

APPENDIX A. SELECTED METRIC DATA

Table 2-1M. Weight of Shipments by Transportation Mode: 2002, 2008, and 2035 (millions of metric tonnes)

	2002				2008				2035			
	Total	Domestic	Exports ³	Imports ³	Total	Domestic	Exports ³	Imports ³	Total	Domestic	Exports ³	Imports ³
Total	17,534	16,030	476	1,028	19,501	17,587	787	1,127	33,758	30,543	1,009	2,206
Truck	10,468	10,284	96	88	12,014	11,830	104	80	20,696	20,167	238	291
Rail	1,704	1,605	29	71	1,821	1,689	56	77	3,198	2,987	52	160
Water	636	539	57	40	573	472	56	45	945	793	103	49
Air, air & truck	10	3	3	5	12	3	4	5	56	9	12	35
Intermodal¹	1,172	178	287	707	1,507	159	560	788	2,357	303	599	1,455
Pipeline & unknown²	3,543	3,422	4	118	3,574	3,436	7	132	6,506	6,284	5	218

¹Intermodal includes U.S. Postal Service and courier shipments and all intermodal combinations, except air and truck. Intermodal also includes oceangoing exports and imports that move between ports and interior domestic locations by modes other than water.

²Pipeline and unknown shipments are combined because data on region-to-region flows by pipeline are statistically uncertain.

³Data 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. The 2008 data are provisional estimates, which are based on selected modal and economic trend data. Methods used to develop these estimates have improved over time, and as a consequence, previously released annual provisional estimates are superseded by the 2008 estimates in this table. Numbers may not add to totals due to rounding.

Table 2-3M. Top Commodities: 2002

Millions of Metric Tonnes		Billions of Dollars	
Total	17,534	Total	13,228
Natural gas & related ¹	2,438	Machinery	(R) 2,015
Gravel	1,858	Electronics	(R) 1,112
Cereal grains	1,207	Mixed freight	(R) 968
Crude petroleum	1,165	Motorized vehicles	(R) 859
Coal	1,144	Natural gas & related ¹	729
Nonmetal mineral products	1,032	Textiles/leather	(R) 570
Gasoline	989	Pharmaceuticals	(R) 549
Waste/scrap	840	Miscellaneous manufactured products	(R) 471
Fuel oils	508	Chemical products	(R) 455
Natural sands	505	Other prepared foodstuffs	(R) 391

Key: R = revised.

¹Natural gas, selected coal products, and products of 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: 2002, 2008, AND 2035

Source: 2002 and 2035: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 2.2, 2007. 2008: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, 2008 provisional estimates, 2009.

TABLE 2-3M. TOP COMMODITIES: 2002

Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 2.2, 2007.

Table 2-4M. Hazardous Materials Shipments by Transportation Mode: 2002

Transportation mode	Value		Metric Tonnes		Tonne kilometers		Kilometers
	\$ Billions	Percent	Millions	Percent	Billions	Percent	Average distance per shipment
All modes, total	660	100.0	1,988	100.0	477	100.0	219
Single modes, total	644	97.6	1,958	98.5	455	95.5	169
Truck ¹	420	63.6	1,052	52.9	161	33.7	138
For-hire	190	28.8	408	20.5	95	19.9	459
Private ²	227	34.3	637	32.0	64	13.5	61
Rail	31	4.7	99	5.0	105	22.1	1,118
Water	47	7.1	207	10.4	103	21.6	S
Air	2	0.2	<1	<.1	<1	<.1	3,347
Pipeline ³	145	22.0	600	30.2	S	S	S
Multiple modes, total	10	1.5	17	0.9	18	3.8	1,366
Parcel, U.S. Postal Service, or courier	4	0.6	<1	<.1	<1	<.1	1,347
Other multiple modes	5	0.8	17	0.8	18	3.8	2,206
Unknown and other modes, total	6	0.9	13	0.6	3	0.7	92

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 most shipments of crude oil.

Note: 1 metric tonne = 1.1023 short tons; 1 tonne kilometer = .6849 ton miles. Numbers and percents may not add to totals due to rounding.

Table 2-5M. Hazardous Materials Shipments by Hazard Class: 2002

Hazard Class	Description	Value		Metric tonnes		Tonne kilometers	
		\$ Billions	Percent	Millions	Percent	Billions	Percent
Class 1	Explosives	8	1.2	5	0.3	2	0.5
Class 2	Gases	74	11.2	194	10.7	54	11.4
Class 3	Flammable liquids	490	74.3	1,623	90.0	319	66.9
Class 4	Flammable solids	7	1.0	10	0.6	6	1.3
Class 5	Oxidizers and organic peroxides	5	0.8	11	0.6	6	1.3
Class 6	Toxics (poison)	8	1.3	8	0.4	6	1.3
Class 7	Radioactive materials	6	0.9	0	<.1	<.1	<.1
Class 8	Corrosive materials	38	5.8	82	4.6	53	11.1
Class 9	Miscellaneous dangerous goods	24	3.6	55	3.1	29	6.2
Total		660	100.0	1,804	100.0	477	100.0

Note: 1 metric tonne = 1.1023 short tons; 1 tonne kilometer = .6849 ton miles. Numbers and percents may not add to totals due to rounding.

TABLE 2-4M. HAZARDOUS MATERIALS SHIPMENTS BY TRANSPORTATION MODE: 2002

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics and U.S. Department of Commerce, Census Bureau, *2002 Commodity Flow Survey, Hazardous Materials* (Washington, DC: December 2004), table 1a, available at www.bts.gov/publications/commodity_flow_survey/2002/united_states/ as of March 30, 2009.

TABLE 2-5M. HAZARDOUS MATERIALS SHIPMENTS BY HAZARD CLASS: 2002

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics and U.S. Department of Commerce, Census Bureau, *2002 Commodity Flow Survey, Hazardous Materials* (Washington, DC: December 2004), table 2a, available at www.bts.gov/publications/commodity_flow_survey/2002/united_states/ as of March 30, 2009.



Table 2-6M. Domestic Mode of Exports and Imports by Tonnage and Value: 2002 and 2035

	Millions of Metric Tonnes		Billions of 2002 Dollars	
	2002	2035	2002	2035
Total	1,504	3,215	2,145	12,277
Truck¹	723	1,920	1,198	6,193
Rail	181	360	114	275
Water	97	152	26	49
Air, air & truck²	8	49	614	5,242
Intermodal³	20	45	52	281
Pipeline & unknown⁴	475	689	141	238

¹Excludes truck moves to and from airports.

²Includes truck moves to and from airports.

³Intermodal includes U.S. Postal Service and courier shipments and all intermodal combinations, except air and truck. In this table, oceangoing exports and imports that move between ports and domestic locations by single modes are classified by the domestic mode rather than intermodal.

⁴Pipeline and unknown shipments are combined because data on region-to-region flows by pipeline are statistically uncertain.

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: 1998-2008 (billions of current U.S. dollars and millions of metric tonnes)

Mode	1998		2000		2007		2008	
	Value	Weight	Value	Weight	Value	Weight	Value	Weight
Truck ¹	350	NA	429	NA	555	174	554	165
Rail ¹	68	NA	94	NA	138	140	140	134
Air	30	<1	45	<1	38	<1	41	<1
Water	21	166	33	176	74	219	93	211
Pipeline ¹	11	NA	24	NA	59	86	88	89
Other ¹	23	NA	29	NA	45	7	47	6
Total¹	503	NA	653	NA	909	627	964	606

Key: NA = not available.

¹The Bureau of Transportation Statistics (BTS) estimated the weight of exports for truck, rail, pipeline, and other modes using weight-to-value ratios derived from imported commodities that vary by country, mode, and commodity.

Notes: 1 metric tonne = 1.1023 short tons. 1 short ton = 2,000 pounds. Mode "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 rounding.

TABLE 2-6M. DOMESTIC MODE OF EXPORTS AND IMPORTS BY TONNAGE AND VALUE: 2002 AND 2035

Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 2.2, 2007.

TABLE 2-8M. VALUE AND TONNAGE OF U.S. MERCHANDISE TRADE WITH CANADA AND MEXICO BY TRANSPORTATION MODE: 1998-2008

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Transborder Freight Data, available at www.bts.gov/transborder as of September 2009.

Table 3-1M. Kilometers of Infrastructure by Transportation Mode: 1980-2007

	1980	1990	2000	2007	Percent change, 1980 to 2007
Public roads, route miles	6,211,518	6,222,926	6,358,386	6,515,164	4.9
National Highway System (NHS)	N	N	417,439	263,511	N
Interstates	66,173	72,536	75,109	75,529	14.1
Other NHS	N	N	184,287	187,982	N
Other	N	N	6,098,989	6,251,650	N
Strategic Highway Corridor Network (STRAHNET)	N	N	99,881	100,898	N
Interstate	N	N	75,113	75,534	N
Non-Interstate	N	N	24,765	25,798	N
Railroad	¹ 294,620	283,085	274,400	225,513	-23.5
Class I	NA	214,337	194,073	151,775	N
Regional	NA	29,570	33,759	27,245	N
Local	NA	39,165	46,567	46,493	N
Inland waterways					
Navigable channels	17,702	17,702	17,702	17,702	0.0
Great Lakes-St. Lawrence Seaway	3,769	3,769	3,769	3,769	0.0
Pipelines					
Oil	351,453	335,938	284,834	267,353	-23.9
Gas	1,692,588	1,913,743	2,203,573	2,446,411	44.5

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

¹Excludes Class III railroads.

Note: 1 kilometer = .6214 miles.

TABLE 3-1M. KILOMETERS OF INFRASTRUCTURE BY TRANSPORTATION MODE: 1980-2007

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/2007/ as of April 1, 2009. **Rail:** Association of American Railroads, *Railroad Facts* (Washington, DC: annual issues). **Navigable channels:** U.S. Army Corps of Engineers, USACE Education, available at www.ndc.iwr.usace.army.mil as of April 13, 2009. **Great Lakes-St. Lawrence Seaway:** The St. Lawrence Seaway Management Corporation, "The Seaway," available at www.greatlakes-seaway.com/en/seaway/facts/index.html as of April 13, 2009. **Oil pipelines: 1980-2000:** Eno Transportation Foundation, *Transportation in America, 2002* (Washington, DC: 2002); **2007:** 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 April 13, 2009. **Gas pipelines:** American Gas Association, *Gas Facts* (Arlington, VA: annual issues).



Table 3-3M. 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 (thousands)	VKT (millions)	Number (thousands)	VKT (millions)	Number (thousands)	VKT (millions)	Number	VKT
Total	3,624	144,789	4,008	168,952	4,701	237,972	5,415	234,348	49	62
Light-heavy	1,030	17,328	1,259	22,550	1,436	31,888	1,914	42,252	86	144
4,536 to 6,350	525	8,754	694	12,874	819	18,509	1,142	24,439	118	179
6,351 to 7,257	242	4,407	282	4,791	316	6,359	396	9,508	64	116
7,258 to 8,845	263	4,168	282	4,884	301	7,020	376	8,306	43	99
Medium-heavy	766	12,200	732	13,103	729	16,301	910	18,934	19	55
8,846 to 11,793	766	12,200	732	13,103	729	16,301	910	18,934	19	55
Heavy-heavy	1,829	115,261	2,017	133,299	2,536	189,782	2,591	173,161	42	50
11,794 to 14,969	377	8,707	387	9,163	428	11,414	437	9,407	16	8
14,969 to 18,144	209	6,619	233	8,505	257	10,612	229	6,066	10	-8
18,144 to 22,680	292	12,271	339	15,484	400	21,046	318	10,778	9	-12
22,680 to 27,216	188	11,517	227	13,998	311	20,361	327	14,404	74	25
27,216 to 36,287	723	73,123	781	82,143	1,070	120,250	1,179	124,701	63	71
36,288 to 45,359	28	2,018	33	2,460	46	3,906	69	4,747	144	135
45,360 to 58,967	8	708	12	1,181	18	1,691	26	2,528	238	257
58,967 or more	4	298	5	365	6	502	6	530	43	78

Key: VKT = vehicle kilometers traveled.

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

Notes: 1 kilometer = .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 3-3M. TRUCKS AND TRUCK KILOMETERS BY AVERAGE WEIGHT: 1987-2002

Sources: 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 April 13, 2009; 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 April 13, 2009.



Table 3-6M. Truck, 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 cars, and sport utility vehicles. Numbers may not add to totals due to rounding.

TABLE 3-6M. TRUCK, TRUCK KILOMETERS, AND AVERAGE DISTANCE BY RANGE OF OPERATIONS AND JURISDICTION: 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 March 30, 2009.

Table 3-7M. 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, panels, minivans, sport utilities, and station wagons.

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 = .6214 miles.

TABLE 3-7M. TRUCK KILOMETERS BY PRODUCTS CARRIED: 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

March 30, 2009.



Table 3-11M. Top 25 Airports by Landed Weight of All-Cargo Operations: 2000-2007¹

Airport	2007 Rank	Landed weight (thousands of metric tonnes)				
		2000	2004	2005	2006	2007
Anchorage, AK (Ted Stevens Anchorage International) ²	1	7,333	8,931	9,402	9,605	9,582
Memphis, TN (Memphis International)	2	5,732	8,061	8,476	8,550	8,865
Louisville, KY (Louisville International-Standiford Field)	3	3,617	3,981	4,165	4,550	4,732
Miami, FL (Miami International)	4	2,657	3,106	3,221	3,258	3,370
Los Angeles, CA (Los Angeles International)	5	2,624	2,778	2,655	3,290	3,112
Indianapolis, IN (Indianapolis International)	6	2,616	2,099	2,309	2,383	2,406
New York, NY (John F. Kennedy International)	7	2,534	2,629	2,550	2,372	2,320
Chicago, IL (O'Hare International)	8	1,870	2,140	2,188	2,003	1,996
Newark, NJ (Newark Liberty International)	9	1,779	1,601	1,697	1,694	1,700
Oakland, CA (Metropolitan Oakland International)	10	1,643	1,545	1,631	1,631	1,643
Fort Worth, TX (Dallas/Fort Worth International)	11	1,534	1,298	1,502	1,562	1,591
Ontario, CA (Ontario International)	12	1,107	1,203	1,219	1,271	1,265
Philadelphia, PA (Philadelphia International)	13	1,319	1,244	1,271	1,239	1,248
Atlanta, GA (William B. Hartsfield International)	14	989	1,055	920	1,070	1,144
Honolulu, HI (Honolulu International)	15	628	880	751	888	1,028
San Francisco, CA (San Francisco International)	16	1,149	671	723	752	943
Houston, TX (George Bush Intercontinental)	17	435	632	644	631	698
Chicago/Rockford, IL (Chicago/Rockford International)	18	593	614	632	631	669
Portland, OR (Portland International)	19	800	651	677	662	647
Phoenix, AZ (Sky Harbor International)	20	835	727	706	659	645
Seattle, WA (Seattle-Tacoma International)	21	961	482	643	643	627
Denver, CO (Denver International)	22	817	692	692	645	583
Minneapolis, MN (Minneapolis-St Paul International/Wold-Chamberlain)	23	564	615	637	562	555
Fort Worth, TX (Fort Worth Alliance)	24	461	339	455	584	505
Salt Lake City, UT (Salt Lake City International)	25	681	563	535	497	486
Top 25 airports³		47,520	49,466	50,762	51,686	52,359
United States, all airports⁴		67,807	67,402	69,029	(R) 69,275	69,476
Top 25 as % of U.S. total		70.1	73.4	73.5	(R) 74.6	75.4

Key: R = revised.

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 proportion of all-cargo operations in-transit.

³Airport rankings change each year. Totals represent the top 25 airports for each year, not necessarily the top 25 airports listed here for 2007.

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 3-11M. TOP 25 AIRPORTS BY LANDED WEIGHT OF ALL-CARGO OPERATIONS: 2000-2007

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_airtraffic/airports/planning_capacity/passenger_allcargo_stats/passenger/media/cy07_cargo.pdf as of April 13, 2009.



Table 5-7M. Fuel Consumption by Transportation Mode: 1980-2007

	1980	1990	2000	2006	2007
Highway					
Gasoline, diesel and other fuels (million liters)	435,125	494,909	615,273	(R) 662,462	666,564
Truck, total	75,549	92,695	133,342	(R) 143,675	145,912
Single-unit 2-axle 6-tire or more truck	26,204	31,631	36,196	(R) 37,291	37,983
Combination truck	49,345	61,064	97,146	(R) 106,384	107,929
Truck (percent of total)	17.4	18.7	21.7	21.7	21.9
Rail, Class I (in freight service)					
Distillate / diesel fuel (million liters)	14,777	11,790	14,005	15,867	15,375
Water					
Residual fuel oil (million liters)	33,883	23,944	24,262	21,779	23,948
Distillate / diesel fuel oil (million liters)	5,594	7,816	8,558	7,203	7,282
Gasoline (million liters)	3,982	4,921	4,254	4,682	4,624
Pipeline					
Natural gas (million cubic meters)	17,970	18,684	18,185	(R) 16,543	17,638

Key: R = revised.

Note: 1 liter = .2642 gallons; 1 cubic meter = 35.3147 cubic feet.

Table 5-8M. Single-Unit Truck Fuel Consumption and Travel: 1980-2007

	1980	1990	2000	2006	2007
Number registered (thousands)	4,374	4,487	5,926	6,649	6,807
Vehicle Kilometers (millions)	64,073	83,527	113,459	(R) 129,295	131,886
Fuel consumed (million liters)	26,206	31,635	36,200	(R) 37,291	37,983
Average kilometers traveled per vehicle	14,649	18,615	19,146	(R) 19,445	19,376
Average kilometers traveled per liter	2.4	2.6	3.1	3.5	3.5
Average fuel consumed per vehicle (liters)	5,992	7,050	6,109	(R) 5,608	5,580

Key: R = revised.

Notes: 1 kilometer = .6214 miles; 1 liter = .2642 gallons.



TABLE 5-7M. FUEL CONSUMPTION BY TRANSPORTATION MODE: 1980-2007

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/2007/ as of April 20, 2009. **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 2007* (Washington, DC: 2008), tables 2, 4, and similar tables in earlier editions. **Pipeline:** U.S. Department of Energy, *Natural Gas Annual 2006*, DOE/EIA-0131(07) (Washington, DC: January 2009), table 15 and similar tables in earlier editions.

TABLE 5-8M. SINGLE-UNIT TRUCK FUEL CONSUMPTION AND TRAVEL: 1980-2007

Source: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics* (Washington, DC: annual issues), table VM-1 and similar tables in earlier editions, available at www.fhwa.dot.gov/policyinformation/statistics/2007/ as of April 1, 2009.

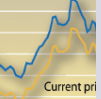


Table 5-9M. Combination Truck Fuel Consumption and Travel: 1980-2007

	1980	1990	2000	2006	2007
Number registered (thousands)	1,417	1,709	2,097	2,170	2,221
Vehicle kilometers traveled (millions)	110,527	151,827	217,294	(R) 228,788	233,357
Fuel consumed (million liters)	49,350	61,070	97,155	(R) 106,384	107,929
Average kilometers traveled per vehicle	78,008	88,845	103,640	(R) 105,449	105,069
Average kilometers traveled per liter	2.2	2.5	2.2	2.2	2.2
Average fuel consumed per vehicle (liters)	34,831	35,737	46,339	(R) 49,032	48,595

Key: R = revised.

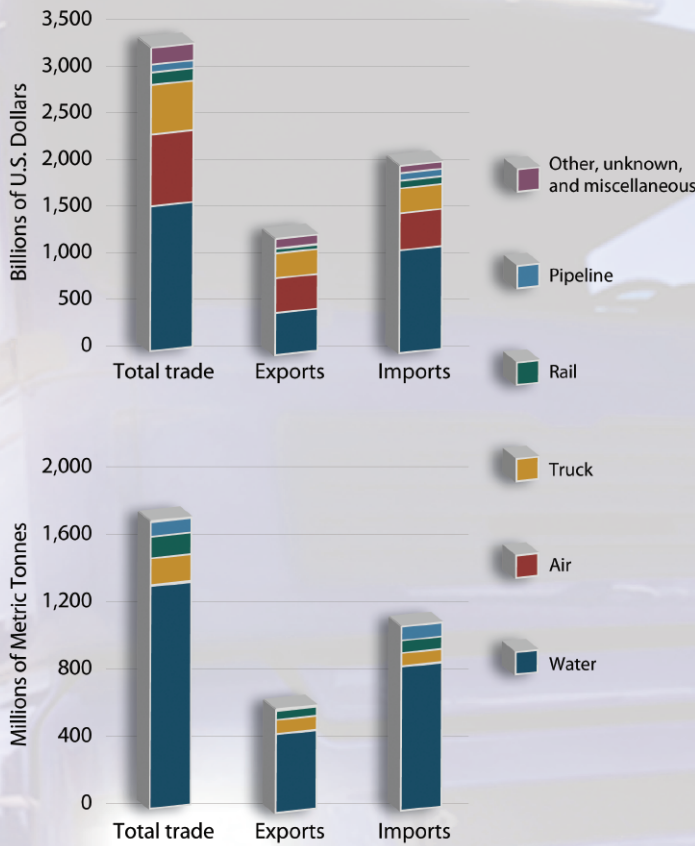
Notes: 1 kilometer = .6214 miles; 1 liter = .2642 gallons.



TABLE 5-9M. COMBINATION TRUCK FUEL CONSUMPTION AND TRAVEL: 1980-2007

Source: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics* (Washington, DC: annual issues), table VM-1 and similar tables in earlier editions, available at www.fhwa.dot.gov/policyinformation/statistics/2007/ as of April 1, 2009.

Figure 2-2M. U.S. International Merchandise Trade by Transportation Mode: 2008



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 2008 weight data for truck, rail, and pipeline 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 MODE OF TRANSPORTATION: 2008

Sources: **Total, water and air data:** U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division, U.S. Imports of Merchandise and U.S Exports of Merchandise DVD's, December 2008. **Truck, rail, and pipeline data:** U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of transportation Statistics, Transborder Freight Data, available at www.bts.gov/transborder as of August 20, 2009. **Other, unknown and miscellaneous data:** special tabulation, August 2009.