

## Chapter 10

# Transportation and the Economy

Summary Statistics from Tables/Figures in this Chapter

Source		
Figure 10.1	Share of gasoline cost attributed to taxes, 2006	
	<i>Canada</i>	31%
	<i>France</i>	67%
	<i>Germany</i>	63%
	<i>Japan</i>	41%
	<i>United Kingdom</i>	65%
Table 10.11	Average price of a new car, 2006 (current dollars)	
	<i>Domestic</i>	22,651
	<i>Import</i>	20,044
Table 10.12	Car operating costs, 2007	
	<i>Variable costs (constant 2007 dollars per 10,000 miles)</i>	1,634
	<i>Fixed costs (constant 2007 dollars per 10,000 miles)</i>	5,369
Table 10.16	Transportation sector share of total employment	
	<i>1997</i>	8.4%
	<i>2007</i>	7.6%



*The average price for a gallon of gasoline in China was 70 cents cheaper than in the United States in 2006. Those in the United Kingdom and Germany paid, on average, more than six dollars per gallon.*

**Table 10.1**  
**Gasoline Prices<sup>a</sup> for Selected Countries, 1990–2006**

	Current dollars per gallon							Average annual percent change
	1990	1995	2000	2003	2004	2005	2006	1990–2006
China	<sup>c</sup>	1.03	<sup>c</sup>	1.33	1.48	1.70	2.11	<sup>c</sup>
Japan	3.16	4.43	3.65	3.47	3.93	4.28	4.47	2.2%
France <sup>b</sup>	3.63	4.26	3.80	4.35	4.99	5.46	5.88	3.1%
United Kingdom <sup>b</sup>	2.82	3.21	4.58	4.70	5.56	5.97	6.36	5.2%
Germany	2.65	3.96	3.45	4.59	5.24	5.66	6.03	5.3%
Canada	1.87	1.53	1.86	1.99	2.37	2.87	3.26	3.5%
United States <sup>d</sup>	1.35	1.34	1.69	1.78	1.88	2.49	2.81	4.7%

	Constant 2006 dollars <sup>e</sup> per gallon							Average annual percent change
	1990	1995	2000	2003	2004	2005	2006	1990–2006
China	<sup>c</sup>	1.36	<sup>c</sup>	1.46	1.58	1.75	2.11	<sup>c</sup>
Japan	4.87	5.86	4.27	3.80	4.19	4.42	4.47	-0.5%
France <sup>b</sup>	5.60	5.64	4.45	4.77	5.33	5.64	5.88	0.3%
United Kingdom <sup>b</sup>	4.35	4.25	5.36	5.15	5.93	6.16	6.36	2.4%
Germany	4.09	5.24	4.04	5.03	5.59	5.84	6.03	2.5%
Canada	2.88	2.02	2.18	2.18	2.53	2.96	3.26	0.8%
United States <sup>d</sup>	2.08	1.77	1.98	1.95	2.21	2.57	2.81	1.9%

**Source:**

U.S. Department of Energy, Energy Information Administration, *Annual Energy Review 2006*, Washington, DC, June 2007.  
(Additional resources: [www.eia.doe.gov](http://www.eia.doe.gov))

**Note:** Comparisons between prices and price trends in different countries require care. They are of limited validity because of fluctuations in exchange rates; differences in product quality, marketing practices, and market structures; and the extent to which the standard categories of sales are representative of total national sales for a given period.

<sup>a</sup> Prices represent the retail prices (including taxes) for regular unleaded gasoline, except for France and the United Kingdom which are premium unleaded gasoline.

<sup>b</sup> Premium gasoline.

<sup>c</sup> Data are not available.

<sup>d</sup> These estimates are international comparisons only and do not necessarily correspond to gasoline price estimates in other sections of the book.

<sup>e</sup> Adjusted by the U.S. Consumer Price Inflation Index.



*Of these selected countries, the United Kingdom had the highest diesel fuel price average in 2006, while China had the lowest.*

**Table 10.2**  
**Diesel Fuel Prices<sup>a</sup> for Selected Countries, 1998–2006**

	Current dollars per gallon									Average annual percentage change
	1998	1999	2000	2001	2002	2003	2004	2005	2006	1998–2006
China	b	b	b	1.20	1.20	1.32	1.47	1.69	2.10	b
Japan	2.25	2.62	2.85	2.63	2.50	2.76	3.09	3.45	3.73	6.5%
France	2.71	2.77	2.95	2.71	2.75	3.39	4.16	4.81	5.13	8.3%
United Kingdom	4.10	4.44	4.66	4.25	4.29	4.82	5.68	6.26	6.64	6.2%
Germany	2.45	2.57	2.79	2.79	3.00	3.79	4.41	5.01	5.30	10.1%
United States <sup>c</sup>	1.04	1.12	1.50	1.40	1.32	1.51	1.81	2.42	2.71	12.7%

	Constant 2006 dollars <sup>d</sup> per gallon									Average annual percentage change
	1998	1999	2000	2001	2002	2003	2004	2005	2006	1998–2006
China	b	b	b	1.37	1.34	1.45	1.57	1.74	2.10	b
Japan	2.79	3.17	3.34	2.99	2.80	3.02	3.29	3.56	3.73	3.7%
France	3.35	3.36	3.45	3.08	3.08	3.72	4.44	4.97	5.13	5.5%
United Kingdom	5.08	5.37	5.45	4.84	4.80	5.28	6.06	6.46	6.64	3.4%
Germany	3.03	3.11	3.27	3.17	3.36	4.15	4.70	5.17	5.30	7.2%
United States <sup>c</sup>	1.29	1.36	1.75	1.60	1.48	1.65	1.94	2.49	2.71	9.7%

**Source:**

U.S. Department of Energy, Energy Information Administration, *International and United States Petroleum (Oil) Price and Crude Oil Import Cost Tables*, Washington, DC, June 2007. (Additional resources: [www.eia.doe.gov](http://www.eia.doe.gov))

**Note:** Comparisons between prices and price trends in different countries require care. They are of limited validity because of fluctuations in exchange rates; differences in product quality, marketing practices, and market structures; and the extent to which the standard categories of sales are representative of total national sales for a given period.

<sup>a</sup> Prices represent the retail prices (including taxes) for automotive diesel fuel for non-commercial (household) use.

<sup>b</sup> Data are not available.

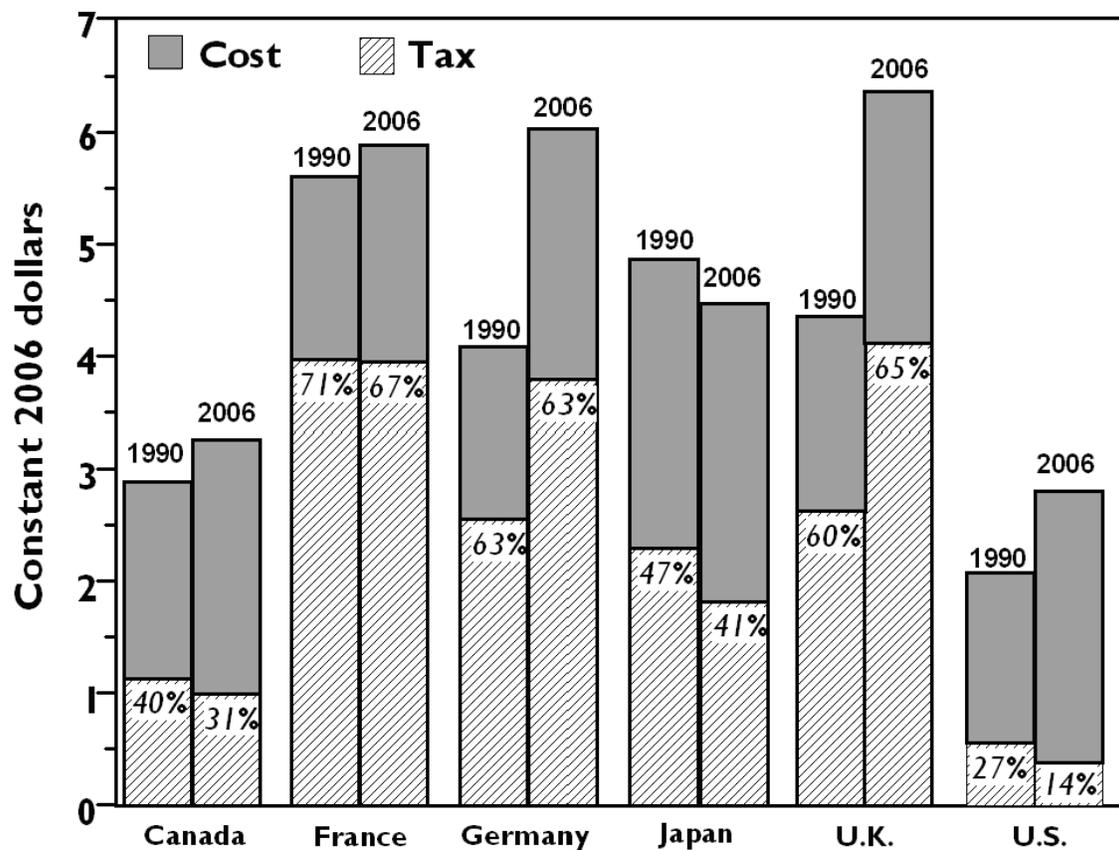
<sup>c</sup> These estimates are for international comparisons only and do not necessarily correspond to gasoline price estimates in other sections of the book.

<sup>d</sup> Adjusted by the U.S. Consumer Price Inflation Index.



*In 2006 more than sixty percent of the cost of gasoline in France, Germany, and the United Kingdom went for taxes. Of the listed countries, the U.S. has the lowest percentage of taxes.*

**Figure 10.1. Gasoline Prices for Selected Countries, 1990 and 2006**



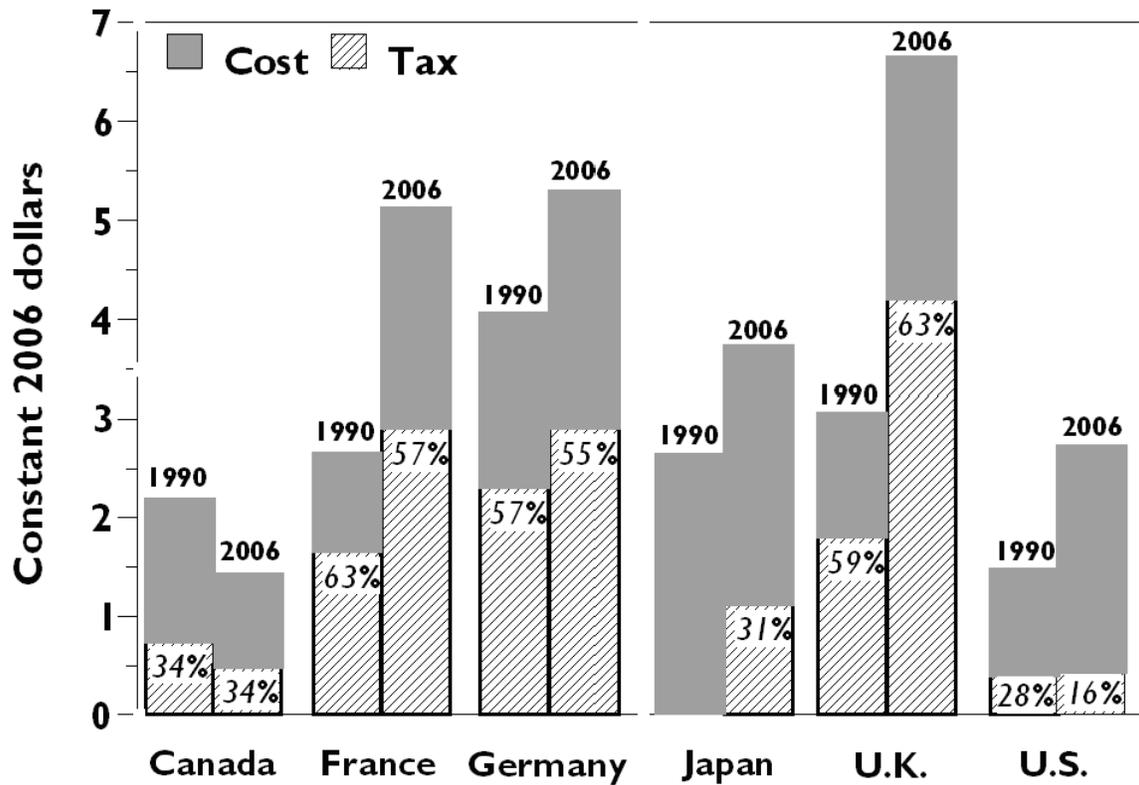
**Source:**

Table 10.1 and International Energy Agency, *Energy Prices & Taxes, Fourth Quarter, 2006*, Paris, France, 2007.  
(Additional resources: [www.iea.org](http://www.iea.org).)



*Diesel fuel is taxed heavily in the European countries shown here. The U.S. diesel fuel tax share is the lowest of the listed countries.*

**Figure 10.2. Diesel Prices for Selected Countries, 1990 and 2006**



**Source:**

Table 10.2 and International Energy Agency, *Energy Prices & Taxes, Fourth Quarter, 2006*, Paris, France, 2007. (Additional resources: [www.iea.org](http://www.iea.org).)



*Though the cost of crude oil certainly influences the price of gasoline, it is not the only factor which determines the price at the pump. Processing cost, transportation cost, and taxes also play a major part of the cost of a gallon of gasoline. The average price of a barrel of crude oil (in constant 2007 dollars) doubled from 2000 to 2007, while the average price of a gallon of gasoline increased only 51% in this same time period.*

**Table 10.3**  
**Prices for a Barrel of Crude Oil and a Gallon of Gasoline, 1978–2007**

Year	Crude oil <sup>a</sup> (dollars per barrel)		Gasoline <sup>b</sup> (cents per gallon)		Ratio of gasoline to crude oil	
	Current	Constant 2007 <sup>c</sup>	Current	Constant 2007 <sup>c</sup>		
1978	12.5	39.6	65.2	207.3	219.8	
1979	17.7	50.6	88.2	251.9	209.1	
1980	28.1	70.6	122.1	307.2	182.7	
1981	35.2	80.4	135.3	308.6	161.3	
1982	31.9	68.5	128.1	275.2	168.8	
1983	29.0	60.3	122.5	255.0	177.5	
1984	28.6	57.1	119.8	239.1	175.7	
1985	26.8	51.5	119.6	230.5	187.8	
1986	14.6	22.7	93.1	176.1	268.7	
1987	17.9	32.7	95.7	174.7	224.5	
1988	14.7	25.7	96.3	168.8	275.7	
1989	18.0	30.0	106.0	177.2	247.7	
1990	22.2	35.2	121.7	193.1	230.0	
1991	19.1	29.0	119.6	182.1	263.5	
1992	18.4	27.2	119.0	175.9	271.2	
1993	16.4	23.5	117.3	168.3	300.2	
1994	15.6	21.8	117.4	164.2	316.3	
1995	17.2	23.4	120.5	163.9	293.7	
1996	20.7	27.6	128.8	170.2	261.2	
1997	19.0	24.6	129.1	166.8	284.8	
1998	12.5	15.9	111.5	141.8	374.0	
1999	17.5	21.8	122.1	152.0	292.9	
2000	28.3	34.0	156.3	188.2	232.3	
2001	23.0	26.9	153.1	179.2	280.2	
2002	24.1	27.8	144.1	166.1	251.1	
2003	28.5	31.2	163.8	184.6	241.1	
2004	37.0	40.6	192.3	211.1	218.4	
2005	50.2	53.3	233.8	248.2	195.5	
2006	60.2	62.0	263.5	271.0	183.7	
2007	67.9	67.9	284.9	284.9	176.1	
		<i>Average annual percentage change</i>				
1978–2007	6.0%	1.9%	5.2%	1.1%		
1997–2007	13.6%	10.0%	8.2%	5.5%		

**Sources:**

Crude oil - U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*, March 2008, Washington, DC, Table 9.1.

Gasoline - U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*, March 2008, Washington, DC, Table 9.4. (Additional resources: [www.eia.doe.gov](http://www.eia.doe.gov))

<sup>a</sup> Refiner acquisition cost of composite (domestic and imported) crude oil.

<sup>b</sup> Average for all types. These prices were collected from a sample of service stations in 85 urban areas selected to represent all urban consumers. Urban consumers make up about 80% of the total U.S. population.

<sup>c</sup> Adjusted by the Consumer Price Inflation Index.



*Diesel fuel price has generally been lower than gasoline; however, from 2005 through 2007 the price of diesel fuel was higher than that of gasoline.*

**Table 10.4**  
**Retail Prices for Motor Fuel, 1978–2007**  
**(cents per gallon, including tax)**

Year	Diesel fuel <sup>a</sup>		Average for all gasoline types <sup>b</sup>	
	Current	Constant 2007 <sup>c</sup>	Current	Constant 2007 <sup>c</sup>
1978	d	d	65	207
1979	d	d	88	252
1980	101	254	122	307
1981	118	269	135	309
1982	116	249	128	275
1983	120	250	123	255
1984	122	243	120	239
1985	122	235	120	230
1986	94	178	93	176
1987	96	175	96	175
1988	95	167	96	169
1989	102	171	106	177
1990	107	170	122	193
1991	91	139	120	182
1992	106	157	119	176
1993	98	141	117	168
1994	111	156	117	164
1995	111	151	121	164
1996	124	163	129	170
1997	120	155	129	167
1998	104	133	112	142
1999	112	140	122	152
2000	149	180	156	188
2001	140	164	153	179
2002	132	152	144	166
2003	151	170	164	185
2004	181	199	192	211
2005	240	255	234	248
2006	271	278	264	271
2007	289	289	285	285
		Average annual percentage change		
1978–2007	4.0% <sup>c</sup>	0.5% <sup>c</sup>	5.2%	1.2%
1997–2007	9.2%	6.4%	8.2%	5.5%

**Sources:**

Gasoline - U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*, March 2008, Washington, DC, Table 9.4.

Diesel - U.S. Department of Energy, Energy Information Administration, *International Energy Annual 2004*, Washington, DC, June 2004, Table 7.2. 2005–2007 data from EIA Petroleum Navigator website. (Additional resources: [www.eia.doe.gov](http://www.eia.doe.gov))

<sup>a</sup> 1980–1993: Collected from a survey of prices on January 1 of the current year. 1994–on: Annual average.

<sup>b</sup> These prices were collected from a sample of service stations in 85 urban areas selected to represent all urban consumers. Urban consumers make up about 80 percent of the total U.S. population.

<sup>c</sup> Adjusted by the Consumer Price Inflation Index.

<sup>d</sup> Data are not available.

<sup>e</sup> Average annual percentage change is from the earliest year possible to 2007.



The fuel prices shown here are **refiner sales prices** of transportation fuels to end users, excluding tax. Sales to end users are those made directly to the ultimate consumer, including bulk consumers. Bulk sales to utility, industrial, and commercial accounts previously included in the wholesale category are now counted as sales to end users.

**Table 10.5**  
**Refiner Sales Prices for Propane and No. 2 Diesel, 1978–2007**  
 (cents per gallon, excluding tax)

Year	Propane <sup>a</sup>		No. 2 diesel fuel	
	Current	Constant 2007 <sup>b</sup>	Current	Constant 2007 <sup>b</sup>
1978	33.5	106.5	37.7	119.9
1979	35.7	102.0	58.5	167.1
1980	48.2	121.3	81.8	205.8
1981	56.5	128.9	99.5	227.0
1982	59.2	127.2	94.2	202.4
1983	70.9	147.6	82.6	172.0
1984	73.7	147.1	82.3	164.2
1985	71.7	138.2	78.9	152.0
1986	74.5	140.9	47.8	90.4
1987	70.1	127.9	55.1	100.6
1988	71.4	125.1	50.0	87.6
1989	61.5	102.8	58.5	97.8
1990	74.5	118.2	72.5	115.0
1991	73.0	111.1	64.8	98.6
1992	64.3	95.0	61.9	91.5
1993	67.3	96.6	60.2	86.4
1994	53.0	74.1	55.4	77.5
1995	49.2	66.9	56.0	76.2
1996	60.5	79.9	68.1	90.0
1997	55.2	71.3	64.2	82.9
1998	40.5	51.5	49.4	62.8
1999	45.8	57.0	58.4	72.7
2000	60.3	72.6	93.5	112.6
2001	50.6	59.2	84.2	98.6
2002	41.9	48.3	76.2	87.8
2003	57.7	65.0	94.4	106.4
2004	83.9	92.1	124.3	136.4
2005	108.9	115.6	178.6	189.6
2006	135.8	139.7	209.6	215.6
2007	148.8	148.8	227.3	227.3
	Average annual percentage change			
1978–2007	5.3%	1.2%	6.4%	2.2%
1997–2007	10.4%	7.6%	13.5%	10.6%

**Source:**

U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*, March 2008, Washington, DC, Table 9.7. (Additional resources: [www.eia.doe.gov](http://www.eia.doe.gov))

<sup>a</sup> Consumer grade.

<sup>b</sup> Adjusted by the Consumer Price Inflation Index.



*The average price of finished aviation gasoline jumped 62 cents from 2005 to 2007; jet fuel rose by 43 cents in that same time period.*

**Table 10.6**  
**Refiner Sales Prices for Aviation Gasoline and Jet Fuel, 1978–2007**  
(cents per gallon, excluding tax)

Year	Finished aviation gasoline		Kerosene-type jet fuel	
	Current	Constant 2007 <sup>a</sup>	Current	Constant 2007 <sup>a</sup>
1978	51.6	164.1	38.7	123.1
1979	68.9	196.8	54.7	156.2
1980	108.4	272.8	86.6	217.9
1981	130.3	297.2	102.4	233.6
1982	131.2	281.9	96.3	206.9
1983	125.5	261.3	87.8	182.8
1984	123.4	246.3	84.2	168.0
1985	120.1	231.4	79.6	153.4
1986	101.1	191.3	52.9	100.1
1987	90.7	165.5	54.3	99.1
1988	89.1	156.2	51.3	89.9
1989	99.5	166.4	59.2	99.0
1990	112.0	177.7	76.6	121.5
1991	104.7	159.4	65.2	99.3
1992	102.7	151.8	61.0	90.1
1993	99.0	142.1	58.0	83.2
1994	95.7	133.9	53.4	74.7
1995	100.5	136.7	54.0	73.5
1996	111.6	147.5	65.1	86.0
1997	112.8	145.7	61.3	79.2
1998	97.5	124.0	45.2	57.5
1999	105.9	131.8	54.3	67.6
2000	130.6	157.3	89.9	108.2
2001	132.3	154.9	77.5	90.7
2002	128.8	148.4	72.1	83.1
2003	149.3	168.2	87.2	98.3
2004	181.9	199.7	120.7	132.5
2005	223.1	236.9	173.5	184.2
2006	268.2	275.8	199.8	205.5
2007	284.9	284.9	216.9	216.9
	Average annual percentage change			
1978–2007	6.1%	1.9%	6.1%	2.0%
1997–2007	9.7%	6.9%	13.5%	10.6%

**Source:**

U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*, March 2008, Washington, DC, Table 9.7. (Additional resources: [www.eia.doe.gov](http://www.eia.doe.gov))

<sup>a</sup> Adjusted by the Consumer Price Inflation Index.



*At the end of 2006, only four states offered tax exemptions to encourage the use of gasohol for transportation purposes. This list is quite short compared to the 30 states which offered gasohol tax exemptions twenty years ago. Still, the Federal Government encourages gasohol use via a difference in the Federal tax rates of gasoline and gasohol.*

**Table 10.7**  
**State Tax Exemptions for Gasohol, 2006**

State	Exemption (Cents/gallon of gasohol)
Connecticut	1.0
Idaho	2.5
Iowa	1.0
South Dakota	2.0

**Source:**

U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2006*, January 2008, Washington, DC, Table MF-121T. (Additional resources: [www.fhwa.dot.gov](http://www.fhwa.dot.gov))

**Table 10.8**  
**Federal Excise Taxes on Motor Fuels, 2006**

Fuel	Cents per gallon
Gasoline <sup>a</sup>	18.40
Diesel	24.40
Gasohol <sup>b</sup>	18.40
Other special fuels <sup>b</sup>	18.30
Neat alcohol (85% Alcohol)	9.25
CNG	48.54/mcf <sup>c</sup>
LNG	11.90
LPG	13.60

**Source:**

U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2006*, January 2008, Washington, DC, Table FE-21B. (Additional resources: [www.fhwa.dot.gov](http://www.fhwa.dot.gov))

<sup>a</sup> All gasohol blends are taxed at the same rate.

<sup>b</sup> Includes benzol, benzene, naphtha, and other liquid used a motor fuel.

<sup>c</sup> Thousand cubic feet.



*These states have laws and incentives for alternative fuels production and/or use.*

**Table 10.9**  
**Federal and State Alternative Fuel Incentives, 2007**

State	Alternative fuel - all	Biodiesel	Ethanol	Natural gas	Liquefied petroleum gas (LPG)	Electric vehicles (EV and NEV)	Hydrogen fuel cells	Blends
Federal US	14	31	24	26	26	17	24	15
Alabama	1	1	1	2	2	1	1	0
Alaska	1	1	1	1	1	2	1	0
Arizona	5	6	6	9	10	10	7	0
Arkansas	2	4	4	4	4	3	3	2
California	21	24	23	28	23	34	27	2
Colorado	6	9	9	10	8	6	7	1
Connecticut	4	5	5	10	8	8	6	1
Delaware	1	1	1	2	2	2	1	0
Dist. of Columbia	3	3	3	4	3	3	3	0
Florida	2	6	7	2	2	4	6	3
Georgia	3	5	4	5	3	5	4	1
Hawaii	4	6	9	4	5	5	5	2
Idaho	0	4	4	2	2	1	1	4
Illinois	2	14	12	7	5	7	5	5
Indiana	3	12	16	6	4	5	4	17
Iowa	6	14	17	7	6	8	6	8
Kansas	2	6	8	4	4	4	2	2
Kentucky	3	8	8	6	4	1	1	4
Louisiana	2	4	4	6	4	4	2	0
Maine	6	9	11	7	7	6	5	4
Maryland	1	4	3	1	1	2	1	0
Massachusetts	1	2	2	3	1	1	1	1
Michigan	6	11	9	6	6	5	6	4
Minnesota	3	8	10	4	4	5	4	4
Mississippi	1	3	2	5	3	1	1	0
Missouri	2	6	5	4	3	4	3	4
Montana	2	7	8	4	4	3	2	2
Nebraska	2	5	5	4	4	2	2	1
Nevada	4	4	4	5	5	5	4	1
New Hampshire	1	3	1	1	1	2	1	0
New Jersey	3	4	4	6	5	5	4	1
New Mexico	7	12	10	8	7	7	9	2
New York	8	11	13	16	10	12	12	2
North Carolina	7	17	15	9	9	8	8	8
North Dakota	1	9	9	1	2	1	3	6
Ohio	2	5	4	2	2	2	3	2
Oklahoma	4	7	7	7	7	7	4	0
Oregon	4	13	12	6	5	8	6	6
Pennsylvania	3	5	5	5	3	5	3	0
Puerto Rico	0	0	0	0	0	0	0	0
Rhode Island	4	5	4	6	5	7	5	3
South Carolina	1	9	9	4	5	3	5	4
South Dakota	0	7	8	1	2	0	0	9
Tennessee	3	9	6	6	5	4	3	5
Texas	6	9	9	12	11	8	8	1
Utah	2	2	2	8	7	8	5	1
Vermont	3	4	4	4	3	4	3	1
Virginia	7	10	10	9	7	8	7	1
Washington	6	16	14	10	9	12	7	7
West Virginia	4	4	4	4	4	5	4	0
Wisconsin	8	13	10	8	6	7	8	1
Wyoming	0	0	2	1	0	0	0	1
<b>Totals</b>	<b>197</b>	<b>397</b>	<b>387</b>	<b>322</b>	<b>279</b>	<b>287</b>	<b>253</b>	<b>149</b>

**Source:**

U.S. Department of Energy, Energy Efficiency and Renewable Energy, Alternative Fuels Data Center. Data downloaded April 2008. (Additional resources: [www.eere.energy.gov/afdc/laws/incen\\_laws.html](http://www.eere.energy.gov/afdc/laws/incen_laws.html))



**Table 10.10**  
**Federal and State Advanced Technology Incentives, 2007**

State	Hybrid Electric Vehicles (HEV)	Emissions Based	Fuel Efficiency	Idle Reduction
Federal US	6	20	14	6
Alabama	0	0	0	0
Alaska	0	0	0	0
Arizona	1	1	0	1
Arkansas	1	0	0	1
California	25	23	3	5
Colorado	3	4	0	1
Connecticut	3	5	1	1
Delaware	0	0	0	0
Dist. of Columbia	1	0	0	1
Florida	1	1	1	0
Georgia	2	2	1	0
Hawaii	1	0	1	0
Idaho	0	0	0	0
Illinois	3	4	1	2
Indiana	1	0	1	0
Iowa	1	0	0	0
Kansas	0	0	0	1
Kentucky	0	0	0	0
Louisiana	1	0	0	0
Maine	1	1	3	0
Maryland	1	1	0	1
Massachusetts	0	0	0	1
Michigan	4	0	0	0
Minnesota	3	1	2	1
Mississippi	1	0	1	0
Missouri	0	1	0	1
Montana	0	0	1	0
Nebraska	0	0	0	0
Nevada	2	3	0	1
New Hampshire	0	1	1	3
New Jersey	3	4	1	2
New Mexico	4	0	2	0
New York	4	2	2	4
North Carolina	5	4	1	4
North Dakota	0	0	0	0
Ohio	0	2	0	1
Oklahoma	1	0	0	0
Oregon	4	4	2	4
Pennsylvania	2	1	1	5
Puerto Rico	0	0	0	0
Rhode Island	1	3	1	1
South Carolina	3	0	0	0
South Dakota	0	0	0	0
Tennessee	2	0	2	0
Texas	1	1	1	3
Utah	1	1	0	1
Vermont	2	3	2	2
Virginia	0	2	2	1
Washington	6	5	2	1
West Virginia	0	0	1	0
Wisconsin	2	1	0	1
Wyoming	0	0	0	0
<b>Totals</b>	<b>103</b>	<b>101</b>	<b>51</b>	<b>57</b>

**Source:**

U.S. Department of Energy, Energy Efficiency and Renewable Energy, Alternative Fuels Data Center. Data downloaded April 2008. (Additional resources: [www.eere.energy.gov/afdc/laws/incen\\_laws.html](http://www.eere.energy.gov/afdc/laws/incen_laws.html))



*In current dollars, import cars, on average, were less expensive than domestic cars until 1982. Since then, import prices have tripled, while domestic prices have doubled (current dollars).*

**Table 10.11**  
**Average Price of a New Car, 1970–2006**

Year	Domestic <sup>a</sup>		Import		Total	
	Current dollars	Constant 2006 dollars <sup>b</sup>	Current dollars	Constant 2006 dollars <sup>b</sup>	Current dollars	Constant 2006 dollars <sup>b</sup>
1970	3,708	19,266	2,648	13,759	3,542	18,404
1975	5,084	19,051	4,384	16,428	4,950	18,549
1980	7,609	18,616	7,482	18,305	7,574	18,531
1981	8,912	19,765	8,896	19,730	8,910	19,761
1982	9,865	20,609	9,957	20,801	9,890	20,661
1983	10,516	21,285	10,868	21,998	10,606	21,468
1984	11,079	21,497	12,336	23,936	11,375	22,071
1985	11,589	21,713	12,853	24,081	11,838	22,180
1986	12,319	22,660	13,670	25,145	12,652	23,272
1987	12,922	22,932	14,470	25,679	13,386	23,755
1988	13,418	22,866	15,221	25,939	13,932	23,742
1989	13,936	22,657	15,510	25,216	14,371	22,364
1990	14,489	22,349	16,640	25,667	15,042	23,202
1991	15,192	22,487	16,327	24,167	15,475	22,906
1992	15,644	22,479	18,593	26,717	16,336	23,474
1993	15,976	22,289	20,261	28,267	16,871	23,538
1994	16,930	23,030	21,989	29,912	17,903	24,354
1995	16,864	22,308	23,202	30,692	17,959	23,757
1996	17,468	22,445	26,205	33,671	18,777	24,126
1997	17,907	22,493	27,722	34,821	19,531	24,532
1998	18,479	22,855	29,614	36,627	20,364	25,186
1999	18,339	22,192	28,695	34,723	20,381	24,663
2000	18,577	21,749	27,447	32,133	20,600	24,117
2001	18,755	21,350	27,539	31,349	20,945	23,843
2002	18,897	21,176	27,440	30,750	21,249	23,812
2003	18,536	20,309	28,139	30,831	21,169	23,194
2004	18,909	20,180	28,408	30,318	21,636	23,091
2005	19,907	20,549	29,700	30,658	22,700	23,432
2006	20,044	20,044	28,739	28,739	22,651	22,651
	Average annual percentage change					
1970–2006	4.8%	0.1%	6.8%	2.1%	5.3%	0.6%
1996–2006	1.4%	-1.1%	0.9%	-1.6%	1.9%	-0.6%

**Source:**

U.S. Department of Commerce, Bureau of Economic Analysis, *National Income and Product Accounts*, underlying detail estimates for Motor Vehicle Output, Washington, DC, 2007. (Additional resources: [www.stat-usa.gov](http://www.stat-usa.gov))

<sup>a</sup> Includes transplants.

<sup>b</sup> Adjusted by the Consumer Price Inflation Index.



The total cost of operating an car is the sum of the fixed cost (depreciation, insurance, finance charge, and license fee) and the variable cost (gas and oil, tires, and maintenance), which is related to the amount of travel. The gas and oil share of total cost in 2007 was 14.3%.

**Table 10.12**  
**Car Operating Cost per Mile, 1985–2007**

Model year	Constant 2007 dollars per 10,000 miles <sup>a</sup>			Total cost per mile <sup>b</sup> (constant 2007 cents <sup>a</sup> )	Percentage gas and oil of total cost
	Variable cost	Fixed cost	Total cost		
1985	1,692	4,701	6,394	63.94	19.9%
1986	1,401	4,957	6,358	63.58	15.1%
1987	1,395	4,846	6,241	62.41	14.7%
1988	1,577	6,047	7,623	76.23	13.6%
1989	1,542	5,627	7,168	71.68	14.2%
1990	1,589	6,160	7,749	77.48	13.2%
1991	1,770	6,509	8,279	82.79	14.6%
1992	1,577	6,632	8,209	82.09	12.6%
1993	1,538	6,224	7,762	77.62	12.7%
1994	1,444	6,085	7,259	75.29	11.8%
1995	1,461	6,097	7,558	75.58	11.7%
1996	1,419	6,197	7,615	76.15	10.9%
1997	1,550	6,239	7,803	78.03	12.1%
1998	1,497	6,335	7,818	78.18	11.1%
1999	1,442	6,340	7,782	77.82	9.8%
2000	1,612	6,243	7,855	78.55	11.6%
2001	1,757	5,970	7,726	77.26	13.2%
2002	1,501	6,200	7,701	77.91	9.7%
2003	1,630	6,078	7,709	77.09	11.6%
2004	1,517	6,782	8,300	83.00	9.4%
2005	1,651	6,336	7,987	79.87	12.0%
2006	1,740	5,401	7,141	71.41	15.3%
2007	1,634	5,369	7,003	70.03	14.3%
Average annual percentage change					
1985–2007	-0.2%	0.6%	0.4%	0.4%	

**Source:**

Ward's Communications, *Motor Vehicle Facts and Figures 2007*, Southfield, Michigan, 2008, p. 66, and annual. Original data from AAA "Your Driving Costs."

<sup>a</sup> Adjusted by the Consumer Price Inflation Index.

<sup>b</sup> Based on 10,000 miles per year.



While the previous table shows costs per *mile*, this table presents costs per *year* for fixed costs associated with car operation. For 2007 model year autos, the fixed cost is almost \$16 per day.

**Table 10.13**  
**Fixed Car Operating Costs per Year, 1975–2007**  
 (constant 2007 dollars)<sup>a</sup>

Model year	Insurance <sup>b</sup>	License, registration & taxes	Depreciation	Finance charge	Total	Average fixed cost per day
1975	1,476	116	2,979	<sup>c</sup>	4,571	12.53
1980	1,399	234	2,964	<sup>c</sup>	5,806	15.91
1985	928	220	2,518	1,066	4,732	12.97
1986	981	251	2,544	1,227	5,002	13.70
1987	1,012	242	2,826	995	5,076	13.90
1988	1,046	254	3,256	1,031	5,587	15.31
1989	1,130	252	3,537	1,031	5,950	16.30
1990	1,125	276	3,941	1,137	6,479	17.76
1991	1,123	267	3,972	1,422	5,784	15.85
1992	1,198	265	4,136	1,212	6,811	18.66
1993	1,100	263	4,182	990	6,535	17.91
1994	1,103	278	4,219	930	6,530	17.89
1995	1,095	284	4,299	960	6,639	18.19
1996	1,150	293	4,313	977	6,732	18.45
1997	1,119	285	4,324	1,015	6,744	18.47
1998	1,163	292	4,346	1,050	6,851	18.77
1999	1,234	287	4,371	1,053	6,945	19.03
2000	1,207	278	4,346	1,057	6,887	18.87
2001	1,193	250	4,272	1,043	6,758	18.52
2002	1,187	235	4,356	969	6,748	18.49
2003	1,270	236	4,308	857	6,672	18.28
2004	1,806	468	4,262	835	7,371	20.19
2005	1,414	427	4,258	811	6,910	18.93
2006	983	568	3,601	760	5,912	16.20
2007	1,013	553	3,489	754	5,809	15.91
<i>Average annual percentage change</i>						
1975–2007	-1.2%	5.0%	0.5%	<sup>c</sup>	0.8%	0.7%
1997–2007	-1.0%	6.9%	-2.1%	-2.9%	-1.5%	-1.5%

**Source:**

Ward's Communications, *Motor Vehicle Facts and Figures 2007*, Southfield, Michigan, 2008, p. 66 and annual. Original data from AAA "Your Driving Costs."

<sup>a</sup> Adjusted by the Consumer Price Inflation Index.

<sup>b</sup> Fire & Theft: \$50 deductible 1975 through 1977; \$100 deductible 1978 through 1992; \$250 deductible for 1993 – on. Collision: \$100 deductible through 1977; \$250 deductible 1978 through 1992; \$500 deductible for 1993 – on. Property Damage & Liability: coverage = \$100,000/\$300,000.

<sup>c</sup> Data are not available.



**Table 10.14**  
**Personal Consumption Expenditures, 1970-2007**  
**(billion dollars)**

Year	Personal consumption expenditures		Transportation personal consumption expenditures		Transportation PCE as a percent of PCE
	Current	Constant 2007 <sup>a</sup>	Current	Constant 2007 <sup>a</sup>	
1970	648.5	3,465.5	81.4	435.0	12.6%
1980	1,757.1	4,421.3	238.9	601.1	13.6%
1990	3,839.9	6,091.5	471.7	748.3	12.3%
2000	6,739.4	8,114.7	853.5	1,027.7	12.7%
2001	7,055.0	8,259.6	872.3	1,021.2	12.4%
2002	7,350.7	8,471.9	882.2	1,016.8	12.0%
2003	7,703.6	8,680.8	921.7	1,038.6	12.0%
2004	8,195.9	8,996.0	976.1	1,071.4	11.9%
2005	8,707.8	9,244.6	1,048.8	1,113.5	12.0%
2006	9,224.5	9,487.1	1,093.4	1,124.5	11.9%
2007	9,734.2	9,734.2	1,138.7	1,138.7	11.7%

**Source:**

U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts, Table 2.3.5, <http://www.bea.doc.gov/bea/dn/nipaweb>.

**Note:** Transportation PCE includes the following categories: transportation, motor vehicles and parts, and gasoline and oil.

**Table 10.15**  
**Consumer Price Indices, 1970-2007**  
**(1970 = 1.000)**

Year	Consumer Price Index	Transportation Consumer Price Index <sup>b</sup>	New vehicle Consumer Price Index	Used vehicle Consumer Price Index	Gross National Product Index
1970	1.000	1.000	1.000	1.000	1.000
1980	2.124	2.216	1.667	1.997	2.702
1990	3.369	3.213	2.286	3.769	5.587
2000	4.438	4.088	2.689	4.994	9.432
2002	4.637	4.077	2.637	4.872	10.037
2004	4.869	4.349	2.582	4.272	11.257
2005	5.034	4.637	2.597	4.468	11.965
2006	5.196	4.824	2.591	4.487	12.683
2007	5.343	4.925	2.566	4.351	13.338

**Source:**

Bureau of Labor Statistics, Consumer Price Index Table 1A for 2007, and annual.

(Additional resources: [www.bls.gov](http://www.bls.gov))

GNP – U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts, Table 1.7.5. (Additional resources: [www.bea.doc.gov](http://www.bea.doc.gov))

<sup>a</sup> Adjusted by the GNP price deflator.

<sup>b</sup> Transportation Consumer Price Index includes new and used cars, gasoline, auto insurance rates, intracity mass transit, intracity bus fare, and airline fares.



The data below were summarized from the Bureau of Labor Statistics (BLS) Current Employment Statistics Survey data using the North American Industry Classification System (NAICS). Transportation-related employment was 7.6% of total employment in 2007.

**Table 10.16**  
**Transportation-related Employment, 1997 and 2007**  
**(thousands)**

	1997	2007
Truck transportation	1,308.2	1,441.2
Transit and ground transportation	349.6	410.0
Air transportation	542.0	492.6
Rail transportation	221.0	234.4
Water transportation	50.7	64.3
Pipeline transportation	49.7	40.1
Motor vehicle and parts - retail	1,723.4	1,913.1
Motor vehicles and parts - wholesale	350.2	350.0
Gasoline stations - retail	956.2	861.2
Automotive repair and maintenance	810.5	888.0
Automotive equipment rental and leasing	184.1	195.0
Manufacturing	2,111.9	1,769.6
<i>Autos and light trucks</i>	244.6	2,185.5
<i>Heavy-duty trucks</i>	42.2	37.5
<i>Motor vehicle bodies and trailers</i>	158.2	164.9
<i>Motor vehicle parts</i>	808.9	608.9
<i>Aerospace products and parts</i>	554.9	487.0
<i>Railroad rolling stock</i>	32.0	26.0
<i>Ship &amp; boat building</i>	146.2	160.9
<i>All other transportation equipment</i>	40.5	39.8
<i>Tires</i>	84.4	58.5
Oil and gas pipeline construction	73.7	95.1
Highway street and bridge construction	294.2	345.4
Scenic & sightseeing	24.5	29.4
Support activities for transportation	473.4	582.5
Couriers and messengers	546.0	582.5
Travel arrangement and reservation services	302.0	226.5
<b>Total transportation-related employment</b>	<b>10,371.3</b>	<b>10,521.3</b>
Total nonfarm employment	122,776.0	137,623.0
Transportation-related to total employment	8.4%	7.6%

**Source:**

Bureau of Labor Statistics web site query system: [www.bls.gov/ces/cesnaics.htm](http://www.bls.gov/ces/cesnaics.htm).  
(Additional resources: [www.bls.gov](http://www.bls.gov))



