

APPENDIX. SELECTED METRIC DATA

Table 2-1M. Weight of Shipments by Transportation Mode: 2007, 2010, and 2040¹
(millions of metric tonnes)

	2007				2010				2040			
	Total	Domestic	Exports ²	Imports ²	Total	Domestic	Exports ²	Imports ²	Total	Domestic	Exports ²	Imports ²
Total	17,127	15,288	594	1,245	16,613	14,873	692	1,049	24,933	20,939	1,655	2,340
Truck	11,592	11,418	86	88	11,331	11,167	86	78	16,786	16,334	247	205
Rail	1,723	1,583	56	84	1,611	1,492	51	67	2,134	1,849	141	145
Water	853	457	50	346	780	421	61	298	1,146	539	103	504
Air, air & truck	12	2	4	5	11	2	4	5	39	7	14	18
Multiple modes & mail	1,292	380	362	550	1,252	363	450	440	2,713	539	1,062	1,111
Pipeline	1,367	1,204	4	159	1,355	1,198	6	152	1,649	1,312	8	328
Other & unknown	287	241	33	13	274	230	34	10	466	359	79	29

¹Many 2007 and 2040 numbers in this table were revised as a result of Freight Analysis Framework (FAF) database improvements in FAF version 3.2.

²Data do not include imports and exports that pass through the United States from a foreign origin to a foreign destination by any mode.

Notes: 1 metric tonne = 1.1023 short tons. Numbers may not add to totals due to rounding. The 2010 data are provisional estimates, which are based on selected modal and economic trend data. All truck, rail, water, and pipeline movements that involve more than one mode, including exports and imports that change mode at international gateways, are included in multiple modes & mail to avoid double counting. As a consequence, rail and water totals in this table are less than other published sources.

Table 2-3M. Top Commodities: 2007¹

Millions of Metric Tonnes		Billions of Dollars	
Total, all commodities	17,128	Total, all commodities	16,651
Gravel	2,054	Machinery	1,759
Cereal grains	1,338	Electronics	1,430
Coal	1,311	Motorized vehicles	1,267
Non-metallic mineral products	1,263	Mixed freight	1,061
Waste/scrap	1,202	Pharmaceuticals	880
Natural gas, coke, asphalt ²	1,175	Textiles/leather	696
Gasoline	912	Miscellaneous manufactured products	692
Crude petroleum	759	Gasoline	689
Fuel oils	676	Plastics/rubber	578
Natural sands	517	Articles of base metal	573

¹Many 2007 numbers in this table were revised as a result of Freight Analysis Framework (FAF) improvements in FAF version 3.2.

²This group includes coal and petroleum products not elsewhere classified such as liquefied natural gas, coke, asphalt, and other products of coal and petroleum refining, excluding gasoline, aviation fuel, and fuel oil.

Note: 1 metric tonne = 1.1023 short tons.

TABLE 2-1M. WEIGHT OF SHIPMENTS BY TRANSPORTATION MODE: 2007, 2010, AND 2040

Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 3.2, 2011.

TABLE 2-3M. TOP COMMODITIES: 2007

Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 3.2, 2011.

Table 2-4M. Hazardous Materials Shipments by Transportation Mode: 2007

Transportation mode	Value		Metric Tonnes		Tonne kilometers		Kilometers
	\$ Billions	Percent	Millions	Percent	Billions	Percent	Average distance per shipment
All modes, total	1,448	100.0	2,024	100.0	472	100.0	154
Single modes, total	1,371	94.6	1,916	94.6	408	86.3	105
Truck ¹	837	57.8	1091	53.9	152	32.2	95
For-hire	359	24.8	449	22.2	92	19.6	344
Private ²	478	33.0	642	31.7	59	12.6	51
Rail	69	4.8	118	5.8	135	28.5	930
Water	69	4.8	136	6.7	54	11.5	616
Air	2	0.1	S	S	S	S	1,762
Pipeline ³	393	27.2	571	28.2	S	S	S
Multiple modes, total	71	4.9	101	5.0	63	13.3	1,342
Parcel, U.S. Postal Service, or Courier	8	0.5	<1	<0.1	<1	<0.1	1,345
Other multiple modes	28	1.9	51	2.5	25	5.3	375
Unknown and other modes, total	7	0.5	8	0.4	2	0.5	93

Key: S = data are not published because of high sampling variability or other reasons.

¹Truck as a single mode includes shipments that went by private truck only, for-hire truck only, or a combination of both.

²Private truck refers to a truck operated by a temporary or permanent employee of an establishment or the buyer/receiver of the shipment.

³Excludes crude oil shipments.

Notes: 1 metric tonne = 1.1023 short tons; 1 tonne kilometer = 0.6849 ton miles. Numbers and percents may not add to totals due to rounding.

Table 2-5M. Hazardous Materials Shipments by Hazard Class: 2007

Hazard class	Description	Value		Metric tonnes		Tonne kilometers	
		\$ Billions	Percent	Millions	Percent	Billions	Percent
Class 1	Explosives	12	0.8	3	0.1	<1	<0.1
Class 2	Gases	132	9.1	206	11.2	118	17.1
Class 3	Flammable liquids	1,170	80.8	1,443	78.6	387	56.3
Class 4	Flammable solids	4	0.3	17	0.9	12	1.7
Class 5	Oxidizers and organic peroxides	7	0.5	12	0.7	15	2.2
Class 6	Toxic (poison)	21	1.5	9	0.5	12	1.8
Class 7	Radioactive materials	21	1.4	<1	<0.1	<1	<0.1
Class 8	Corrosive materials	51	3.6	94	5.1	95	13.8
Class 9	Miscellaneous dangerous goods	30	2.1	52	2.8	49	7.1
Total		1,448	100.0	1,836	100.0	688	100.0

Notes: 1 metric tonne = 1.1023 short tons; 1 tonne kilometer = 0.6849 ton miles. Numbers and percents may not add to totals due to rounding.

TABLE 2-4M. HAZARDOUS MATERIALS SHIPMENTS BY TRANSPORTATION MODE: 2007

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics and U.S. Department of Commerce, Census Bureau, *2007 Commodity Flow Survey, Hazardous Materials* (Washington, DC: February 2010), table 1a, available at www.bts.gov/publications/commodity_flow_survey/ as of August 22, 2011.

TABLE 2-5M. HAZARDOUS MATERIALS SHIPMENTS BY HAZARD CLASS: 2007

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics and U.S. Department of Commerce, Census Bureau, *2007 Commodity Flow Survey, Hazardous Materials* (Washington, DC: February 2010), table 1a, available at www.bts.gov/publications/commodity_flow_survey/ as of August 22, 2011.

Table 2-6M. Domestic Mode of Exports and Imports by Tonnage and Value: 2007 and 2040¹

	Millions of Metric Tonnes		Billions of 2007 Dollars	
	2007	2040	2007	2040
Total	1,839	3,995	3,193	9,863
Truck²	697	1,760	1,345	3,889
Rail	240	505	197	422
Water	128	223	52	93
Air, air & truck³	9	32	927	3,619
Multiple modes & mail⁴	133	374	278	899
Pipeline	314	597	137	255
Other & unknown	46	108	127	497
No domestic mode⁵	272	395	130	189

¹Many 2007 and 2040 numbers in this table were revised as a result of Freight Analysis Framework (FAF) improvements in FAF version 3.2.

²Excludes truck moves to and from airports.

³Includes truck moves to and from airports.

⁴Multiple modes & mail includes U.S. Postal Service, courier shipments, and all intermodal combinations, except air and truck. In this table, oceangoing export and import shipments that move between ports and domestic locations by single modes are classified by the domestic mode rather than multiple modes & mail.

⁵No domestic mode includes waterborne import shipments of crude petroleum off-loaded directly at the domestic destination (refineries) with no domestic mode of transportation.

Notes: 1 metric tonne = 1.1023 short tons. Numbers may not add to totals due to rounding.

Table 2-8M. Value and Tonnage of U.S. Merchandise Trade with Canada and Mexico by Transportation Mode: 2000-2010 (billions of current U.S. dollars and millions of metric tonnes)

Mode	2000		2005		2009		2010	
	Value	Weight	Value	Weight	Value	Weight	Value	Weight
Truck ¹	429	NA	491	173	455	141	557	170
Rail ¹	94	NA	116	128	96	98	131	122
Air	45	<1	33	<1	39	<1	45	<1
Water	33	176	58	232	59	172	81	190
Pipeline ¹	24	NA	52	78	49	89	63	96
Other ¹	29	NA	39	5	37	5	40	8
Total¹	653	NA	790	616	735	506	918	586

Key: NA = not available.

¹The U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics estimated the weight of exports for truck, rail, pipeline, and other modes using weight-to-value ratios derived from imported commodities.

Notes: 1 metric tonne = 1.1023 short tons. "Other" includes shipments transported by mail, other and unknown modes, and shipments through Foreign Trade Zones. Totals for the most recent year differ slightly from the Freight Analysis Framework due to variations in coverage and FAF conversion of values to constant dollars. Numbers may not add to totals due to rounding.

TABLE 2-6M. DOMESTIC MODE OF EXPORTS AND IMPORTS BY TONNAGE AND VALUE: 2007 AND 2040

Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 3.2, 2011.

TABLE 2-8M. VALUE AND TONNAGE OF U.S. MERCHANDISE TRADE WITH CANADA AND MEXICO BY TRANSPORTATION MODE: 2000-2010

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, North American Transborder Freight Data, available at www.bts.gov/transborder as of August 28, 2011; U.S. Department of Commerce, Census Bureau, Foreign Trade Division, FT920 - *U.S. Merchandise Trade: Selected Highlights* (Washington, DC: annual issues).



Table 3-1M. Kilometers of Infrastructure by Transportation Mode: 1980-2009

	1980	1990	2000	2008	2009
Public roads, route kilometers	6,211,518	6,222,926	6,358,386	6,532,576	NA
National Highway System (NHS)	N	N	417,439	264,075	NA
Interstates	66,173	72,536	75,109	75,657	NA
Other NHS	N	N	184,287	188,418	NA
Other	N	N	6,098,989	6,268,500	NA
Strategic Highway Corridor Network (STRAHNET)	N	N	99,881	100,182	NA
Interstate	N	N	75,113	75,657	NA
Non-Interstate	N	N	24,765	24,525	NA
Railroad	2,946,204	283,085	274,400	224,213	223,878
Class I	NA	214,337	194,073	151,403	151,144
Regional	NA	29,570	33,759	26,859	20,605
Local	NA	39,165	46,567	45,951	52,129
Inland waterways					
Navigable channels	17,702	17,702	17,702	17,702	17,702
Great Lakes-St. Lawrence Seaway	3,769	3,769	3,769	3,769	3,769
Pipelines					
Oil	351,453	335,938	284,834	278,404	275,713
Gas	1,692,588	1,913,743	2,203,573	2,454,136	2,456,389

Key: N = not applicable; NA = not available.

¹Excludes Class III railroads.

Note: 1 kilometer = 0.6214 miles.

TABLE 3-1M. KILOMETERS OF INFRASTRUCTURE BY TRANSPORTATION MODE: 1980-2009

Sources: **Public roads:** U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics* (Washington, DC: annual issues), tables HM-16 and HM-49, available at www.fhwa.dot.gov/policyinformation/statistics/2009/ as of October 5, 2011. **Rail:** Association of American Railroads, *Railroad Facts* (Washington, DC: annual issues). **Navigable channels:** U.S. Army Corps of Engineers, *A Citizen's Guide to the USACE*, available at www.corpsreform.org/sitepages/downloads/CitzGuideChptr1.pdf as of October 5, 2011. **Great Lakes-St. Lawrence Seaway:** The St. Lawrence Seaway Development Corporation, "The Seaway," available at www.greatlakes-seaway.com/en/seaway/facts/index.html as of October 5, 2011. **Oil pipelines: 1980-2000:** Eno Transportation Foundation, *Transportation in America, 2002* (Washington, DC: 2002). **2001-2009:** U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety, *Pipeline Statistics*, available at www.phmsa.dot.gov/pipeline/library/data-stats as of October 5, 2011. **Gas pipelines:** American Gas Association, *Gas Facts* (Arlington, VA: annual issues).

Table 3-3M. Top 25 Airports by Landed Weight of All-Cargo Operations: 2000-2009¹

Airport	2009 Rank	Landed weight (thousands of metric tonnes)				
		2000	2006	2007	2008	2009
Memphis, TN (Memphis International)	1	5,732	8,550	8,865	8,845	8,586
Anchorage, AK (Ted Stevens Anchorage International) ²	2	7,333	9,605	9,582	8,143	7,042
Louisville, KY (Louisville International-Standiford Field)	3	3,617	4,550	4,732	4,738	4,662
Miami, FL (Miami International)	4	2,657	3,258	3,370	3,170	2,882
Indianapolis, IN (Indianapolis International)	5	2,624	2,383	2,406	2,326	2,075
Los Angeles, CA (Los Angeles International)	6	2,616	3,290	3,112	2,609	1,710
Chicago, IL (O'Hare International)	7	2,534	2,003	1,996	1,908	1,587
New York, NY (John F. Kennedy International)	8	1,870	2,372	2,320	2,016	1,443
Newark, NJ (Newark Liberty International)	9	1,643	1,694	1,700	1,566	1,328
Fort Worth, TX (Dallas/Fort Worth International)	10	1,779	1,562	1,591	1,464	1,303
Oakland, CA (Metropolitan Oakland International)	11	1,534	1,631	1,643	1,580	1,216
Atlanta, GA (William B. Hartsfield International)	12	1,107	1,070	1,144	1,059	1,159
Ontario, CA (Ontario International)	13	1,319	1,271	1,265	1,225	1,060
Philadelphia, PA (Philadelphia International)	14	989	1,239	1,248	1,146	1,027
Honolulu, HI (Honolulu International)	15	628	888	1,028	936	926
Seattle, WA (Seattle-Tacoma International)	16	1,149	643	627	677	729
Houston, TX (George Bush Intercontinental)	17	435	631	698	684	711
San Francisco, CA (San Francisco International)	18	961	752	943	703	678
Denver, CO (Denver International)	19	593	645	583	567	566
Phoenix, AZ (Sky Harbor International)	20	835	659	645	612	554
Chicago/Rockford, IL (Chicago/Rockford International)	21	800	631	669	644	512
Cincinnati, OH (Cincinnati/Northern Kentucky International) ³	22	817	91	88	94	512
Portland, OR (Portland International)	23	564	662	647	595	494
San Juan, PR (Luis Munoz Marin International)	24	681	549	474	391	493
Minneapolis, MN (Minneapolis-St Paul International/Wold-Chamberlain)	25	638	562	555	510	430
Top 25 airports⁴		47,520	51,686	52,359	48,645	43,684
United States, all airports⁵		67,807	69,275	69,476	64,666	57,327
Top 25 as % of U.S. total		70.1	74.6	75.4	75.2	76.2

¹Dedicated to the exclusive transportation of cargo, all-cargo operations do not include aircraft carrying passengers that also may be carrying cargo. Aircraft landed weight is the certificated maximum gross landed weight of the aircraft as specified by the aircraft manufacturers.

²Anchorage includes a large share of all-cargo operations in-transit.

³The significant 2006 decrease in landed weight at Cincinnati/ Northern Kentucky International Airport was due to a major reduction in DHL Airways' cargo operations, which have since rebounded.

⁴Limited to airports with an aggregate landed weight in excess of 100 million pounds (50,000 short tons) annually.

Note: 1 metric tonne = 1.1023 short tons.

TABLE 3-3M. TOP 25 AIRPORTS BY LANDED WEIGHT OF ALL-CARGO OPERATIONS: 2000-2009

Source: U.S. Department of Transportation, Federal Aviation Administration, Air Carrier Activity Information System (ACAIS) database, All-Cargo Data, available at www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/as of August 19, 2011.



Table 3-4M. Trucks and Truck Kilometers by Average Weight: 1987-2002¹

Average weight (kilograms)	1987		1992		1997		2002		Percent Change, 1987 to 2002	
	Number (thousands)	VKT (millions)	Number	VKT						
Total	3,624	144,789	4,008	168,952	4,701	237,972	5,415	234,348	49.4	61.9
Light-heavy	1,030	17,328	1,259	22,550	1,436	31,888	1,914	42,252	85.9	143.8
4,536 to 6,350	525	8,754	694	12,874	819	18,509	1,142	24,439	117.6	179.2
6,351 to 7,257	242	4,407	282	4,791	316	6,359	396	9,508	63.6	115.8
7,258 to 8,845	263	4,168	282	4,884	301	7,020	376	8,306	43.2	99.3
Medium-heavy	766	12,200	732	13,103	729	16,301	910	18,934	18.8	55.2
8,846 to 11,793	766	12,200	732	13,103	729	16,301	910	18,934	18.8	55.2
Heavy-heavy	1,829	115,261	2,017	133,299	2,536	189,782	2,591	173,161	41.7	50.2
11,794 to 14,969	377	8,707	387	9,163	428	11,414	437	9,407	15.9	8.0
14,969 to 18,144	209	6,619	233	8,505	257	10,612	229	6,066	9.7	-8.4
18,144 to 22,680	292	12,271	339	15,484	400	21,046	318	10,778	9.0	-12.2
22,680 to 27,216	188	11,517	227	13,998	311	20,361	327	14,404	73.8	25.1
27,216 to 36,287	723	73,123	781	82,143	1,070	120,250	1,179	124,701	63.1	70.5
36,288 to 45,359	28	2,018	33	2,460	46	3,906	69	4,747	144.3	15.2
45,360 to 58,967	8	708	12	1,181	18	1,691	26	2,528	238.5	257.2
58,967 or more	4	298	5	365	6	502	6	530	43.2	77.9

Key: VKT = vehicle kilometers traveled.

¹Excludes trucks with an average weight of 4,536 kilograms (10,000 pounds) or less.

Note: 1 kilometer = 0.6214 miles; 1 kilogram = 2.2046 pounds. Weight includes the empty weight of the vehicle plus the average weight of the load carried. Numbers may not add to totals due to rounding.

Table 3-7. Trucks, Truck Kilometers, and Average Distance by Range of Operations and Jurisdiction: 2002

	Number of Trucks (thousands)	Truck Kilometers (millions)	Kilometers per Truck (thousands)
Total	5,521	233,622	42
Off the road	183	3,641	20
50 miles or less	2,942	68,444	23
51 to 100 miles	685	30,836	45
101 to 200 miles	244	18,957	78
201 to 500 miles	232	28,194	122
501 miles or more	293	42,978	147
Not reported	716	40,330	56
Not applicable	226	241	1
Operated in Canada	2	116	69
Operated in Mexico	2	47	30
Operated within the home base state	4,196	136,746	33
Operated in states other than the home base state	496	65,821	133
Not reported	599	30,650	51
Not applicable	226	241	1

Notes: 1 kilometer = 0.6214 miles. Includes trucks registered to companies and individuals in the United States except pickups, minivans, other light vans, and sport utility vehicles. Numbers may not add to totals due to rounding.

TABLE 3-4M. TRUCKS AND TRUCK KILOMETERS BY AVERAGE WEIGHT: 1987-2002

Source: U.S. Department of Commerce, Census Bureau, 2002 Vehicle Inventory and Use Survey: United States, EC02TV-US (Washington, DC: 2004), available at www.census.gov/prod/ec02/ec02tv-us.pdf as of August 22, 2011; U.S. Department of Commerce, Census Bureau, 1992 Truck Inventory and Use Survey: United States, TC92-T-52 (Washington, DC: 1995), available at www.census.gov/prod/ec97/97tv-us.pdf as of August 22, 2011.

TABLE 3-7M. TRUCKS, TRUCK KILOMETERS, AND AVERAGE DISTANCE BY RANGE OF OPERATIONS AND JURISDICTIONS: 2002

Source: U.S. Department of Commerce, Census Bureau, 2002 Vehicle Inventory and Use Survey: United States, EC02TV-US, Table 3a (Washington, DC: 2004), available at www.census.gov/prod/ec02/ec02tv-us.pdf as of August 22, 2011.

Table 3-8M. Truck Kilometers by Products Carried: 2002¹

Products carried	Millions of kilometers
Total²	233,622
Animals and fish, live	1,182
Animal feed and products of animal origin	3,360
Grains, cereal	2,201
All other agricultural products	4,282
Basic chemicals	1,410
Fertilizers and fertilizer materials	2,681
Pharmaceutical products	491
All other chemical products and preparations	2,174
Alcoholic beverages	1,808
Bakery and milled grain products	5,717
Meat, seafood, and their preparations	4,918
Tobacco products	717
All other prepared foodstuffs	11,953
Logs and other wood in the rough	1,849
Paper or paperboard articles	5,052
Printed products	1,231
Pulp, newsprint, paper, paperboard	3,115
Wood products	5,730
Articles of base metal	5,301
Base metal in primary or semifinished forms	4,637
Nonmetallic mineral products	4,906
Tools, nonpowered	12,487
Tools, powered	10,424
Electronic and other electrical equipment	4,866
Furniture, mattresses, lamps, etc.	3,288
Machinery	5,190
Miscellaneous manufactured products	6,449
Precision instruments and apparatus	1,181
Textile, leather, and related articles	2,475
Vehicles, including parts	6,186
All other transportation equipment	1,024
Coal	484
Crude petroleum	212
Gravel or crushed stone	4,490
Metallic ores and concentrates	73
Monumental or building stone	744
Natural sands	1,753
All other nonmetallic minerals	802
Fuel oils	1,983
Gasoline and aviation turbine fuel	1,365
Plastic and rubber	3,850
All other coal and refined petroleum products	1,886
Hazardous waste (EPA manifest)	306
All other waste and scrape (non-EPA manifest)	4,260
Recyclable products	1,484
Mail and courier parcels	7,660
Empty shipping containers	1,278
Passengers	440
Mixed freight	23,590
Products, equipment, or materials not elsewhere classified	426
Products not specified	10,232
Not applicable ³	241
No product carried	46,632

¹Excludes pickups, minivans, other light vans, and sport utility vehicles.

²Detail lines may not add to total because multiple products/hazardous materials may be carried at the same time.

³Vehicles not in use. When the respondent had partial-year ownership of the vehicle, annual miles were adjusted to reflect miles traveled when not owned by the respondent.

Note: 1 kilometer = 0.6214 miles.

TABLE 3-8M. TRUCK KILOMETERS BY PRODUCTS CARRIED: 2002

Source: U.S. Department of Commerce, Census Bureau, 2002 Vehicle Inventory and Use Survey: United States, EC02TV-US (Washington, DC: 2004), available at <http://www.census.gov/prod/ec02/ec02tv-us.pdf> as of August 22, 2011.



Table 5-7M. Fuel Consumption by Transportation Mode: 2007-2009

	2007	2008	2009
Highway¹			
Gasoline, diesel and other fuels (million liters)	666,929	646,349	636,412
Truck, total	178,724	180,562	168,328
Single-unit 2-axle 6-tire or more truck	61,750	64,888	61,855
Combination truck	116,973	115,673	106,473
Truck (percent of total)	101.4	27.9	26.4
Rail, Class I (in freight service)			
Distillate / diesel fuel (million liters)	15,375	14,709	12,082
Water			
Residual fuel oil (million liters)	23,948	19,174	17,197
Distillate / diesel fuel oil (million liters)	7,282	4,495	4,793
Gasoline (million liters)	4,625	4,301	4,278
Pipeline			
Natural gas (million cubic meters)	17,595	18,348	16,940

¹Based on a new methodology, FHWA revised its annual vehicle miles travelled, number of vehicles, and fuel economy data beginning with 2007. Information on the new methodology is available at www.fhwa.dot.gov/policyinformation/statistics.cfm. Data in this table should not be compared to those in previous editions of *Freight Facts and Figures*.

Notes: 1 liter = 0.2642 gallons; 1 cubic meter = 35.3147 cubic feet.

Table 5-9M. Single-Unit Truck Fuel Consumption and Travel: 2007-2009

	2007	2008	2009
Number registered (thousands)	8,117	8,288	8,356
Vehicle kilometers (millions)	193,079	204,144	193,375
Fuel consumed (million liters)	61,750	64,888	61,855
Average kilometers traveled per vehicle	23,788	24,631	23,141
Average kilometers traveled per liter	3.1	3.1	3.1
Average fuel consumed per vehicle (liter)	7,608	7,827	7,403

Notes: 1 kilometer = 0.6214 miles; 1 liter = 0.2642 gallons. Based on a new methodology, FHWA revised its annual vehicle miles travelled, number of vehicles, and fuel economy data beginning with 2007. Information on the new methodology is available at www.fhwa.dot.gov/policyinformation/statistics.cfm. Data in this table should not be compared to those in previous editions of *Freight Facts and Figures*.

TABLE 5-7M. FUEL CONSUMPTION BY TRANSPORTATION MODE: 2007-2009

Sources: Highway: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics* (Washington, DC: annual issues), table VM-1, available at www.fhwa.dot.gov/policyinformation/statistics/2009/ as of October 5, 2011. Rail: Association of American Railroads, *Railroad Facts* (Washington, DC: annual issues), p. 40. Water: U.S. Department of Energy, Energy Information Administration, *Fuel Oil and Kerosene Sales 2009* (Washington, DC: 2010), tables 2, 4, and similar tables in earlier editions. Pipeline: U.S. Department of Energy, *Natural Gas Annual 2009* (Washington, DC: December 2010), table 15 and similar tables in earlier editions.

TABLE 5-9M. SINGLE-UNIT TRUCK FUEL CONSUMPTION AND TRAVEL: 2007-2009

Source: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics* (Washington, DC: annual issues), table VM-1, available at www.fhwa.dot.gov/policyinformation/statistics/2009/ as of October 5, 2011.



Table 5-10M. Combination Truck Fuel Consumption and Travel: 2007-2009

	2007	2008	2009
Number registered (thousands)	2,635	2,585	2,617
Vehicle kilometers traveled (millions)	296,426	295,826	270,103
Fuel consumed (million liters)	116,973	115,673	106,473
Average kilometers traveled per vehicle	112,481	114,429	103,206
Average kilometers traveled per liter	2.5	2.6	2.5
Average fuel consumed per vehicle (liters)	44,387	44,743	40,681

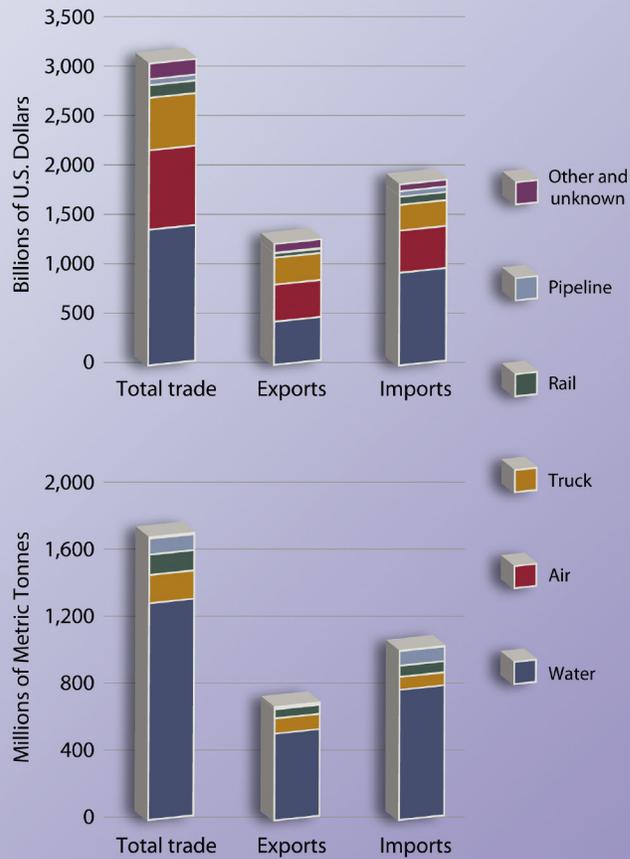
Notes: 1 kilometer = 0.6214 miles; 1 liter = 0.2642 gallons. Based on a new methodology, FHWA revised its annual vehicle miles travelled, number of vehicles, and fuel economy data beginning with 2007. Information on the new methodology is available at www.fhwa.dot.gov/policyinformation/statistics.cfm. Data in this table should not be compared to those in previous editions of *Freight Facts and Figures*.



TABLE 5-10M. COMBINATION TRUCK FUEL CONSUMPTION AND TRAVEL: 2007-2009

Source: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics* (Washington, DC: annual issues), table VM-1, available at www.fhwa.dot.gov/policyinformation/statistics/2009/ as of October 5, 2011.

2-2M. U.S. International Merchandise Trade by Transportation Mode: 2010



Notes: 1 metric tonne = 1.1023 short tons. The U.S. Department of Transportation (USDOT), Research and Innovative Technology Administration, Bureau of Transportation Statistics estimated 2009 weight data for truck, rail, pipeline, and other and unknown modes using value-to-weight ratios derived from imported commodities. Totals for the most recent year differ slightly from the USDOT, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework (FAF) due to variations in coverage and FAF conversion of values to constant dollars. Numbers may not add to totals due to rounding.

FIGURE 2-2M. U.S. INTERNATIONAL MERCHANDISE TRADE BY TRANSPORTATION MODE: 2009
Sources: Total, water and air data: U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division, FT920 - U.S. Merchandise Trade: Selected Highlights (Washington, DC: January 2010). Truck, rail, and pipeline data: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, North American Transborder Freight Data, available at www.bts.gov/transborder as of August 15, 2010. Other, unknown and miscellaneous data: special tabulation, August 2011.