

# APPENDIX A. SELECTED METRIC DATA

**TABLE 2-1M. WEIGHT OF SHIPMENTS BY MODE: 2002, 2006, 2035 (MILLIONS OF METRIC TONNES)**

	2002				2006				2035			
	Total	Domestic	Exports <sup>3</sup>	Imports <sup>3</sup>	Total	Domestic	Exports <sup>3</sup>	Imports <sup>3</sup>	Total	Domestic	Exports <sup>3</sup>	Imports <sup>3</sup>
<b>Total</b>	(R) 17,588	16,079	(R) 477	1,031	19,086	17,276	564	1,246	(R) 33,863	30,638	(R) 1,012	(R) 2,213
<b>Truck</b>	10,501	10,316	97	88	11,520	11,274	153	92	20,761	20,230	239	291
<b>Rail</b>	1,710	1,610	29	71	1,856	1,733	37	86	3,208	2,996	52	160
<b>Water</b>	638	541	57	40	626	530	44	53	948	795	104	49
<b>Air, air &amp; truck</b>	(R) 10	3	3	(R) 5	14	5	4	5	(R) 56	9	(R) 12	(R) 35
<b>Intermodal<sup>1</sup></b>	1,176	178	288	709	1,368	177	321	870	2,364	304	601	1,460
<b>Pipeline &amp; unknown<sup>2</sup></b>	3,554	3,432	4	118	3,702	3,558	5	139	6,526	6,303	5	219

**Key:** R = revised.

<sup>1</sup>Intermodal includes U.S. Postal Service and courier shipments and all intermodal combinations except for rail and truck.

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

<sup>3</sup>Data do not include imports and exports shipped by international air cargo and shipments that pass through the United States from a foreign origin to a foreign destination by any mode.

**Notes:** Numbers may not add to totals due to rounding. 1 ton = 0.91 metric tonne.

**TABLE 2-3M. TOP COMMODITIES: 2002**

Metric Tonnes (millions)		Value (\$ billions)	
<b>Total</b>	<b>17,532</b>	<b>Total</b>	<b>13,120</b>
Natural gas & related	2,437	Machinery	1,866
Gravel	1,858	Electronics	948
Cereal grains	1,207	Mixed freight	944
Crude petroleum	1,165	Motorized vehicles	855
Coal	1,144	Natural gas & related <sup>1</sup>	729
Nonmetal min. prods. <sup>2</sup>	1,032	Textiles/leather	545
Gasoline	989	Pharmaceuticals	519
Waste/scrap	840	Unknown	458
Fuel oils	508	Chemical prods.	444
Natural sands	505	Misc. mfg. prods.	411

<sup>1</sup>Natural gas, selected coal products, and products of petroleum refining, excluding gasoline, aviation fuel, and fuel oil.

<sup>2</sup>Nonmetallic mineral products.

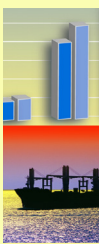
**Note:** 1 ton = 0.91 metric tonne.

**TABLE 2-1M. WEIGHT OF SHIPMENTS BY MODE: 2002, 2006, 2035 (MILLIONS OF METRIC TONNES)**

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

**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, 2006.



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

Transportation mode	Value		Metric tonnes		Tonne-kilometers		Average kilometers per shipment
	\$ Billion	Percent	(Millions)	Percent	(Billions)	Percent	
<b>TOTAL all modes</b>	<b>660.2</b>	<b>100.0</b>	<b>1,988.1</b>	<b>100.0</b>	<b>477.0</b>	<b>100.0</b>	<b>219</b>
<b>Single modes, total</b>	<b>644.5</b>	<b>97.6</b>	<b>1,958.2</b>	<b>98.5</b>	<b>455.4</b>	<b>95.5</b>	<b>169</b>
Truck <sup>1</sup>	419.6	63.6	1,051.9	52.9	160.8	33.7	138
For-hire	189.8	28.8	407.8	20.5	95.1	19.9	459
Private <sup>2</sup>	226.7	34.3	637.0	32.0	64.4	13.5	61
Rail	31.3	4.7	99.2	5.0	105.2	22.1	1,118
Water	46.9	7.1	207.0	10.4	103.1	21.6	S
Air	1.6	0.2	0.1	Z	0.1	Z	3,347
Pipeline <sup>3</sup>	145.0	22.0	600.0	30.2	S	S	S
<b>Multiple modes, total</b>	<b>9.6</b>	<b>1.5</b>	<b>17.0</b>	<b>0.9</b>	<b>18.2</b>	<b>3.8</b>	<b>1,366</b>
Parcel, U.S. Postal Service or courier	4.3	0.6	0.2	Z	0.2	Z	1,347
Other	5.4	0.8	16.8	0.8	18.1	3.8	2,206
<b>Unknown and other modes, total</b>	<b>6.1</b>	<b>0.9</b>	<b>12.9</b>	<b>0.6</b>	<b>3.4</b>	<b>0.7</b>	<b>92</b>

**Key:** S = data are not published because of high sampling variability or other reasons; Z = zero or less than 1 unit of measure.  
<sup>1</sup>Truck as a single mode includes shipments that went by private truck only, for-hire truck only, or a combination of both.  
<sup>2</sup>Private truck refers to a truck operated by a temporary or permanent employee of an establishment or the buyer/receiver of the shipment.  
<sup>3</sup>Excludes most shipments of crude oil.  
**Note:** 1 ton = 0.91 metric tonne; 1 ton-mile = 1.46 tonne-kilometer.

**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	7.9	1.2	4.5	0.2	2.3	0.5
Class 2	Gases	73.9	11.2	193.6	9.7	54.4	11.4
Class 3	Flammable liquids	490.2	74.3	1,622.9	81.6	319.1	66.9
Class 4	Flammable solids	6.6	1.0	10.3	0.5	6.4	1.3
Class 5	Oxidizers and organic peroxides	5.5	0.8	11.5	0.6	6.2	1.3
Class 6	Toxics	8.3	1.3	7.7	0.4	6.2	1.3
Class 7	Radioactive materials	5.9	0.9	0.1	0.003	0.1	0.01
Class 8	Corrosive materials	38.3	5.8	82.3	4.1	52.9	11.1
Class 9	Miscellaneous dangerous goods	23.6	3.6	55.4	2.8	29.4	6.2
<b>Total</b>		<b>660.2</b>	<b>100.0</b>	<b>1,988.1</b>	<b>100.0</b>	<b>477.0</b>	<b>100.0</b>

**Note:** 1 ton = 0.91 metric tonne; 1 ton-mile = 1.46 tonne-kilometer.

**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, U.S. Department of Commerce, U.S. Census Bureau, 2002 Economic Census, Transportation, 2002 Commodity Flow Survey, Hazardous Materials (Washington, DC: December 2004), table 1a.

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

**Source:** U.S. Department of Transportation, Bureau of Transportation Statistics and U.S. Department of Commerce, Census Bureau, 2002 Economic Census, Transportation, 2002 Commodity Flow Survey, Hazardous Materials (Washington, DC: December 2004), table 2a.



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

	Metric Tonnes (millions)		Value (\$ billions)	
	2002	2035	2002	2035
<b>Total</b>	(R) 1,509	(R) 3,225	2,145	(R) 12,277
<b>Truck<sup>1</sup></b>	725	1,926	1,198	6,193
<b>Rail</b>	182	361	114	275
<b>Water</b>	97	153	26	49
<b>Air &amp; truck<sup>2</sup></b>	(R) 8	(R) 49	(R) 614	(R) 5,242
<b>Intermodal<sup>3</sup></b>	20	46	52	281
<b>Pipeline &amp; unknown<sup>4</sup></b>	477	692	141	238

**Key:** R = revised.

<sup>1</sup>Excludes truck moves to and from airports.

<sup>2</sup>Includes truck moves to and from airports.

<sup>3</sup>Intermodal includes U.S. Postal Service and courier shipments and all intermodal combinations, except air and truck.

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

**Notes:** TABLE 2-6M NEW WAS UPDATED IN FEBRUARY 2008. IT DIFFERS FROM THE PRINT VERSION PUBLISHED IN NOVEMBER 2007. Numbers may not add to totals due to rounding. 1 ton = 0.91 metric tonne.

**TABLE 2-8M. VALUE AND WEIGHT OF U.S. MERCHANDISE TRADE WITH CANADA AND MEXICO BY TRANSPORTATION MODE: 1998-2006**

Mode	1998		2000		2005 <sup>1</sup>		2006	
	Value (current \$ billions)	Weight (millions of metric tonnes)	Value (current \$ billions)	Weight (millions of metric tonnes)	Value (current \$ billions)	Weight (millions of metric tonnes)	Value (current \$ billions)	Weight (millions of metric tonnes)
Truck	350	NA	429	NA	491	173	534	NA
Rail	68	NA	94	NA	116	128	129	NA
Air	30	<1	45	<1	33	<1	36	<1
Water	21	166	33	176	58	232	70	229
Pipeline	11	NA	24	NA	52	78	57	NA
Other	23	NA	29	NA	39	5	40	NA
<b>Total</b>	<b>503</b>	<b>NA</b>	<b>653</b>	<b>477</b>	<b>790</b>	<b>616</b>	<b>865</b>	<b>NA</b>

**Key:** NA = not available.

<sup>1</sup>2005 data are from the U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, North American Freight Transportation (Washington, DC: 2003), tables A-1 and A-2, available at [www.bts.gov](http://www.bts.gov) as of August 12, 2006.

**Notes:** Individual modal totals may not sum to exact totals due to rounding. 1 ton = 0.91 metric tonne. For value, "Other" is the difference between the total and the sum of the individual modes.

**TABLE 2-6M NEW. DOMESTIC MODE OF EXPORTS AND IMPORTS BY WEIGHT 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, 2008.

**TABLE 2-8M. VALUE AND WEIGHT OF U.S. MERCHANDISE TRADE WITH CANADA AND MEXICO BY TRANSPORTATION MODE: 1998-2006**

**Source:** U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Transborder Freight Data, September 2007.

**TABLE 3-1M. KILOMETERS OF INFRASTRUCTURE BY TRANSPORTATION MODE: 1980-2005**

	1980	1990	2000	2005	Percent change, 1980-2005
<b>Public roads, route kilometers</b>	6,211,806	6,223,214	6,358,681	6,456,095	3.9
National Highway System (NHS)	N	N	259,409	261,314	N
Interstates	66,176	72,540	75,113	75,432	14.0
Other NHS	N	N	184,296	185,882	N
Other	N	N	6,099,272	6,194,779	N
<b>Strategic Highway Corridor Network (STRAHNET)</b>	N	N	99,886	100,504	N
Interstate	N	N	75,116	75,435	N
Non-Interstate	N	N	24,766	25,069	N
<b>Railroad</b>	<sup>1</sup> 294,634	283,098	274,412	226,612	-23.1
Class I	NA	214,347	194,082	226,612	N
Regional	NA	29,572	33,761	24,765	N
Local	NA	39,167	46,570	36,241	N
<b>Inland waterways</b>					
Navigable channels	17,703	17,703	17,703	17,703	0.0
Great Lakes-St. Lawrence Seaway	3,769	3,769	3,769	3,769	0.0
<b>Pipelines</b>					
Oil	351,469	335,954	284,847	256,710	N
Gas	1,692,666	1,913,832	2,203,675	2,313,432	36.7

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

<sup>1</sup>Excludes Class III railroads.

**Note:** 1 mile = 1.61 kilometers.



**TABLE 3-1M. KILOMETERS OF INFRASTRUCTURE BY TRANSPORTATION MODE: 1980-2005**

**Sources:** Public roads: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, (Washington, DC: annual issues), table HM-16. **Rail:** Association of American Railroads, *Railroad Facts* (Washington, DC: various issues). **Navigable channels:** U.S. Army Corps of Engineers. **Oil pipelines:** 1980-2002: Eno Transportation Foundation, *Transportation in America, 2002* (Washington, DC: 2002). 2003: U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety, *Pipeline Statistics*, Internet site <http://ops.dot.gov/stats/lpo.htm> as of June 6, 2007. **Gas pipelines:** American Gas Association, *Gas Facts* (Arlington, VA: annual issues).



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

Average weight (kilograms)	1987		1992		1997		2002		Percent change, 1987-2002	
	Number (thousands)	VKT (millions)	Number (thousands)	VKT (millions)	Number (thousands)	VKT (millions)	Number (thousands)	VKT (millions)	Number	VKT
<b>Total</b>	<b>3,624</b>	<b>144,796</b>	<b>4,008</b>	<b>168,960</b>	<b>4,701</b>	<b>237,983</b>	<b>5,415</b>	<b>234,359</b>	<b>49</b>	<b>62</b>
<b>Light-heavy</b>	<b>1,030</b>	<b>17,329</b>	<b>1,259</b>	<b>22,551</b>	<b>1,436</b>	<b>31,890</b>	<b>1,914</b>	<b>42,254</b>	<b>86</b>	<b>144</b>
4,536 to 6,350	525	8,754	694	12,875	819	18,510	1,142	24,440	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	4,885	301	7,021	376	8,306	43	99
<b>Medium-heavy</b>	<b>766</b>	<b>12,200</b>	<b>732</b>	<b>13,104</b>	<b>729</b>	<b>16,302</b>	<b>910</b>	<b>18,935</b>	<b>19</b>	<b>55</b>
8,846 to 11,793	766	12,200	732	13,104	729	16,302	910	18,935	19	55
<b>Heavy-heavy</b>	<b>1,829</b>	<b>115,266</b>	<b>2,017</b>	<b>133,305</b>	<b>2,536</b>	<b>189,791</b>	<b>2,591</b>	<b>173,169</b>	<b>42</b>	<b>50</b>
11,794 to 14,969	377	8,708	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	6,067	10	-8
18,144 to 22,680	292	12,271	339	15,485	400	21,047	318	10,779	9	-12
22,680 to 27,216	188	11,518	227	13,999	311	20,362	327	14,404	74	25
27,216 to 36,287	723	73,127	781	82,147	1,070	120,256	1,179	124,707	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.

<sup>1</sup>Excludes trucks with an average weight of 10,000 pounds or less.

**Note:** Weight includes the empty weight of the vehicle plus the average weight of the load carried; 1 mile = 1.61 kilometers; 1 pound = 0.45 kilogram.

**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*

(Washington, DC: 2004), available at <http://www.census.gov/svsd/www/02vehinv.html> as of July 1, 2005; U.S. Department

of Commerce, Census Bureau, *1992 Truck Inventory and Use Survey: United States* (Washington, DC: 1995), available at

<http://www.census.gov/svsd/www/97vehinv.html> as of July 1, 2005.





**TABLE 3-5M. TRUCK KILOMETERS BY PRODUCTS CARRIED: 2002<sup>1</sup>**

Products carried	Millions of kilometers
<b>Total<sup>2</sup></b>	<b>(R) 233,728</b>
Animals and fish, live	1,182
Animal feed and products of animal origin	3,360
Grains, cereal	2,202
All other agricultural products	4,283
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 products foodstuff	11,954
Logs and other wood in the rough	1,849
Paper or paperboard articles	5,053
Printed products	1,231
Pulp, newsprint, paper, paperboard	3,115
Wood products	5,731
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	10,425
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	1,366
Plastic and rubber	3,851
All other coal and refined petroleum products	1,886
Hazardous waste (EPA manifest)	306
All other waste and scrape (non-EPA manifest)	4,261
Recyclable products	1,484
Mail and courier parcels	7,660
Empty shipping containers	1,278
Passengers	440
Mixed freight	23,591
Products, equipment, or materials not elsewhere classified	426
Products not specified	10,232
Not applicable <sup>3</sup>	241
No product carried	46,653

**Key:** R = revised.

<sup>1</sup> Excludes pickups, panels, minivans, sport utilities, and station wagons.

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

<sup>3</sup> Vehicles 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 mile = 1.61 kilometers.



**TABLE 3-5M. TRUCK KILOMETERS BY PRODUCTS CARRIED: 2002**

**Source:** U.S. Department of Commerce, Census Bureau, *Vehicle Inventory and Use Survey 2002: United States* (Washington, DC: 2004), available at <http://www.census.gov/svsd/www/02vehinv.html> as of July 26, 2007.

**TABLE 3-8M. TOP 25 AIRPORTS BY LANDED WEIGHT OF ALL-CARGO OPERATIONS: 2000-2005<sup>1</sup>**

Airport	2005 Rank	(thousands of metric tonnes)				
		2000	2002	2003	2004	2005
Anchorage, AK (Ted Stevens Anchorage International) <sup>2</sup>	1	7,333	8,159	8,171	8,931	9,402
Memphis, TN (Memphis International)	2	5,732	8,007	7,947	8,061	8,476
Louisville, KY (Louisville International-Standiford Field)	3	3,617	3,812	3,785	3,981	4,165
Miami, FL (Miami International)	4	2,657	2,879	2,938	3,106	3,221
Los Angeles, CA (Los Angeles International)	5	2,624	2,756	2,830	2,778	2,655
New York, NY (John F. Kennedy International)	6	2,534	2,642	2,664	2,629	2,550
Indianapolis, IN (Indianapolis International)	7	1,870	2,011	2,133	2,140	2,309
Chicago, IL (O'Hare International)	8	2,616	2,121	2,065	2,099	2,188
Newark, NJ (Newark Liberty International)	9	1,779	1,595	1,664	1,601	1,697
Oakland, CA (Metropolitan Oakland International)	10	1,643	1,584	1,537	1,545	1,631
Fort Worth, TX (Dallas/Fort Worth International)	11	1,534	1,343	1,344	1,298	1,502
Philadelphia, PA (Philadelphia International)	12	1,319	1,330	1,238	1,244	1,271
Ontario, CA (Ontario International)	13	1,107	1,310	1,213	1,203	1,219
Atlanta, GA (William B. Hartsfield International)	14	989	1,058	1,083	1,055	919
Honolulu, HI (Honolulu International)	15	828	946	996	1,035	751
Covington/Cincinnati, OH (Cincinnati/Northern Kentucky International)	16	628	880	923	880	737
San Francisco, CA (San Francisco International)	17	835	787	707	727	723
Dayton, OH (James M. Cox Dayton International)	18	2,026	814	712	714	715
Phoenix, AZ (Sky Harbor International)	19	817	710	678	692	706
Denver, CO (Denver International)	20	1,149	939	1,089	671	692
Portland, OR (Portland International)	21	800	740	679	651	677
Houston, TX (George Bush Intercontinental)	22	435	437	604	632	644
Seattle, WA (Seattle-Tacoma International)	23	564	564	624	615	643
Minneapolis, MN (Minneapolis-St Paul International/Wold-Chamberlain)	24	593	572	567	614	637
Chicago/Rockford, IL (Chicago/Rockford International)	25	682	529	544	563	632
<b>Top 25 airports<sup>3</sup></b>		<b>46,709</b>	<b>48,524</b>	<b>48,737</b>	<b>49,465</b>	<b>50,761</b>
<b>United States, all airports<sup>4</sup></b>		<b>67,806</b>	<b>66,617</b>	<b>66,290</b>	<b>67,401</b>	<b>69,029</b>
<b>Top 25 as % of U.S. total</b>		<b>68.9%</b>	<b>72.8%</b>	<b>73.5%</b>	<b>73.4%</b>	<b>73.5%</b>

<sup>1</sup>All-cargo operations are operations dedicated to the exclusive transportation of cargo. This does not include aircraft carrying passengers that may also be carrying cargo. Aircraft landed weight is the certificated maximum gross landed weight of the aircraft as specified by the aircraft manufacturers.

<sup>2</sup>Anchorage includes a large proportion of all-cargo operations in-transit.

<sup>3</sup>Represents top 25 airports in the reference year not necessarily the airports shown here.

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



**TABLE 3-8M. TOP 25 AIRPORTS BY LANDED WEIGHT OF ALL-CARGO OPERATIONS: 2000-2005**

**Source:** U.S. Department of Transportation, Federal Aviation Administration, Air Carrier Activity Information System

(ACAIS) database, All-Cargo Data, available at [http://www.faa.gov/airports\\_airtraffic/airports/planning\\_capacity/passenger\\_allcargo\\_stats/passenger/index](http://www.faa.gov/airports_airtraffic/airports/planning_capacity/passenger_allcargo_stats/passenger/index) as of June 8, 2007.



**TABLE 5-7M. FUEL CONSUMPTION BY TRANSPORTATION MODE: 1980-2005**

	1980	1990	2000	2004	2005
<b>Highway</b>					
Gasoline, diesel and other fuels (million liters)	435,171	494,962	615,338	(R) 656,887	659,748
Truck, total	75,557	92,705	133,356	(R) 125,485	126,633
Single-unit 2-axle 6-tire or more truck	26,206	31,635	36,200	(R) 33,912	34,229
Combination truck	49,350	61,070	97,156	(R) 91,573	92,404
Truck (percent of total)	17.4	18.7	21.7	(R) 19.1	19.2
<b>Rail, Class I (in freight service)</b>					
Distillate / diesel fuel (million liters)	14,778	11,792	14,006	15,365	15,513
<b>Water</b>					
Residual fuel oil (million liters)	33,887	23,947	24,264	17,754	19,605
Distillate / diesel fuel oil (million liters)	5,595	7,817	8,559	8,101	7,594
Gasoline (million liters)	3,982	4,921	4,255	(R) 3,909	4,773
<b>Pipeline</b>					
Natural gas (million cubic meters)	17,970	18,684	18,185	(R) 16,033	16,559

**Key:** R = revised.

**Note:** 1 gallon = 3.8 liters; 1 cubic foot = 0.03 cubic meters.

**TABLE 5-8M. SINGLE-UNIT TRUCK FUEL CONSUMPTION AND TRAVEL: 1980-2005**

	1980	1990	2000	2004	2005
Number registered (thousands)	4,374	4,487	5,926	6,161	6395
Vehicle-Kilometers (millions)	64,073	83,527	113,459	(R) 126,239	127,418
Fuel consumed (million liters)	26,206	31,635	36,200	(R) 33,912	34,229
Average kilometers traveled per vehicle	14,649	18,615	19,146	(R) 20,490	19,924
Average kilometers traveled per liter	2.4	2.6	3.1	3.7	3.7
Average fuel consumed per vehicle (liter)	5,992	7,050	6,109	(R) 5,504	5,352

**Key:** R = revised.

**Note:** 1 mile = 1.61 kilometers; 1 gallon = 3.8 liters.

**TABLE 5-7M. FUEL CONSUMPTION BY TRANSPORTATION MODE: 1980-2005**

**Sources:** **Highway:** U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2005* (Washington, DC: 2005), table VM-1 and similar tables in earlier editions. **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 2005* (Washington, DC: 2005), tables 2, 4, and similar tables in earlier editions. **Pipeline:** U.S. Department of Energy, *Natural Gas Annual 2005*, DOE/EIA-0131(04) (Washington, DC: December 2005), table 15 and similar tables in earlier editions.

**TABLE 5-8M. SINGLE-UNIT TRUCK FUEL CONSUMPTION AND TRAVEL: 1980-2005**

**Source:** U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2005* (Washington, DC: 2005), table VM-1 and similar tables in earlier editions.



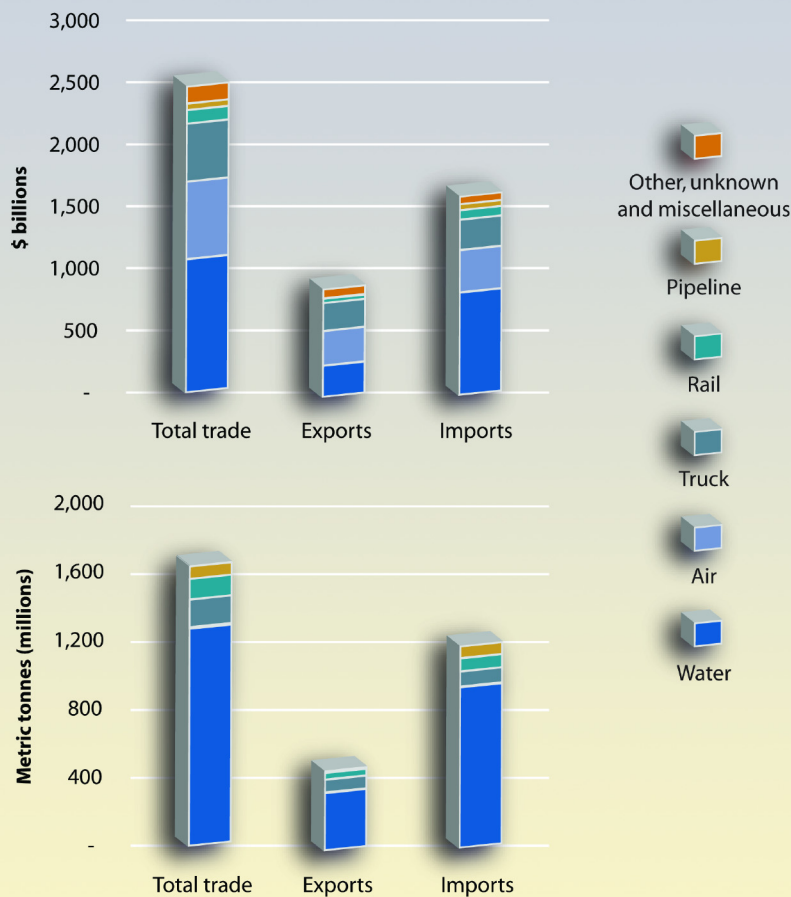
**TABLE 5-9M. COMBINATION-TRUCK FUEL CONSUMPTION AND TRAVEL: 1980-2005**

	1980	1990	2000	2004	2005
Number registered (thousands)	1,417	1,709	2,097	2,010	2,087
Vehicle-kilometers traveled (millions)	110,527	151,827	217,294	(R) 229,122	231,202
Fuel consumed (million liters)	49,350	61,070	97,155	(R) 91,573	92,404
Average kilometers traveled per vehicle	78,008	88,845	103,640	(R) 113,972	110,795
Average kilometers traveled per liter	2.2	2.5	2.2	2.5	2.5
Average fuel consumed per vehicle (liters)	34,831	35,737	46,339	(R) 45,551	44,281

**Key:** R = revised.

**Note:** 1 mile = 1.61 kilometers; 1 gallon = 3.8 liters.

**FIGURE 2-2M. U.S. INTERNATIONAL MERCHANDISE TRADE BY MODE OF TRANSPORTATION: 2005**



**TABLE 5-9M. COMBINATION-TRUCK FUEL CONSUMPTION AND TRAVEL: 1980-2005**

**Source:** U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2005* (Washington, DC: 2005), table VM-1 and similar tables in earlier editions.

**FIGURE 2-2M. U.S. INTERNATIONAL MERCHANDISE TRADE BY MODE OF TRANSPORTATION: 2005**

**Source:** Compiled by U.S. Department of Transportation (USDOT), Research and Innovative Technology Administration (RITA), Bureau of Transportation Statistics (BTS), August 2006. **Water and air data**—U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division, U.S. Exports of Merchandise and U.S. Imports of Merchandise, December 2005. **Total, truck, rail, pipeline, other and unknown data**—USDOT, RITA, BTS, Transborder Freight Data 2005; and special calculation, August 2006.