifically identified, were included in Commodity Code 08. In the 2012 CFS, ethanol moved to Commodity Code 17.

(CF30) Prior to the 2012 CFS, fuel alcohols such as ethanol were included in Commodity Code 08, although not specifically identified. Also, kerosene was included in Commodity Code 19. In the 2012 CFS, ethanol, fuel alcohols and kerosene moved to Commodity Code 17.

(CF40) Prior to the 2012 CFS, biodiesel, although not specifically identified, was included in Commodity Code 07. In the 2012 CFS, biodiesel moved to Commodity Code 18.

Note: Value-of-shipments estimates have not been adjusted for price changes.

**SOURCE:** U.S. Department of Transportation, Bureau of Transportation Statistics, and U.S. Department of Commerce, U.S. Census Bureau, 2012 Commodity Flow Survey, Final Estimates, December 2014.

Table 3

## Shipment Characteristics by Industry for the United States: 2012

[Estimates are based on data from the 2012 Commodity Flow Survey. Because of rounding, estimates may not be additive.]

NAICS code	NAICS title	Value (million dollars)	Tons (thousands)	Ton-miles (millions)	Average miles per shipment
	<b>Total</b>	13,852,143	11,299,409	2,969,506	630
212	Mining (except oil and gas)	99,888	2,900,863	859,267	47
31-33	Manufacturing	5,679,313	4,155,850	1,279,523	713
311	Food manufacturing	744,573	545,892	261,169	239
312	Beverage and tobacco product manufacturing	142,936	159,843	49,408	292
313	Textile mills	30,328	7,101	3,731	765
314	Textile product mills	21,595	5,096	2,313	918
315	Apparel manufacturing	12,462	515	402	1,169
316	Leather and allied product manufacturing	4,870	688	707	1,105
321	Wood product manufacturing	76,802	211,440	59,705	341
322	Paper manufacturing	180,585	156,327	83,270	532
323	Printing and related support activities	79,263	21,535	10,296	769
324	Petroleum and coal products manufacturing	835,321	1,222,084	165,106	216
325	Chemical manufacturing	785,839	609,778	313,078	887
326	Plastics and rubber products manufacturing	216,973	59,798	33,421	764
327	Nonmetallic mineral product manufacturing	98,603	707,054	73,594	180
331	Primary metal manufacturing	265,380	189,419	87,875	602
332	Fabricated metal product manufacturing	333,287	96,723	38,545	562
333	Machinery manufacturing	402,610	36,938	26,510	889
334	Computer and electronic product manufacturing	331,636	4,576	3,791	1,164
335	Electrical equipment, appliance, and component manufacturing	120,145	16,619	12,347	998
336	Transportation equipment manufacturing	782,011	80,977	38,028	806
337	Furniture and related product manufacturing	66,809	14,850	9,652	792
339	Miscellaneous manufacturing	147,284	8,599	6,571	1,003
42	Wholesale trade	6,119,269	3,780,403	723,220	413
423	Merchant wholesalers, durable goods	2,605,062	969,034	228,502	455
4231	Motor vehicle and motor vehicle parts and supplies merchant wholesalers	540,855	66,571	31,340	381
4232	Furniture and home furnishing merchant wholesalers	66,139	16,524	9,024	672
4233	Lumber and other construction materials merchant wholesalers	114,200	329,887	31,865	87
4234	Professional and commercial equipment and supplies merchant wholesalers	437,435	22,255	12,219	642
4235	Metal and mineral (except petroleum) merchant wholesalers	202,708	151,632	49,683	223
4236	Electrical and electronic goods merchant wholesalers	450,951	26,276	12,083	517
4237	Hardware, plumbing and heating equipment and supplies merchant wholesalers	125,401	18,443	5,011	257
4238	Machinery, equipment, and supplies merchant wholesalers	433,454	64,434	14,655	323
4239	Miscellaneous durable goods merchant wholesalers	233,919	273,012	62,620	829
424	Merchant wholesalers, nondurable goods	3,514,207	2,811,368	494,718	321
4241	Paper and paper product merchant wholesalers	96,163	39,288	7,602	314
4242	Drugs and druggists' sundries merchant wholesalers	535,889	12,815	6,710	487
4243	Apparel, piece goods, and notions merchant wholesalers	121,916	9,535	8,015	997
4244	Grocery and related product merchant wholesalers	647,284	336,965	66,571	123
4245	Farm product raw material merchant wholesalers	239,194	642,820	260,458	265
4246	Chemical and allied products merchant wholesalers	153,656	104,935	22,535	223
4247	Petroleum and petroleum products merchant wholesalers	1,319,585	1,396,357	77,968	74
4248	Beer, wine, and distilled alcoholic beverage merchant wholesalers	120,471	55,359	2,973	43
4249	Miscellaneous nondurable goods merchant wholesalers	280,049	213,293	41,886	445
4541	Electronic shopping and mail-order houses	318,266	11,966	9,392	1,173
45431	Fuel dealers	35,694	36,034	734	19
4931 <sup>(CF1)</sup>	Warehousing and storage (CF1)	1,207,896	294,522	60,458	748
5111	Newspaper, periodical, book, and directory publishers	49,500	11,660	2,130	S
551114	Corporate, subsidiary, and regional managing offices	342,317	108,111	34,782	769

S- Withheld because estimate did not meet publication standards.

(CF1) For the 2012 and 2007 Commodity Flow Surveys, this industry group only includes captive (enterprise support) warehouses that provide storage and shipping support to other establishments of the same company. Warehouses offering their services to the general public and other businesses are excluded. For tabulation and publication purposes, NAICS Subsector 484 (Truck Transportation) is grouped with NAICS Industry Group 4931 (Warehousing and Storage).

Note: Value-of-shipments estimates have not been adjusted for price changes.

**SOURCE:** U.S. Department of Transportation, Bureau of Transportation Statistics, and U.S. Department of Commerce, U.S. Census Bureau, 2012 Commodity Flow Survey, Final Estimates, December 2014.